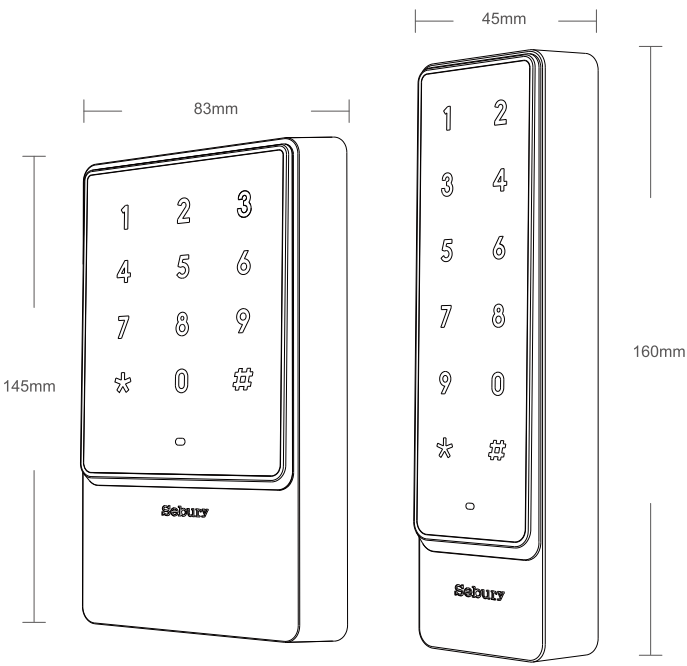
Sebury

sTouch2 / 2s

INSTRUCTION MANUAL



sTouch2 sTouch2s

1. Introduction, Features and Specifications:

1.1Introduction:

sTouch2 control one door, and can be connected with external card reader to realize the special functions such as anti-passback through wiegand wire. It can directly drive electric lock, alarm, and external exit button and magnetic door switch. It can read different kinds of contactless cards such as EM, HID, Mifare and CPU at the same time. 2000 user capacity, each user have a card and a password. In addition, the product can also set 1 administrator password, 1 adding card, 1 delete card, 1 anti-stress card and 1 anti-stress password, easy operation and more safe for users.

1.2Features:

Zinc alloy structure, waterproof design , fully potted, confirm to IP65.
High strength wear-resistant glass panel, capacitive touch keypad.
125Khz built-in EM&HID card reader.
13.56Mhz built-in Mifare&CPU card reader(ISO14443A).
The back light can be set to Normal ON, Normal OFF or Automatic mode.
Multi-function, including card reader, standalone access control, anti-passback and various of working modes, suitable for various application places.

1.3 Specification:

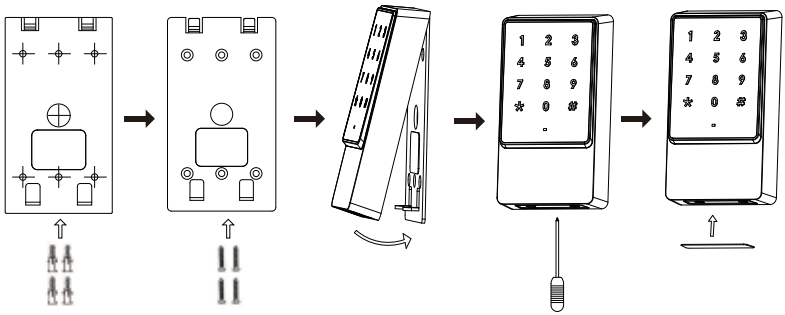
Input Voltage:	DC12～24V
Quiescent Current:	≤45mA
Reading distance of EM&HID card:	5cm
Reading distance of Mifare&CPU card:	2cm
Reading card Antenna Frequency:	125KHz & 13.56MHz
Card number transmit format:	Wiegand 26-37 （HID card output wiegand 26-37 bit automatically ）
Keypad output format:	Input a 4-6 digits password, card number output, Single Key a 4 bits output, Single Key a 8 bits output.
Dimension(Height x Wide x Depth):	sTouch2:145x83x26mm,sTouch2s:160x45x26mm
Working Environment Temperature:	-20～60° C
Working Environment Humidity:	0～95% (non-condensing)

2. Installation and Wiring Instruction

2.1 Package List

Item	Product Name	Model/Description	QTY	Remark
1	Color box	sTouch2	1	
2	Access controller	sTouch2	1	
3	Instruction Manual	sTouch2 instruction manual	1	
4	Punch sticker	sTouch2	1	
5	Screw Hole Decoration piece	sTouch2	1	
6	Expansion Rubber Bung	Φ6mm×30 mm	4	white
7	Self Tapping Screw	ΦKA3mm×25 mm	4	Zinc plating

2.2 Installation Steps



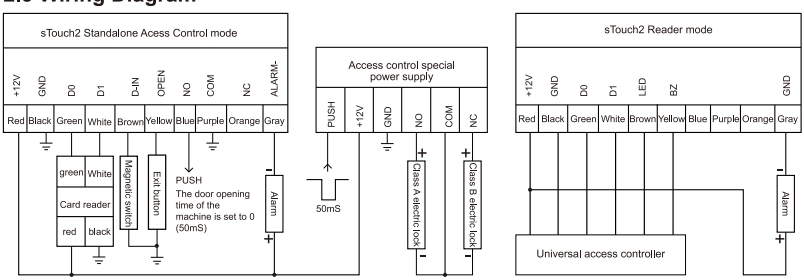
①Stick the punch sticker on the wall, drill Φ14mm hole for outlet and 4 Φ6mm installation holes with expansion, then insert 4 expansion rubber bungs into the installation holes;

② Screw out the anti-dropping screws under the side of the product with a screwdriver, take off the bottom shell of the product, compare the opening position of the bottom shell, and fix the bottom shell on the wall with 4 self-tapping screws;

③According to the selected wiring diagram, cut the lead wire to the appropriate length, and cut off the excess wire ends, connect the system wire through the wall or in the embedded box according to the wiring diagram one by one, taking care not to connect wrong or short circuit, otherwise the machine may be burn out. After checking correctly, power on shortly to test whether the indicator is normal, and whether the buzzer beep, otherwise cut off the power supply immediately, re-check whether the wiring is correct. After checking correctly, install the product lid on the back shell on the wall, and fix it with anti-drop screws.

④stick decoration piece on the anti-dropping screw position.

2.3 Wiring Diagram



Wiring Diagram

Note:Type A Electronic lock refers to the electric unlock when power on, such as electric control lock, electric lock.

Type B Electronic lock refers to the electric unlock when power off, such as magnetic lock, electric bolt lock.

3. Administrator Card Operation

3.1 Add User Card

Read Adding card once ,read several user card continuously, finally read adding card once.

3.2 Delete User card

Read delete card once, read several user card continuously, finally read delete card once.

4. User Operation

4.1 Use Card Open Door
Read valid user card once, the lock opened.

4.2 Use Card and Password Open Door
Read valid user card once, then enter 4-6 digits user's password, press "#", the lock opened.

4.3 Use Card or Password Open Door
Read user card once, the lock opened.
Or enter 4-6 digits user's password, press "#", the lock opened.

4.4 Multi-Card Open Door: the door opening mode is required to be card mode, the number of multi-card door opening is set to 2-10
Read 2-10 times different valid user card(the interval should not exceed 5 seconds), the lock opened.

4.5 Electric Lock Switch Mode
In normal mode, the electric lock will be closed for a period of time after being opened, which is equal to a delay switch

In switch mode, switch the state of electric lock once for each valid unlock operation, and keep the state of lock all the time.

4.6 Modify User Password
Press "*", read user card once, enter 4-6 digits old password #, enter 4-6 digits new password #, repeat enter 4-6 digits new password#.
Or press "#", enter 1-2000(ID) #, enter 4-6 digits old password #, enter 4-6 new password #, repeat enter 4-6 digits new password #.
Note: password users must get their ID number and initial password from administrator, for cardholders, modifying password must use card mode at the first time.

5. Alarm Function

5.1 Anti-tamper Alarm
When turn on anti-tamper Alarm function, if the device is disassembled illegally, the built-in buzzer and external alarm will both alarm.

5.2 Door Status Alarm
When connect with door status switch, if the door is opened illegally, the built-in buzzer and external alarm will both alarm.

5.3 Anti-stress Alarm
When the door is forced to open by illegal elements:
Read anti-stress card, or enter anti-stress password #, the door opened, the external alarm will alarm, but built-in buzzer don't alarm.

5.4 Cancel the Alarm
During anti-tamper and door status alarm, read valid user card or enter administrator password to cancel alarm, if there is no any operation, the alarm will canceled automatically beyond the set alarm time.

6. Anti-crack Function

To prevent malicious cracking of the card and password, try to enter an invalid administrator password、user password、anti-stress password or read invalid card, and start corresponding operation after 10 times errors, including three levels: unlimited number of errors, 10 times errors locked for 10 minutes, 10 times errors alarm for 1-3 minutes.

7. Reset to Factory Default

In the state of Power off, the indicator light turn on orange when power on for 1 second, press "*" within 1 second, release it until hearing two shot beep voice, then hear a long beep voice, enter the normal operation state. Reset to factory default setting is successfully, but don't delete user information.

8. Voice and Light Indication

Operation Status	Indicator Light Color	Buzzer
Standby	Red	
Keypad		Short Beep
Read Card	Green	Long Beep
Unlock	Green	Long Beep
Operation Successful	Green	Long Beep
Operation Failed		3 short beep
Password Inputting	Slow Red Flash	
Read card and password	Slow Red Flash	
Read Multi-card to open door	Slow Red Flash	
1st menu	Slow Red Flash	
2nd menu	Slow Orange Flash	
During Setting	Orange	
Manage card Enter	Orange	Two short beep
Manage Card Exit	Red	Long beep
Alarm	Fast Red Flash	Alarm Voice

9. Administrator Keypad Operation:

Enter Administrator Operation			
Red	Red Flash	Remark	Function
*	6-8 digits administrator password, #	Default: 888888	Enter administrator Operation Status

When administrator password is not entered correctly, the effective operation interval will be more than 5 seconds, and the current operation will exit to the normal standby state; when administrator enter correct password, the effective operation interval more than30 seconds, and the current operation will exit to the normal standby state. During operation programme, press "#" means confirm input number, in adding or delete cards operation, it means end the loop of operation and return to the previous operation; Press "*" key every time to exit the first-level operation state, and observe the indicator color to know which state exit at present. The following operations are valid only after entering the administrator operation status.

9.1 Basic Operation:

Basic Operation			
Red Flash	Orange	Function	Remark
0	6-8 digits new password，#，repeat 6-8 digits new password，#	Modify administrator password	
1	Read card	Adding 1 card②	Rotate Operation③
	1-2000（ID），#，read card		
	8 or 10 digits card number①，#		
	1-2000（ID），#，8 or 10 digits card number, #		
	1-2000（ID），#，4-6 digits user password，#	Adding 1 user password	
2	Read card	Delete 1 card	Rotate Operation
	8 or 10 digits card number，#		
	1-2000（ID），#	Delete 1 user	
2	0000，#	Delete all cards and password	
3	0，#	Card to open door	Default 2
	1，#	Card and password to open door	
	2，#	Card or password to open door	
4	0，#	Open time 50mS	Default 5
	1-99，#	Open time 1-99S	

Note:
①8 digits card number, such as 118，32319，some card omit the front number 118, written in 32319, it must read card to add the card correctly; 10-digit card number, such as 0007765567, some cards omit the front number 000, written in 7765567, and add 0 in front to input 0007765567.

②Adding a user password 1234 with the card at the same time, this password is limited to use modify user password, can not open the door.

③After adding 1 card, it can add another 1 card or another 1 user password continuously without having to re-enter menu 1.

9.2 Advanced Operation:

Advanced Application				
Red Flash	Orange Flash	Orange	Function	Remark
6	1	Read card	Setting adding card	
	2	Read card	Setting delete card	
	3	Read card	Setting anti-stress card	
	4	8-digit anti-stress password #	Setting anti-stress password	
	5	0, #	Normal Unlocking	Default 0
		1, #	Setting switch mode①	
	6	1-10, #	Number of multi-card door opening②	Default 1
	7	1-2000（ID number），#，8 or 10 digits card number, #，1-2000 card quantities, #	Adding serial number cards in batch③	
	9	1	Administrator unlock	Exit automatically④
System Setting				
7	0	0-15, #	Facility address	Default 0
	1	0, #	Reader mode	Default 1
		1, #	Standalone access control for single door	
		5, #	Anti-passback mode	
	2	26-37, #	Card number output format	Default 26

	3	0, #	4-6 digits key +facility code virtual card number output	Default 1
		1, #	Single Key a 4bit output	
		2, #	Single Key a 8bit output	
	4	0, #	Turn off Alarm⑤	Default 1
		1-3, #	Turn on Alarm for 1-3 minutes	
User Options Setting				
8	1	0, #	IIndicator Light Normally OFF⑥	Default 1
		1, #	Indicator Light Normally ON	
	2	0, #	Buzzer OFF⑦	Default 1
		1, #	Buzzer ON	
	3	0, #	Keypad Light Normally OFF	Default 1
		1, #	Keypad Light Normally ON	
		2, #	Keypad Light Automatic mode⑧	
	4	0, #	Turn Off anti-tamper alarm	Default 0
		1, #	Turn On anti-tamper alarm	
	5	0, #	Unlimited Error number	Default 0
		1, #	10 times errors⑨ locked for 10 minutes	
		2, #	10 times errors alarm for 1-3 minute	

Note:

①For each effective unlocking operation, change the switch state once, and keep locking the state all the time.

②Only valid under the card opening mode, open the door after reading 2-10pcs cards continuously.

③The device will take ID number and card number as the initial data, add 1 card, then automatically increase ID number and card number, continue to increase the next card, until the specified number of cards have been added, but the increasing ID number can not exceed 2000, and the input ID number + card quantities-1<=2000.

④After unlocking, it enter the normal working state.

⑤When the alarm is turned off, it is invalid for the anti-tamper, anti-stress and door status alarm.

⑥Refers to static state, operation in accordance with the normal instructions.

⑦After entering administrator password, the buzzer will sound normally.

⑧Pressing key or reading card once, the keypad light will be turned off after 30s delay. However, when the keypad light is off, it means turn on the keypad when press the keypad at first, without any other function.

⑨Start the corresponding operation after 10 errors continuously, including: try to enter invalid administrator password, user password, anti-stress password or read invalid card.

10. Various Working Modes Application

There are 3 working modes about the device, such as reader mode, standalone access control mode, anti-passback mode, default standalone access control.

The device can be connected to the external reader through Wiegand and realize various function. The information such as card number and password are stored inside the device, external reader is only an input device for reading card or password. The external reader can be connected to multiple devices in parallel, but the function are the same, the operation on the local device and external readers are different,depending on the mode setting.

10.1 Reader Mode

As a card reader, the device has the following functions:

Enter Administrator Operation			
Red	Red Flash	Function	Remark
*	6-8digits administrator password #	Enter administrator operation mode	Default 888888

Reader Settings

Red Flash	Orange Flash	Orange	Function	Remark
0		6-8digits new passwords #, repeat 6-8 digits new passwords #	Modify Administrator Password	
7	0	0-15, #	Facility code	Default 0
	1	0, #	Reader mode	Default 1
		1, #	Standalone mode	
		5, #	Anti-pass back mode	
	2	26-37, #	Card number output format	Default 26
	3	0, #	4-6 digits +facility code virtual card number output	Default 1
		1, #	Single Key a 4bit output	
		2, #	Single Key a 8bit output	
	4	0, #	Turn off Alarm	Default 1
		1-3, #	Turn on Alarm for 1-3 minutes	
8	1	0, #	Indicator Light Normally OFF	Default 1
		1, #	Indicator Light Normally ON	
	2	0, #	Buzzer OFF	Default 1
		1, #	Buzzer ON	
	3	0, #	Keypad Light Normally OFF	Default 1
		1, #	Keypad Light Normally ON	
		2, #	Keypad Light Automatic mode	
	4	0, #	Turn off anti-tamper alarm	Default 0
		1, #	Turn on anti-tamper alarm	

When LED level is low, indicator light will turn to Green, LED level rising, indicator light will turn to normal.

When BZ level is low, the Buzzer will beep, BZ level rising or after 30 seconds, the Buzzer will turn to normal. Use as a card reader, card number and keypad output in wiegand format, the output data is shown by the low level of D0 &D1 cable, list as below:

D0: low level means 0, green cable.

D1: low level means 1, white cable.

The pulse width for low voltage is 40 us, and the time internal is 2 ms.

EM, Mifare card output format is wiegand 26-37, HID card does not need to be set, and automatically wiegand 26-37 output according to card format. The output format should match the connected controller, and the default is wiegand 26.

There are 3 formats Keypad output set as below:

Format 0: 4-6 digits facility code virtual card number output, enter 4-6 digits password, press “#”, wiegand 26-37 output, 10-bit decimal card number. Card number as follows, the 1-4 bit is the facility code, the range is 0 to 15, add “0” in the front if less than 4 digits, the 5-10 bit is 4-6 digits password, add “0” in the front if less than 6 digits. For example, facility code is 15, the password is 999999, then output card number is 0015999999, the maximum output card number is 0015999999, that is 0xF423FF, wiegand 26 card number format output are available, it can be seen 0015999999 shown on the device of 10-bit decimal card number, it is easy to the management of entering password.

Format 1: Single Keypad 4bit output, it means press one Keypad, output a 4Bit data, the corresponding relationship is listed as below:

1（0001）, 2（0010）, 3（0011）

4（0100）, 5（0101）, 6（0110）

7（0111）, 8（1000）, 9（1001）

*（1010）, 0（0000）, #（1011）

Format 2: Single Keypad 8bit output, it means press one Keypad, output a 8bit data, the first 4 digit are the reverse of the back 4 digits, the corresponding relationship is listed as below:

1（11100001），2（11010010），3（11000011）
4（10110100），5（10100101），6（10010110）
7（10000111），8（01111000），9（01101001）
*（01011010），0（11110000），#（01001011）

10.2 Standalone Access Control Mode

Under this mode:

The electric lock can be opened by reading user card or inputting user password on the device or external card reader.

Read anti-stress card or input anti-stress password on the device or external card reader to open the electric lock, the external alarm will sound at the same time.

10.3 Anti-passback Mode

The anti-passback means that it need read card not only enter room but also exit room to the same door, it cannot read card twice continuously to enter room or exit, prevent two people from entering and exiting with one card at the same time, under this mode:

Read anti-stress card or input anti-stress password on the device or external card reader to open the electric lock, the anti-passback mode will not affect the device, the external alarm will sound at the same time.

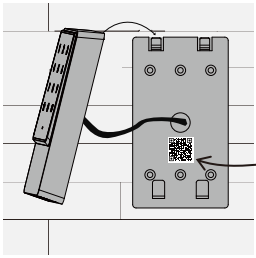
Read user card on the device or external card reader, user must read card on the device at the first time if want to enter room, user must read card on the card reader at the second time if want to exit room, the user must read card repeatly between the device and external card reader, then can enter room or exit room.

In anti-passback mode, user password is invalid.

11 Simple Troubleshooting

Trouble Phenomenon	Fault Reason	Fault Reason&Solution
Reading distance too close	1.Card quality issue 2.Switch power supply interferences card reading	1.Please use original card 2.Power supply and standalone access control need connect to ground wire.
User password setting error	1.The password setting does not comply with the specification 2.Setting user password under card reader mode	1. User password can not set to 1234 2. User password only can be 4-6 digits
Cannot open door after inputting user password	Use password 1234 to open door	1234 is user password initial data, and can not use to open door, it must modify to other password number.
Alarm under normal situation	When the product is installed, there is light leakage at the bottom.	When the device is installed, the bottom should be close to the wall without light leakage.
No reaction after reading card	The product is not at the standby state.	Press "*" to exit, the indicator become red, let the device standby state
The Keypad light doesn't work.	Keypad light mode setting incorrect.	1.Please set the key light mode to normal ON or automatic 2.In automatic mode, the indicator light will turn off automatically without operation after 30S.
Can not enter administrator setting	Forgetting administrator password	Reset to factory default, default administrator password is 888888. Use conditions and parameters need to be reset without losing user data.
Other Phenomenon	Not above reasons	Users can't solve the problem by themselves, please consult our professional after-sales service staff

12 E-instruction



Please unpack the shell and scan the
QR code on the back
shell to get an
E-instruction if you lost the physical one

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Operational Video

E-Instruction

Introductory Video