

User Manual

SA60

Date: 2025.07.07

Doc Version:

English

Thank you for choosing our product. Please read the instructions carefully before operation. Follow these instructions to ensure that the product is functioning properly. The images shown in this manual are for illustrative purposes only.



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If there is any issue related to the product, please contact us.

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About the Company

ZKTeco is one of the world's largest manufacturer of RFID and Biometric (Fingerprint, Facial, Finger-vein) readers. Product offerings include Access Control readers and panels, Near & Far-range Facial Recognition Cameras, Elevator/floor access controllers, Turnstiles, License Plate Recognition (LPR) gate controllers and Consumer products including battery-operated fingerprint and face-reader Door Locks. Our security solutions are multi-lingual and localized in over 18 different languages. At the ZKTeco state-of-the-art 700,000 square foot ISO9001-certified manufacturing facility, we control manufacturing, product design, component assembly, and logistics/shipping, all under one roof.

The founders of ZKTeco have been determined for independent research and development of biometric verification procedures and the productization of biometric verification SDK, which was initially widely applied in PC security and identity authentication fields. With the continuous enhancement of the development and plenty of market applications, the team has gradually constructed an identity authentication ecosystem and smart security ecosystem, which are based on biometric verification techniques. With years of experience in the industrialization of biometric verifications, ZKTeco was officially established in 2007 and now has been one of the globally leading enterprises in the biometric verification industry owning various patents and being selected as the National High-tech Enterprise for 6 consecutive years. Its products are protected by intellectual property rights.

About the Manual

This manual introduces the operations of SA60 product.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

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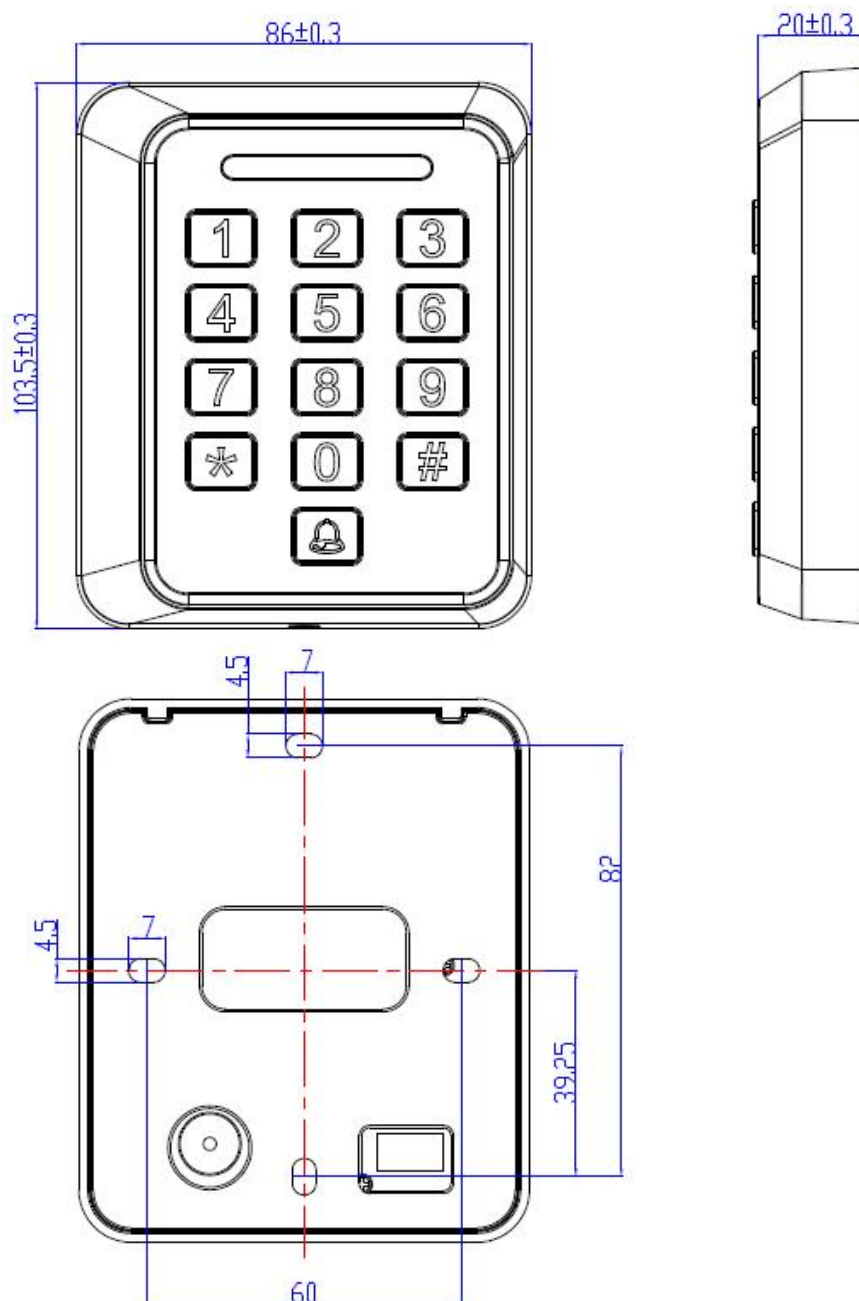
1 Applicable Models

This manual applies to the access control terminal, including the following models.

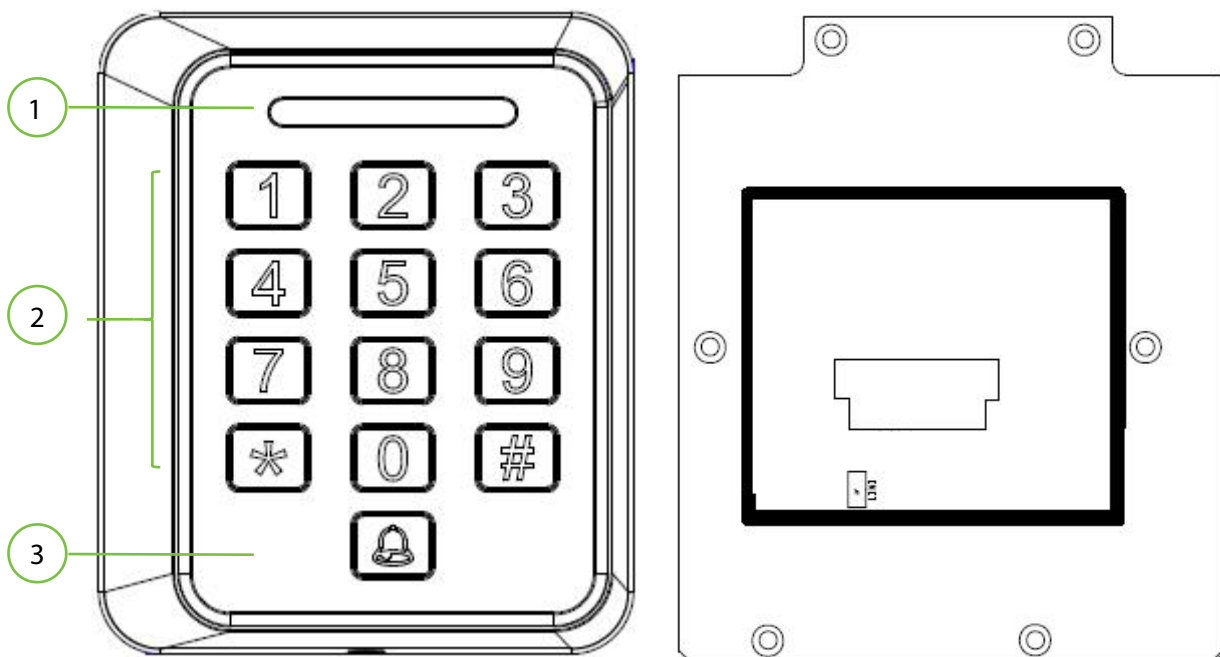
Product Series	Model	Supported Card Types
SA60	AC01-SA13H	ID
	AC01-SA13H	IC

2 Appearance Introduction

2.1 Dimensions (Unit: mm)



2.2 Appearance Description



No.	Name	Description
1	Status LED	Displays device status; flashes blue in standby mode.
2	Card Swiping Area	RFID smart card swiping area.
3	Doorbell	Doorbell button.
4	INIT Port	Used for factory reset (refer to Appendix - Factory Reset Operation).

3 Wiring and Installation

3.1 Wiring Definitions

Red	Power +12V
Black	Ground (GND)
Blue	NC (Normally Closed)
Orange	COM (Common)
Gray	NO (Normally Open)
Purple	SEN (Door Sensor)
Yellow	BUT (Exit Button)
Green	BELL+ (Doorbell)
White	BELL- (Doorbell)

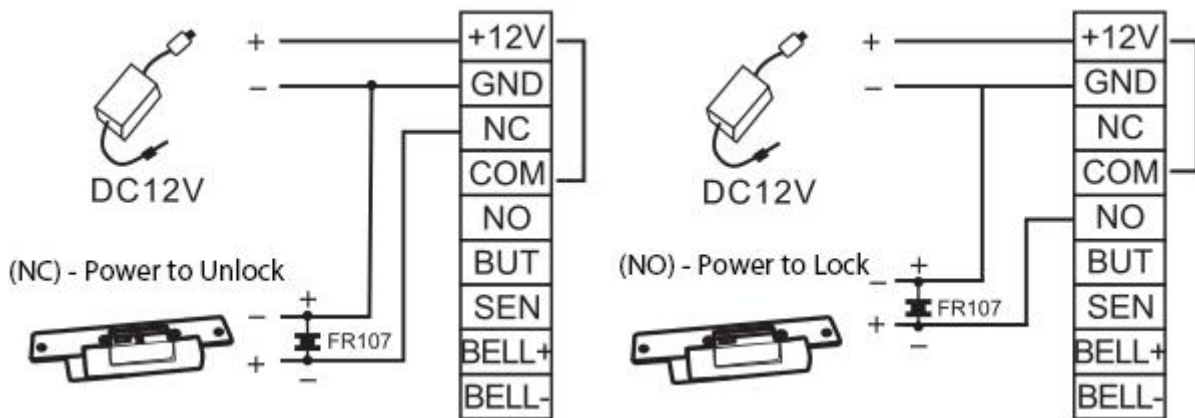
3.2 Wiring Instructions

Warning: Do not wire while powered on

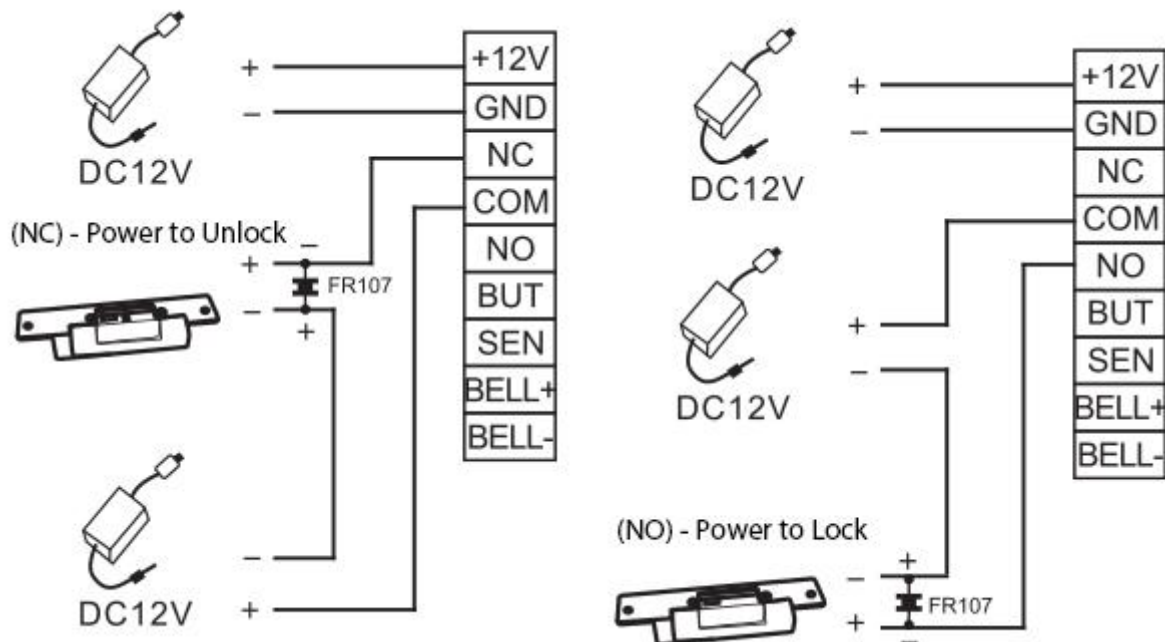
Note:

- ① This device supports both normally open and normally closed locks, connected to different terminals for different functions.
- ② To prevent the self-induction voltage generated by the electric lock during switching from affecting the access control system, a FR107 diode (do not reverse the polarity) can be connected in parallel with the electric lock to release the self-induction voltage.

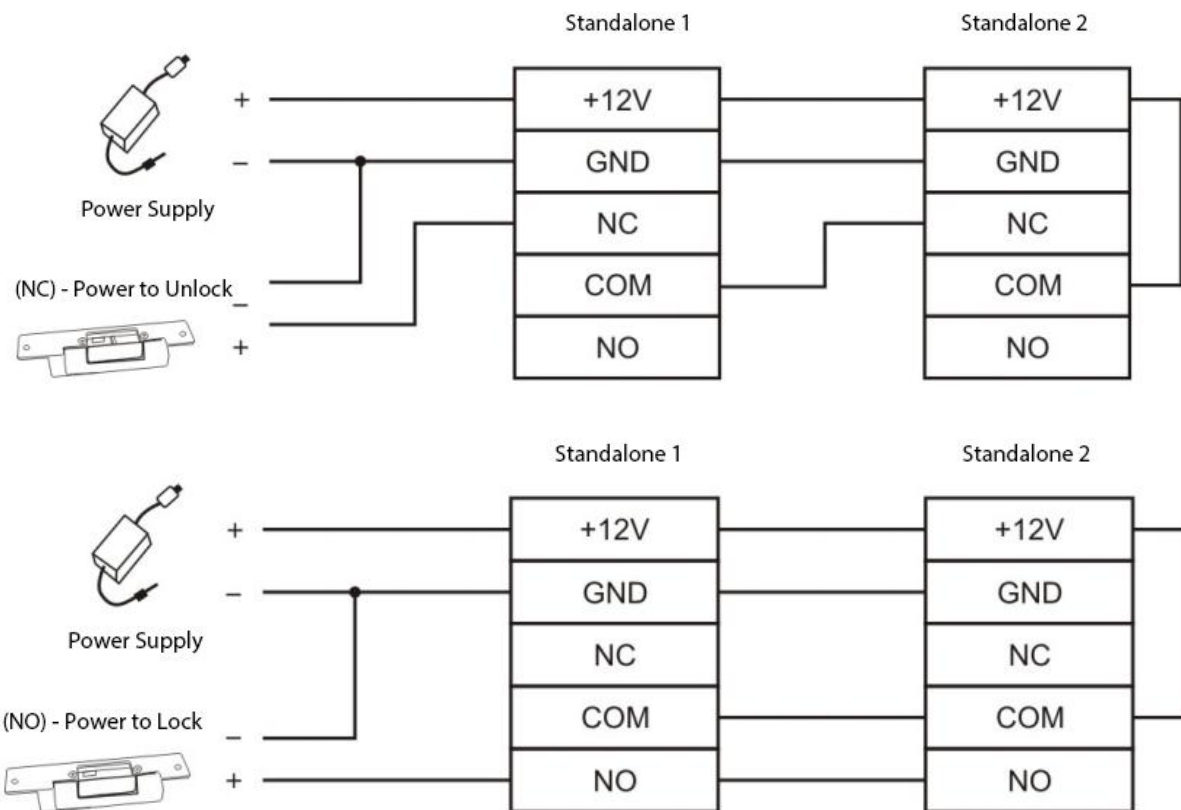
(1) Device and lock sharing the same power supply, as shown below:



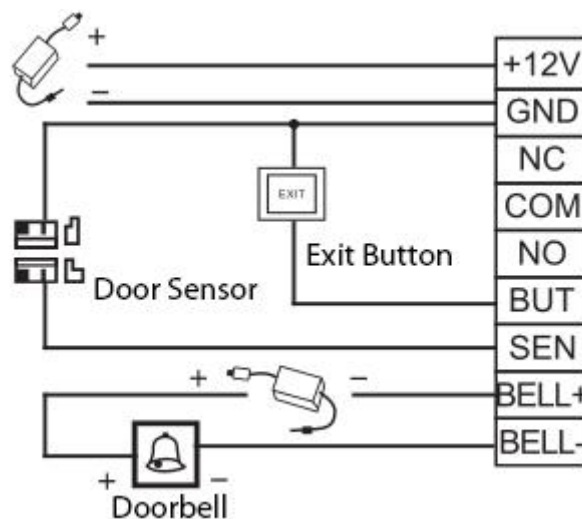
(2) Device and lock using separate power supplies, as shown below:



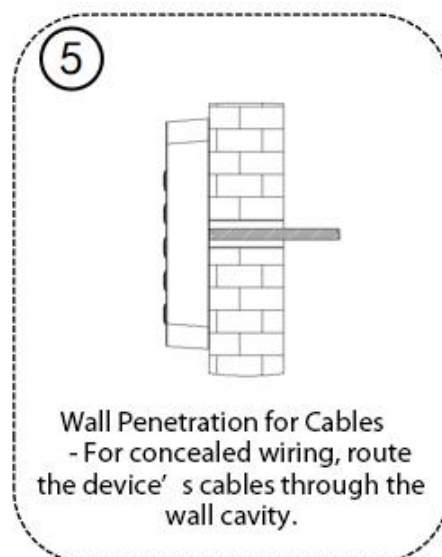
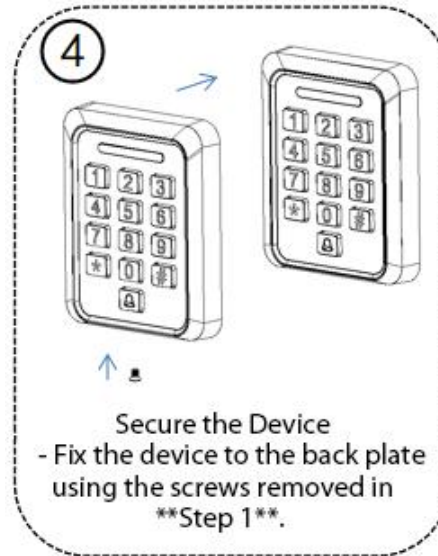
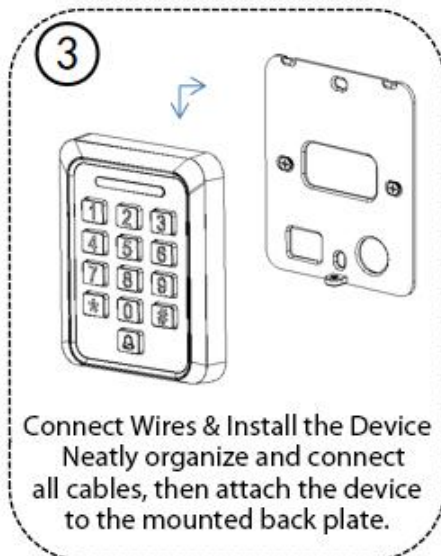
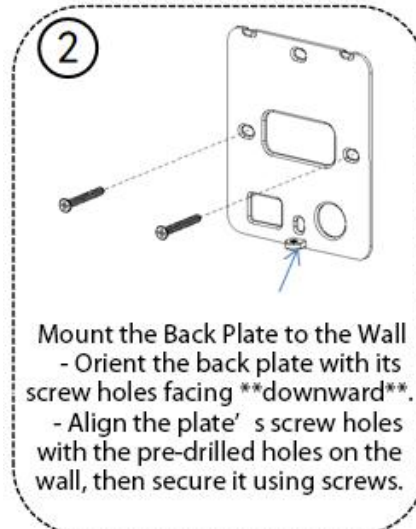
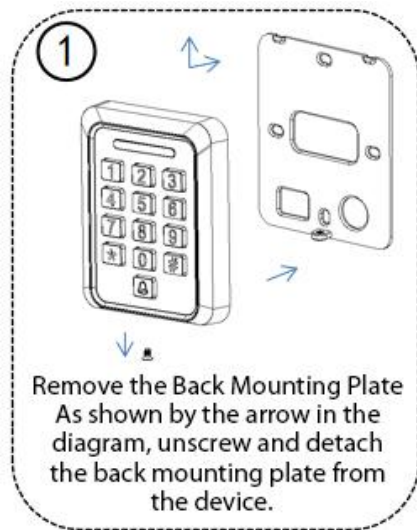
(3) Two devices connected to the same electric lock, as shown below:



(4) Connecting other devices, as shown below:



3.3 Installation Diagram

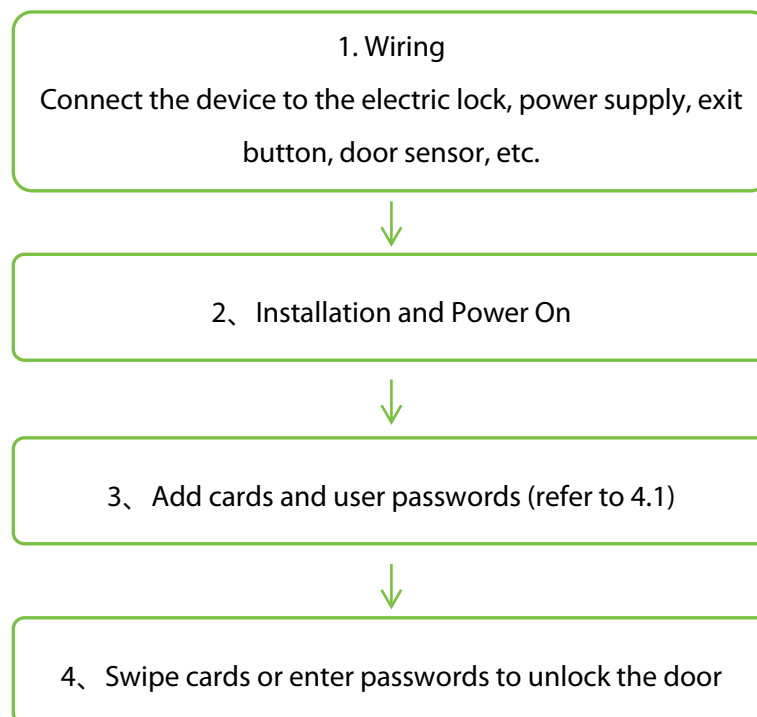


Note:

1. Complete wiring before installation.
2. When installing the access control terminal onto the mounting plate, avoid excessive force to prevent bending or deformation.

4 Operation Instructions

4.1 Operation Flow



4.2 Device Testing

First, connect the device to the electric lock, power supply, exit button, door sensor, etc., according to the wiring definitions and instructions. Then, power on the device. The status LED will light up in light blue, the buzzer will sound once, and the green LED will light up. After a moment, the status LED will flash blue, indicating successful startup. The device is in standby mode with the blue LED flashing.

Add cards and user passwords as described in 4.1.

Swipe a card: the green LED lights up, the buzzer sounds once, and the door unlocks.

Enter a password followed by #: the green LED lights up, the buzzer sounds once, and the door unlocks.

5 Keypad Operations

5.1 User Management

1. Administrator Operations

To ensure data security, users must verify the administrator password before operating the device.

Press * # + administrator password.

Note: Verification success is indicated by a green LED flash and a single buzzer sound. The default administrator password is 1234. It is recommended to change the default password after verification.

2. Change Administrator Password

Press * # + administrator password + 0 + new password # + new password #.

Note: The default administrator password is 1234. The recommended length is 4-6 digits.

3. Default Passwords

Administrator	Default: 1234. Recommended length: 4-6 digits.
General Password	Default: 8888. Length: 4-6 digits. Only one general password can be set.
User Password	User-added door-opening password. Length: 4-6 digits.

4. Password User Operations:

Unlock with Password	Enter password + #.
Add User Password	Press * # + admin password + 2 + 4-6 digit password #.
Delete User Password	Press * # + admin password + 4 + user password #.
Modify User Password	Press * # + admin password + 6 + old password # + new password #.
Set General Password	Press * # + admin password + 9 + 4-6 digit password #.
Delete General Password	Press * # + admin password + 9 + 0000 #.

Note:

- ① General passwords and user passwords can unlock the door; administrator passwords cannot.
- ② Setting a new general password will invalidate the previous one.

5. Card User Operations:

Add	Press * # + admin password + 1 + swipe card.
Delete	Press * # + admin password + 4 + swipe card.
Unlock	Swipe card.

Note: Multiple cards can be added or deleted consecutively. Press * to exit.

6. Card + Password User Operations:

Add	①Press * # + admin password + 3 + swipe card + 4-6 digit password #. ②Press * \# + admin password + 3 + 4-6 digit password # + swipe card.
Delete	①Press * # + admin password + 4 + swipe card. ②Press * # + admin password + 4 + user password #.
Modify	Press * # + admin password + 6 + swipe card + 4-6 digit new password #.
Unlock	①Swipe card + enter 4-6 digit password #. ②Enter 4-6 digit password # + swipe card. ◦

Note: Either method can be used.

7. Delete All Users

Press * # + admin password + 5 #

Note: The default administrator password is 1234

5.2 Parameter Settings

Unlock Delay	Press * # + admin password + 7 + 1 + unlock delay time #
Door Sensor Alarm	Press * # + admin password + 7 + 2 + 0 or 1 (0: off, 1: on)
Door Sensor Mode	Press * # + admin password + 7 + 4 + 0 or 1 (0: NC, 1: NO)
LED Indicator	Press * # + admin password + 7 + 6 + 0 or 1 (0: off, 1: on)
Door Sensor Alarm Delay	Press * # + admin password + 7 + 7 + alarm delay time #
Restore Settings	Press * # + admin password + 8 # + 0 #

Note: Restoring settings resets device parameters to defaults but does not delete cards, passwords, or reset the administrator password.

Default Parameters:

Door Sensor Alarm	On
Door Sensor Mode	Normally Open (NO)
Door Sensor Alarm Delay	15 seconds (range: 1 – 255 seconds)
Unlock Delay	3 seconds (range: 1 – 60 seconds)
LED Indicator	On

6 Management Card and Installation Card

Operations

6.1 Card Types

Card Type	Description
Installation Card	①The first card swiped after factory reset is recognized as the installation card. ②Swipe once: Enter card addition mode. Subsequent swipes add user cards. ③Swipe twice: Enter card deletion mode. Subsequent swipes remove user cards. ④Swipe eight times: Delete all users.
Management Card	Swipe once to enter administrator mode (equivalent to entering * # + admin password).
Addition Card	Swipe once, then swipe user cards to authorize them (batch authorization).
Deletion Card	Swipe once, then swipe user cards to remove authorization (batch deletion).

Note: Press * to exit after adding or deleting cards.

6.2 Card Settings

Installation Card	The first card swiped after factory reset is recognized as the installation card.
Management Card	Press * # + admin password + 0 + swipe card.
Addition Card	Press * # + admin password + 9 + swipe first card (addition card).
Deletion Card	Swipe second card (deletion card).

7 Appendix

7.1 Status Descriptions

Status	Description
Buzzer sounds once, green LED flashes once	Card verification successful.
Buzzer sounds three times, blue LED flashes twice	Incorrect password, verification failed
Light blue LED flashes four times, green LED flashes once, buzzer sounds five times	Factory reset performed.
Blue LED flashes	Standby mode.

7.2 Precautions

- ① Use a non-switching linear DC power supply for the access control terminal. The recommended power supply distance is within 100 meters. For distances exceeding 100 meters, use a separate power supply.
- ② Ensure the input voltage is within $12V \pm 10\%$ for normal operation.
- ③ Maintain a minimum distance of 30 cm between two access control terminals.
- ④ To reduce long-distance noise, connect the shield layer of the transmission line to the ground shared by the access control terminal and controller.

7.3 Factory Reset

Power off the device and remove the back cover. Locate the two INIT ports. Use tweezers, a needle, or a thin wire to connect the two ports. Power on the device. The buzzer will sound five times, indicating a successful factory reset.

After resetting, remove the connection tool and restart the device.

Note: Factory reset deletes all cards, passwords, and other data, and resets the administrator password to the default 1234. Proceed with caution.

7.4 Frequently Asked Questions

1	Q	Forgot administrator password.
	A	If a management card is available, use it to reset the password. Otherwise, perform a factory reset to restore the default password (1234). Note: This will delete all user data.
2	Q	Any password can unlock the door.
	A	The administrator password may have been leaked, allowing unauthorized additions of user passwords. Delete all user data, change the administrator password, and add new user passwords.
3	Q	Device emits a continuous alarm after power-on.
	A	Likely caused by a door sensor alarm. Disable the alarm via keypad or set the door sensor mode to normally closed (NC).

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