ZKTeco
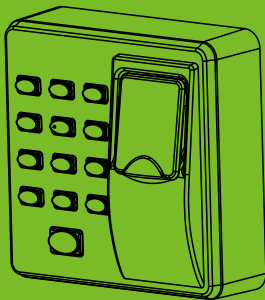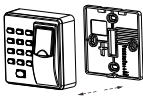
User Manual

Access Control System

Version: 1.2.1
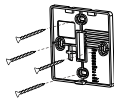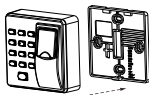
1. Equipment Installation

(1) Remove the screw on the bottom of device.

(2) Take away the back cover.

(3) Fix the back cover on the wall according to the mounting paper.

(4) Fix the device to the back cover.

(5) Fix the screw.
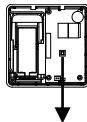
Tamper Alarm Button

2. Structure and Function

Lock ① Lock Sensor ②
③ Exit Button
④ Bell
⑤ Alarm
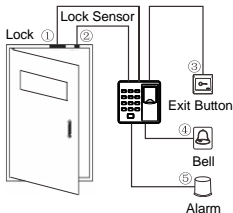
Access Control System Function:
(1) When a registered user's identity is verified, the Access Control device will send out signal to unlock the door.
(2) The door sensor will detect the status of the lock. If the door is unexpectedly opened or improperly closed, the alarm will be triggered.
(3) It supports the exit button for opening the door from inside.
(4) It supports door bell.
(5) If the Access Control device is dismantled, the alarm will be triggered.

3. Lock Connection

⚠️ **Warning**: **No operation when power on!**

(1) The system supports NO LOCK and NC LOCK. The NO LOCK (normally open at power on) is connected with **NO** terminal, and the NC LOCK is connected with **NC** terminal.

(2) To prevent the generation of self-inductance EMF which would affect the system, when the electrical lock is linked to the Access Control System, it is required to connect one FR107 diode (equipped in the package, do not reverse the polarities) in parallel in order to release the self-inductance EMF.

(1) Device shares power with the lock

When Device share power with the lock:
$U_{LOCK}=12V$, I-$I_{LOCK} >1A…$ ①
and the lock is near to the device.

DC12V

NC Lock

(2) Does not share power with the lock
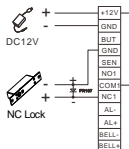
Device does not share power with the lock:
A. When U_{LOCK} =12V I-I_{LOCK} ≤1A;
B. When U_{LOCK} ≠12V;
C. When the lock is far apart from the device.

DC12V

DC12V

NC Lock
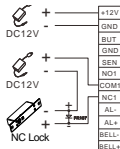
① **I**: device' output current, U_{LOCK}: lock voltage, I_{LOCK}: lock current.

(3) One device controls one lock

FR107

NC Lock

Exit Button

Professional Access Control Power Supply

Access Control Device
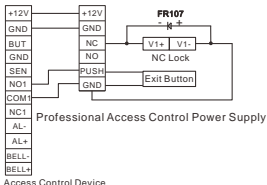
4. Connected with Other Devices
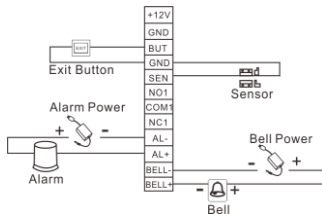
Only devices with an alarm ≤ DC 12V can be connected.

5. Connect with Power
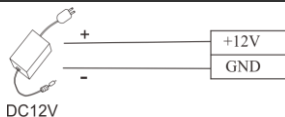
Input DC 12V, 500mA (50mA in idle status) Positive is connected with **+12V**, negative is connected with **GND** (do not reverse the polarities).

Instructions

Step 1: Power on after the device is completely installed on the wall.

Step 2: Authenticate administrator password and change it immediately. Adjust access control parameters, which include changing passwords for door opening, and setting unlocking duration, authentication mode, concealed mode, door sensor mode and alarm etc.

Step 3: You may register and authenticate user accounts, cards or passwords.

Operation Instructions

1. User Management

1.1 Administrator Operation

To ensure data security of the device, users can operate the device only after the administrator password is authenticated.

❖ **Administrator Authentication**

1. Press [*]. (The indicator is off and makes a long beep.)	→	2. Press[#]. (Enter step of password authentication.)	→	3. Enter the administrator password. (The default password is 1234.)

5. Exit. (Press [*] or do not operate the device within 20 seconds, The indicator turns red and makes a long beep, then automatically exit.)	←	4. Authentication succeeds. (The indicator turns green.)
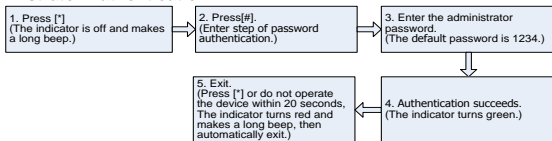
☺Note: The default administrator password is 1234. You are advised to change the initial password at the beginning.

❖ **Change Administrator Password**

1. The administrator password is authenticated.	→	2. Press [8].	→	3. Enter a new administrator password.

6. Exit. (The indicator turns red and makes a long beep.)	←	5. Password is successfully changed. (The indicator turns green and makes a long beep.)	←	4. Enter the new administrator password again for authentication.

Fail (The indicator turns red and makes three beeps.)
Succeed
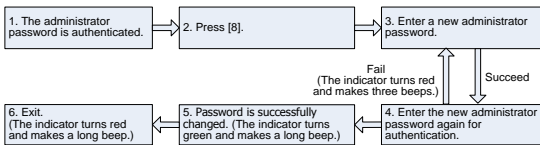
☺Note: Four-digit passwords are automatically verified. If passwords less than four digits, press [#] to confirm.

❖ Open Door by Entering Administrator Password

```
┌─────────────────────┐   ┌─────────────────────────┐   ┌─────────────────────────┐
│ 1. The administrator │ → │ 2. Press [0] or [#].    │ → │ 3. Press [0] or [#].    │
│ password is          │   │ (The indicator turns    │   │ (The indicator turns    │
│ authenticated.       │   │ green and makes a long  │   │ green and makes a long  │
│                      │   │ beep.)                  │   │ beep.)                  │
└─────────────────────┘   └─────────────────────────┘   └─────────────────────────┘
                                                                      ↓
┌─────────────────────┐   ┌─────────────────────────┐
│ 5.Exit.             │ ← │ 4. The door is opened   │
│ (The indicator turns│   │ (The indicator turns    │
│ red and makes a long│   │ green and makes a long  │
│ beep.)              │   │ beep.)                  │
└─────────────────────┘   └─────────────────────────┘
```
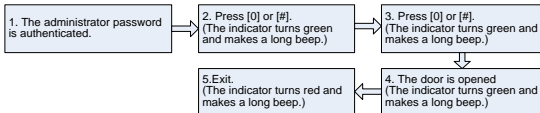
☺Note: This function can be used to open the door.

❖ Forgot Administrator Password

If administrator password is lost, you may reset the password to default through tamper switch. Dismantle the device and wait for 30 seconds until a short beep is heard, then press the Tamper Switch three times to reset to the initial administrator password, this operation must be done within 30 seconds.

☺Note: The default administrator password is 1234.

1.2 Adding Users

Register the fingerprint or card of a user or register cards in batches.

❖ Adding a User

```
┌─────────────────┐   ┌──────────┐   ┌──────────────────────────────┐
│ 1. The          │ → │ 2. Press │ → │ 4. Register fingerprint or   │
│ administrator is│   │ [1].     │   │ card. (Press fingers three   │
│ authenticated.  │   │          │   │ times or swipe the card once.)│
└─────────────────┘   └──────────┘   └──────────────────────────────┘
                                     ┌──────────────────────────────┐
                                     │ 3. Input user ID twice       │
                                     │ (The indicator turns green   │
                                     │ and makes a long beep.)      │
                                     └──────────────────────────────┘
                                     ┌──────────────────────────────┐
                                     │ 4. Register fingerprint or   │
                                     │ card. (Press fingers three   │
                                     │ times or swipe the card once.)│
                                     └──────────────────────────────┘
┌──────────────────────┐   ┌──────────────────────────────┐
│ 6. Exit.             │ ← │ 5. Registration succeeds.    │
│ (Press [*], the      │   │ (The indicator turns green   │
│ indicator turns red  │   │ and makes a long beep.)      │
│ and makes a long     │   │                              │
│ beep. )              │   │                              │
└──────────────────────┘   └──────────────────────────────┘
```

☺Note:
1. Five digits user ID is automatically verified, if user ID is less than five digits, press [#] to confirm.
2. If the user ID is not available, the ID number increases automatically. It continues to register new one once a user is successfully registered.
3. The registration fails if the user ID, fingerprint or the card has been registered (the

indicator turns red and makes three short beeps). When the indicator turns green, you can register the user again. If you fail to swipe card, press fingerprint or enter user ID for three times, the device will enter in idle status.

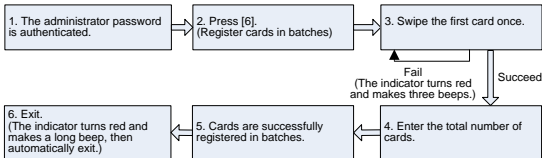❖ **Registering Cards in Batches**

```
1. The administrator password
is authenticated.        →  2. Press [6].              →  3. Swipe the first card once.
                            (Register cards in batches)
                                                          ↑
                                                          Fail        Succeed
                                                   (The indicator turns red      ↓
                                                   and makes three beeps.)
6. Exit.                     5. Cards are successfully     4. Enter the total number of
(The indicator turns red  ←  registered in batches.    ←  cards.
and makes a long beep, then
automatically exit.)
```

☺Note:
1. In the process of entering the total number of cards, three-digit numbers are automatically verified. For numbers with less than three digits, press [#] to confirm. Press [*] to enter the total number of cards again.
2. You must clear all the registered users before registering cards in batches. IDs of the to-be-registered cards must be consecutive numbers.

1.3 Register Access Passwords

This device supports 8 passwords, each password has a Group ID ranged from 1 ~ 8. The default password value is 0 for all groups, which means those passwords are disabled.

```
1. The administrator password   2. Press [3]. (The indicator   3. Enter the group ID of
is authenticated.            →  turns green and makes a     →  password.(Group IDs: 1 ~ 8.)
                                long beep.)
                                                                        ↓
7. Exit. (Press [*], the indicator   6. Registration succeeds.      4. Enter the password twice.
turns red and makes a long     ←  (The indicator turns green  ←  (The password is consists of
beep, then automatically exit)    and makes a long beep.)        four digits.)
```

☺Note:
1. When a password is changed to be 0, 00, 000, or 0000, the password is disabled.

3

2. When a password is successfully changed, you can immediately change the next password by entering another group ID.

1.4 User Authentication
Card / Fingerprint / Password Authentication
When the device is power-on, it enters user authentication state.
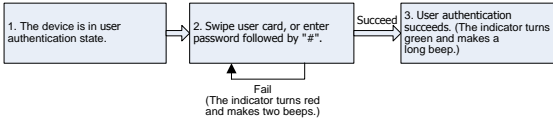
☺Note: Press [#] after entering a password for authentication. The door opens if the entered password is identical with one of the 8 passwords. The initial eight passwords for opening the door are empty.

1.5 User Deletion
Delete one, multiple or all registered user(s).
❖ Deleting One User
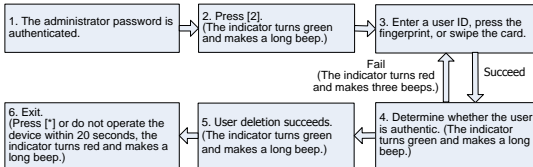
☺Note:
1. You can either swipe the card, press fingerprint or input user ID to delete a user. Five digits user ID will be automatically verified, if user ID is less than five digits, press [#] to confirm.

2. After successful deletion, the device will automatically enter the process of deleting next user. Press [*] to exit.

❖ **Deleting All Users**

1. The administrator password is authenticated.	2. Press [9]. (The indicator turns green and makes a long beep.)

3. Press [9]. (The indicator turns green and makes a long beep.)

5. Exit. (The indicator turns red and makes a long beep, then automatically exit.)

4. Deletion of all users succeeds. (The indicator turns green and makes a long beep.)
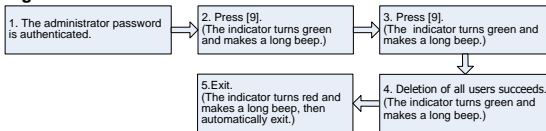
☺Note: In step 3, Press [9] for automatic confirmation. Other numbers are considered invalid. If an invalid number is entered, the device indicator turns red and makes three short beeps, then makes a long beep and exits the process.

2. Access Control Management

2.1 Unlocking Duration Configuration

1. The administrator password is authenticated.	2. Press [4]. (The indicator turns green and makes a long beep.)

3. Enter the unlocking duration. (range: 1s to 10s)

5. Exit. (The indicator turns red and makes a long beep again.)

4. Modification of the unlocking duration succeeds. (The indicator turns green and makes a long beep.)
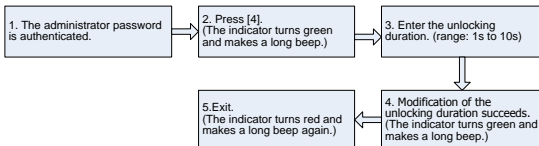
☺Note: Press [10] for automatic confirmation. For values with less than 10, press [#] to confirm. Values greater than 10 will be considered invalid.

2.2 Authentication Mode Configuration

1. The administrator password is authenticated.	2. Press [5]. (The indicator turns green and makes a long beep.)

3. Enter authentication mode.

5. Exit. (The indicator turns red and makes a long beep.)

4. Configuration succeeds. (The indicator turns green and makes a long beep.)
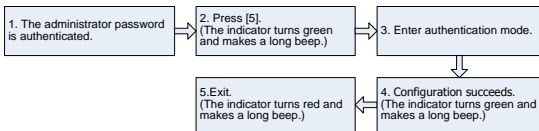
©Note: Details about authentication modes are as follows:

Authentication Mode	Value	Description
PW	1	Only password verification
RF	2	Only RF Card verification
FP	3	Only fingerprint verification
FP/PW/RF	4	fingerprint or password or RF Card verification
RF&PW	5	RF Card and password verification (swipe card before entering password)
FP&PW	6	fingerprint and password verification (fingerprinting before entering password)

2.3 Concealed Mode Configuration

Under standby mode, when the Concealed Mode is on, the indicator will be turned off.
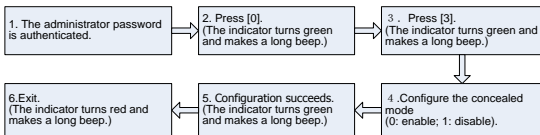
©Note: When user is authenticating the card or fingerprints or password under Concealed Mode, the indicator will still blink correspondingly to denote process status.

2.4 Door Sensor Mode Configuration

The door sensor has three modes:

● **NONE**: The door sensor is disabled.

● **NO** (**Normally Open**): The door sensor will send an alarm signal if it detects the door is closed.

● **NC** (**Normally Close**): The door sensor will send an alarm signal if it detects the door is open.

```
┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│ 1. The administrator │   │ 2. Press [0].       │   │ 3．Press [5].       │
│ password is          │──▶│ (The indicator turns│──▶│ (The indicator turns│
│ authenticated.       │   │ green and makes a   │   │ green and makes a   │
│                      │   │ long beep.)         │   │ long beep.)         │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
                                                               │
┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│ 6.Exit.             │   │ 5. Conflagration    │   │ 4 .Configure the    │
│ (The indicator turns│◀──│ succeeds.           │◀──│ door sensor mode    │
│ red and makes a long│   │ (The indicator turns│   │ (0: NO;1: NC; 2:    │
│ beep again)         │   │ green and makes a   │   │ None).              │
│                     │   │ long beep.)         │   │                     │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
```
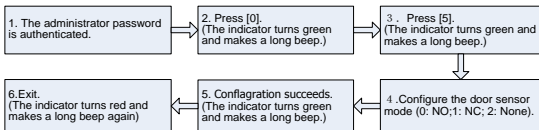
2.5 Alarm Configuration

☺Note: If an alarm is triggered, it can be terminated after the user is authenticated.

❖ Configuring Alarm Switch

Only if the alarm switch is set to be ON will the Failed Authentication Alarm and Door Sensor Alarm be effective. The default status of the alarm switch is ON.

```
┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│ 1. The administrator │   │ 2. Press [0].       │   │ 3．Press [1].       │
│ password is          │──▶│ (The indicator turns│──▶│ (The indicator turns│
│ authenticated.       │   │ green and makes a   │   │ green and makes a   │
│                      │   │ long beep.)         │   │ long beep.)         │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
                                                               │
┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│ 6.Exit.             │   │ 5. The configuration│   │ 4 .Configure the    │
│ (The indicator turns│◀──│ is successful.      │◀──│ alarm setting.      │
│ red and makes a long│   │ (The indicator turns│   │ (0: enable; 1:      │
│ beep again.)        │   │ green and makes a   │   │ disable).           │
│                     │   │ long beep.)         │   │                     │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
```
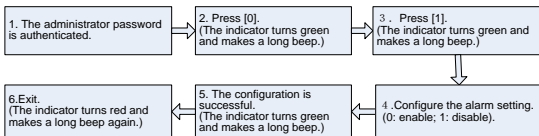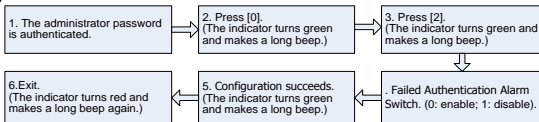
☺Note: The Temper Alarm is still effective even if the alarm switch is OFF.
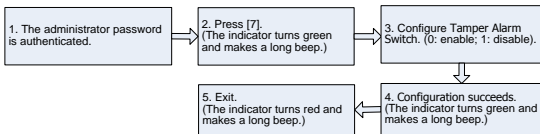
❖ Configuring Failed Authentication Alarm

If the administrator fails in authentication in 3 attempts, Failed Authentication Alarm will be triggered. No authentication can be made within 20 seconds.

```
┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│ 1. The administrator │   │ 2. Press [0].       │   │ 3. Press [2].       │
│ password is          │──▶│ (The indicator turns│──▶│ (The indicator turns│
│ authenticated.       │   │ green and makes a   │   │ green and makes a   │
│                      │   │ long beep.)         │   │ long beep.)         │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
                                                               │
┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│ 6.Exit.             │   │ 5. Configuration    │   │ . Failed            │
│ (The indicator turns│◀──│ succeeds.           │◀──│ Authentication Alarm│
│ red and makes a long│   │ (The indicator turns│   │ Switch. (0: enable; │
│ beep again.)        │   │ green and makes a   │   │ 1: disable).        │
│                     │   │ long beep.)         │   │                     │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
```
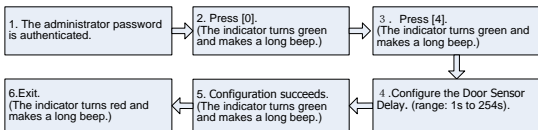
❖ Configuring Tamper Alarm

If this function is enabled, alarms will be raised when the device is dismantled from the wall.

```
1. The administrator password   →   2. Press [7].                    →   3. Configure Tamper Alarm
is authenticated.                    (The indicator turns green           Switch. (0: enable; 1: disable).
                                     and makes a long beep.)
```
```
5. Exit.                        ←   4. Configuration succeeds.
(The indicator turns red and        (The indicator turns green and
makes a long beep.)                 makes a long beep.)
```

❖ Configuring Door Sensor Delay

When the door is not closed well after a time period, the Door Sensor Delay will raise an alarm to alert users. Its configured value is the time period denoting how long after the door is opened will the alarm ring.

```
1. The administrator password   →   2. Press [0].                    →   3. Press [4].
is authenticated.                    (The indicator turns green           (The indicator turns green and
                                     and makes a long beep.)              makes a long beep.)
```
```
6. Exit.                        ←   5. Configuration succeeds.       ←   4. Configure the Door Sensor
(The indicator turns red and        (The indicator turns green            Delay. (range: 1s to 254s).
makes a long beep.)                  and makes a long beep.)
```

☺Note:
1. Three-digit values will be automatically verified. For values with less than three digits, press [#] to confirm. Values greater than 254 are considered invalid.
2. When an alarm is triggered, the device interior alarm will be triggered first, 30 seconds later, the device exterior alarm will be triggered.

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