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**INTRODUCTION**

The SK5-X/SK6-X is a universal keypad, can work as standalone keypad, access controller or standard Wiegand output reader. It uses Atmel MCU assuring stable performance. The operation is very user-friendly, and low-power circuit makes it long service life.

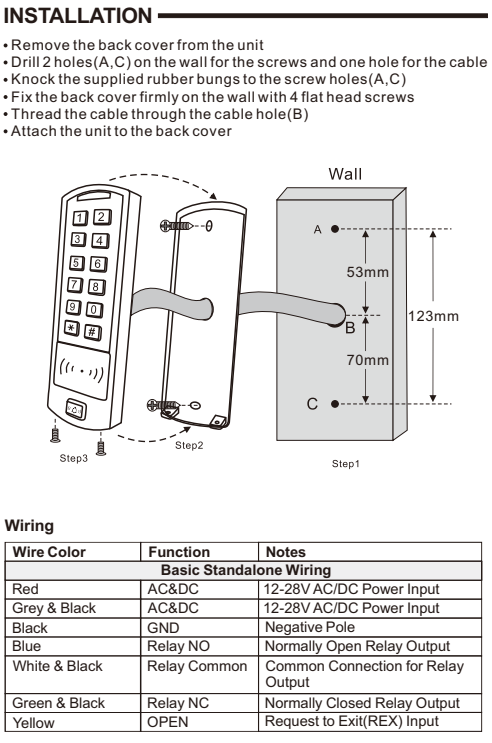
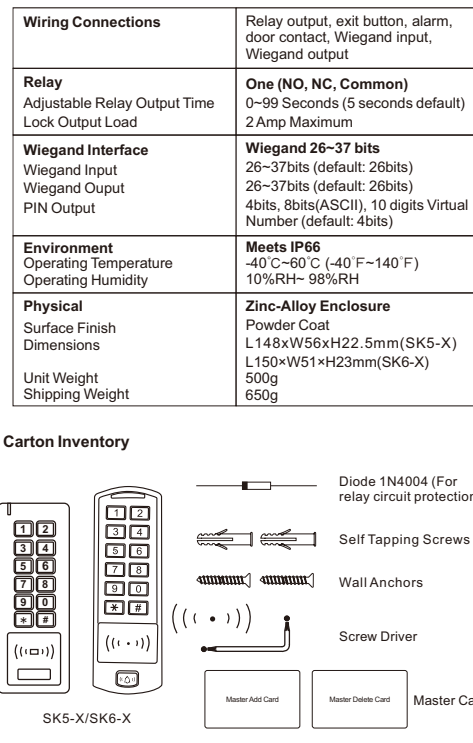
The SK5-X/SK6-X supports 600 users, it support multi access modes in either card access, PIN access, Card+PIN access, or multi cards/PINs access, it can read 125KHz EM & HID for Low Frequency and 13.56MHz Mifare for High Frequency tokens, cards and tags. Another advantage of the SK5-X/SK6-X is it has extra features including block enrolment, interlock, Wiegand 26-37 bits interface, 12-28V AC/DC voltage...etc.

**Features**

- Waterproof, conforms to IP66
- One relay, keyboard programmer
- 600 users
- PIN length: 4-6 digits
- Card type: 125KHz EM card, 125KHz HID card, 13.56MHz Mifare card
- Wiegand 26-37 bits input & output
- Can be used as Wiegand reader with LED & Buzzer output
- Pulse mode, Toggle mode
- 2 devices can be interlocked for 2 doors
- Built in light dependent resistor (LDR) for anti tamper
- Backlit keypad
- Low temperature resistance(-40°C)

**Specifications**

User Capacity	600
Common Users	598
Panic Users	2
Operating Voltage	12-28V AC/DC
Idle Current	< 65mA
Active Current	< 100mA
Proximity Card Reader	HID & EM & Mifare
Radio Technology	125KHz & 13.56MHz
Read Range	2-6cm



**Pass-Through Wiring (Wiegand Reader or Controller)**

Green	D 0	Wiegand Input/Output Data 0
White	D 1	Wiegand Input/Output Data 1
<b>Advanced Input and Output Features</b>		
Grey	Alarm Output	Negative contact for Alarm
Brown	Contact Input	Door/Gate Contact Input (Normally Closed)
Brown & Black (SK6-X)	Door Bell A	Contact for Door Bell
Yellow & Black (SK6-X)	Door Bell B	Contact for Door Bell

**Sound and Light Indication**

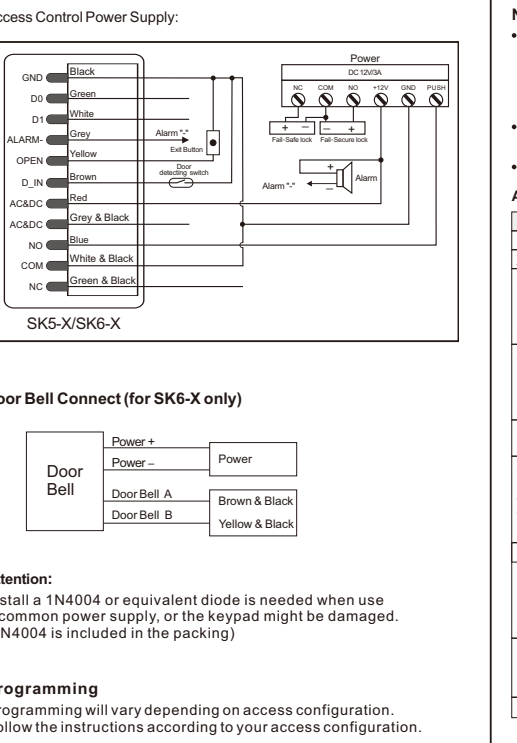
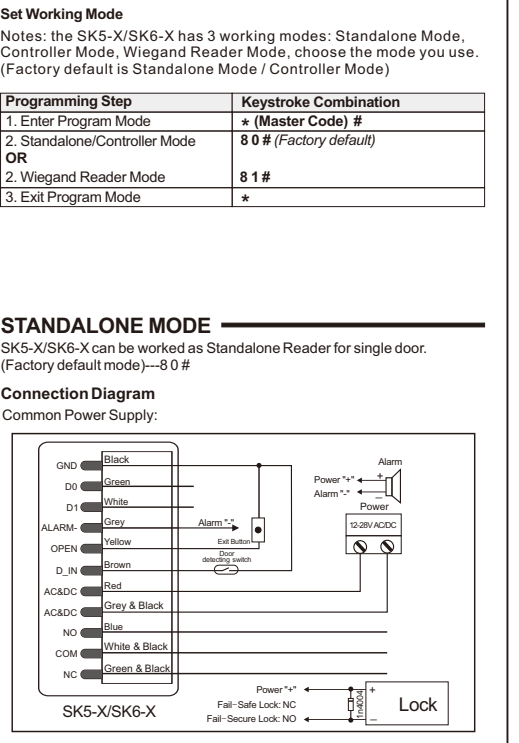
Operation Status	LED	Buzzer
Stand by	Red light bright	-
Enter into programming mode	Red light shines	One beep
In the programming mode	Orange light bright	One beep
Operation error	-	Three beeps
Exit from the programming mode	Red light bright	One beep
Open lock	Green light bright	One beep
Alarm	Red light Shines quickly	Beeps

**Basic Configure**

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Update Master Code	# (Factory default is 123456)
3. Exit Program Mode	*

**Set Master Code**

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Update Master Code	# (New Master Code) # (Repeat New Master Code)
3. Exit Program Mode	*



**Notes:**

- User ID number:** Assign a user ID to the access card / PIN in order to track it. The common user ID number can be any number from 1-598, the panic user ID is from 599-600. IMPORTANT: User ID is do not have to be proceeded with any leading zeros. Recording of User ID is critical. Modifications to the user require the User ID be available.
- Proximity Card:** Any 125KHz industry standard 26 bits HID and EM cards and 13.56MHz Mifare card.
- PIN:** Can be any 4-6 digits except 8888 which is reserved.

**Add Common Users**

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add Card: Using Auto ID (Allows SK5-X/SK6-X to assign Card to next available User ID number)	1 (Read Card) #
OR	
2. Add Card: Select Specific ID (Allows Master to define a specific User ID to associate the card to)	1 (User ID) # (Read Card) # (User ID is any number from 1-598)
OR	
2. Add Card: by Card Number	1 (Input 8/10 digits Card number) #
OR	
2. Add Card: Block Enrolment (Allows Master to add up to 598 card to the Reader in a single step). Takes 2 minutes to program.	1 (User ID) # (Card quantity) # (The first card number) # (Cards' number must be consecutive; Card quantity/number of cards to be enrolled).
<b>Add PIN User</b>	
2. Add PIN: Using Auto ID (Allows SK5-X/SK6-X to assign PIN to next available User ID number)	1 (PIN) #
OR	
2. Add PIN: Select Specific ID (Allows Manager to define a specific User ID to associate the PIN to)	1 (User ID) # (PIN) # (The user ID is any number from 1-598)
3. Exit	*

**SK5-X/SK6-X Simplified Instruction**

Function Description	Operation
Enter the Programming Mode	*- 123456 - # (123456 is the factory default master code)
Change the Master Code	0 - New Code - # - Repeat the New Code - # (code: 6 digits)
Add Card User	1 - Read Card - # (can add Card continuously)
Add PIN User	1 - PIN - # (PIN Length: 4-6 digits)
Delete User	2 - Read Card - # for Card user 2 - PIN - # for PIN user
Exit From the Programming Mode	*
How to be granted access	
Card User	Read card
PIN User	Input PIN #

**Add Panic Users**

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add Card:	1 (User ID) # (Read Card / Input 8/10 digits Card number) #
OR	
2. Add PIN:	1 (User ID) # (PIN) # (User ID is any number from 599-600)
3. Exit	*

**Change PIN Users**

Programming Step	Keystroke Combination
Note: Below is done outside programming mode, users can undertake this themselves	
1. Change PIN: By Card	* (Read Card) (Old PIN) # (New PIN) # (Repeat New PIN) #
2. Change PIN: By PIN	* (User ID) # (Old PIN) # (New PIN) # (Repeat New PIN) #
3. Exit	*

**Delete Users**

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Delete Common Card User	4 1 #
OR	
2. Delete Card - By Card	2 (Read Card) #
OR	
2. Delete Card - By ID number	2 (User ID) #
OR	
2. Delete User - By Card number	2 (Input 8/10 digits Card number) #
OR	
2. Delete Common PIN User	2 (Input PIN) #
OR	
2. Delete PIN - By PIN	2 (User ID) #
OR	
2. Delete PIN - By ID number	2 (User ID) #
OR	
2. Delete Panic Card User	2 (User ID) #
OR	
2. Delete Panic PIN User	2 (User ID) #
<b>Delete All Users</b>	
2. Delete All Users	2 (Master Code) #
3. Exit	*

**Set Relay Configuration**

The relay configuration sets the behaviour of the output relay on activation.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add Card:	1 (User ID) # (Read Card / Input 8/10 digits Card number) #
OR	
2. Add PIN:	1 (User ID) # (PIN) # (User ID is any number from 599-600)
3. Exit	*

**OR**

1. Pulse Mode	3 (1-99) # (factory default)
2. Toggle Mode	3 0 # (factory default)
3. Exit	*

**Set Access Mode**

For Multi cards/ PINs access mode, the interval time of reading cards/inputting PINs can not exceed 5 seconds, or else, the SK5-X/SK6-X will exit to standby automatically.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Card access	4 0 # (factory default)
OR	
2. Card+PIN access	4 1 #
OR	
2. Card or PIN access	4 2 # (Factory default)
OR	
2. Multi cards/PINs access	4 3 (2-9) # (Only after reading 2-9 cards or PINs, the door can be opened)
3. Exit	*

**Door Detecting**

Door Open Too Long (DOTL) warning: When used with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened normally, but not closed after 1 minute, the inside buzzer will beep automatically to remind people to close the door and continue for 1 minute before switching off automatically.

**Door Forced Open warning:** When used with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened by force, or if the door is opened after 60 seconds of the electro-mechanical lock not closed properly, the inside buzzer and alarm output will both operate. Enter Master code #2 or valid user card /PIN to silence.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Disable door open detection	5 0 # (factory default)
OR	
2. To enable door open detection	5 1 #
3. Exit	*

**Set Strike-out Alarm**

The strike-out alarm will engage after 10 failed card/PIN attempts (Factory default is OFF). It can be set to deny access for 10 minutes after engaging or disengage only after entering a valid card/PIN or Master code.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Strike-Out OFF	6 0 # (factory default)
OR	
2. Strike-Out ON	6 1 # Access will be denied for 10 minutes
OR	
2. Strike-Out ON (Alarm)	6 2 #
3. Exit	*

**Set Audible and Visual Response**

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Control Sounds	OFF = 7 0 # ON = 7 1 #
OR	
2. Control LED	OFF = 7 2 # ON = 7 3 #
OR	
2. Control Keypad Backlit	OFF = 7 4 # ON = 7 5 # (factory defaults are ON)
3. Exit	*

**Master Cards Usage**

Using Master Cards to add and delete card / PIN users

**Add a User**

- (Read Master Add Card)
- (Read User Card) / (Input User PIN #) Repeat Step 2 for additional user cards/PINs
- (Read Master Add Card)

**Delete a User**

- (Read Master Delete Card)
- (Read User Card) / (Input User PIN #) Repeat Step 2 for additional user cards/PINs
- (Read Master Delete Card)

**Users Operation & Reset to Factory Default**

- Open the door:** Read valid user card or inputting valid user PIN
- Remove Alarm:** Read valid user card or inputting valid user PIN, or input Master Code #
- To reset to factory default & Add Master Cards:** power off, press the exit button, hold it and power on, there will be two beeps, and the LED light turns into yellow, release the exit button, then read any two cards (can be 125KHz EM card, 125KHz HID card or 13.56MHz Mifare card, the LED will turn into red, means reset to factory default successfully. Of the two cards reading, the 1<sup>st</sup> one is Master Add Card, the 2<sup>nd</sup> one is the Master Delete Card.

**Remarks:**

- If no Master Cards added, must press the Exit Button for at least 10 seconds before release.
- Reset to factory default, the user's information is still retained.

**CONTROLLER MODE**

SK5-X/SK6-X can work as Controller, connected with the external Wiegand reader. (Factory default mode)—8 0 #

