Outdoor Stand-Alone Weatherproof Keypads

Manual

(SK-2323-SDQ shown)

(SK-1323-SPQ shown)

Model Number	2 Relay Outputs	Backlit Keys	Proximity Reader
Mullion-Style Keypads			
SK-2323-SDQ	✓	✓	
SK-2323-SPQ	✓	✓	✓
Sealed-Environment Keypads			
SK-1323-SDQ	✓	✓	
SK-1323-SPQ	✓	✓	✓

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Features:

- 12~24 VAC/VDC operation
- 1,010 User codes
- 2 Form C relays, each rated 1A@30VDC
- Each relay has programmable output time from 1~99 seconds or toggle
- Output #2 can be programmed for use with a doorbell
- 2 Egress inputs for exiting the premises without keying in the code
- Backlit keys for easy nighttime use
- Able to mount to a single-gang back box
- Door sensor input for anti-tailgating operation
- All features are programmed directly from the keypad - no need for an external programmer
- EEPROM memory protects programmed information in case of power loss
- Optical tamper for added security
- Circuitry is potted with epoxy for outdoor use
- IP65 weatherproof rating, rugged aluminum construction
- Built-in proximity card reader (SK-2323-SPQ and SK-1323-SPQ only)

Specifications:

Operating voltage		12~24 VAC/VDC
Current draw	Standby	64mA@12VDC
	1 Relay active	92mA@12VDC
	2 Relays active	120mA@12VDC
Relay outputs	Output #1	1A@30VDC, Form C, NO/NC/COM
	Output #2	1A@30VDC, Form C, NO/NC/COM
Egress inputs	Input #1	N.O. Ground
	Input #2	N.O. Ground
Door sensor input		N.C. Ground
Tamper sensor		Optical
Operating temperature		-4°~122° F (-20°~50° C)
Keypad LED life		60,000 hours (over 6.8 years)
Weight	SK-1323 Series	1-lb 2-oz (510g)
	SK-2323 Series	11-oz (312g)
Proximity reader frequency (SK-2323-SPQ and SK-1323-SPQ only)		125kHz
Proximity reader read distance (SK-2323-SPQ and SK-1323-SPQ only)		2" (5cm)

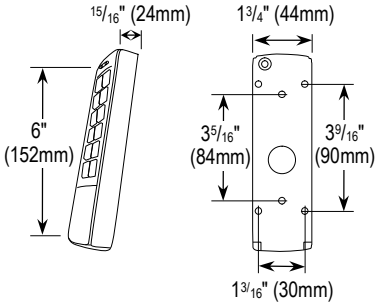
Accessories:

PR-K1K1-AQ: Proximity key fobs (Sold in packs of 10)

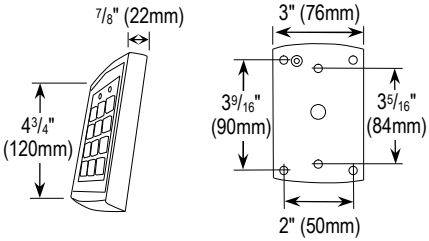
PR-K1S1-A: Proximity cards (Sold in packs of 10)

Dimensions:

SK-2323 Series



SK-1323 Series



Parts List:

1x Keypad	4x Mounting screws	1x Security screw	1x Mounting template	2x Diodes
1x Manual	4x Screw anchors	1x Star wrench	2x Metal oxide varistors (MOV)	

LED & Audible Indicators:

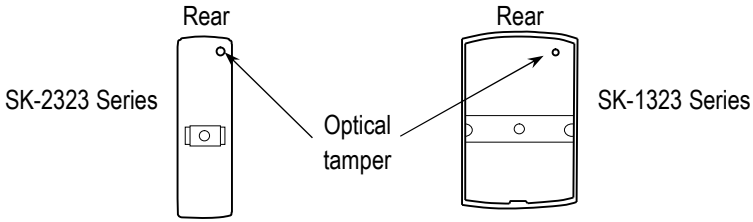
Left LED	Right LED	Keypad Status
OFF	Green	Power ON
OFF	Orange	Programming Mode
Green	Orange flashing	Waiting to program code/card* (card+code access mode)
Red	Orange flashing	Code/card* already present
Green	Green	Relay 1 activated
Red	Green	Relay 2 activated
Orange	Green	Relay 1 and 2 both activated
Orange	Orange	Restoring factory defaults
Green flashing	Green	Waiting for code/card entry* (card+code access mode)
OFF	OFF	Power OFF / Clearing user codes

Audible Tones	Keypad Status
1 Long tone	Confirmation
1 Short tone	Key press
2 Short tones	Invalid entry
3 Short tones	User code/card denied
Constant short tones	Alarm triggered
6 short + 1 long tone	All user codes deleted
No tone when key is pressed	Wrong code lockout

*Card operation with SK-2323-SPQ and SK-1323-SPQ only.

Optical Tamper:

There is an optical tamper on the rear of each unit. If the sensor detects light, the tamper alarm will sound. For information on how to program the optical tamper, please see pg. 13, *Programming the Optical Tamper*.

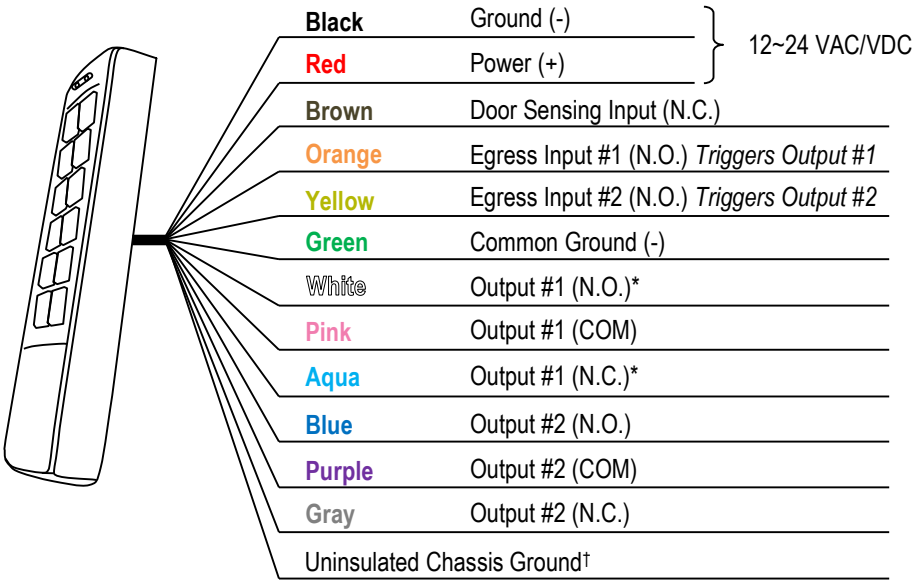


Important Notes:

IF USING THE KEYPAD WITH A MECHANICALLY OPERATED DOOR OR GATE, MOUNT THE KEYPAD AT LEAST 5' (15m) 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.
2. The keypad must be properly grounded. Use a minimum 22AWG wire connected to the Uninsulated Chassis Ground wire. Failure to do so may damage the keypad.
3. All wiring and programming should be done by a professional installer to reduce the risk of improper installation.
4. Basic keypad functions are located on pg. 16 of this manual. Be sure to store this manual in a safe place for future reference.
5. If using VAC, use the Green Common Ground wire for all sensor input.

Basic Wiring Diagram:



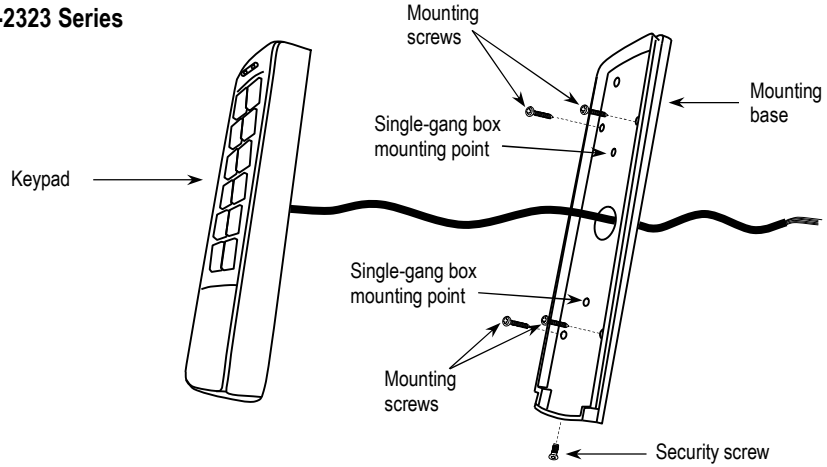
SK-2323 series shown. Wiring is the same for both series.

*See pg. 6 for instructions on using the included diode/varistor.

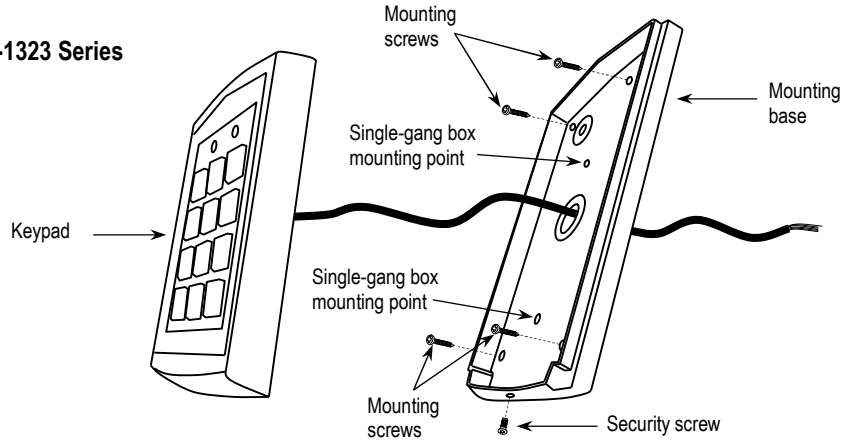
†**Chassis Ground:** Connect a continuous wire from the Uninsulated Chassis Ground wire to a grounding point to avoid damage from static discharge. A good grounding point could include a grounded metal conduit, a cold-water pipe, or a grounding rod. Use 18AWG wire for earth ground for best results. Wire used must be at least 22AWG.

Installation:

SK-2323 Series



SK-1323 Series



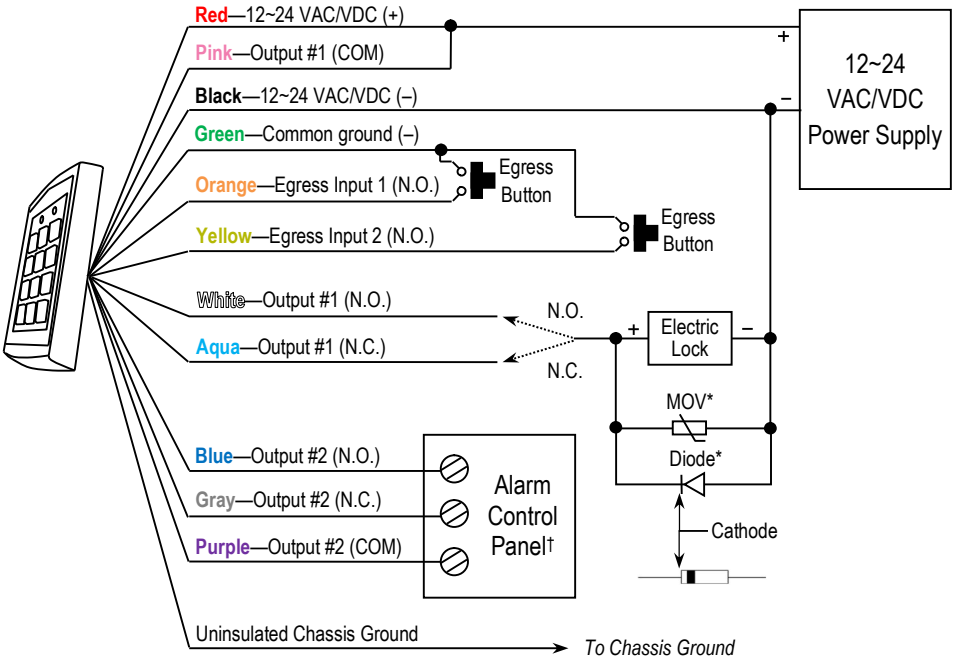
1. Find a suitable location to mount the keypad. Do not install where it will be too high or too low for most users to operate the keypad.
2. Using the included star wrench, unscrew the security screw located on the bottom of the keypad's mounting base.
3. Carefully remove the keypad from the mounting base.
4. Drill holes in the 4 designated mounting points located on the mounting base. If needed, use the included mounting template.
5. Using the 4 included mounting screws, secure the mounting base to a wall or other mounting surface. If mounting to brick or drywall, it may be necessary to use the included screw anchors.
6. If the installation is using surface wiring, mount the keypad to a single-gang box using the 2 single-gang box mounting points.
7. Connect each of the wires that will be used to operate the keypad according to the wiring diagram below. Be sure to carefully check whether a diode or MOV is needed for your installation.
8. Reattach the keypad to the mounting base.
9. Use the included star wrench to tighten the security screw and secure the keypad to the base.

Sample Wiring and Applications:

(SK-1323 series shown. All examples apply to both the SK-1323 and SK-2323 series.)

NOTE: Sample applications are based on VDC power supplies.

Connection to Lock Device and Alarm System Arm/Disarm Control:

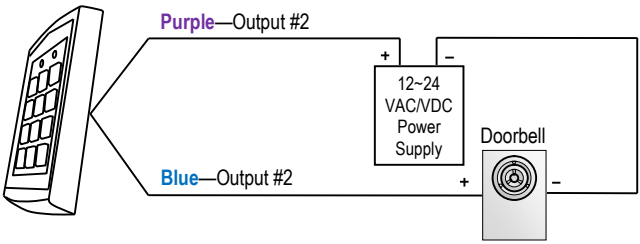


*To protect the relay, you must install the enclosed diode—with the cathode (striped end ——▮——) toward the positive side—for DC powered locks **OR** install the varistor (MOV) ⟹● for AC powered locks and for electromagnetic locks ***unless*** *your lock has a diode/MOV built in* (all SECO-LARM electromagnetic locks have built-in protection). A second diode and MOV is included for output 2 in case it may also be connected to a second lock. Failure to use these as directed will void the warranty.

†Output #2 controls the arm/disarm of the alarm control panel. Consult the alarm control panel manual for more information.

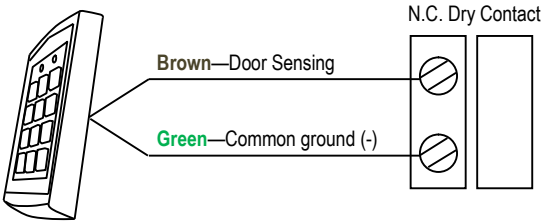
Connecting to a Doorbell:

If the keypad is connected to a doorbell, press ✱ to activate the doorbell. The doorbell output lasts 1 second. For instructions on programming the keypad for doorbell, see pg. 13, *Programming the Output #2 Function*.

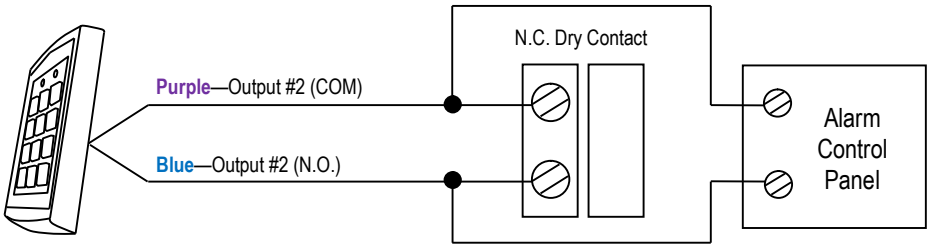


Door Sensing:

The door sensing input is used for anti-tailgating. When used with a N.C. magnetic contact the relay will de-energize one second after the door has been closed. This will bypass any existing relay timing.



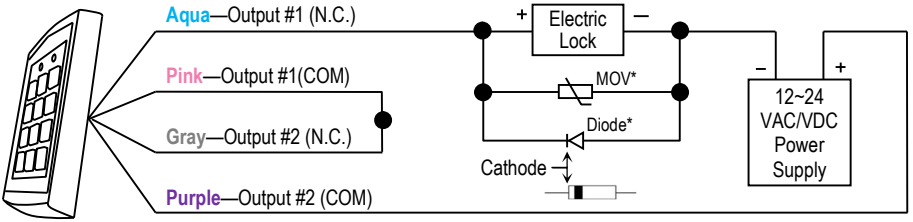
Shunting an Alarm N.C. Zone:



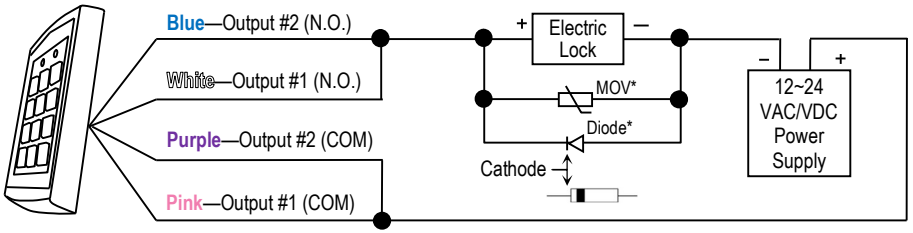
Door-Hold-Open Code:

Output #1 and Output #2 can be wired together in such a way that electric lock devices remain unlocked as long as Output #2 is activated.

For N.C. Locking Devices



For N.O. Locking Devices



*Connect the included diode—with the cathode (striped end ——▮——) toward the positive side—for DC powered locks **OR** the metal oxide varistor (MOV ——⬭——) for AC powered locks and for electromagnetic locks ***unless*** *your lock has a diode/MOV built in* (all SECO-LARM electromagnetic locks have built-in protection). Failure to use these as directed will void the warranty. See pg. 6 for details.

User Control Chart:

Output #1: Toggle / Timed (____ sec.) Programmed for ________________________________

User ID	User Name	Access Code	User ID	User Name	Access Code

User Control Chart (Continued):

Output #1: Toggle / Timed (____ sec.) Programmed for _____

User ID	User Name	Access Code	User ID	User Name	Access Code

Output #2: Toggle / Timed (____ sec.) Programmed for _____

User ID	User Name	Access Code	User ID	User Name	Access Code
00			**05**		
01			**06**		
02			**07**		
03			**08**		
04			**09**		

NOTE: Copy these two pages to keep records of your installations.

Programming Instructions:

1. **Codes are programmed to be 2~6 digits in length. All codes must be the same length.**
2. **Before inputting any of the following, enter Programming Mode by entering the Master Code twice.** The default Master Code is 1234.
   To enter Programming Mode, enter [1] [2] [3] [4] [1] [2] [3] [4]
3. **To exit Programming Mode, press the [#] key.**
4. **The keypad will exit Programming Mode if no keys are pressed for 30 seconds.**

Programming Tips:

- Program a new Master Code immediately.
- Take note of the keypad status LEDs—
  - **Right LED Solid Green:** Standby Mode
  - **Right LED Solid Orange:** Programming Mode
  - **Left LED Solid Green / Right LED Flashing Orange:** Awaiting code/card entry
- If you are unsure of which mode the keypad is in, press [#] until the right LED is green. The keypad is now in the Standby Mode. Enter the master code twice to return to Programming Mode.

First Time Keypad Use:

Take these steps the first time the keypad is programmed.

A. Enter Programming Mode

Enter: [1] [2] [3] [4] [1] [2] [3] [4] *(Default Master Code is **1234**).*

B. Program Code Length

NOTE: To keep the default 4-digit code length, skip to step C, *Program the Master Code*.

WARNING: After a new code length is programmed, all user codes will be deleted and the master code will be reset.

1. Enter Programming Mode by entering the Master Code twice. (Default Master Code is ***1234***).
2. Enter [*] [9] [0] [4].
3. Enter the desired code length. This must be a number from 2~6.
4. Exit Programming Mode by pressing [#].

NOTE: The Master Code will reset depending on the programmed code length. These will be the new Master Codes after the code length is reset:

Code Length	New Master Code
2 digits	12
3 digits	123
4 digits	1234

Code Length	New Master Code
5 digits	12345
6 digits	123456

C. Program the Master Code

1. Enter Programming Mode by entering the Master Code twice. (Default Master Code is ***1234***).
2. Enter [*] [3].
3. Enter the new Master Code twice. The Master Code may not be the same as a user code.
   Example: If the desired new Master Code is **4321**, enter: [4] [3] [2] [1] [4] [3] [2] [1]
4. Exit Programming Mode by pressing [#].

*SK-2323-SPQ and SK-1323-SPQ only.

D. Program the Master Card (SK-1323-SPQ and SK-2323-SPQ only)

In addition to a Master Code, a Master Card can also be programmed. Swiping a Master Card will give direct access to Programming Mode.

1. Enter Programming Mode by entering the Master Code twice. (Default Master Code is ***1234***)
2. On the keypad, enter [*] [7].
3. If the left LED is solid green and the right LED is flashing orange, a Master card is already programmed. Clear it by entering [*] [*]. The keypad will beep in confirmation and the left LED will start flashing green.
4. Swipe a proximity card (PR-K1S1A or similar). This card is now the Master Card.
5. Exit Programming Mode by pressing [#].

E. Setting the Output #1 Access Mode*

DEFAULT: User card <u>OR</u> user code.

1. Enter Programming Mode by entering the Master Code twice.
2. Enter [*] [0].
3. Enter one of the following:
   - [0] [0] ***User card ONLY***
   - [0] [1] ***Either user card <u>OR</u> user code (DEFAULT)***
   - [0] [2] ***User card <u>AND</u> user code***

NOTE: Deleting all users is recommended before changing the access mode to user card with user code. See pg. 14, *Deleting All Users*.

4. Exit Programming Mode by pressing [#].

Programming Output #1:

Each Output #1 user can be programmed to have a user code, a user card, or both user code and card.*

NOTE: For all of the following programming functions, the keypad must be in Programming Mode. To enter Programming Mode, enter the Master Code twice.

A. Programming User Codes

1. Enter a user ID number. ([0] [0] [0] to [9] [9] [9])
2. If the left LED is red, previous user data exists. Clear it by entering [*] [*]. The keypad will beep in confirmation and the left LED will turn green.
3. Enter a new user code.
4. To program the next user, repeat from step 1 in section A, B, or C.
5. Exit Programming Mode by pressing [#].

B. Programming User Cards*

1. Enter a user ID number. ([0] [0] [0] to [9] [9] [9])
2. If the left LED is red, previous user data exists. Clear it by entering [*] [*]. The keypad will beep in confirmation and the left LED will turn green.
3. Swipe a new user card.
4. Return to Programming Mode by pressing [#].
5. To program the next user, repeat from step 1 in section A, B, or C.
6. Exit Programming Mode by pressing [#] again.

*SK-2323-SPQ and SK-1323-SPQ only.

Continued from pg. 11.

C. Programming Both User Codes and Cards*

1. Enter a user ID number. ([0] [0] [0] to [9] [9] [9])
2. If the left LED is red, previous user data exists. Clear it by entering [*] [*]. The keypad will beep in confirmation and the left LED will turn green.
3. Swipe a new user card.
4. Enter a new user code.
5. To program the next user, repeat from step 1 in section A, B, or C.
6. Exit Programming Mode by pressing [#].

Programming Output #2:

Each Output #2 user may only have a user code OR a user card programmed.

NOTE: For all of the following programming functions, the keypad must be in Programming Mode. To enter Programming Mode, enter the Master Code twice.

A. Programming an Output #2 User Code

1. Enter [*] [4].
2. Enter a user ID number. ([0] [0] to [0] [9])
3. If the left LED is red, previous user data exists. Clear it by entering [*] [*]. The keypad will beep in confirmation and the left LED will turn green.
4. Enter a new user code.
5. To program the next user, repeat from step 2 in section A or B.
6. Return to Programming Mode by pressing [#].
7. Exit Programming Mode by pressing [#] again.

B. Programming an Output #2 User Card*

1. Enter [*] [4].
2. Enter a user ID number. ([0] [0] to [0] [9])
3. If the left LED is red, previous user data exists. Clear it by entering [*] [*]. The keypad will beep in confirmation and the left LED will turn green.
4. Swipe a new user card.
5. To program the next user, repeat from step 2 in section A or B.
6. Return to Programming Mode by pressing [#].
7. Exit Programming Mode by pressing [#] again.

Deleting or Changing Users and Cards:

Deleting or Changing the Master Card*

Step 1	**Step 2**	**Step 3**
Enter: [*] [7]	*Delete the existing Master Card by entering:* [*] [*]	*Swipe a new Master Card.* **or** *Exit Programming Mode by entering* [#].

*SK-2323-SPQ and SK-1323-SPQ only.

Deleting or Changing an Output #1 User:

Step 1
Enter a user ID number.
[0] [0] [0] to [9] [9] [9]

Step 2
Delete existing user by entering:
[*] [*]

Step 3
*Swipe a new user card.**
or
Enter a new user code.
[X] [X] [X] [X]
or
Return to Programming Mode by entering [#]

- This option deletes Output #1 users one at a time.
- To delete all users, see pg. 14, *Deleting All Users*.

Deleting or Changing an Output #2 User:

Step 1
Enter:
[*] [4]

Step 2
Enter a user ID number.
[0] [0] to [0] [9]

Step 3
Delete existing user by entering:
[*] [*]

Step 4
*Swipe a new user card.**
or
Enter a new user code.
[X] [X] [X] [X]
or
Return to Programming Mode by entering [#]

- This option deletes Output #2 users one at a time.
- To delete all users, see pg. 14, *Deleting All Users*.

Additional Programming:

Programming the Output #1 Timer

DEFAULT: 1 second

Step 1
Enter:
[*] [1]

Step 2
For toggle mode, enter:
[0] [0]
or
For timed output, enter:
[0] [1] to [9] [9]

- **01** to **99** is the number of seconds Output #1 will activate.

Programming the Output #2 Function

Output #2 can be activated via [*] or through user codes. Use the following steps to program its function.

DEFAULT: User codes

Step 1
Enter:
[*] [2]

Step 2
For user codes, enter:
[0] [1]
or
For doorbell, enter:
[0] [2]

- When Output #2 is programmed for doorbell, press [*] to activate doorbell. Doorbell output lasts 1 second.

Programming the Output #2 Timer

DEFAULT: 1 second

Step 1
Enter:
[*] [5]

Step 2
For toggle mode, enter:
[0] [0]
or
For timed output, enter:
[0] [1] to [9] [9]

- **01** to **99** is the number of seconds Output #2 will activate.

Programming the Optical Tamper

DEFAULT: OFF

Step 1
Enter:
[*] [6]

Step 2
To turn optical tamper OFF, enter:
[0] [1]
or
To turn optical tamper ON, enter:
[0] [2]

*SK-2323-SPQ and SK-1323-SPQ only.

Resetting the Keypad:

NOTE: Resetting the keypad will cause some or all programmed data to be lost. Do not perform either of these steps unless it is absolutely necessary.

Deleting All Users:

Enter:

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

IMPORTANT: Once key entry is made, all user codes and user cards will be deleted and the keypad will return to Programming Mode. The Master Code and all other programming settings will remain the same. To restore factory settings, see *Restore Factory Settings* below.

Restore Factory Settings:

Enter:

[*] [8] [9] [9]

IMPORTANT: Once key entry is made, keypad will return to factory default settings. No user information will be retained and the Master Code will be ***1234***. For SK-2323-SPQ and SK-1323-SPQ, Output #1 Access Mode will be set to user codes or user cards.

Manually Resetting the Master Code:

If the Master Code has been forgotten or does not work, the following steps can be taken to reset the Master Code:

1. Disconnect power from the keypad.
2. Hold down the [#] key.
3. While holding the [#] key, reconnect the power.
4. After 3 seconds, the keypad will beep to confirm a successful reset.

NOTE: Manually resetting the Master Code will only reset the Master Code. It will not affect the Master Card, User Code, or any other saved data. To delete the Master Card, see pg. 12, *Deleting or Changing the Master Card*.

NOTE: The Master Code will reset depending on the programmed code length. These will be the new Master Codes after the code length is reset:

Code Length	New Master Code
2 digits	12
3 digits	123
4 digits	1234

Code Length	New Master Code
5 digits	12345
6 digits	123456

Factory Defaults:

Code Length	4 digits
Master Code	1234
Output #1 Access Mode*	User codes OR user cards
Output #1 User Codes	None
Output #2 User Codes	None
Output #1 Timer	1 second
Output #2 Timer	1 second
Output #2 Function	User codes
Tamper Alarm	OFF

*SK-1323-SPQ and SK-2323-SPQ only

Using the Keypad:

For programming instructions, see pg. 10, *Programming Instructions*.

Entering a User Code

- To activate either Output #1 or Output #2, enter the user code directly into the keypad.
- Do not enter the user ID number. The user ID number is only used during Programming Mode.
  Example: If a user code for Output #1 is ***4321***, enter [4] [3] [2] [1] to trigger Output #1.

Using a User Card

- To activate either Output #1 or Output #2 with a user card, hold the user card in front of the keypad. The keypad will beep once the user card has been read.

Using a User Card with a User Code

- If Output #1 is programmed to accept a user card with a user code, swipe the user card. Immediately enter the user code. This may be done in reverse order.

Wrong Code Lockout

- If a wrong code is entered or an invalid card is swiped 5 consecutive times, the keypad will go into lockout for 1 minute. During this time, no codes can be entered and no cards can be swiped.
- Pushing buttons or swiping cards during lockout will extend the lockout time.

Troubleshooting:

The keypad will not accept user codes or user cards	• Make sure the Output #1 Access Mode is programmed to accept user codes. (See pg. 11, *Setting the Output #1 Access Mode*) • If an incorrect card or code has been entered, the keypad may be in Wrong Code Lockout. Wait 1 minute. (See pg. 15, *Wrong Code Lockout*)
The keypad will not program new user codes or user cards	• Before inputting new code or card, check the left LED. If it is red, previous user data exists. Press [*] [*] to delete.
The keypad will not program a new Master Card	• Before inputting new code or card, check the left LED. If it is solid green, a Master Card is already programmed. Press [*] [*] to delete.
Programming option will not work	• It is likely the keypad is not in the correct mode. Press [#] until the right LED turns green to put the keypad in Standby Mode. Enter Programming Mode and begin again.
Output #2 will not activate	• Make sure that Output #2 is programmed for the correct function. (See pg. 13, *Programming the Output #2 Function*)
Egress input is not working	• Check that the egress device is wired correctly. (See pg. 4, *Wiring Diagram*)
Relay output will not stop	• Make sure that the output is not set for toggle mode. (See pg. 13, *Programming the Output #1 Timer* and *Programming the Output #2 Timer*)

Quick Reference Guide:

NOTE: For complete programming instructions, please see pg. 10, *Programming Instructions.*

Operation Function	Action
Enter an Output #1 user code	Directly enter on the keypad
Enter an Output #2 user code	Directly enter on the keypad
Ring doorbell	Press ✱ (if programmed)
Enter Programming Mode	Enter the master code twice
Exit Programming Mode	Press #
Reset or restore the keypad	Please see full instructions on pg. 14
Program the proximity reader	Please see full instructions on pgs. 10 and 13

*The following functions are performed **after** entering Programming Mode.*

Operation Function	Step 1	Step 2	Step 3
Change the master code	Enter ✱ 3	Enter the new Master Code twice	
Program a new Output #1 user code	Enter a 3-digit user ID (from 000~999)	Enter a user code.	
Program a new Output #2 user code*	Enter ✱ 4	Enter a 2-digit user ID (from 00~09)	Enter a new user code.
Deleting an Output #1 user *	Enter a 3-digit user ID (from 000~999)	Enter ✱ ✱	
Deleting an Output #2 user *	Enter ✱ 4	Enter a 2-digit user ID (from 00~09)	Enter ✱ ✱
Set Output #1 timer	Enter ✱ 1	Enter number of seconds (from 00~99)	
Set Output #2 timer	Enter ✱ 5	Enter number of seconds (from 00~99)	
Set Output #2 function	Enter ✱ 2	Enter: **01** for user codes **02** for doorbell	
Set tamper alarm	Enter ✱ 6	Enter: **01** for OFF **02** for ON	

**After programming these functions, press # to return to Programming Mode.*

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