ENFORCER®

Vandal-Resistant Surface-Mount Access Control Keypads

SK-1123-SDQ / SK-1123-SPQ

Installation Manual

SK-1123-SDQ shown

CE RoHS

Model	Outputs	Backlit Keys	Proximity Reader
SK-1123-SDQ	Two	Yes	No
SK-1123-SPQ	Two	Yes	Yes

- 12~24 VDC/VAC Auto-adjusting operation
- Up to 1,000 possible user codes (000~999) for output 1 and 100 (001~100) for output 2
- Up to 50 (01~50) possible visitor codes, for one-time or limited-time use (1~99 hours)
- Up to 50 (01~50) duress codes for output 1, 10 (01~10) for output 2
- Output 1: Form C relay, 1A@30VDC max. / output 2: Form C relay, 1A@30VDC max.
- Outputs 1 and 2 can be programmed to activate for up to 99,999 seconds (nearly 28 hours)
- Tamper output N.C. Dry contact, 50mA@24VDC max.
- All features are programmed directly from the keypad No need for an external programmer
- EEPROM Memory protects programmed information in case of power loss
- Egress input lets users exit the premises without keying in the code
- Keypad illuminates when a button is pressed, programmable for FULL or AUTO in standby
- Data I/O terminal for split-series setup providing added security
- Expansion port for future optional features
- Door sensor input for anti-tailgating
- Interlocking input for connecting to a second keypad
- IP66 Weatherproof
- Surface-mount back box included

SK-1123-SPQ includes all the above features plus:

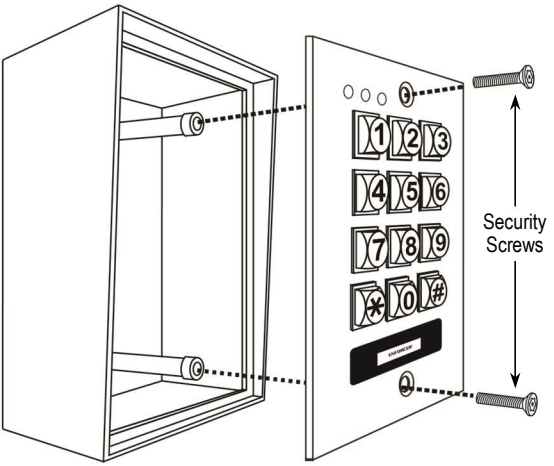
- Built-in proximity reader

SECO-LARM®

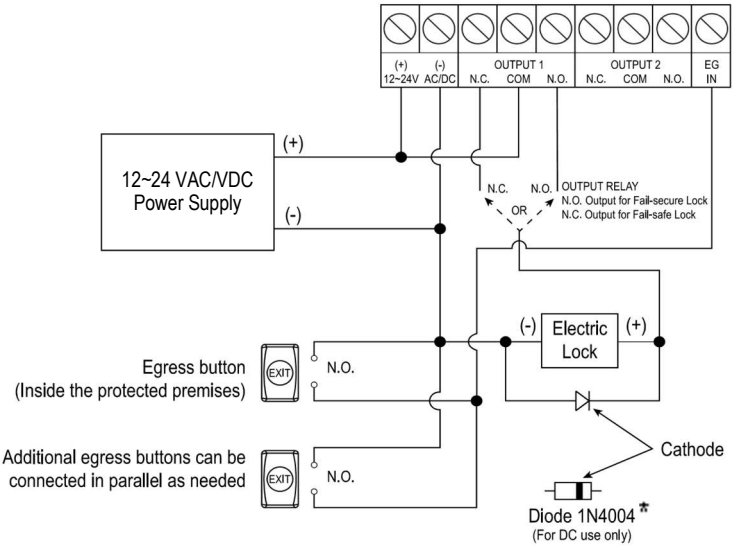
Quick Installation Guide

This page is for installers looking to do a basic installation and programming of the keypad. For more in-depth installation and programming instructions, see the *Table of Contents* on pg. 4. For optional Split-Series Controller installation and operation instructions, please refer to its manual.

Mounting Diagram



Quick Wiring Diagram



*To protect the relay, you must install the included diode—with the cathode (striped end ——▮——) wired toward the positive side—for DC powered locks ***unless*** *your lock has a diode built in.* AC powered locks and electromagnetic locks require a varistor/MOV (05D390K or similar, not included) wired in the same location ***if*** *the lock does not have one built in* (all SECO-LARM electromagnetic locks have built-in protection). Failure to use these as directed will void the warranty.

Quick Programming Guide

This page is for installers looking to do a basic installation and programming of the keypad. For more in-depth installation and programming instructions, see the *Table of Contents* on pg. 4. For optional Split-Series Controller installation and operation instructions, please refer to its manual.

Programming Tips

- The *master, super user, common user, visitor, duress*, and *user codes* cannot be the same.
- A flashing amber LED indicates the keypad is in standby mode. A solid amber LED indicates the keypad is in programming mode.
- If the *user code entry mode* is set for *auto-entry*, your *user codes* will need to be the **same number of digits** as the *master code* (see *Programming the User Code Entry Mode*, pg. 26).

Programming Instructions

Follow the instructions below if the following covers your needs.

- A new *master code*
- A single 4-digit *user code* for all users and no user cards*
- One output to unlock a door
- A 3-second delay time in opening the door after the output is activated

1. Turn off the beeping before the 1-minute power-up period ends

   [1][2] [#]

2. Enter *programming mode*

   [0][0][0][0] [*][*]

   NOTE: The default *master code* is 0000**.**

3. Change the *master code*

   [0][1] [X][X][X][X] [#]

   NOTE: In the formula above, [X][X][X][X] represents the new *master code*.

4. Set the *user code* to operate output 1 (unlock the door)

   [1][0] [2] [0][0][0] [X][X][X][X] [#]

   NOTE: [0][0][0] chooses *user ID* #000 of 1,000 possible users (000~999).

   [X][X][X][X] is the new user code for *user ID* #1.

5. Set the *output delay time* (skip this step if the default value of 5 seconds is acceptable)

   [5][1] [3] [#]

   NOTE: [3] sets the *output delay time* for 3 seconds.

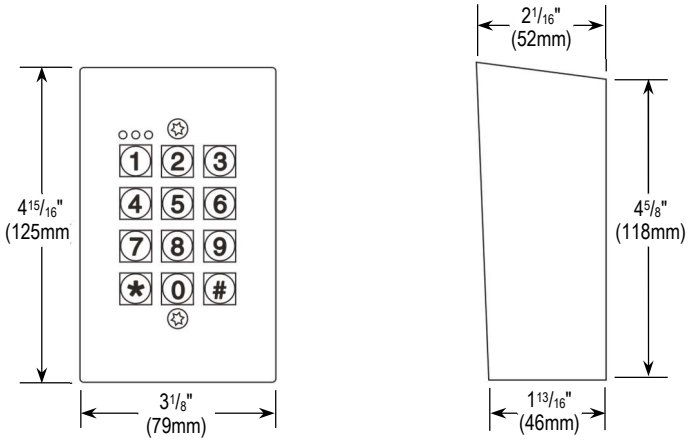
6. Exit *programming mode*

   [*][*]

*Proximity reader is only available on the SK-1123-SPQ

Table of Contents

Overview



Parts List

1x **Keypad**	1x **Back box**	2x **Security screws**	1x **Security wrench**
3x **Diode**	3x **Mounting screws**	3x **Mounting screw anchors**	1x **Manual**

Specifications

Model		**SK-1123-SDQ**	**SK-1123-SPQ**
Operating voltage		12~24 VAC/VDC	
Current draw (@12VDC)	**Standby**	66mA	
	Keypress	93mA	
	Output 1 active	99mA	
	Outputs 1 & 2 active	126mA	
	Total (max.)	160ma	
Outputs	**#1 Form C**	1A@30VDC	
	#2 Form C	1A@30VDC	
	Key active	100mA@24VDC	
	Duress	100mA@24VDC	
	Interlock	100mA@24VDC	
	Tamper	50mA@24VDC	
Inputs	**Egress**	N.O. Ground	
	Door sensor	N.C. Ground	
	Door inhibit	N.O. Ground	
Proximity reader frequency		n/a	125kHz (EM125)
Proximity reader sensing distance		n/a	$1\frac{1}{2}$" (38mm)
IP rating		IP66 Weatherproof	
Operating humidity		5~95%, non-condensing	
Operating temperature		-4°~158° F (-20°~70° C)	
Housing material		Die-cast aluminum, powder paint coating	
Dimensions (including back box)		$4\frac{15}{16}$"x$3\frac{1}{8}$"x$2\frac{1}{16}$" (125x79x52 mm)	
Weight		1-lb 2-oz (520g)	

LED Indicators and Keypad Sounds

LED Indicators

	Red LED (Left)	Amber LED (Center)	Green/Red LED (Right)
Steady	Output 2 activated	Programming mode	Output 1 activated (green) Output 1 inhibited (red)
Flashing	–	Standby mode	Inhibit mode paused (red)

Keypad Sounds and Amber LED

Status	Sounds*	Amber LED (Center)
In programming mode	–	Steady ON
Successful key entry	1 Beep	1 Flash
Successful code/card† entry	2 Beeps	2 Flashes
Unsuccessful code/card† entry	5 Beeps	5 Flashes
Power up delay	Continuous beeping	Continuous flashing
Output relay activation‡	1-Sec long beep	–
In standby mode§	–	1 Flash/second
System restore mode	2 Beeps	Fast flashing for 2.5 minutes
Code/card† already stored	1 Long beep	–
Real time clock stopped after power loss	Continuous 3 fast beeps every 5 seconds	–

*Keypad sounds can be programmed ON or OFF (see pg. 26).

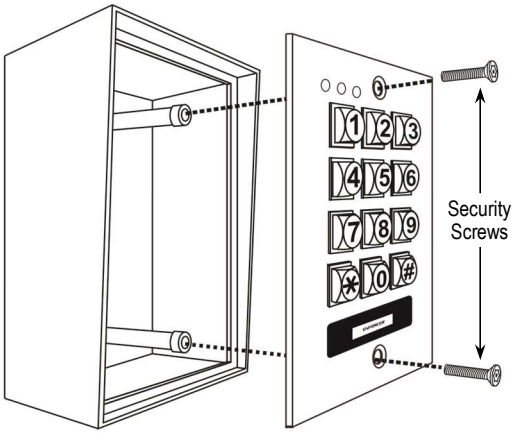
†Proximity card reader is only on the SK-1123-SPQ.

‡Output relay activation sounds can be programmed for 1-sec long beep, 2 short beeps, or OFF (see pg. 27).

§Amber LED flashing during standby mode can be programmed ON or OFF (see pg. 27).

Installation

1. Find a suitable location to mount the keypad. Install it at the height at which most users will be able to easily operate the keypad.
2. Install the back box using the included mounting screws and mounting screw anchors (if necessary).
3. Run the wire through the wall or conduit to the back box location, then run the wire through the hole on the back of the back box.
4. Refer to the wiring diagram (pg. 8) and ensure that the backlit jumper is properly set.
5. Connect the wires to the keypad according to the *Wiring Diagram* on pg. 8 and the *Sample Applications* starting on pg. 9.
6. Finish assembly by attaching the keypad to the back box with the included security screws.



Important Notes

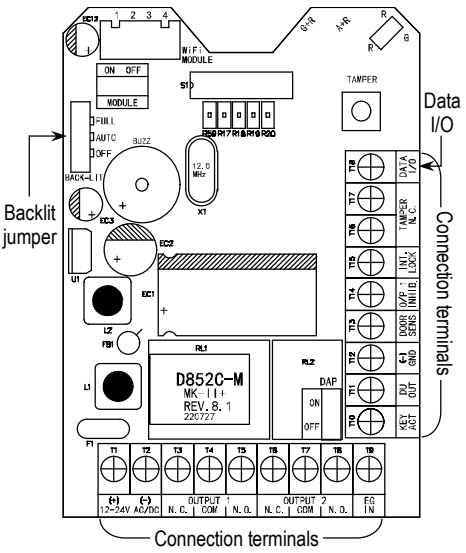
IF USING THE KEYPAD WITH A MECHANICALLY OPERATED DOOR OR GATE, MOUNT THE KEYPAD AT LEAST 15' (5m) FROM THE DOOR OR GATE TO PREVENT USERS FROM BEING CRUSHED OR PINNED. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

1. Always disconnect power before servicing the keypad. Do not apply power until all connection wiring is completed.
2. The keypad must be properly grounded. Use a minimum of 22AWG wire connected to the ground terminal. Failure to do so may damage the keypad.
3. Allow at least 2ft (60cm) between this and any other keypads to avoid interference.
4. All wiring and programming should be done by a professional installer to reduce the risk of improper installation.
5. The user's guide for this keypad is located on pg. 31 of this manual.
6. Be sure to store this manual in a safe place for future reference.

Wiring Diagram

Connection Terminals

Terminal		Description
12~24 VAC/VDC		Connect to a 12~24 VAC/VDC power supply. **Observe polarity**.
Relay Output 1	N.C.	NO/NC/COM 1A@30VDC max.
	COM	
	N.O.	
Relay Output 2	N.C.	NO/NC/COM 1A@30VDC max.
	COM	
	N.O.	
Egress input		N.O. Pushbutton contact to ground. Press button to initiate door unlock output.
Key active output		Transistor ground output, max. 100mA@24VDC Switches to ground (–) for 10 seconds after any button is pressed.



Duress output	Transistor ground, max. 100mA@24VDC Switches to ground (–) to trigger a silent alarm or other device when the user enters a *duress code*
Ground (–)	Common ground output
Door sensor	Connect to an optional N.C. sensor such as a magnetic contact to monitor if a door is open or closed. Connect to ground (–) if not used.
Output 1 inhibit	N.O. input, connect to interlock control of second keypad if needed so that if one keypad is used to unlock a door, the other is temporarily disabled.
Interlock control	N.O. input, connect to output 1 inhibit of second keypad if needed so that if one keypad is used to unlock a door, the other is temporarily disabled.
Tamper N.C.	Tamper switch output, N.C. contact, max. 50mA@24VDC. Connect to the N.C. 24-hour protection zone of an alarm if needed.
Data I/O	Connect to optional ENFORCER Split-Series Controller to allow the keypad to operate as a split-series access controller.

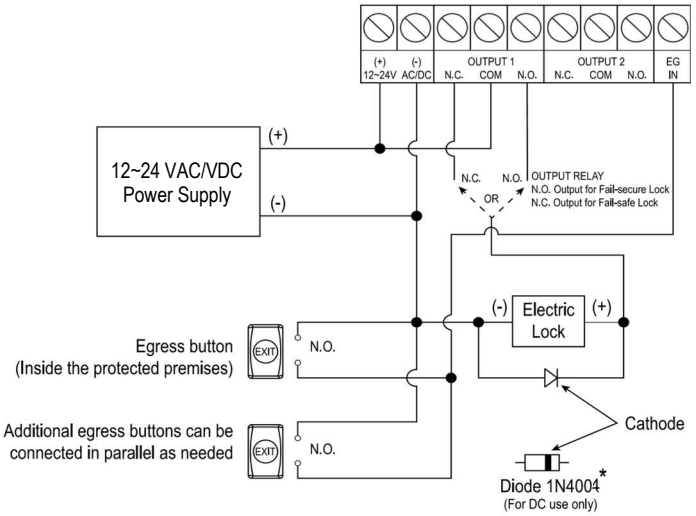
Backlit Jumper Settings

Position	Description
Full	Dim backlight during standby. Full backlight for 10 seconds after any button press.
Auto	No backlight during standby. Full backlight for 10 seconds after any button press.
Off	Off. Backlight function disabled.

Sample Applications

Stand-Alone Door Lock

In this application, the keypad is connected to a single door lock and an egress pushbutton.



*To protect the relay, you must install the included diode—with the cathode (striped end ——▮——) wired toward the positive side—for DC powered locks ***unless*** *your lock has a diode built in.* AC powered locks and electromagnetic locks require a varistor/MOV (05D390K or similar, not included) wired in the same location ***if*** *the lock does not have one built in* (all SECO-LARM electromagnetic locks have built-in protection). Failure to use these as directed will void the warranty.

Door-Hold-Open Mode

- For N.C. locking devices – Connect outputs in series with working device (see Fig. 1).
- For N.O. locking devices - Connect outputs in parallel with working device (see Fig. 2).

Fig. 1

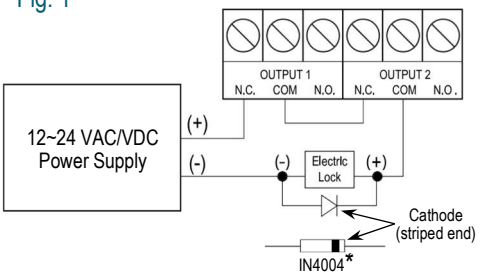
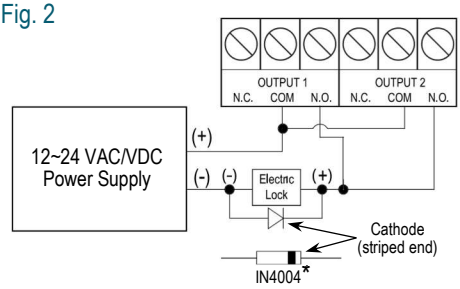


Fig. 2



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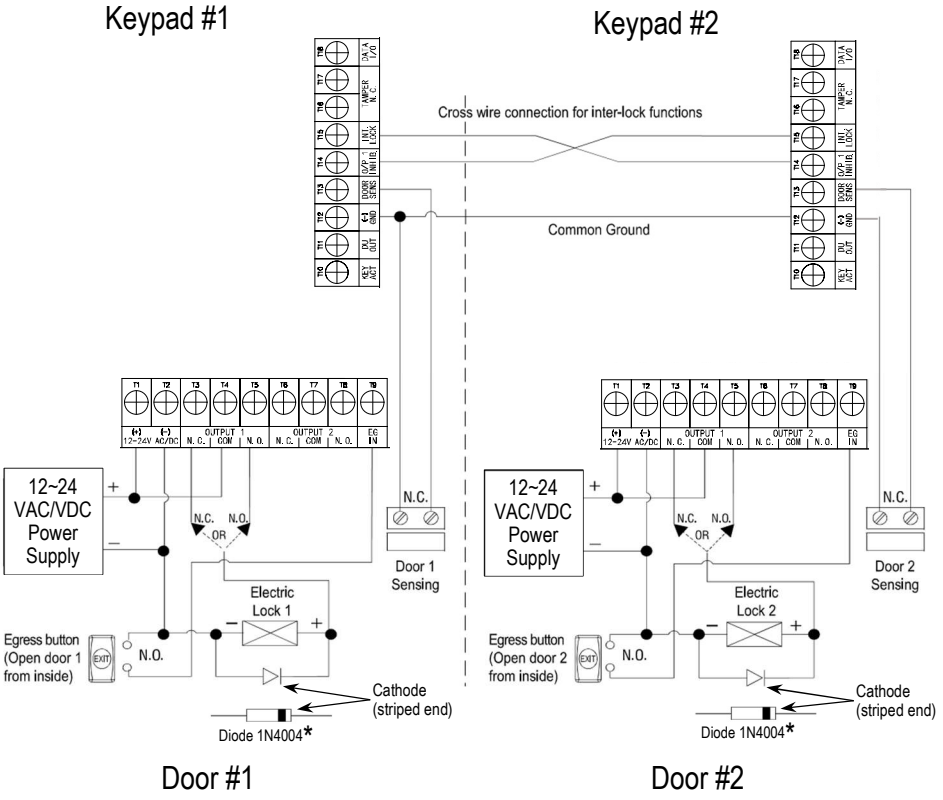
Sample Applications (Continued)

Inter-Lock System Using Two Keypads

In this application, two keypads are each connected to separate door locks, magnetic contacts, and egress pushbuttons. While one door is open, the other cannot be opened.

- Use an N.C. magnetic contact or some other N.C. device to detect whether a door is opened or closed. Do this for the two doors being protected.



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Getting Ready to Program

Codes or Cards*

The keypad can be set to be activated by users in one of three ways.

1. **Keypad code only** – There are five types of keypad codes
   - *Master code* – Used **only** for entering programming mode; there can be only one *master code* per keypad.
   - *Super user code* – Can be used to activate outputs 1 and 2, or to disable (inhibit) or enable the operation of output 1.
   - *User codes* – Unique codes for each user to activate outputs 1 or 2.
   - *Visitor codes* – Temporary user codes that can be assigned to visitors or temporary workers to activate output 1; the *visitor codes* can be programmed for one-time use or to expire after a set number of hours has passed.
   - *Duress codes* – Assigned to specific users as a way to send a silent alert if forced to use keypad under duress
2. **Proximity card only*** – Standard 125kHz (EM125) proximity cards can be used to activate outputs 1 or 2.
3. **Card + code*** – For enhanced security, the user can be required to also enter a code after tapping a proximity card. The code may be unique to each card or to a group of users, or a common code can be used with all cards.

Security Levels

There are four possible security levels for the keypad.

1. **Card only*** – The most basic, convenient level of security. Hold a previously programmed *user card* over the keypad to activate outputs 1 or 2 (see *Programming User Codes and Proximity Cards* on pg. 17).
2. **User code only** – Type in a 4- to 8-digit user code to activate outputs 1 or 2 (see pg. 17).
3. **Card + common user code*** – All valid *user cards* can be programmed with a single *common user code* so that outputs 1 or 2 can only be activated if one of the *user cards* and the *common user code* are used together. The *common user code* is automatically assigned when each *user card* is programmed into the keypad (see *Programming a Common User* Code on pg. 16).
4. **Card + unique user code*** – The most secure level. Each *user card* can be programmed with its own unique *user code* so that outputs 1 or 2 can only be activated if the *user card* and the *unique user code* are used together (see pg. 17).

NOTES

- The *master*, *super user*, *common user*, *visitor*, *duress*, and *user codes* cannot be the same.
- For optional Split-Series Controller installation and operation instructions, please refer to its manual.

*Proximity cards are supported only on the SK-1123-SPQ

Getting Ready to Program (Continued)

Power Up the Keypad

When the keypad is first powered up, it will beep continuously for about 1 minute. During this power-up time, if needed, use *direct access to programming (DAP)* to reset the *master code* (see *Direct Access to Programming* on pg. 30).

1. Turn off the beeping before the 1-minute power-up period ends

   [1][2] [#]

   This will immediately stop the beeping. When the beeping has ended, the keypad is ready for normal operation or for programming.

Enter and Exit Programming Mode

All programming of the keypad is done in *programming mode*.

1. Enter *programming mode*.

   [X][X][X][X] [*][*]

   NOTE: In the formula above, [X][X][X][X] represents the *master code*. The default *master code* is "0000" (see *Programming the Master Code* on pg. 14 to program a new *master code*). The amber LED will change to steady ON to indicate that the keypad is in *programming mode*.

2. Exit *programming mode*.

   [*][*]

   The [*][*] entry can be used to exit *programming mode* at any time while programming. The amber LED will return to flashing, indicating standby mode, upon exiting *programming mode*.

   NOTE: **DO NOT DISCONNECT THE KEYPAD FROM POWER WHILE IN PROGRAMMING MODE**. Disconnecting the keypad while in *programming mode* could cause a keypad memory error.

Programming Format and Default Programming Values

In this manual, the format used for programming the keypad is as follows.

- A 2-digit ([X][X]) FUNCTION identifier to tell the keypad what is being programmed.
- A varying number of digits ([X]) represents the parameters of that FUNCTION.
- Press the [#] key to confirm programming of the FUNCTION.

The following is a list of the different programming functions.

Function	Parameters	Default functions and values	Page #
01	Master code	Default 0000, code length from 4~8 digits	14
02	Super user code	No default, must be programmed	15
03	Common user code for output 1*	No default, must be programmed	16
04	Common user code for output 2*	No default, must be programmed	16
10	User codes/cards* for output 1	No default, must be programmed	16
20	User codes/cards* for output 2*	No default, must be programmed	16
40	Visitor codes for output 1	No default, must be programmed	19
41	Duress codes for output 1	No default, must be programmed	20
42	Duress codes for output 2	No default, must be programmed	20
51	Output mode/duration for output 1	5-Second output, momentary	22
52	Output mode/duration for output 2	5-Second output, momentary	22
55	System real-time clock	No default, must be programmed	23
56	Auto-disable time (output 1)	No default, must be programmed	24
60	Wrong-code system lock-up	Locks keypad after 10 false code/card tries	25
70	User code entry mode	Manual entry of "#" after each code	26
71	Keypad sounds	Programming and operation beeps enabled	26
72	Output relay activation sounds	1-Second beep when output is activated	27
73	Amber LED standby flashing	Center LED flashes on standby	27
80	Door-forced-open warning	Warning disabled	28
81	Door-propped-open warning	Warning disabled	28
90	Egress delay/warning/alarm	Egress output happens immediately	29

NOTE The *direct access to programming (DAP)* code 2828 (see pg. 30) and the system restore code 9999 (see pg. 14) are fixed and cannot be changed, even via programming.

*Proximity cards and common user codes are supported only on the SK-1123-SPQ

System Restore

System restore will reset all programming values except the *master code* back to the default values shown on pg. 13.

1. Make sure the keypad is in *programming mode* (see *Enter and Exit Programming Mode* on pg. 12).
2. Initiate system restore.
   [9][9][9][9] [#]

NOTES

- System restore will reset ALL programming except the *master code* back to default values. Be careful to use *system restore* only when absolutely necessary.
- System restore may take several minutes. The amber LED will flash rapidly during this time.
- Once *system restore* has been completed, the keypad will beep twice to show that all programming values have been reset to their default values and are ready to be reprogrammed.
- At this point, the keypad is still in *programming mode*.

Programming the Master Code

The *master code* is used to enter *programming mode*. The *master code* **does not** serve as a *user code* for activating outputs 1 or 2.

1. Make sure the keypad is in *programming mode* (see *Enter and Exit Programming Mode* on pg. 12).
2. Enter new *master code*.
   [0][1] [X][X][X][X] [#]

NOTES

- [X][X][X][X] represents the new *master code*, which can be 4 to 8 digits long.
- There can be **only one *master code*** for the keypad.
- Programming a new *master code* will overwrite the previous *master code*.
- If the *master code* is forgotten, use *direct* access *to programming (DAP)* to reset the master code (see pg. 30).
- The *master, super user, common user, visitor, duress*, and *user codes* **cannot be the same**.
- If the keypad is set for *auto code-entry* mode, all codes will need to be the **same number of digits** as the *master code* (see *Programming the User Code Entry Mode* on pg. 26).

The Super User Code

The *super user* code has multiple functions.

- The *super user code* can activate or deactivate output 1 and 2 at any time.
- The *super user code* can toggle operation of output 1 on or off.
- The *super user code* can pause or restart the timed output 1 auto-disable period.
- The *super user code* can also enable or disable output 1. An administrator may want to disable the output in the evening or on the weekend to prevent other users from entering a protected area.

The *super user code* is exempt from system inhibition or lockup functions and is valid at any time.

Programming the Super User Code

1. Make sure the keypad is in *programming mode* (see *Enter and Exit Programming Mode* on pg. 12).
2. Enter the new *super user code*.

   [0][2] [X][X][X][X] [#]

NOTES

- [X][X][X][X] represents the new *super user code*, which can be 4 to 8 digits long.
- There can be **only one *super user code*** for the keypad.
- Programming a new *super user code* will overwrite the previous *super user code*.
- The *master, super user, common user, visitor, duress*, and *user codes* **cannot be the same**.

Deleting the Super User Code

This function is useful for protecting the premises in case the *super user code* is lost or forgotten.

To delete a *super user code.*

1. Make sure the keypad is in *programming mode* (see pg. 12).
2. Enter

   [0][2] [#]

Using the Super User Code

In these examples, assume the *super user code* is 2580.

1. Activate or deactivate output 1 (timed or toggle, depending on programming).

   [2][5][8][0] [#] [1]
2. Activate or deactivate output 2 (timed or toggle, depending on programming).

   [2][5][8][0] [#] [2]

The Super User Code (Continued)

3. Toggle operation of output 1 ON or OFF.

   [2][5][8][0] [#] [7]

   NOTES

   - This function is used to leave output 1 active for extended periods of time.
   - While output 1 remains active, the green LED remains lit.
   - Do not forget to deactivate this function after its use is no longer required.
   - It is recommended to only use this function with fail-safe locks. Fail-secure locks may be damaged by staying activated for too long.
   - All functions requiring use of door sensor input are suspended while this function is in use.

4. To temporarily pause or restart the timed output 1 auto-disable period.

   [2][5][8][0] [#] [8]

   NOTES

   - This function is used to enable the operation of output 1 if it was disabled using the *auto-disable* function (see pg. 24).
   - When the output 1 *auto-disable function* is inactive, the red LED will flash steadily. This indicates that the output may now be used.

5. Disable or enable output 1 (toggle, regardless of programming).

   [2][5][8][0] [#] [9]

   NOTES

   - This is used to prevent users from accessing the protected premises.
   - For more information on programming timed or toggle mode, see *Programming the Output Mode and* Duration on pg. 21.
   - The right red LED will remain steady ON while output 1 is disabled.
   - For safety reasons, the egress button works regardless of whether output 1 is enabled or disabled via the super user code.
   - The *super user code* continues to operate output 1 even while that output is disabled.

Programming a Common User Code

This function* allows a *common user code* to be automatically added to each *user card* as it is programmed. Every *user card* also uses the same *common user code* to operate outputs 1 or 2. This provides greater security than programming the keypad to operate with the card alone. It is also more convenient than assigning each user a *unique user code*, although *unique user codes* offer an even greater degree of security.

1. To program a *common user code* for output 1.

   [0][3] [X][X][X][X] [#]

*The *Common user code* function is supported only on the SK-1123-SPQ

Programming a Common User Code (Continued)

2. To program a *common user code* for output 2.

   [0][4] [X][X][X][X] [#]

3. To delete a *common user code* for output 1

   [0][3] [#]

NOTES

- [X][X][X][X] represents the new *common user code*, which can be 4 to 8 digits long.
- Programming a new *common user code* will overwrite the previous *common user code*.
- A *common user code* is not necessary if unique user codes are assigned.
- The *master, super user, common user, visitor, duress*, and *user codes* cannot be the same.

Programming User Codes and Proximity Cards

When programming *user codes* and/or *user cards**, use this general formula.

[A][A] [B] [C][C][C] [D][D][D][D] [#]

[A] – Output

[B] – Security level (or 5, to delete a *user code* or *card**)

[C] – *User ID*

[D] – *User code* / proximity *card**

Outputs

- [1][0] – Output 1, up to 1,000 possible *user codes* and/or *user cards*
- [2][0] – Output 2, up to 100 possible *user codes* and/or *user cards*

Security Levels and Card*/Code Deletion

There are four possible security levels for the keypad.

- [1] **Card only*** – The most basic, convenient level of security. Just tap a previously-programmed *user card* over the keypad to activate outputs 1 or 2.
  NOTE: The *duress code* feature cannot be used with the keypad programmed to the "card only" security mode. However, a *duress code* can be entered instead of a card.
- [2] **User code only** – Type in a 4 to 8-digit *user code* to activate outputs 1 or 2.
- [3] **Card + unique user code*** – The most secure level. This code is programmed separately for each *user card* and can be unique to the card, or the same code can be used for a group or department. The *card* and *code* must be used together to operate the output.

*Proximity cards are supported only on the SK-1123-SPQ

Programming User Codes and Proximity Cards (Continued)

- [4] **Card + common user code*** – All valid *user cards* can be programmed with a single *common user code* so that outputs 1 or 2 can only be activated if one of the *user cards* and the *common user code* are used together. The *common user code* is automatically assigned as each *user card* is programmed into the keypad.
- [5] – Delete a programmed *user card** or *user code*.
- [0][9][9][9] – Delete all programmed *user cards** or *codes* for the selected output.

User IDs

- [0][0][0] to [9][9][9] – 1,000 unique *user IDs* for *user codes* and *cards** for output 1
- [0][0][1] to [1][0][0] – 100 unique *user IDs* for *user codes* and *cards** for output 2

User Codes

- A *user code* can be 4 to 8 digits long and must have the same length as the *master code* if the keypad is used in *auto-entry mode* (see *Programming the User Code Entry Mode* on pg. 26).
- The *master, super user, common user, visitor, duress,* and *user codes* **cannot be the same**.

Examples

1. Program only a *user card* for *user ID* #017 for output 1.*

   [1][0] [1] [0][1][7] ***READ CARD*** [#]

2. Program *user code* 2275 for *user ID* #010 for output 1.

   [1][0] [2] [0][1][0] [2][2][7][5] [#]

3. Delete a *user card* for output 1

   [1][0] [5] ***READ CARD*** [#]

4. Delete *code* or *card* for *user ID* #002 for output 1.

   [1][0] [5] [0][0][2] [#]

5. Delete all users for output 1.

   [1][0] [0][9][9][9] [#]

6. Program a *user card* for *user ID* #001 for output 1 for use with a *common user code**.

   [1][0] [4] [0][0][1] ***READ CARD*** [#]

   NOTE: A *common user code* must already be programmed to the output (see pg. 16).

7. Program a *user card* for *user ID* #023 for output 2 for use with a *unique user code**.

   [2][0] [3] [0][2][3] ***READ CARD*** [2][4][6][8] [#]

*Proximity cards are supported only on the SK-1123-SPQ

Programming Visitor Codes

Visitor codes are temporary codes that expire after use or after a specified amount of time has elapsed. While active, they operate output 1 as normal *user codes*.

NOTES

- *Visitor codes* cannot be used to deactivate the duress output (see *Operating Duress Codes* on pg. 21).
- If a *visitor code* is programmed using a number previously programmed as a *user code*, the *visitor code* will be kept and the *user code* will be replaced.
- If the keypad is powered down, any programmed *visitor codes* will be deleted.

When programming *visitor codes*, use this general formula.

[4][0] [A][A] [B][B] [C][C][C][C] [#]

[4][0] – Program *visitor codes*

[A] – *Visitor ID*

[B] – Valid duration (hours)

[C] – *Visitor code*

Visitor IDs

- [0][1] to [5][0] – 50 unique *visitor IDs* for *visitor codes* for output 1
- [0][9][9][9] – Delete all currently programmed *visitor codes*.

Valid Duration

- [0][0] – Set a one-time code. This code can only be used once by a visitor, after which it is automatically deleted.
- [0][1] to [9][9] – Set the duration the *visitor code* will be valid, from 1 to 99 hours.

Visitor Codes

- A *visitor code* can be 4 to 8 digits long and must have the same length as the *master code* if the keypad is used in *auto entry mode* (see *Programming the User Code Entry Mode* on pg. 26).

Examples

1. Set the *visitor code* for ID #1 to 1268 and make it a one-time code.
   [4][0] [0][1] [0][0] [1][2][6][8] [#]
2. Set the *visitor code* for ID #2 to 1378 and make it valid for three hours.
   [4][0] [0][2] [0][3] [1][3][7][8] [#]
3. Delete the *visitor code* for ID #2 from memory.
   [4][0] [0][2] [#]
4. Delete all currently programmed *visitor codes*.
   [4][0] [0][9][9][9] [#]

Programming Duress Codes

Duress codes allow users to trigger a silent alarm or alert if forced to allow access to a protected area. If a user uses a *duress code* instead of their normal *user code*, outputs 1 or 2 will activate as normal, but the duress output will simultaneously activate to trigger a silent alarm or alert.

NOTES

- *Duress codes* are always valid and are not inhibited by any other operation of the keypad.
- *Duress codes* cannot be the same as any other codes.
- *Duress codes* can be used either as stand-alone codes or in conjunction with a *user card**, depending on how the *user codes* are programmed (see *Programming User Codes and Proximity Cards* on pg. 17).
- The *duress code* should be easy to remember. For instance, it can be the same as a user's normal *user code*, but with a single digit changed, such as subtracting or adding 1 to the first or last digit of the code. For example, if the *user code* is 1369, a good *duress code* might be 2369.

When programming *duress codes*, use this general formula.

[4][A] [B][B] [C][C][C][C] [#]

[A] – Output

[B] – *Duress ID*

[C] – *Duress code*

Outputs

- [4][1] – Output 1
- [4][2] – Output 2

Duress IDs

- [0][1] to [5][0] – Up to 50 *duress IDs* can be programmed for output 1.
- [0][1] to [1][0] – Up to 10 *duress IDs* can be programmed for output 2.
- [0][9][9][9] – Delete all currently programmed *duress IDs* for the selected output.

Duress Codes

- A *duress code* can be 4 to 8 digits long and must have the same length as the *master code* if the keypad is used in *auto-entry mode* (see *Programming the User Code Entry Mode* on pg. 26).

*Proximity cards are supported only on the SK-1123-SPQ

Programming Duress Codes (Continued)

Examples

1. Set the *duress code* for ID #01 for output 1 to 2369.

   [4] [1] [0] [1] [2] [3] [6] [9] [#]

2. Set the *duress code* for ID #01 for output 2 to 23980.

   [4] [2] [0] [1] [2] [3] [9] [8] [0] [#]

3. Delete the *duress code* for ID #01 for output 1 from memory.

   [4] [1] [0] [1] [#]

4. Delete all *duress codes* for output 1 from memory.

   [4] [1] [0] [9] [9] [9] [#]

Operating Duress Codes

If a *duress code* is used in place of a normal *user code*, both the appropriate outputs 1 or 2 and the duress output will be activated. However, a *duress code* **cannot** deactivate the duress output.

Only a **normal *user code/card****, ***super user code***, or a ***master code*** can deactivate the duress output.

NOTE: A *duress code* can also be used in conjunction with a *use card* to activate the duress output. However, a *user card* alone cannot activate the duress output.

Examples

In these examples, assume that 2369 is an output 1 *duress code* and that 1369 is a *user code*.

1. Activate the duress output and output 1 using the *duress code*:

   [2] [3] [6] [9] [#]

   NOTE: Subsequently entering the *duress code* will activate output 1 again but will not deactivate the duress output.

2. Deactivate the duress output using the *user code*.

   [1] [3] [6] [9] [#]

3. Activate the duress output and activate output 1 using the *duress code* and a *user card**.

   READ CARD [2] [3] [6] [9] [#]

*Proximity cards are supported only on the SK-1123-SPQ

Programming the Output Mode and Duration

The relay for the outputs 1 and 2 can be programmed to trigger ON and OFF with a user code or user card* (toggle mode), or to trigger for a programmed length of time of up to nearly 28 hours before automatically turning OFF. The toggle or timed outputs can be used for locking or unlocking a door or for a variety of functions that can be controlled with the keypad.

When programming the output mode and duration, use this general formula.

[A][A] [B][B][B][B][B] [#]

[A] –Output

[B] – *Output mode and duration*

Outputs

- [5][1] – Output 1
- [5][2] – Output 2

Output Mode and Duration

- [0] – Start/stop (toggle) mode. In this case, the output starts when a *user code* and/or *user card** is entered and stops when a *user code* and/or *user card** is entered.
- [1] to [9][9][9][9][9] – The output triggered by a *user code* and/or *user card** lasts 1 to 99,999 seconds (nearly 28 hours) before automatically turning off (default 5 seconds).

NOTE: While the keypad is in momentary timed output mode, the output can be reset any time by entering the *super user code*.

Examples

In these examples, assume that the *super user code* is 2580.

1. In *programming mode*, set output 1 to toggle.
   [5][1] [0] [#]
2. In *programming mode*, set output 2 to 60 seconds.
   [5][2] [6][0] [#]
3. Reset output 1 timer.
   [2][5][8][0] [#] [1]
4. Reset output 2 timer.
   [2][5][8][0] [#] [2]

*Proximity cards are supported only on the SK-1123-SPQ

Programming the Real-Time Clock

A 24-hour *real-time clock* provides the baseline time needed to start and stop the output 1 *auto-disable time* (see *Programming the Auto-Disable Time* on pg. 24).

If the output 1 *auto-disable time* is not programmed, it is not necessary to set the *real-time clock*.

To set the clock, use this general formula.

[5][5] [H][H][M][M] [#]

[5][5] – Program *real-time clock*

[H][H] – Hours

[M][M] – Minutes

Setting Hours and Minutes

- [H][H] represents hours and [M][M] represents minutes in the military (24-hour) time format, from 00:00 to 23:59.

Examples

1. Set the *real-time clock* to 11:30 AM.
   [5][5] [1][1][3][0] [#]
2. Set the *real-time clock* to 7:15 PM.
   [5][5] [1][9][1][5] [#]

NOTES

- To ensure accurate time, it is advised to re-program the *real-time clock* every three to six months and when Daylight Savings Time begins and ends (if applicable).
- If the *auto-disable time* is programmed, losing power will cause the keypad to beep 3 times every 5 seconds. To deactivate this alert, either reset the *real-time clock* or clear the *auto-disable time*.
- If the *auto-disable time* is not programmed, losing power will not cause the keypad to beep.

Programming the Auto-Disable Time

The keypad can be programmed so that output 1 is disabled for a certain period every day. Output 1 will be disabled at the start time and will be re-enabled at the end time. This ensures that users are not allowed into the protected premises, such as during lunch hour or at night.

NOTES

- The *real-time clock* must be operating to set the output *auto-disable time* (see *Programming the Real-Time Clock* on pg. 23).
- For safety purposes, the egress button still works while output 1 is auto-disabled.
- The time is set using the military (24-hour) time format (00:00 to 23:59).
- If the programmed start time is before the end time, output 1 is auto-disabled within a single day. If the programmed start time is after the end time, the end time will be on the following day.
- The start time and end time cannot be the same.
- The *auto-disable time* can be temporarily paused and restarted using the *super user code* (see *Programming the Super User Code* on pg. 15).
- During the *auto-disable time*, the *super user code* can be used to operate output 1.
- The red LED will remain lit during the *auto-disable time*.

When programming the *auto-disable time*, use this general formula.

[5][6] [H][H][M][M] [H][H][M][M] [#]

[5][6] – Program *auto-disable time* for output 1

[H][H][M][M] – Start time

[H][H][M][M] – End time

Start Time

- Start time for the *auto-disable time*. [H][H] represents hours and [M][M] represents minutes in the military (24-hour) time format, from 00:00 to 23:59.

End Time

- End time for the *auto-disable time*. [H][H] represents hours and [M][M] represents minutes in the military (24-hour) time format, from 00:00 to 23:59.

Examples

In these examples, assume that the super user code is 2580.

1. In *programming mode*, set the *auto-disable time* from 12:00 PM to 1:00 PM.
   [5][6] [1][2][0][0] [1][3][0][0] [#]

2. In *programming mode*, set the *auto-disable time* from 6:30 PM to 7:30 AM the following day.
   [5][6] [1][8][3][0] [0][7][3][0] [#]

Programming the Auto-Disable Time (Continued)

3. In *programming mode*, clear the *auto-disable time*.

   [5][6] [#]

4. Temporarily pause or resume the *auto-disable time*.

   [2][5][8][0] [#] [8]

5. Activate output 1 during the *auto-disable time* (i.e., open the protected door).

   [2][5][8][0] [#] [1]

Programming the Wrong-Code System Lockup

The keypad can be programmed to lock up to secure the premises against unauthorized entry if multiple wrong codes are entered or multiple wrong cards* are tapped.

When programming the *wrong-code system lockup*, use this general formula.

[6][0] [A][A] [#]

[6][0] – Program *wrong-code system lockup*

[A][A] – Lock options

Lock Options

Choose from several different options for the *wrong-code system lockup* security level.

- [1] – After 10 successive false attempts using incorrect *user codes* or *user cards**, the keypad will lock for 60 seconds (default).
- [2] – After 10 successive false attempts using incorrect *user codes* or *user cards**, the duress output will activate. The duress output can be deactivated using any output 1 *user code* or *user card**, or via the *super user code*.
- [5] to [1][0] – After 5 to 10 successive false attempts using incorrect *user codes* or *user cards**, the keypad will lock for 15 minutes or until the *super user code* is used as follows.

  SUPER USER CODE [#] [9]
- [0][0] – No system lock-up will happen.

NOTES

- The keypad's red LED will remain lit to show that the keypad is locked.
- The *duress code* will still function in this mode.

*Proximity cards are supported only on the SK-1123-SPQ

Programming the User Code Entry Mode

The keypad can be programmed for auto- or manual user code entry modes.

- **Auto-entry mode** – Pressing the [#] key is not required after typing in a *user code*. In auto entry mode, all *user codes* must have the same number of digits as the *master code*.
- **Manual-entry mode** – The [#] key must be pressed after the *user code* to indicate the code has been entered completely. In this case, the *user codes* can have a different number of digits, from 4 to 8 digits.

To Program

- For auto-entry mode

  [7] [0] [1] [#]

- For *manual-entry mode* (default)

  [7] [0] [2] [#]

NOTE: If the keypad was previously programmed for *manual-entry mode* and then is reprogrammed for *auto-entry mode*, any codes whose length exceeds the number of digits of the *master code* will no longer operate the keypad. However, if the keypad is reprogrammed for *manual-entry mode*, the longer codes will again operate the keypad.

Programming the Keypad Sounds

Some of the keypad sounds can be programmed off.

- **Keypad-audible mode** – All the keypad's status beeps are enabled.
- **Keypad-silent mode** – The successful key entry beep (1 beep) and the unsuccessful *user code* or *card** entry beeps (5 beeps) are disabled. However, the warning and power-up delay beeps remain active. This provides for a quieter work environment.

To Program

- To enable *keypad-audible mode* (default)

  [7] [1] [1] [#]

- To enable *keypad-silent mode*

  [7] [1] [0] [#]

NOTE: This programming function only impacts the keypad sounds. It does not impact the output relay activation sounds (see *Programming the Output Relay Activation Sounds* on pg. 27).

*Proximity cards are supported only on the SK-1123-SPQ

Programming the Output Relay Activation Sounds

The keypad output sounds can be programmed for one of three modes.

1. **No beeps** – The keypad will not beep when the output is activated.
   [7] [2] [0] [#]

2. **1-second beep** (default) – The keypad will beep for 1 second when the output is activated.
   [7] [2] [1] [#]

3. **2 short beeps** – The keypad will beep twice when the output is activated.
   [7] [2] [2] [#]

NOTE: This programming function only impacts the output relay activation sounds. It does not impact the keypad sounds (see *Programming the Keypad Sounds* on pg. 26).

Programming the Amber LED in Standby Mode

The keypad's amber LED typically flashes while the keypad is in *standby mode* but can be programmed off if needed.

1. Enable amber LED flashing during *standby mode* (default).
   [7] [3] [1] [#]

2. Disable amber LED flashing during *standby mode*.
   [7] [3] [0] [#]

Programming the Door-Forced-Open Warning/Duration

If the keypad is connected to an optional magnetic contact or other door protection switch or device, the keypad can be programmed to beep when a door has been forced open. The keypad beep can be set to activate for 1 to 999 seconds.

1. *Door-forced-open warning* OFF (default)

   [8] [0] [0] [#]

2. *Door-forced-open warning* ON and duration

   [8] [0] [T] [T] [T] [#]

NOTES

- [T] [T] [T] represents the beep active duration, which can be set from 1 to 999 seconds.
- If programmed for *door-forced-open warning*, the keypad will beep if the door is forced open without using either a valid *user code* and/or *card** or the egress button. The keypad will not beep if the door is opened with a valid *user code* and/or *card** or the egress button.

Programming the Door-Propped-Open Warning/Delay

If the keypad is connected to an optional magnetic contact or other door protection switch or device, the keypad can be programmed to beep when a door has been propped open beyond a set duration. This prompts authorized users to close a door that was not closed properly or to investigate a door that may have been deliberately propped open.

1. *Door-propped-open warning* OFF (default)

   [8] [1] [0] [#]

2. *Door-propped-open warning* ON and duration

   [8] [1] [T] [T] [T] [#]

NOTES

- [T] [T] [T] represents the delay duration, which can be set from 1 to 999 seconds.
- The delay time provides time for a door to close normally before triggering the *door-propped-open warning*.
- The *door-propped-open warning* beeping will stop when the open door is closed.

*Proximity cards are supported only on the SK-1123-SPQ

Programming the Egress Delay/Warning

With most keypads, the egress button provides a simple way for someone inside a protected area to exit through a locked door by pressing a button instead of using a keypad. However, in some situations, delaying the egress operation and/or providing some warning when the egress button is used is desirable.

For example, in hospitals or schools, it may be desirable to delay the egress operation and provide a warning to prevent patients or young children from easily leaving the protected area.

For simple egress with no delay or warning, do not change this setting. It is disabled by default.

When programming the egress delay/warning, use this general formula.

[9][0] [A] [B][B] [#]

[9][0] – Program *egress delay/warning*

[A] – Egress mode

[B][B] – Delay duration

Egress Modes

There are four possible egress operation configurations.

- [1] **Momentary contact with no warning** (default) – Press the egress button momentarily for silent egress operation immediately or after the programmed delay.
- [2] **Momentary contact with warning beep** – Press the egress button momentarily. The keypad will beep for the programmed delay duration to warn that someone is preparing to exit the protected area before allowing the door to open.
- [4] **Hold contact with no warning** – Press and hold the egress button for the programmed delay until the door opens. This prevents accidental opening of the door.
- [5] **Hold contact with warning beep** – Press and hold the egress button for the programmed delay until the door opens. The keypad will beep during the delay to warn that someone is preparing to exit the protected area before allowing the door to open.

NOTE: When the egress button is programmed to hold for a delay before the door is released, it is important to post a sign near the egress button to notify users of the delay time.

Delay Time

- [0] – No delay (default)
  Output 1 operates immediately when the egress button is pressed.
- [1] to [9][9] – Egress button delay duration
  The delay duration can be set from 1 to 99 seconds. This tells the keypad how long to wait after the egress button is pressed before activating output 1.

Programming the Egress Delay/Warning (Continued)

Examples

1. Momentary mode – Press the egress button, and the keypad will beep for 5 seconds before output 1 activates.

   [9][0] [2] [5] [#]

2. Hold button to activate – Press and hold the egress button for 10 seconds, and the keypad will beep for those 10 seconds before output 1 activates.

   [9][0] [5] [1][0] [#]

3. Return to default setting – Press the egress button to activate output 1 with no beep or delay.

   [9][0] [1] [0] [#]

NOTE: For safety and to avoid confusion, when a delay or a press-and-hold delay is programmed, please post a notice near the egress button, such as "Press and hold the button for 5 seconds or until the door is unlocked."

Direct Access to Programming

Direct access to programming (DAP) is used to reset the master code if it is forgotten. DAP will not change the programming of the keypad in any other way.

To Use DAP

1. Disconnect the keypad's power.
2. Wait one minute to ensure that the keypad's power is fully discharged.
3. Reconnect the power. The keypad will beep repeatedly for one minute.
4. While the keypad is beeping, press the egress button once to stop the beeping.

   NOTE: If no egress button is installed, use a small jumper wire to momentarily connect the egress input and common ground terminals.

5. Enter the *DAP* code.

   [2][8][2][8] [*][*]

6. The amber LED will now turn ON, indicating that the keypad is ready for a new master code to be programmed.

NOTES

- See *Programming the* Master *Code* on pg. 14 for how to program a new *master code*.
- *Direct access to programming (DAP)* will not reset the keypad's programming. It will only enter *programming mode* to program a new *master code*.
- For a complete system reset, see *System Restore* on pg. 14.

Users' Guide to Operating the Keypad

See *Programming the Master Code* on pg. 14 and *Programming the Super User Code* on pg. 15 for functions specific to those authorized to use those codes.

Opening the Door

In these examples, assume that the *user code* is 2275, the *common user code* is 3526, and a *unique user code* is 2468.

- **Security level 1** – card only*.
  READ CARD
  One long beep indicates that the door can be opened.
- **Security level 2** – code only
  [2][2][7][5] [#]†
  One long beep indicates that the door can be opened.
- **Security Level 3** – Card + *common user code**.
  READ CARD
  Two short beeps and a rapidly flashing amber LED indicates the *user card* is accepted and the keypad is waiting for the *common user code*.
  [3][5][2][6] [#]†
  One long beep indicates that the door can be opened.
- **Security Level 4** – Card + *unique user code**
  READ CARD
  Two short beeps and a rapidly flashing amber LED indicates the *user card* is accepted and the keypad is waiting for the *user code*.
  [2][4][6][8] [#]†
  One long beep indicates that the door can be opened.

NOTE: For more information on security levels, please see *Getting Ready to Program* on pg. 11.

Operating the Egress Button

Press the egress button from inside the protected premises to unlock the door and exit without using the keypad.

NOTE: For more information on programming the Egress button, please see *Programming the Egress Delay/Warning* on pg. 29.

*Only applicable on the SK-1123-SPQ

†The # key is not needed if the keypad is programmed for auto entry mode. See pg. 26.

Accessories

Proximity Cards

(sold in packs of 10)
PR-K1S1-A

Proximity Key Fobs

(sold in packs of 10)
PR-K1K1-AQ

Installer Notes

Warranty and Notices

FCC COMPLIANCE STATEMENT **For SK-1123-SPQ** **FCC ID: K4E1123SPQ**

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

IMPORTANT WARNING Incorrect mounting which leads to exposure to rain or moisture inside the enclosure could cause a dangerous electric shock, damage the device, and void the warranty. Users and installers are responsible for ensuring that this product is properly installed and sealed.

IMPORTANT Users and installers of this product are responsible for ensuring that the installation and configuration of this product complies with all national, state, and local laws and codes. SECO-LARM will not be held responsible for the use of this product in violation of any current laws or codes.

California Proposition 65 Warning These products may contain chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

LIMITED LIFETIME WARRANTY This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for the lifetime of the product. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM. This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship. The sole obligation of SECO-LARM and the purchaser's exclusive remedy, shall be limited to the replacement or repair only, at SECO-LARM's option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damage of any kind to the purchaser or anyone else. For all other countries the warranty is 1 (one) year.

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