

# .....SKE Series 12-Pad

## Self-Contained Keyless Entry® System With Relay

INSTALLATION & INSTRUCTION MANUAL





## **SKE Series 12-Pad**

### **Self-Contained Keyless Entry® System With Relay**

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#### **Document Information**

IOMK1 Installation/Operations Manual for the SKE Series 12-Pad 3x4 and 2x6 - June 2018. *This documentation is also applicable to prior revisions except where noted.*

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#### **Certifications**

The SKE-34 is listed by CSA for Elevator Equipment. CSA B44.1-04/ASME-A17.5-2004. Class 2411 02.

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# •••• Introduction

## ■ Overview – The SKE Series 12-Pad

The Essex SKE Series All-In-One 12-Pad Self-Contained Keyless Entry® System is an extremely versatile Keypad that can be configured in the field. It has one built-in relay. It is ideal to control one lock, either fail safe or fail secure. It can also trigger a contact closure to activate an automatic door opener or gate operator. There are two additional open collector outputs. With 2 installer-provided external relays, up to 3 devices can be controlled.



■ 3x4 Keypad (left) and 2x6 Keypad (right)

# •••• Keypad

## ■ Keypad Specifications

Input Voltage:	5VDC or 12 to 24VDC (Jumper Selectable)
Standby Current Draw:	25mA
Outputs:	1 Relay, 24VAC/DC Max, 1A Max; 2 Open Collector, 1/4 A Max to Ground
Keypad Switch Life:	>1 Billion Cycles
Keypad Operating Environment:	-40°C to +70°C (-40°F to +160°F), 100% Relative Humidity

*continued next page*

## ■ Keypad Specifications, cont'd.

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3x4 Keypad Dimensions:	5-1/8"H x 3-3/8"W x 7/16"D (13 x 8.6 x 1.1 cm)
2x6 Keypad Dimensions:	7-1/8"H x 1-3/4"W x 3/4"D (13 x 8.6 x 1.1 cm)

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3x4 Keypad Weight:	16 oz (454 gm)
2x6 Keypad Weight:	4.4 oz (125 gm)

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LED's:	1 Red, 1 Green
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## ■ Keypad Part Numbers

### 3x4 Keypad

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SKE-34S	Stainless Steel Bezel
SKE-34K	Black Bezel
SKE-34X	No Bezel

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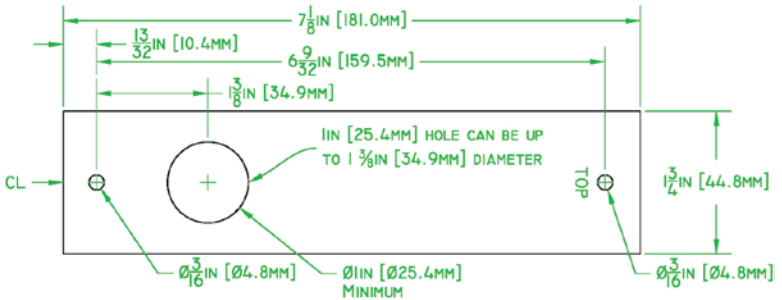
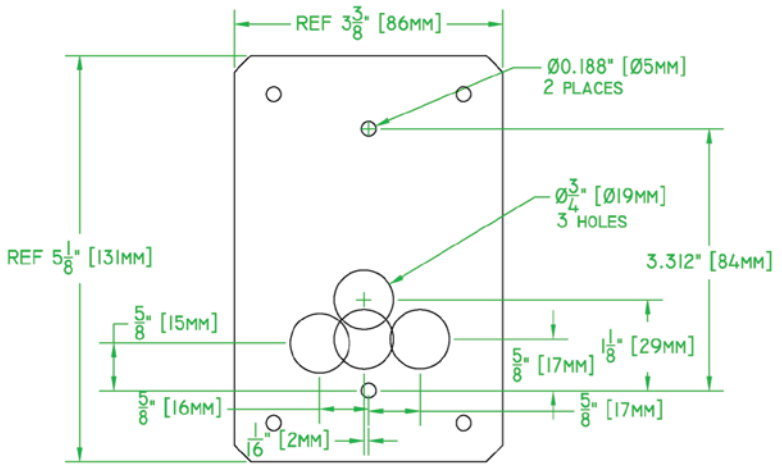
### 2x6 Keypad

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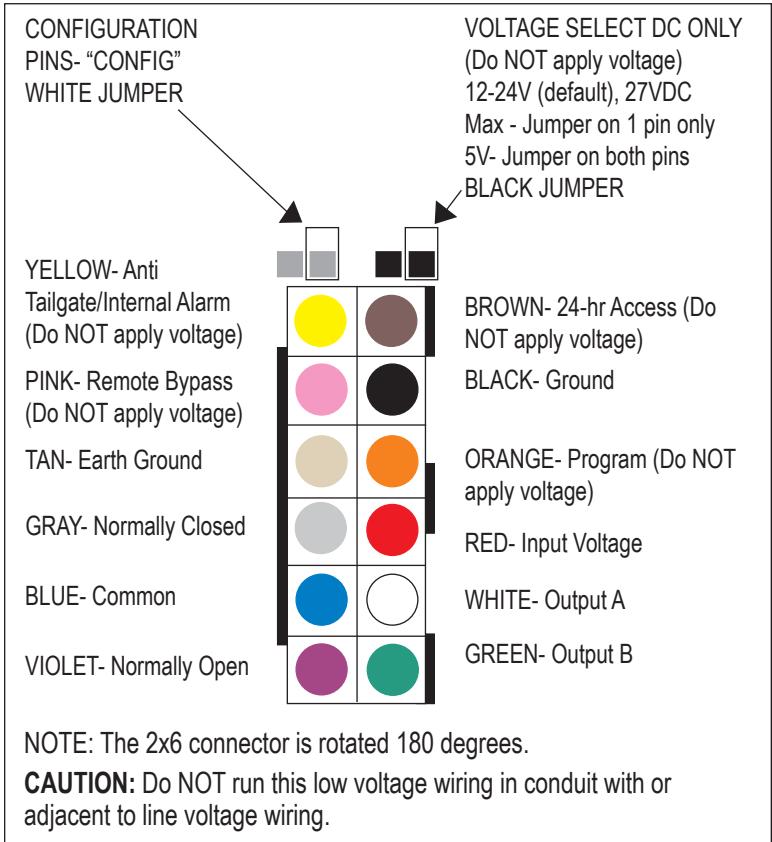
SKE-26I	Illuminated
SKE-26S	Stainless Steel Overlay

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## ■ Keypad Cutting Templates



# ••••• Keypad Connector Diagram



**NOTE:** 6 wires, grey, green, white, orange, pink, and brown, are cut back, and if used, will need to be stripped.

**RED- +Voltage, 27VDC Max**

**BLACK- Ground**

*continued next page*



## YELLOW- Anti Tailgate.

If not used, this must be connected to BLACK. By adding a door monitor switch between YELLOW and BLACK, the door will relock immediately after opening. If the third output is set up as an Internal Alarm, this switch will trigger the alarm if the door is opened without a code or if the door is left open longer than the Door Ajar Time setting.

## PINK- Remote Bypass

Normally it is cut back. If used, strip and connect as required. Connect a Normally Open push button between PINK and BLACK to trigger the main output for its normal Door Open Time setting.

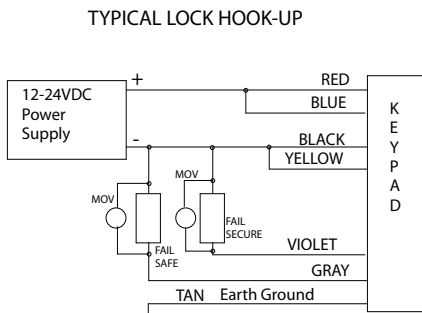
## ORANGE- Set Up Programming

Normally it is cut back. If used, strip and connect as required. Momentarily connecting ORANGE to BLACK puts the unit in Set Up Mode (same as entering \* 3, Master Code #).

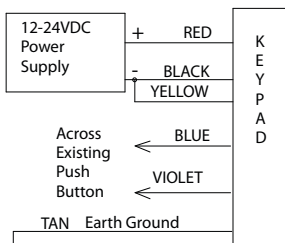
## BROWN- 24-hour Access

Normally it is cut back. If used, strip and connect as required. If Time Clock is enabled in Set up (page 16) and the BROWN wire is grounded, all codes work normally. When the BROWN wire is not grounded, only those codes with 24-hour Access Authorization (page 16) will function.

## Internal Relay Wiring Diagram



TYPICAL GARAGE DOOR  
or GATE HOOK-UP



# ••••• Keypad Configuration

## Voltage Selection

The factory default setting for the Keypad voltage is 12-24VDC. Verify that the jumper is removed or placed over only one pin. For 5VDC, the black jumper should be placed across both pins. If changing the voltage is necessary, make sure the power is removed first.

## Keypad Output Selection

**THE KEYPAD OUTPUT IS FACTORY CONFIGURED AND DOES NOT NEED TO BE RECONFIGURED IN THE FIELD.**

## Keypad Reset

In certain cases you may want to erase all user codes and restore system defaults. To perform this procedure:

1. Remove power.
2. Where the white jumper is located, jumper the two pins above the connector labeled "CONFIG." See Keypad Connector Diagram.
3. Apply appropriate power. (You should hear 4 beeps and the RED LED will flash and the GREEN LED will be solid).
4. After 4 beeps, once the Keypad is in configuration mode, enter 0099#. The Keypad will beep twice and both LEDs will flash for approximately 10 seconds. (During this time, the Keypad will appear dead. Do NOT remove power!!!)
5. Wait and you will hear 4 beeps and the RED LED will flash and the GREEN LED will be solid.
6. Enter the configuration number followed by #.
  - a. Keypad Output

**Keypad Output**  
Self-Contained - Non-encoded

**Configuration**  
99 #

- b. (OPTIONAL) To change the audible beep, enter

**Code    Audible Beep**

201 #    Normal Beep (factory default)

200 #    Short Click (quieter)

- c. (OPTIONAL) To change the illumination on the SKE-26 only, enter the code as follows:

**Code    Standby Mode    Normal Operation**

210 #    Off (factory default)    Off (factory default)

211 #    Off    Dim

212 #    Off    Bright

213 #    Dim    Dim

214 #    Dim    Bright

You should hear 3 beeps indicating successful configuration (the RED LED will continue to flash and the GREEN LED will be solid). If you hear a long error beep, re-enter the configuration number followed by #.

7. Remove power.
8. Remove configuration jumper.
9. Re-apply power.

**CAUTION:** This procedure completely erases the memory and restores factory defaults!!! Once the memory is cleared, all programmed User Codes are erased and factory default settings are restored.

**IMPORTANT:** Once the configuration is selected, you must remove power, remove the configuration jumper and then re-apply power in order to complete the configuration procedure. Note: If the configuration jumper is not removed, the LED's will flash and the Keypad will beep continuously.

# Self-Contained Keyless Entry® System With Relay

## ■ Specifications

Input Voltage:	5VDC or 12 to 24VDC (Jumper Selectable)
Standby Current Draw:	25mA
Outputs:	1 Relay, 1A 24V Max; 2 Open Collector, 1/4 A Max to Ground
Programmable Output: (Door Open Time)	1 to 99 seconds Default - 5 seconds
Latching:	Off (Default), Manual (Toggle On/Off) Timed
# of Users:	502 (1 Master User, 500 Users, 1 Temporary User)
Code Length:	3 to 8 Digits
Default Master Code:	1-2-3
Tamper Alarm:	4 Incorrect Code Attempts
Access Code Protection:	Non-Volatile Memory

## ■ Configuration

### Input Requirements

The SKE Series accepts 5VDC or 12 - 24VDC. Use black jumper across the power pins only for 5VDC operation, otherwise leave open. System current draw (max) is as follows:

- Standby: 25mA
- During Operation: 100mA

## **Output Capabilities**

### **Main Door Output**

SPDT relay rated at 24V 1A Max.

### **Output A**

A transistor output intended to drive a relay that can be programmed for one of the following:

1. CCTV or Light Controller - First key press triggers a Timed Output (1 to 99 seconds).
2. Auxiliary Output - Manual Control or Timed Output (1 to 99 seconds).
3. Second Door - Users can be assigned to open a 2nd door.
4. Doorbell - Press # at the Keypad to trigger a 1 second output for a doorbell (not included).

### **Output B**

A transistor output intended to drive a relay that can be programmed for one of the following:

1. CCTV or Light Controller - First key press triggers a Timed Output (1 to 99 seconds).
2. Auxiliary Output - Manual Control or Timed Output (1 to 99 seconds).
3. Third Door - Users can be assigned to open a 3rd door.
4. Internal Alarm System - Detect Break-in, Door-ajar & Tamper.
5. Doorbell - Press # at the Keypad to trigger a 1 second output for a doorbell (not included).

# ••••• Quick Programming Guide for SKE 12-Pad

The SKE 12-Pad is factory configured and does not have to be reconfigured in the field.

The **#** is used as ENTER, and **\*\*** is CLEAR. The default Master Code is **1-2-3**

- To change the Master Code, enter **\* 3 – 1-2-3-#**
- Then enter **1-#**, followed by new **Master Code - # - \* - \***
- To verify the new Master Code, enter new **Master Code** followed by **#**
- To program a user code, enter **\*-1-Master Code-#-1-#**
- To program the first User Code, enter **1-#, first user code -#-#**
- To program a second user code, enter **2-#, second user code-#-#**
- To program a third user code, enter **3-#, third user code-#-#**
- To exit user code programming, enter **\*-\* \*-\***

Please refer to the instruction manual for addition programming.

# ••••• Programming Overview

There are two programming commands used with the SKE 12-Pad Self-Contained Keyless Entry® System.

**\*3** is the Programming System Setup (page 12). This programming command allows the programming of the Master Code, setting the main relay opening time, allows latching (toggling) of the main relay, etc.

**\*1** is the Programming Command for programming user codes (page 18). When programming the user codes, you have the ability to assign users authorizations. You can authorize a user to latch (if the system was set up to latch in the \*3 programming sequence), you can allow a user to program or delete codes or activate one of the other outputs, etc.

The SKE-12 Pad is configured at the factory. Under normal installation, there is no need to Configure or Reset the keypad unless the Beeper needs to be quieter or the Illumination needs to be activated on the SKE-26 only.

The Default Master Code is: **1 2 3 #** (for enter)

The Relay On Time is: **5 sec**

# ••••• Programming System Setup

The System Setup can only be modified if you know the Master Code. When the system is initially set up, the default system settings should be reviewed prior to other programming.

1. Enter \* 3



2. Enter the Master Code followed by #

Example: \* 3 1 2 3 #

This opens programming and causes:

Red LED	Green LED
Fast Flash	Solid

3. Proceed to one of the following eight programming options:

## ■ Changing the Master Code (Default: 1,2,3)

- a. Enter 1 #
- b. Enter the New Master Code followed by #
- c. Return to Step 3 or enter \* \* to exit programming.

### Keypad Status After Step Completion

Step	Beep	Red LED	Green LED
a	Double	Fast Flash	Slow Flash
b	Triple	Fast Flash	Solid

**Note:** If you forget the Master Code, momentarily ground the ORANGE wire. This will take you to Step 3 of Programming System Setup. Once you enter setup mode, you have 30 seconds to begin the program sequence.



■ **Setting the Main Door Open Time (Default: 5 Seconds)**

- a. Enter **2 #**
- b. Enter the desired Door Open Time (1-99 seconds), followed by **#**  
Example: **2 # 1 5 #** (15 sec. Door Open Time)
- c. Return to Step 3 or enter **\*\*** to exit programming.

**Keypad Status After Step Completion**

Step	Beep	Red LED	Green LED
a	Double	Fast Flash	Slow Flash
b	Triple	Fast Flash	Solid

■ **Setting Latching Option (Default: Off)**

- a. Enter **3 #**
- b. Select the desired latching option:  
**Off- 0 #**  
**Manual- 9 9 #**  
**Timed-** Enter the desired time interval in hours (1-98), followed by **#**.  
Example: **3 # 8 #** (Sets timed latching for 8 hrs)
- c. Return to Step 3 or enter **\*\*** to exit programming.

**Keypad Status After Step Completion**

Step	Beep	Red LED	Green LED
a	Double	Fast Flash	Slow Flash
b	Triple	Fast Flash	Solid

■ **Configuring Output A (Default: Aux #1)**

- a. Enter **4 #**
- b. Select one of the following:
  - **CCTV / External Light**
    - 1) Enter **1 #**

- 2) Enter the desired On Time (1-99 seconds), followed by #  
 Example: **4 # 1 # 1 5 #**  
 (Sets CCTV/Light Option for 15 seconds)

■ **Auxiliary Device #1**

- 1) Enter **2 #**
- 2) Enter the momentary output time (1-99 seconds), followed by #; **-or-** Enter **0** to set the auxiliary device for Manual Operation (ON/OFF), followed by #  
 Example: **4 # 2 # 0 #**  
 (Sets Auxiliary Device with Manual Operation)

■ **Second Door**

- 1) Enter **3 #**
- 2) Enter the desired Door Open Time (1-99 seconds), followed by #
- 3) Select the desired latching method:  
**Off- 0 #**  
**Manual- 9 9 #**  
**Timed-** Enter the desired time interval in hours (1-98), followed by #  
 Example: **4 # 3 # 5 # 9 9 #**  
 (Sets Second Door with 5 second Door Open Time and Manual Latching)

■ **Doorbell**

- 1) Enter **4 #**

- c. Return to Step 3 or enter \* \* to exit programming.

**Keypad Status After Step Completion**

Step	Beep	Red LED	Green LED
a	Double	Fast Flash	Slow Flash
1)	Double	Fast Flash	Fast Flash
2)	Triple	Fast Flash	Solid

■ **Configuring Output B (Default: CCTV)**

- a. Enter **5 #**
- b. Select one of the following:

■ **CCTV / External Light**

- 1) Enter **1 #**
- 2) Enter the desired On Time (1-99 seconds), followed by **#**  
Example: **5 # 1 # 1 5 #**  
(Sets CCTV/Light Option for 15 seconds)

■ **Auxiliary Device #2**

- 1) Enter **2 #**
- 2) Enter the momentary output time (1-99 seconds), followed by **#**; **-or-** Enter **0** to set the auxiliary device for Manual Operation (ON/OFF), followed by **#**  
Example: **5 # 2 # 0 #**  
(Sets Auxiliary Device with Manual Operation)

■ **Third Door**

- 1) Enter **3 #**
- 2) Enter the desired Door Open Time (1-99 seconds), followed by **#**
- 3) Select the desired latching method:  
**Off- 0 #**  
**Manual- 9 9 #**  
**Timed-** Enter the desired time interval in hours (1-98), followed by **#**  
Example: **5 # 3 # 5 # 9 9 #**  
(Sets Second Door with 5 second Door Open Time and Manual Latching)

■ **Doorbell**

- 1) Enter **4 #**

■ **Internal Alarm**

- 1) Enter **5 #**
- 2) Enter the desired Door Ajar Time (1-99 seconds), followed by **#**

Example: **5 # 5 # 1 0 #**

(Sets Internal Alarm with 10 second Door Ajar Time)

Output is normally ON and turns OFF when triggered.

- c. Return to Step 3 or enter **\* \*** to exit programming.

■ **Master Code Door Unlock Option (Default: Allow)**

- a. Enter **6 #**
- b. Enter **0 #** to prevent the master code from unlocking the door.
- c. Enter **1 #** to allow the master code to unlock the door.
- d. Return to Step 3 or enter **\* \*** to exit programming.

■ **Time Clock Input (Default: Prevent)**

- a. Enter **7 #**
- b. Enter **0 #** to prevent lockout
- c. Enter **1 #** to lockout all users that do not have 24 hour option enabled.
- d. Return to Step 3 or enter **\* \*** to exit programming.

# ••••• Normal System Operation

## ■ Keypad LED Status Indicators

- A solid green LED indicates that the door is unlocked.
- A solid red LED indicates that the door is locked.

# is used as Enter; \* is used as Clear.

Depending on how the System Options are configured, User Commands are used to operate Manual Latching and Auxiliary Outputs. The User Commands are trailing digits entered after an authorized user code followed by #. The ability to use these User Commands depends on authorizations assigned to each User (see Programming Individual Users, page 18).

As the Main Output activates, the green LED will flash for 5 seconds. While the green LED is flashing, enter one (or more) of the following User Commands:

- 0 #** to Latch the Door Closed (Main Relay, 2<sup>nd</sup> Door or 3<sup>rd</sup> Door)
- 1 #** to Latch the Door Open (Main Relay, 2<sup>nd</sup> Door or 3<sup>rd</sup> Door)
- 2 #** to Turn Output A OFF (2<sup>nd</sup> Output as Aux.)
- 3 #** to Turn Output A ON (2<sup>nd</sup> Output as Aux.)
- 4 #** to Turn Output B OFF (3<sup>rd</sup> Output as Aux.)
- 5 #** to Turn Output B ON (3<sup>rd</sup> Output as Aux.)

## ■ Tamper Alarm

An audible Tamper Alarm sounds when four incorrect code entries are made. After 30 seconds, the unit returns to standby mode.

# ••••• Programming Individual Users

Authorized users (master code or any user authorized to program) can program users directly from the Keypad. Each Individual User can be assigned various authorizations if desired. Review System Setup before programming individual users.

1. Enter \* 1



2. Enter the Master Code or an Authorized Code followed by #

Example: \* 1 1 2 3 #

This opens programming and causes:

Red LED	Green LED
Slow Flash	Solid

3. Add a new individual user with or without authorizations:

## ■ Adding a New Individual User

- a. Enter 1 #
- b. Enter the User ID (1 to 500) followed by #
- c. Enter the User Code/PIN (3-8 digits), followed by #
- d. **FOR NO AUTHORIZATIONS, enter # to complete programming for this User (Step E on next page).** To allow **User Authorizations** for this User, enter the Authorization **Code** as shown below, followed by #. Repeat for additional authorizations.

### Code      User Authorization

- |     |                                       |
|-----|---------------------------------------|
| 1#  | Latching Authorization                |
| 2#  | Program or Delete Users Authorization |
| 3#  | Output A Authorization (see notes)    |
| 4#  | 2nd Door (see notes)                  |
| 5#  | Output B Authorization (see notes)    |
| 6-7 | <i>Continued on next page</i>         |

d. cont'd.

**Code User Authorization**

**6#** 3rd Door (see notes)

**7#** 24-hour Access (see notes)

e. **To complete programming for this User, enter #.**

f. To program an additional User, return to Step b.

g. If no more Users are to be added, enter \*\* and return to Step 3, or if you have completed all User Programming, enter \*\* a second time to complete programming sequence and reset system to normal operation.

**Keypad Status After Step Completion**

Step	Beep	Red LED	Green LED
a	Double	Slow Flash	Slow Flash
b	Double	Slow Flash	Fast Flash
c	Double	Slow Flash	Fast Flash
d	Double	Slow Flash	Fast Flash
e	Triple	Slow Flash	Slow Flash

**Notes on Adding New Users:**

■ Auxiliary Device or 2nd or 3rd Door authorization depends on configuration of the A and B Outputs. Auxiliary outputs are controlled by trailing digits by any authorized user. See Programming System Setup on page 12.

■ If either Output is configured for 2nd or 3rd Door operation and a user is given 4# or 6# Authorization, their User Code will activate the configured output, not the Main Relay. A user cannot control more than a single door.

■ 24-hour Access requires an external time clock or keyswitch. This allows you to restrict access to Users who are not assigned 24-hour Access. See Time Clock Input on page 16.

■ **Modify a User by User ID**

- a. Enter **2 #**
- b. Enter the User ID (1 to 500) for the User to be modified, followed by **#**
- c. To change this User's Code, enter the New User Code followed by **#**

**- OR, see step d below -**

- d. To keep this User's Code, enter **#**. Then, enter the desired User Authorization, followed by **#**. (Repeat for additional authorizations or skip to Step e for no authorizations.)

**Code      User Authorization**

- 1#**      Latching Authorization
- 2#**      Program or Delete Users Authorization
- 3#**      Output A Authorization (see notes)
- 4#**      2nd Door (see notes)
- 5#**      Output B Authorization (see notes)
- 6#**      3rd Door (see notes)
- 7#**      24-hour Access (see notes)

- e. **Enter # to complete programming for this User.**
- f. To modify an additional User, return to Step b.
- g. If no more Users are to be modified, enter **\* \*** and return to Step 3, or if you have completed all User Programming, enter **\* \*** a second time to complete programming sequence and reset system to normal operation.

■ **Modify a User by User Code**

- a. Enter **3 #**
- b. Enter the User Code for the User you wish to modify, followed by **#**
- c. To change this User's Code, enter the New User Code followed by **#**

**- OR, see step d on next page -**



- d. To keep this User's Code, enter **#**. Then, enter the desired User Authorization, followed by **#**. (Repeat for additional authorizations or skip to Step e for no authorizations.)

**Code    User Authorization**

<b>1#</b>	Latching Authorization
<b>2#</b>	Program or Delete Users Authorization
<b>3#</b>	Output A Authorization (see notes)
<b>4#</b>	2nd Door (see notes)
<b>5#</b>	Output B Authorization (see notes)
<b>6#</b>	3rd Door (see notes)
<b>7#</b>	24-hour Access (see notes)

- e. **Enter # to complete programming for this User.**
- f. To modify an additional User, return to Step b.
- g. If no more Users are to be modified, enter **\* \*** and return to Step 3 or if you have completed all User Programming, enter **\* \*** a second time to complete programming sequence and reset system to normal operation.

**Note on Modifying Users:**

- Once you have begun to modify a User, previously programmed authorizations are deleted for this User.

■ **Deleting a User by User ID**

- a. Enter **4 #**
- b. Enter the User ID (1 to 500) for the User to be deleted, followed by **#**
- c. To delete an additional User, return to Step b.
- d. If no more Users are to be deleted, enter **\* \*** and return to Step 3, or if you have completed all User Programming, enter **\* \*** a second time to complete programming sequence and reset system to normal operation.

### ■ Deleting a User by User Code

- a. Enter **5 #**
- b. Enter the User Code to be deleted, followed by **#**
- c. To delete an additional User, return to Step b.
- d. If no more Users are to be deleted, enter **\* \*** and return to Step 3, or if you have completed all User Programming, enter **\* \*** a second time to complete programming sequence and reset system to normal operation.

### ■ Adding a Temporary User

- a. Enter **6 #**
- b. Enter the User Code / PIN (3-8 digits), followed by **#**
- c. Enter the desired Temporary access Time (1-99 hours), followed by **#**
- d. For 24-hour Access, enter **0** for No or **1** for Yes, followed by **#**
- e. You are now back to Step 3 (page 18).

### ■ Deleting a Temporary User

- a. Enter **7 #**
  - b. You are now back to Step 3 (page 18).
4. Enter **\* \*** to complete the sequence and reset the system to normal operation.

## •••• Frequently Asked Questions

**“I am a facility manager/homeowner/end user and my keypad no longer unlocks my door. What do I do?”**

Check that the keypad is still functioning and each key press gives a beep and the red LED blinks. If yes, then the keypad is still good.

Although the keypad is the “face” of your access control system, it is only a part of that system, and there are other elements that complete that system. It is recommended that you call an access control or security professional to evaluate and repair that system.

**“I am an installer and the brand new keypad won’t unlock the door. What shall I do?”**

Check that the keypad still functions – each key press gives a beep and the red LED blinks. If yes, then the keypad is likely okay.

Verify that the keypad is in the “self-contained” mode by setting it with the procedure in the manual – the “Keypad Reset” instructions. The keypad is set to this mode at the factory.

Check that the “remote bypass” or pink wire will still unlock the door by momentarily grounding this wire.

Check that the Master code unlocks the door.

Check if the power supply that powers the keypad and lock has enough voltage and/or current to supply both devices.

If a separate power supply is used for the lock, make sure that one side is connected to the keypad relay common, the blue wire, and the lock is connected to either the NO (normally open) or NC (normally closed) contacts. When a valid code is entered and the internal relay energizes, this will energize the strike or de-energize the magnetic lock. See the relay wiring diagram.

**“I am an installer and the brand new keypad won’t work at all. What shall I do?”**

Check that the keypad has power – at least 12V DC on the red and black wires to the keypad.

Check that the 12V DC jumper is installed on only one pin if 12V is applied, and the jumper is installed across two pins if only 5V is applied.

Check that the red LED only blinks when each key is pressed and does not flicker when there is no keypad activity.

For flickering LEDs, check that the power supply is adequate for the keypad and other loads, and it provides enough current for it to operate properly – at least 100mA, just for the keypad, plus a good margin for any locking device. Refer to the specifications for those devices.

Make sure that the power supply has the correct polarity applied to the keypad – positive voltage on the red lead, and circuit return on the black lead.

**“With a code entry, the LED goes from red to green, but the door will not unlock or unlocks too briefly no matter what I set the door open time to. What do I do?”**

Check that the yellow wire is connected to the black wire.

If a door sensor switch is installed, be sure that the switch has continuity when the door is closed, and it is connected from yellow to black on the keypad.

**“I’ve just installed the keypad and there are a number of wires on the harness that are not connected to anything. What do I do with them?”**

Trim them back so that they do not short to anything or to each

other, and stow them so that they are not interfering with the placement of the keypad.

The tan wire should be connected to the closest facility earth grounding. This may be the metal conduit that the cable wiring is going through, if it is so attached to facility earth ground. It may also be wired to the power ground line which is the “green” conductor associated with AC power.

Note that the data and DC lines for the keypad should not be in the same conduit or races as facility power for the building, but in their own conduit or races.

**“I’ve been called to an installation, and the keypad no longer is working and appears dead. What should I do?”**

Verify that the keypad is still receiving power and that the current drawn by the keypad is less than 100mA but greater than 5mA DC current.

Our Limited Lifetime Warranty normally does not cover external events such as power surges or other factors that have nothing to do with the keypad. We do not manufacture the power supplies or controllers that are connected to the keypad, and so we cannot warrant against their failure from mis-application of power. See our Limited Lifetime Warranty description on our public website: <http://www.keyless.com/PDF/GeneralWarranty.pdf>

The keypad may be better protected against such collateral damage by the installer applying devices or procedures that are within the industry’s best standard practice, such as surge protection and other devices to better isolate or mitigate the access control equipment from external factors.

If the keypad is still inoperable after verifying the external elements, the keypad will have to be replaced.

**“I’ve been called to an installation, and although the keypad seems to be working, it no longer opens the door. What do I do?”**

Measure the continuity through the internal relay contacts, blue to gray with the relay off, and blue to violet with the relay energized. This should be essentially shorted. An open circuit may be the result of excessive load current and should be no more than 2A maximum.

Measure the continuity across the internal relay contacts, blue to violet with the relay off, and blue to gray with the relay energized. This should be essentially open. Short circuits will indicate that an over voltage had occurred across the relay contacts. There is a limit of no more than 40V AC.

If these conditions are not met, that means that the relay may have been damaged, and the keypad will have to be replaced. Unfortunately, either of these conditions may have violated our Limited Lifetime Warranty: <http://www.keyless.com/PDF/GeneralWarranty.pdf>

Some electrical loads may have relatively high peak currents. This high peak current may exceed the contact current limit over time, eventually destroying the relay contacts. An electrical “snubber” circuit may have to be installed across the relay contacts to limit or mitigate this high peak current. This “snubber” is not supplied by Essex Electronics.

**“I need to install one of your keypads in a coastal marine environment. What precautions may I take to better protect this equipment in this environment?”**

Although our keypads are made from durable materials and should withstand such environments, they will benefit from two added precautions:

1. The application of a dielectric-type grease should be used after all electrical connections are spliced. This will better protect such connections for corrosion and damage from the environment.
2. The application of a bead of sealant around the installation of the keypad should be used to block moisture from wicking into the electrical connections.

**“My customer is complaining that there is some wear on the face of the keypad, indicating the most used buttons. How should I resolve this?”**

Although our keypads are made from durable materials, the use of car keys or other hard elements, such as batons or tools to press the buttons of the keypad, may damage the face of the keypad. The end user should be cautioned against using such devices and only use their fingers to operate the keypad. In cold climates, the fingers may remain gloved.

Such damage is cosmetic in nature, and the keypad should continue to operate. It is recommended that the pin or access code be changed so that different keys are used to grant access.

Sometimes the wear may be too great to reliably use the keypad and the keypad may need to be replaced. Please review our General Warranty Policy: <http://www.keyless.com/PDF/GeneralWarranty.pdf>

**“My customer needs to add a code, or codes, to the keypad. How is this done?”**

A copy of our Installation & Instruction Manual is provided with the keypad and should be given to your customer for reference.

If no copy is found, it may be downloaded from our public website at <http://www.keyless.com/PDF/SKE12PadIOM.pdf>. Instructions

for adding, deleting, modifying, and adding temporary users are contained in this manual.

A worksheet or table of users and associated user codes should be maintained for the convenience of your customers, either by them or their security contractor, depending on the number of users (up to 500 plus a master code, plus a temporary user).

**“My customer has a second door they wish to control. Is that possible with this keypad?”**

The short answer is “yes,” given a number of set conditions.

The keypad will have to be programmed to allow for 2nd (or 3rd) door control, which is different than auxiliary outputs. See the “Programming System Setup” section of this manual. When a user is authorized for the 2nd (or 3rd) door, with “4#” (or 6#), that user only controls that door, and no other.

Any authorized user may control auxiliary outputs by using their pin and trailing digits, e.g., “3#” for output A. In this way, a user may control multiple doors.

This second door lock will require its own external relay that is controlled by other outputs from the keypad – white wire for output A, and green for output B. This relay should operate at 12 to 24V DC; it is non-inverting to a programmed “low” for unlock, and its power budget should be within the power supply loads. It should be noted that due to some internal circuits of the keypad, when such a relay is commanded “off,” the keypad output voltage may not be high enough to release the relay, in which case an external resistor, approximately 500 ohms and ½ W, may be installed across the relay coil, or input drive to +.

**“My customer has users that need to be restricted to certain times of the day. How may I do this using the keypad?”**



Attach the brown wire to a time clock device (not supplied by Essex Electronics) that grounds this wire during the times that you wish to allow access to those users and disconnects this wire from ground during the restricted times.

When this wire is not grounded only those users with 24-hour access authorization will be able to unlock the door.

See “Programming System Setup” time clock setting, which is normally set to prevent lockout and will need to be changed to lock out unauthorized users.

**“My customer does not have, or does not remember, the keypad master code, and the default master code does not work. How may I change or modify user codes without this number?”**

A new master code may be programmed into the keypad if you have access to the back of the keypad and its harness.

Momentarily ground the orange wire. This will place the keypad in the programming system setup, and the master code may then be changed, within 30 seconds, by entering 1#, followed by the new master code, followed by #, and then \*\* (double asterisk) to exit this programming.

# •••• Notes

# •••• Notes

# ••••• Warranty & Repairs

## ■ General Warranty Policy (effective date May 1, 2014)

**Essex Electronics Inc.** (“Essex”) warrants that at the time of original purchase from Essex the products specified below are free from defects in workmanship and material. Subject to the conditions and limitations set forth below, Essex will, at its option, either repair or replace any part of its products that prove defective by reason of improper workmanship or materials. Repaired parts or replacement products will be provided by Essex on an exchange basis, and will be either new or refurbished to be functionally equivalent to new. Essex reserves the right to discontinue a product for any reason, without notice, at any time. If a product that has been discontinued proves defective and if Essex is unable to repair or replace the product, within the terms expressed in this Limited Warranty, a substitute product may be provided at Essex’s election, as a replacement for the original discontinued product.

This Limited Warranty extends only to the original retail or wholesale Buyer and the original site of installation. It does not cover any damage to this product or parts thereof, if the product is installed in violation of the applicable codes or ordinances, or is not installed and used in accordance with our installation instructions. This warranty applies only to standard Essex products purchased as completed assemblies and does not cover custom products (excluding custom graphics) nor does it cover products purchased as subassemblies. This warranty will only include the normal operating life of the LED’s and relays as specified by the manufacturer. It does not cover any damage that results from accident, abuse, misuse, natural disaster, insufficient or excessive electrical supply, abnormal mechanical or environmental conditions, or any unauthorized disassembly, repair, or modification. This Limited Warranty also does not apply to any product on which the original identification or date of manufacture information has been

altered, obliterated or removed. In no event shall Essex be liable for any damage to persons, property or area surrounding the installation site caused by any malfunction of the product manufactured or supplied by Essex.

Essex will not pay, nor be responsible for shipping, transportation or delivery charges, or other cost of removal of a defective product or installation of a replacement product. The original component replaced under this Limited Warranty in any system shall become the property of Essex and as such will, at our request, be returned to our factory with transportation charges paid by the Buyer.

**Limited Lifetime Warranty:** Products carrying Limited Lifetime Warranty against defects in materials and workmanship are Essex KTP Series Keypads, K1 Series, SKE Series Keypads, KE-265 Series, PEB Series and Hand-E-Tap Series Door Access Switches. Only products with a manufactured date of 5/1/06 to the present date are covered by this Limited Lifetime Warranty.

**Limited 18 Month Warranty:** Products carrying an 18 month warranty against defects in materials and workmanship include External Power Supplies, Hand-E-Wave™, HID Edge® controllers, products with embedded 125 kHz and 13.56 MHz Card Reader processors including the PiezoProx®, iSMART™, K-Prox, RoxProx™, RoxClass™, T-Prox™, iRox™ and iRox Plus™.

**Limited 3 Year Warranty:** Essex KE-1700 Series and AKE-5 Series are covered by a 3 year limited warranty against defects in materials and workmanship.

**Limited 2 Year Warranty:** Essex products used for Elevator access control applications are covered by a 2 year limited warranty. This includes the KE-1000, KE-1900 and SKE-34 used in an elevator access control installation.

Essex Electronics, Inc.'s liability and Buyer's remedy under this warranty is limited to the repair or replacement at Seller's election

of the product, or parts thereof, returned to Essex Electronics Inc. at Buyer's expense and shown to Essex Electronics Inc.'s reasonable satisfaction to have been defective.

Notice of any defect must be sent in writing to Essex Electronics, Inc., 1130 Mark Avenue, Carpinteria, California, 93013, USA and must include the date code of the unit, description of the defect and factory assigned Return Authorization #. Upon receipt of such notification, Essex will determine whether to repair or replace. We also reserve the right to have our representative make any inspection or repairs, or furnish replacements.

**ESSEX RESERVES THE RIGHT TO AMEND THIS GENERAL WARRANTY POLICY AS REQUIRED.**

**Disclaimer of Warranties: Limitation of Buyer's Remedies**

Except for the repair or replacement at seller's option which is expressly set forth above, Essex Electronics Inc. extends no warranty of any kind, express or implied, and disclaims any implied warranty of merchantability or suitability for purpose for which sold, with respect to the keypads, keyless entry coded access system or accessories. Except for the limited repair or replacement specified above, under no circumstances will Essex Electronics Inc. be liable to buyer under or in connection with any manufacture or sale of any of the products set forth above under any tort, negligence, strict liability, contract or other legal or equitable theory, or for incidental or consequential damages, or buyer's cost of effecting insurance coverage.

The foregoing limited warranty expressed herein constitutes the sole and entire warranty with respect to the products set forth above and is in place of any and all other warranties, express or implied.

This warranty may not be expanded or extended by any oral representation, written sales information, advertising, drawings or otherwise. Essex Electronics Inc. is not responsible hereunder for incidental damage to person or property, or other incidental or

consequential damages. The remedies of the buyer shall be limited to those provided in this limited lifetime warranty to the exclusion of any and all other remedies, including, without limitation, incidental or consequential damages.

This Limited Lifetime Warranty shall be governed by and interpreted in accordance with the California Uniform Commercial Code and by the procedural laws of the State of California. Any lawsuit or other action which arises out of, relates to, or is in connection with the manufacture or sale of the products set forth above shall be governed by California law, and the venue for any such action shall be the Superior Court of the State of California in and for Santa Barbara County, California.

### ■ **Repair Policy**

Should it be necessary for a component or a system to be returned for repair, it must be accompanied with an RA# (Return Authorization Number) issued by the factory. Please call 1-800-KEYLESS (800-539-5377) to obtain an RA#. All returns must be sent to the factory freight prepaid. Collect shipments will not be accepted at any time. Standard turnaround time is ten (10) working days from the date of receipt. Repaired components will be returned UPS Ground (or equivalent). Any other shipping requests or instructions will be at the customer's expense.

At the factory's discretion, warranty repairs will include repair or replacement, update and testing. Returns and repairs out of the warranty period or in warranty with damage not covered under warranty shall be subject to a repair charge. All non-warranty repair freight charges are paid for by the customer. Non-warranty repair charges must be paid by credit card. (Factory Authorized Distributors are subject to standard terms).



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