User Manual

Walk Through Metal Detector

ZK-D4330 (TP Version)

Date: June 2021

Doc Version: 1.0

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 the ZK-D4330 (TP Version) Walk-through Metal Detector.

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

Table of Contents

# 1 <u>Overview</u>

1.1 Introduction

ZK-D4330 (TP Version) Walk Through Metal Detector, also known as Security Door, is a fixed detection device used primarily for inspecting the metal items concealed on the body. When a person passes through the device carrying metal object(s) larger than the preset size, the device will immediately generate alarms, and display the alarm location as well. The people detected with metal need to be checked by the security guard thoroughly and the prohibited metal articles should be ceased, if found. It is highly sensitive to magnetic metals and have a strong detection capability, but are weak in detecting non-magnetic metals.

This device features faster induction, more accurate detection, higher sensitivity level, and stronger interference immunity.
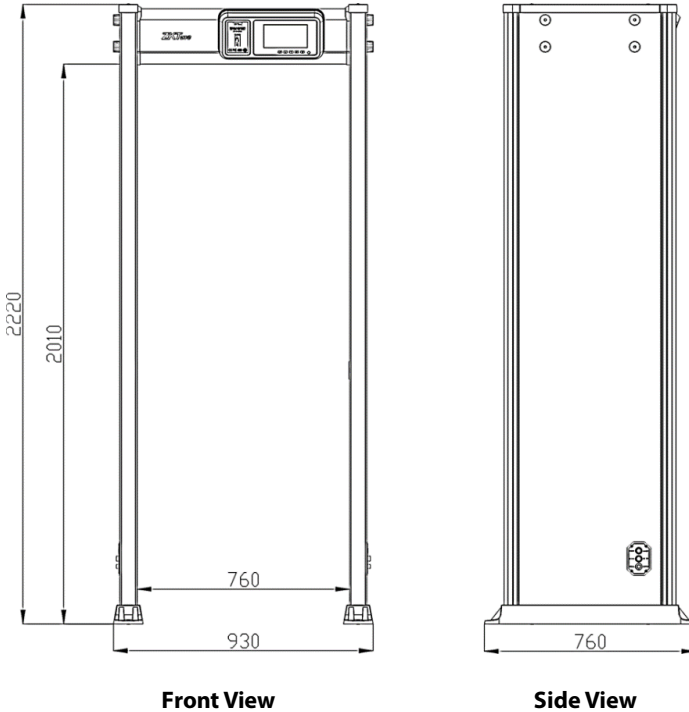
1.2 Appearance
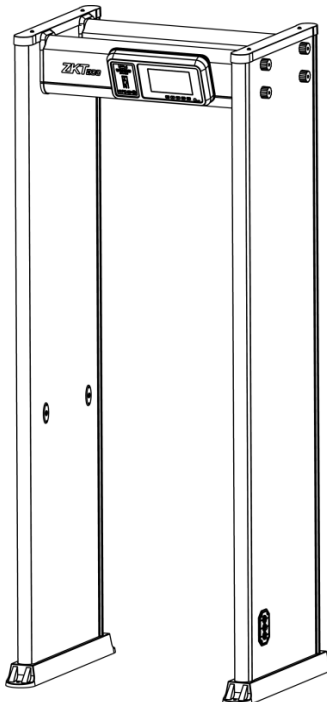
1.3 Components
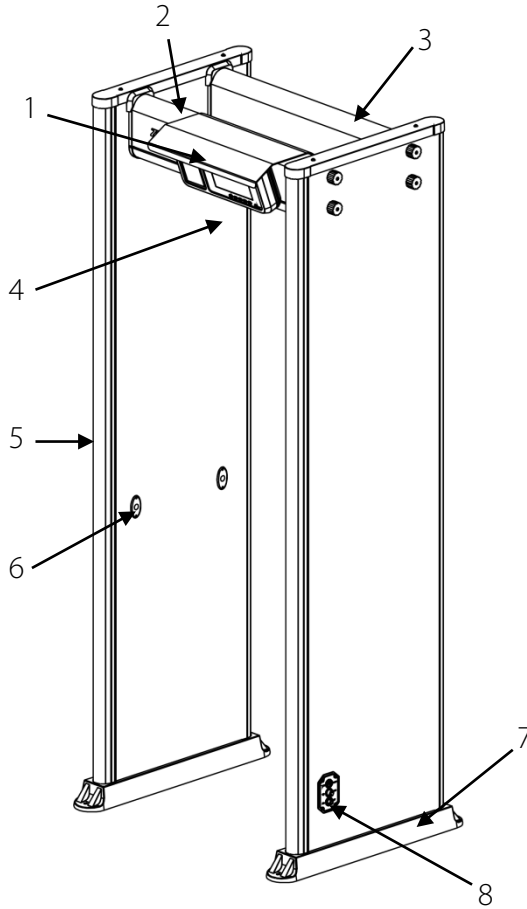
1.	Transparent Rainproof Canopy (Optional)	5.	Alarm Indicator Post
2.	Front Beam	6.	Infrared Sensors
3.	Rear Beam	7.	Waterproof Foot Cover
4.	Host	8.	Power Interface, Reserved Linkage Interface & Power Button

2 Product Specifications

2.1 Dimensions

Front View   **Side View**

2.2 Technical Specifications

Feature		Specifications
Power		DC 15V, 5A
Operating Temperature		-20℃ to 50℃
Dimensions	**External**	2220(H) x 930(W) x 760(D) mm
	Channel	2010(H) x 760(W) x 760(D) mm
	Package	2300(H) x 335(W) x 800(D) mm
Weight		70 kg

3   Installation

3.1   Safety Precautions

- Install the detector in a flat and stable area. Make sure that the detector is installed firmly in the selected area.

- It can be used for both indoor and outdoor purposes. If used outdoor, cover it with a canopy to protect against rain.

- Before installation, make sure the left and right door panels are placed at the corresponding location. Avoid high temperatures and wet environments.

- Wait for 1 minute for the self-diagnosis of the detector when it starts. Do not touch the detector during a security check to avoid any false alarm.

- Install the detector away from radio-frequency devices to avoid interference. Make sure that there is no large metal object or strong magnetic field around the detector for at least 2 meters.

- Do not hit the detector hardly, as it may cause false alarms.

- Do not disassemble the unit without the guidance of a professional technician.

- Each device has a warranty card, with which users can have their devices maintained or repaired free of charge within the warranty period.

3.2   Instructions for the Pedestrians

- A line must be drawn at a distance of 50 cm away from the detector. And the pedestrians must cross the line one-by-one while passing through the detector to ensure a smooth operation.

- Pedestrians should walk at a normal speed. They must not deliberately form a crowd, rush, walk slowly, or damage the door panel.

- Before passing through the metal detector, the pedestrians must remove all the metal objects he/she is carrying (such as keys, mobile phone, watch, coins, etc.), and place it on the security chute or a table, and pick it up after the security check.

- If the detector alarms when someone passes through indicates that there is/are some metal object(s) concealed in his/her body. The security guard can use a hand-held metal detector to precisely detect the metals position according to the alarm zones.

3.3   Installation Site

The following section describes the requirements of the installation environment.

3.3.1   Metallic Items

The detector must be installed at a distance of 1 m from the fixed metallic items such as aluminum alloy/stainless-steel windows, doors, etc. to prevent false alarms which may affect the sensitivity of the detector. Also, the portable metallic objects must be kept at least 2 m away from the detector to avoid false alarms.

3.3.2   Floor

The installation floor must be flat and rigid to avoid any shake from the movement of the people walking through the detector.

3.3.3   Electromagnetic Radiation and Interference

Since the detector uses Bilateral Receiver technology, it must be installed at a distance of at least 1 m away from the sources of electromagnetic radiation or electromagnetic interference as it may affect the sensitivity of the detector. The parameters that define the distance are determined by the installation environment and it varies for different installation environments.

The sources of electromagnetic radiation and electromagnetic interference can be Electrical Control Box, Radiofrequency equipment, Interphone, High Power Motor, Power Transformer, Ac Power Lines, Thyristor Control Circuit (High Power Switching Power Supply, Inverter Welder), Engine, Motor, etc.

3.3.4   Parallel Installation

No. of detectors installed parallelly	Distance between the detectors
2	> 10 cm
3	> 30 cm
4 or more	> 50 cm

NOTE: The detectors must operate at a different frequency to avoid interference. The distance varies according to the actual working environment.

3.4 Installation Steps

Make sure that the device is installed as per the following installation instructions. If you want to open the chassis, you should contact the agent for permission. Otherwise, you will bear any consequence resulting from your actions.

After reading the precautions and checking the packing list, please follow the steps below for installation.

Step 1: Open the package, and then place the left and right door panels on the ground in the direction shown in the figure 3-1 below. Pay attention to distinguish the left, right and direction of the door panel (the signal line interface faces upward and inward).
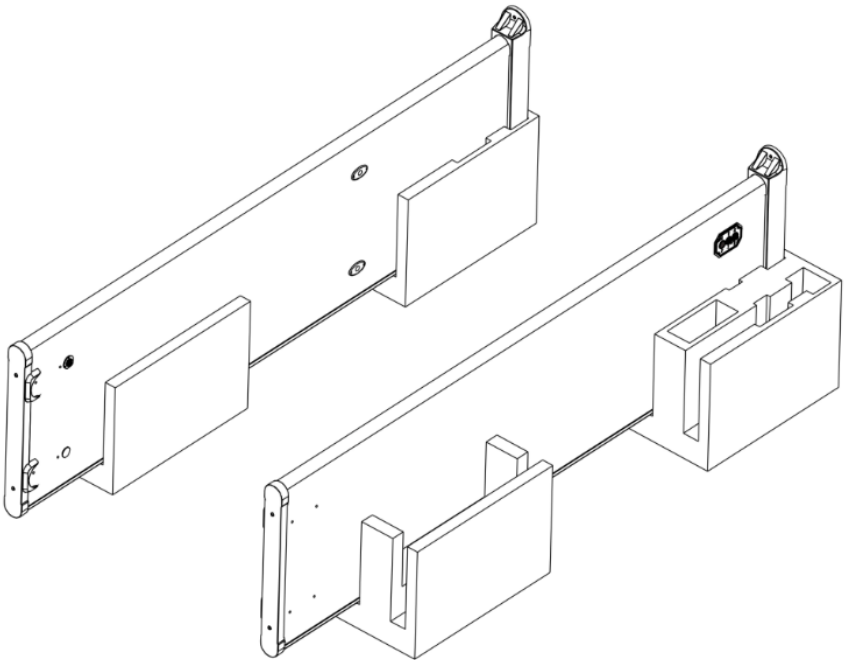
Figure 3-1

Step 2: Connect the rear beam with the left and right door panels with bolts, as shown in the figure 3-2 below (note that the bolts are not tightened at this time).
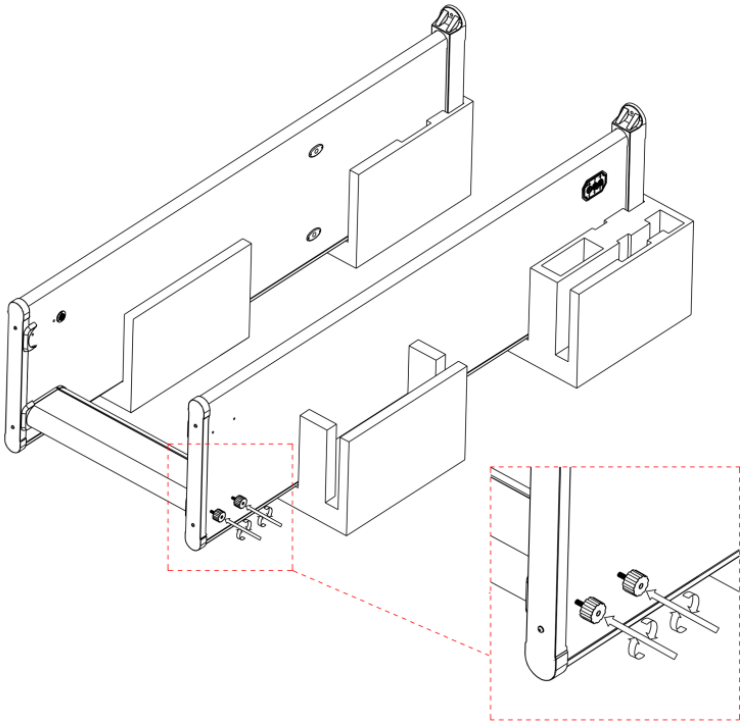
Figure 3-2

Step 3: Open the beam cover, as shown in the figure3-3 below.
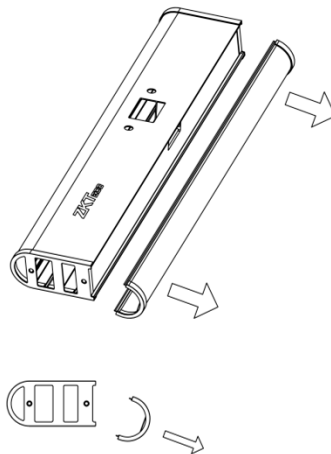
Figure 3-3

The disassembly skills are shown in the figure 3-4 below:

1. Both thumbs gently squeeze down.

2. Keep your thumb lightly pinched and rotate the back cover backwards.
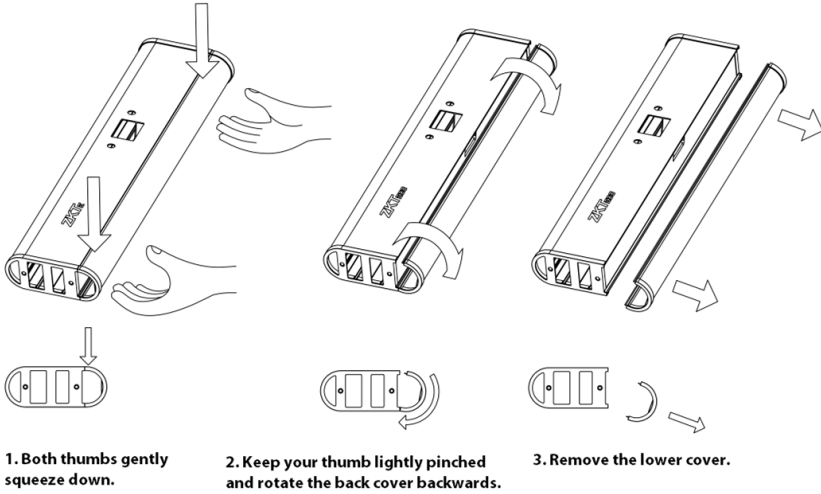
3. Remove the lower cover.

Figure 3-4

Step 4: Connect the front beam with the left and right door panels with bolts and tighten 8 bolts, as shown in the figure 3-5 below.
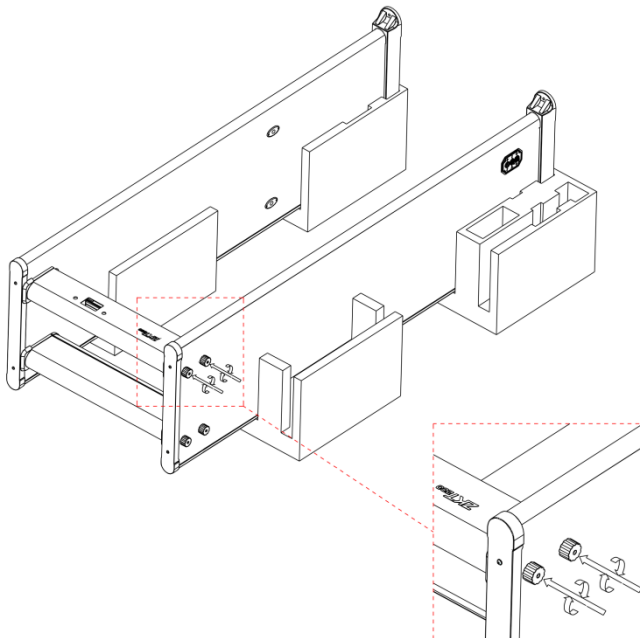

Figure 3-5

Step 5: Install the adjustable metal bracket on the host. The screws and holes on both sides of the bracket can fix and adjust the display angle of the host, as shown in the figure 3-6 below.
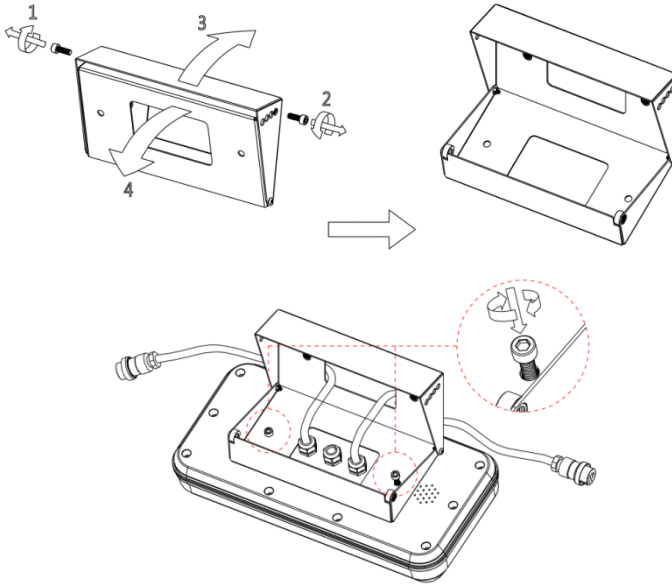
Figure 3-6

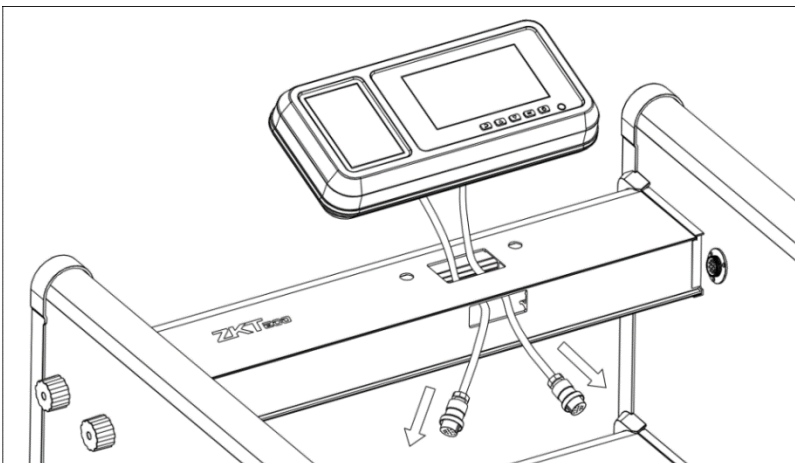**Step 6:** Pass the host signal line through the opening of the front beam, as shown in the figure 3-7 below.

Figure 3-7

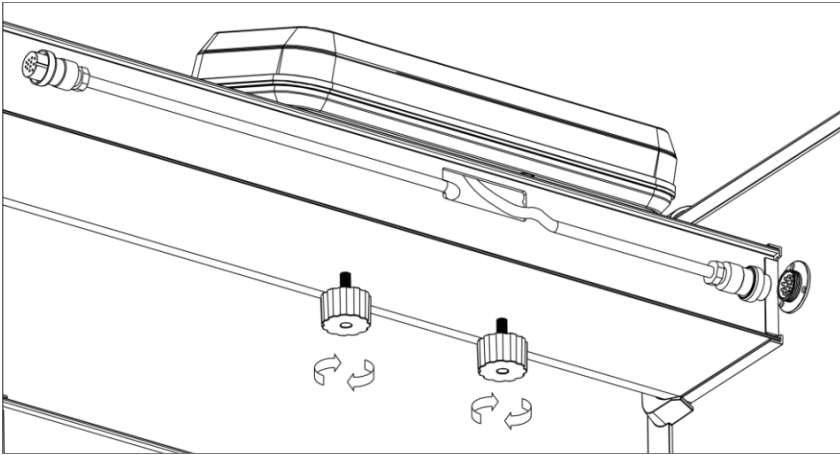**Step 7:** Connect the host and the front cross beam with bolts, as shown in the figure 3-8 below (if the rain cover is optional, it can be installed together).

Figure 3-8

Step 8: Insert and tighten the left and right signal wire plugs, as shown in the figure 3-9 below (pay attention to distinguish the left and right signal wires).
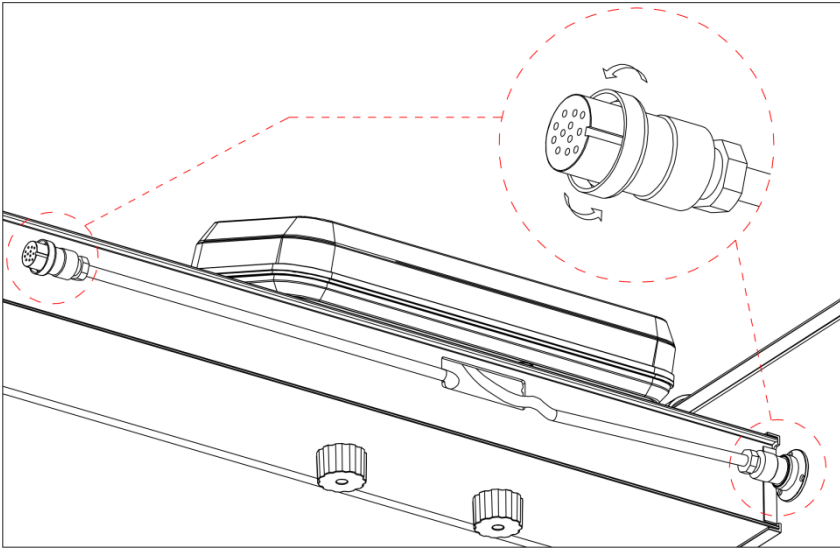

Figure 3-9

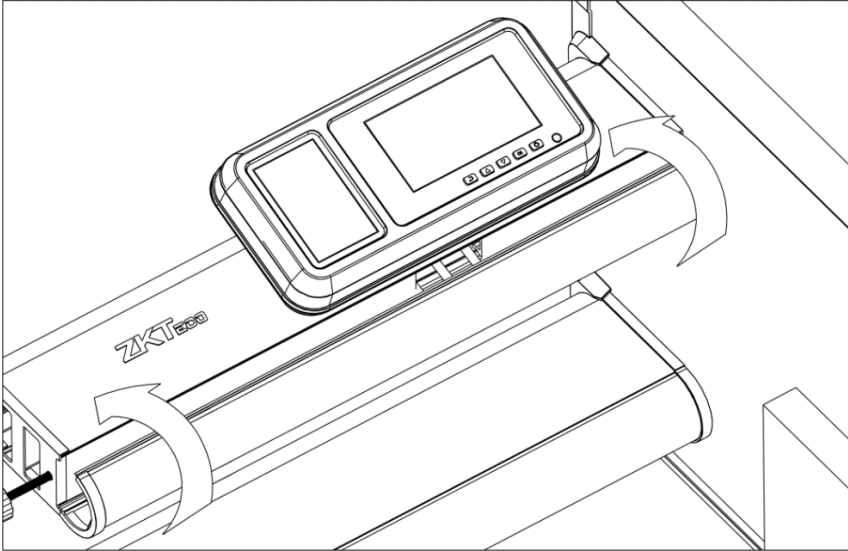**Step 9:** Cover the beam cover, as shown in the figure 3-10 below.

Figure 3-10

The installation skills are shown in the figure 3-11 below:

1. Insert the cover at an angle

2. Keep your thumb lightly pinched and rotate the back cover upwards.
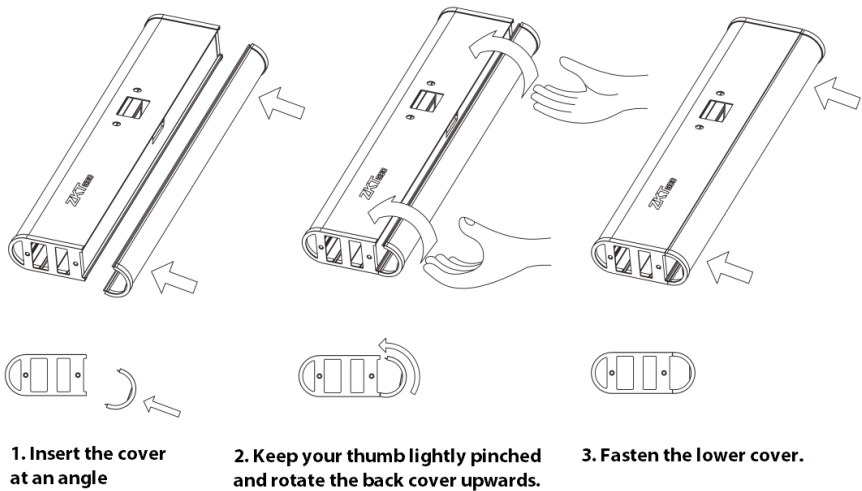
3. Fasten the lower cover.

Figure 3-11

Step 10: Lift and move the security gate to the designated working position, connect the side power cord, and press the power switch to enter the working state, as shown in the figure 3-12 below.
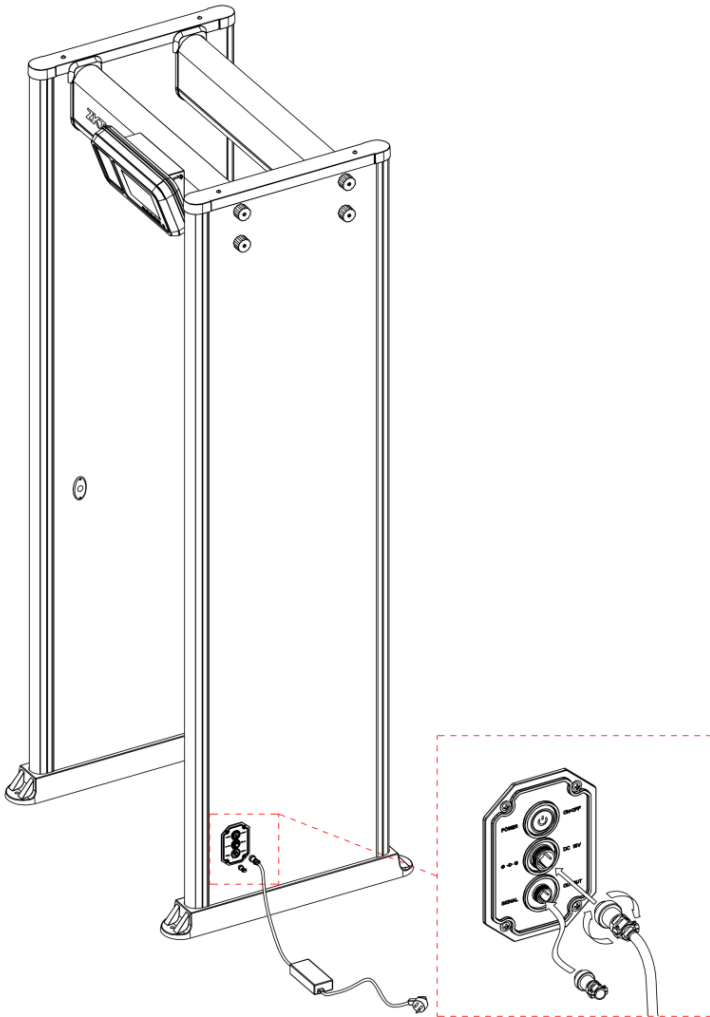

Figure 3-12

4 <u>Performance and Technical Features</u>

Accurate Positioning: There is an option to select 1, 6, 11, 18, or 33 overlapping detection zones with bilateral transmit and receive technology. The detection zones can accurately detect the objects with an intuitive display of the target location.

Micro Processor Technology: The Microprocessor Control Unit generates the electromagnetic waves for scanning. The scanning rate can be precisely controlled.

Adjustable Sensitivity: ZK-D4330 detection zones have 1 to 500 sensitivity levels. You can preset the metal size for excluding items like coins, keys, jewelry, buckle, etc.

Visual Sensitivity Adjustment: When you adjust the sensitivity level of a detection zone, the LED light mapping of the detection zone turns on.

Digital Pulse Technology: Digital signal processing and filtering system in the detector has excellent anti-interference ability.

Password Protection: Only the correct password can change the sensitivity and other parameters. The password contains six digits.

Count Statistics: The detector displays the number of pedestrians passed and Alarm count accurately.

Harmless: The detector is harmless to heart pacemakers, pregnant women, magnetic floppy disks, recording tapes, etc.

Waterproof Foot Cover: The waterproof foot cover helps to fix the device firmly and also protects the device against water.

Easy to install: The detector has an integrated design and it can be effortlessly installed or disassembled in 15 minutes.

Linkage: A signal cable connector is delivered with the device. You can connect it to implement linkage between the turnstile and the walk through metal detector.

5 Control Panel
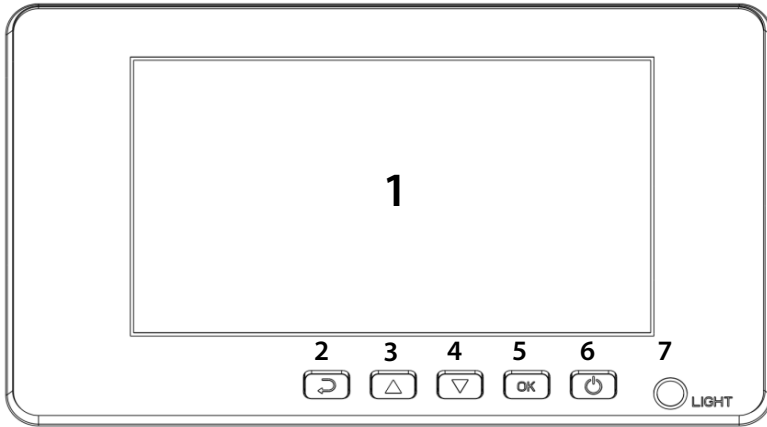
The components of the Control Panel are given below:

1		**7" Touch Screen**	Displays information such as the number of passengers, alarms, detection signal strength, time, and channel etc.
2	⊃	**Return Button**	Exits the current menu item.
3	▲	**Up Button**	Selects a menu item or increases a value.
4	▼	**Down Button**	Selects a menu item or decreases a value.
5	**OK**	**OK Button**	Enters a menu item or save settings.
6	⏻	**Power Button**	Turn on the device or press and hold for 3 seconds on the standby interface to turn off the device.
7	◎	**Light**	Infrared remote signal receive terminal.

6 Remote Control Description
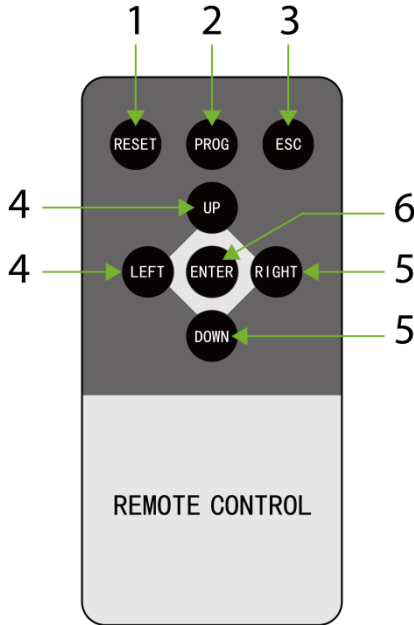
The buttons of the Remote Control and their description are given below:

1	**RESET**	Undefined.
2	**PROG**	Long press 3 seconds to turn off the device.
3	**ESC**	Exits the current menu item.
4	**UP / LEFT**	Selects a menu item or increases a value.
5	**DOWN / RIGHT**	Selects a menu item or decreases a value.
6	**ENTER**	Menu key, confirmation key and adjustment value.

7 Detection Zones

A. 7" Touch screen and control buttons

B. Detection zone display

There are four unique sets of precise positioning LEDs evenly distributed on the door panels, showing the status of 33 detection zones, as shown on the right. The zone indicators can be turned on or off. If the walkthrough metal detector detects metals of the size that reach or exceed the preset value, the alarm indicator of the detection zone turns on, and an alarm is generated.

(No alarm is generated if the device is in mute state.)

C. Infrared sensor

After being connected to a power supply, the metal detector starts to work. When no person or object passing through the device, the infrared sensors stop alarming to avoid false alarm and accurately count passengers and alarm times.
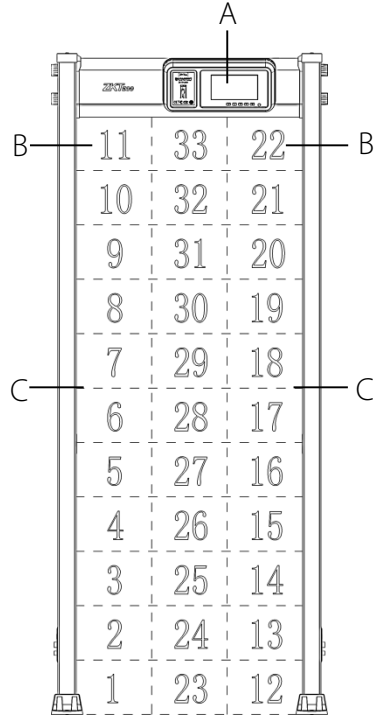
7.1 Adjustment of Detection Zone's Sensitivity

1. The device must be in a firm and stable position to achieve the best detection result (refer to Installation Site). To check whether the device is in a stable state, perform the following steps:

   a) Power on the detector and check whether it is shaking or not, after one minute.

   b) The device should not alarm when the testing person is not carrying any metal items while walking through the detector.

2. You can exclude the small portable metal objects from being scanned such as rings, key, belt buckle, shoes, and so on, by following the steps given below :

a) Choose a small metal as a sample. Increase the sensitivity, so that the device alarms when the testing person carries the sample and pass through the detector.

b) You need to decrease the sensitivity a little and pass through the detector again carrying the sample. If it still alarms, you need to reduce the sensitivity once again, until the device does not alarm when the sample is passed through.

Note: If you want to decrease the sensitivity in a certain zone, you must only adjust the sensitivity of the related zone. After implementing the above adjustments, the metal smaller than the sample will not generate an alarm, but the metal objects bigger than the sample can be detected accurately.

8 Operational Procedure

8.1 Standby Interface

Connect the power supply to the detector. After 2 seconds of initialization, the following standby interface is displayed:
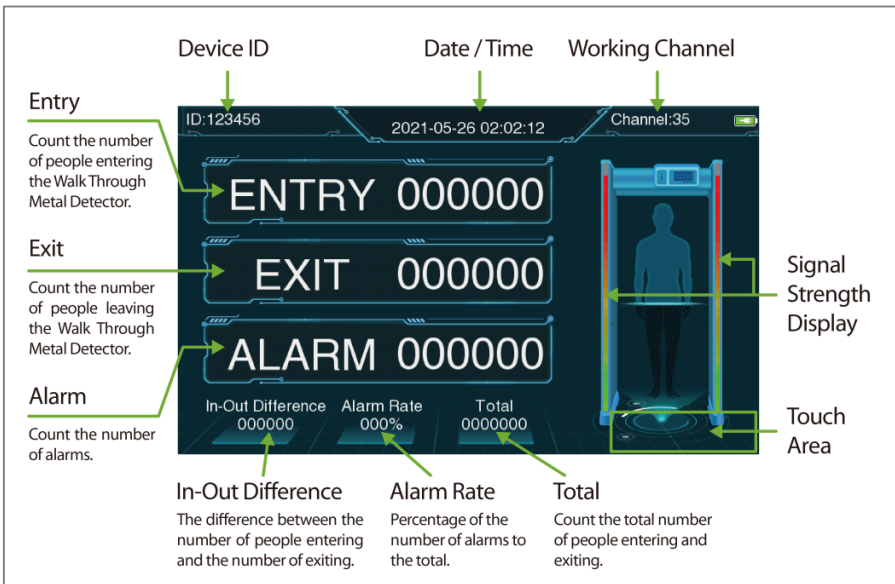

The standby interface displays the following content: Device ID Number, Date and Time, Working Channel, Entry Count, Exit Count, Alarm Count, In-Out Difference, Alarm Rate, Total number and detection signal strength, etc.

8.2 Main Menu

In the standby mode, tap the "Touch Area" at the bottom right corner of the screen, or press the **OK** button on the control panel to enter the verification password input interface. For the first operation of the device, please enter the factory password of the device: **100000**, and select "**Confirm**" after completion. When the prompt "Verify Succeed", the verification is completed, as shown in the following figure.

NOTE: There are two ways to operate this device, the first is to click on the touch screen for operation, such as directly clicking on the screen icon to select the content, clicking on the ➕ icon to set the value, and clicking on the ⬅ back icon to confirm save and return to the upper menu. The second is to use the control buttons for operation, and the following mainly introduces the operation method of the control buttons.
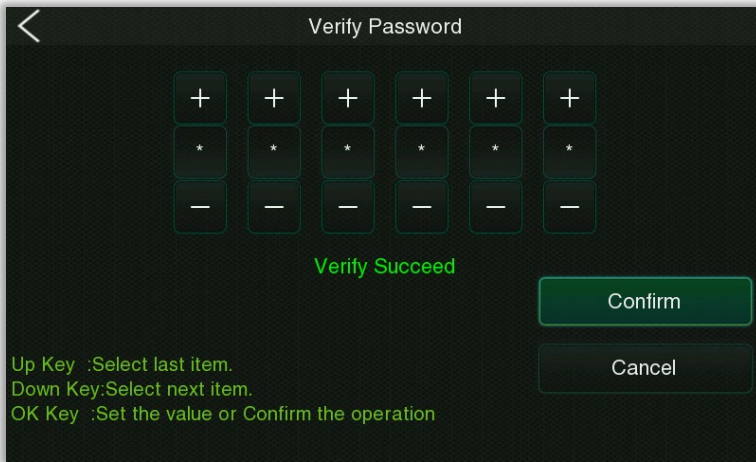
Operation: Press the **[OK]** button to enter the verification password input interface, then press the **[OK]** button to set the value, press the **[▲]/ [▼]** button to switch, select "Confirm" and then press the **[OK]** button to save and exit.

After entering the password successfully, you will enter the main menu interface as shown below:
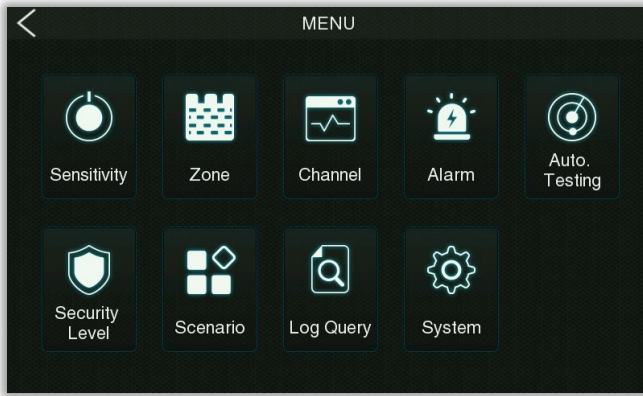

Function Description

| Menu	Descriptions
Sensitivity	Used to set the detection sensitivity threshold, including Global Sensitivity and Zone Sensitivity.
Zone	Used to set up independent zones to facilitate precise positioning of detected objects.
Channel	Used to set the frequency band, including Manual Setting and Auto Setting.
Alarm	Used for alarm settings, including parameters such as Volume, Delay, Ring Tone, Random Alarm, and Alarm Mode.
Auto. Testing	Automatically detect whether the functions of each module are available, including Zone, LED and Speaker test.
Security Level	Used to set the security level.
Scenario	It is used to set the application scenarios of the device.
Log Query	Record query function, convenient for users to query the logs saved in the device.
System	Set the relevant parameters of the system to maximize the function and display of the device to meet user needs, including Password, Screen Sleep, Date / Time, Language, Saved Records, Reset, Detect Mode, Relay Mode, and Custom ID etc.

8.3 Sensitivity Adjustment

Select **Sensitivity** on the **Main Menu** interface, and press **OK** to set the sensitivity level of each detection zone, as shown in the following:
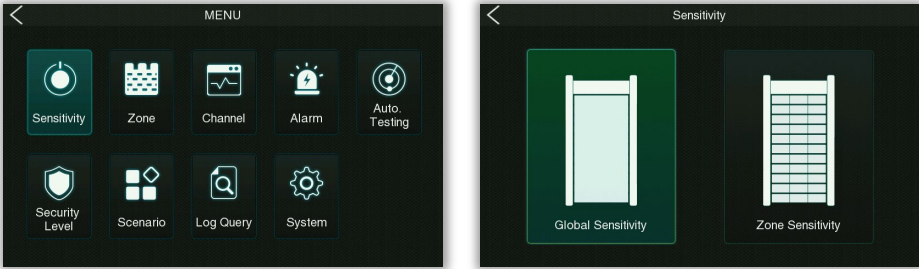

- **Global Sensitivity**

Select **Global Sensitivity** on the **Sensitivity** interface and press **OK** to get into its setting interface, as shown in the following:
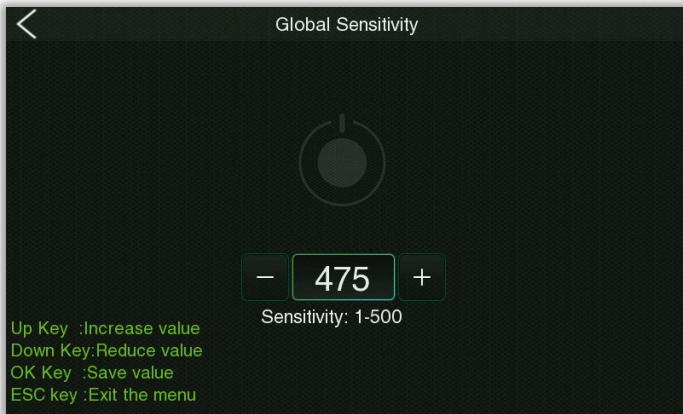
The larger the global sensitivity threshold the higher the sensitivity, and the effective value is 1 to 500, the default value is 475.

- **Zone Sensitivity**

Select **Zone Sensitivity** on the **Sensitivity** interface and press **OK** to get into its setting interface, as shown in the following:
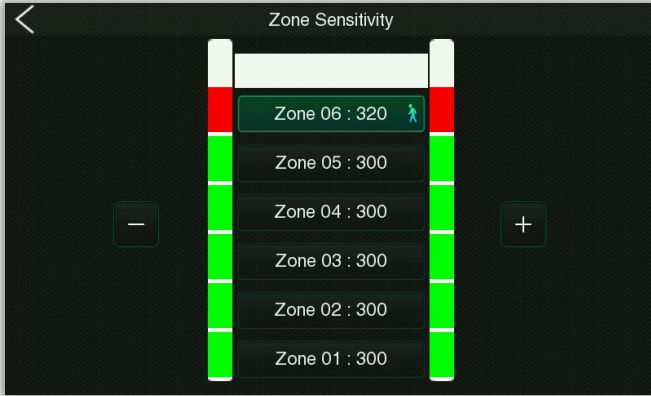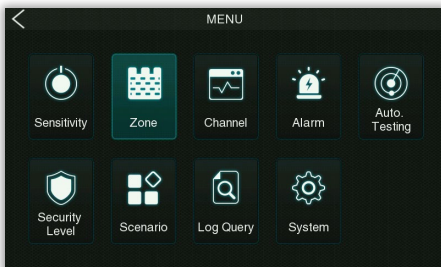
After selecting the partitions, set them separately. The selected partition will appear with a [icon] icon. Then you will not be able to select other partitions, only click this partition again or press OK to confirm and the icon will disappear. The greater the zone sensitivity threshold, the higher the sensitivity, the effective value is 1-500, and the default value is 475. **Note:** You need to set up independent defense zones in the **Defense Zone Settings** interface first.

Operation: Press the **[OK]** button to enter the sensitivity setting interface, then press the **[▲]/ [▼]** button to increase or decrease the value, press **[OK]** button to save and exit to the upper menu after finishing, directly press **[↵]** button to exit to the upper menu without saving the current value.


8.4 Zone Mode

In the zone mode, you can select the number of independent zone according to the operational needs of the device.

Select **Zone** on the **Main Menu** interface, and press **OK** to select the particular zone settings, as shown in the following:

Operation: Press the **[OK]** button to enter the zone setting interface, then press the **[▲]**/ **[▼]** button to select, press **[OK]** button to save and exit.

Remark: Different independent zones, the **Zone Sensitivity** interface is as follows:
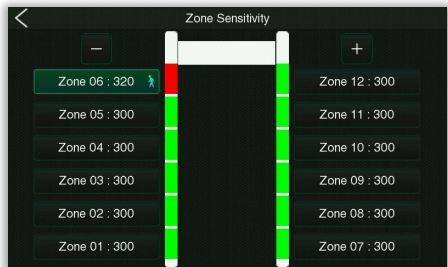
Note: The selected partition will appear with a icon. Then you will not be able to select other partitions, only click this partition again or press OK to confirm and the icon will disappear.

8.5   Channel Settings

Select **Channel** on the **Main Menu** interface, and press **OK** to enter the band setting interface, as shown in the following:
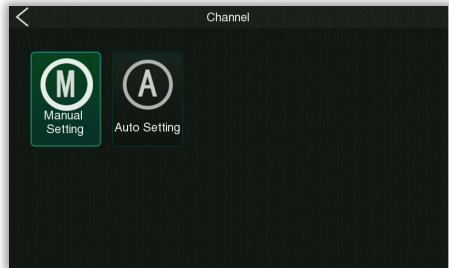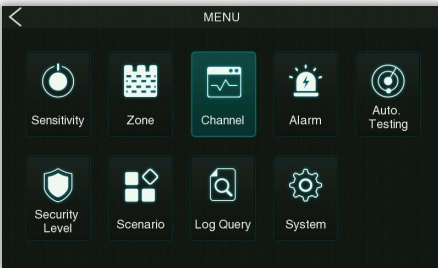
● **Manual Setting**

Select **Manual Setting** on the **Channel** interface and press **OK** to get into its setting interface. The channel range is from 1 to 100, the default value is 35.
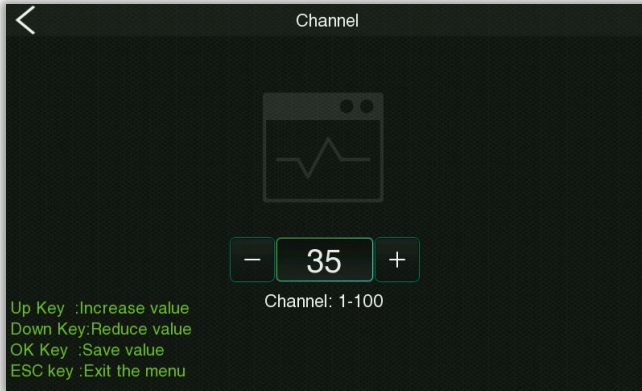
Operation: Press the **[OK]** button to enter the setting interface, then press the **[▲]/ [▼]** button to increase or decrease the value, press **[OK]** button to save and exit to the upper menu after finishing, directly press **[⏎]** button to exit to the upper menu without saving the current value.
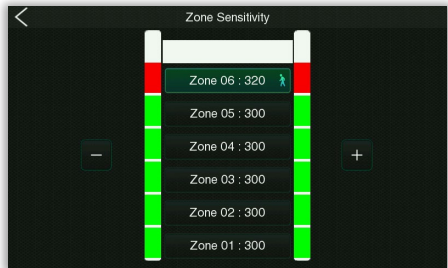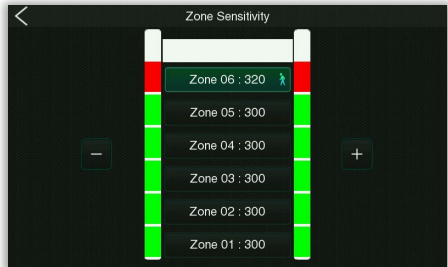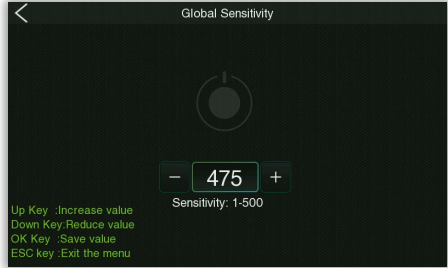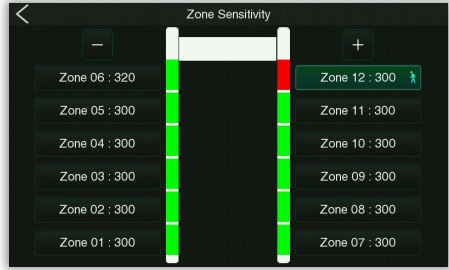
● **Auto Setting**

Select **Auto Setting** on the **Channel** interface and press **OK** to get into its setting interface, as shown in the following:

Operation: Press the **[OK]** button to enter the auto setting interface and the device will execute the automatic setting. When it prompts "Settings Completed", it will complete the automatic setting of the frequency band and jump to the main menu.

## 8.6 Alarm Settings

Select **Alarm** on the **Main Menu** interface, and press **OK** to enter the alarm settings interface, as shown in the following:
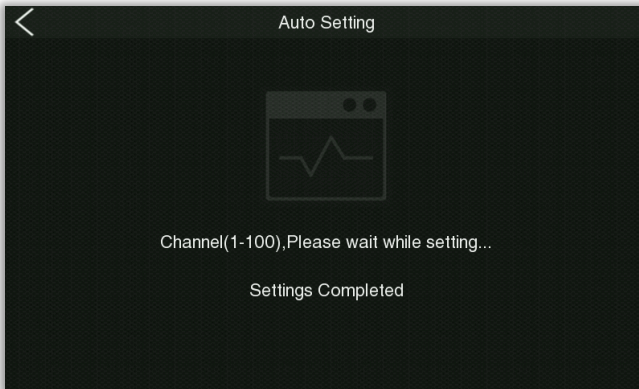

- **Volume**

Select **Volume** on the Alarm setting interface, and press **OK** to enter the alarm volume settings interface, as shown in the following:
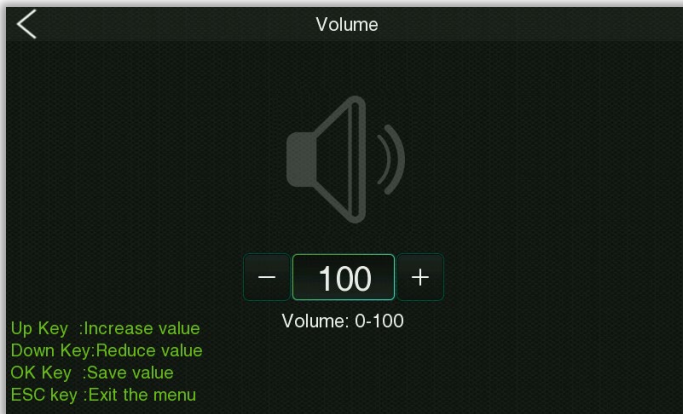
Used to set the alarm volume, the larger the value the higher the volume, valid values are 0 to 100, the default value is 80.

Operation: Press the **[OK]** button to enter the volume setting interface, then press the **[▲]/[▼]** button to increase or decrease the value, press **[OK]** button to save and exit to the upper menu after finishing, directly press **[⏎]** button to exit to the upper menu without saving the current value.

● **Delay**

Select **Delay** on the Alarm setting interface, and press **OK** to enter the alarm delay duration setting, as shown in the following:
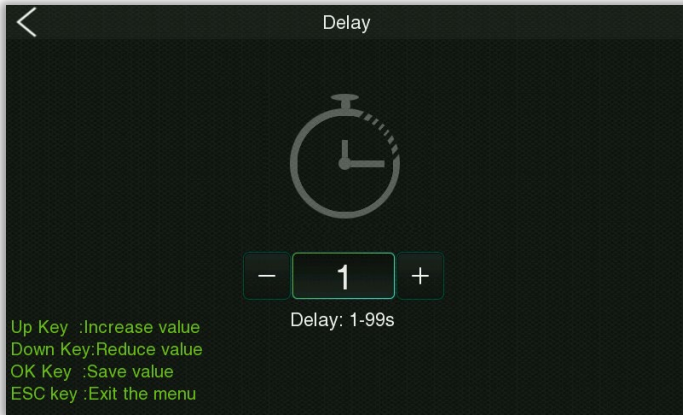
Used to set the length of time for the alarm to ring, the effective value is 1 to 99 seconds, the default value is 1 second.

Operation: Press the **[OK]** button to enter the setting interface, then press the **[▲]/ [▼]** button to increase or decrease the value, press **[OK]** button to save and exit to the upper menu after finishing, directly press **[⏎]** button to exit to the upper menu without saving the current value.
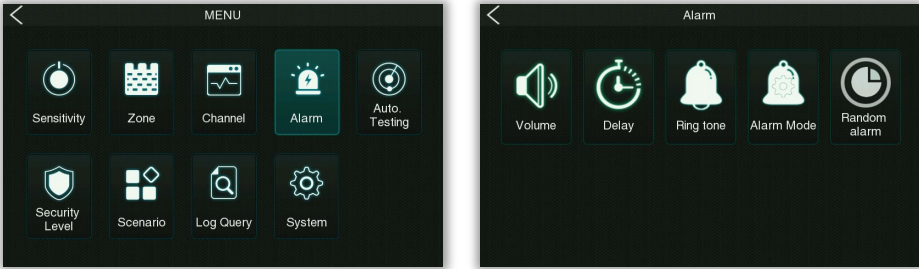

● **Ring Tone**

Select **Ring Tone** on the Alarm setting interface, and press **OK** to enter the alarm alarm ring setting interface, as shown in the following:

It is used to set the ringtone when the alarm rings, a total of 16 ringtones can be selected.

Operation: Press the **[OK]** button to enter the ring tone setting interface, then press the **[▲]/ [▼]** button to select, press **[OK]** button to save and exit.

●   **Alarm Mode**

<u>NOTE:</u> When the **Zone** is selected as "**06 Independent Zones**", the **Alarm Mode** function can be set in the alarm setting interface.

Select **Alarm Mode** on the Alarm setting interface, and press the **OK** to enter the alarm mode setting interface, as shown in the following:


Function Description

Menu	Descriptions
All Zone	In the All Zone alarm mode, when the detected metal content reaches or exceeds the set metal content, the area alarm light of the detected metal will be serial lit, and an alarm will sound at the same time. Suitable for normal mode.
Interval Zone	In the Interval Zone alarm mode, the zone warning lights that detect strong metal content will light up at intervals, that is, two consecutive zones will not light up at the same time. Facilitates identification and focused detection of stronger zones by security personnel.
Single Zone	In the Single Zone alarm mode, only the zone with the strongest metal content is detected and the alarm lamp lights up. Facilitate the security personnel to precisely focus on the area for detection.

Operation: Press the **[OK]** button to enter the alarm mode setting interface, then press the **[▲]/ [▼]** button to select, press **[OK]** button to save and exit.

● **Random alarm**

Select **Random alarm** on the Alarm setting interface, and press **OK** to enter the random alarm setting interface, as shown in the following:
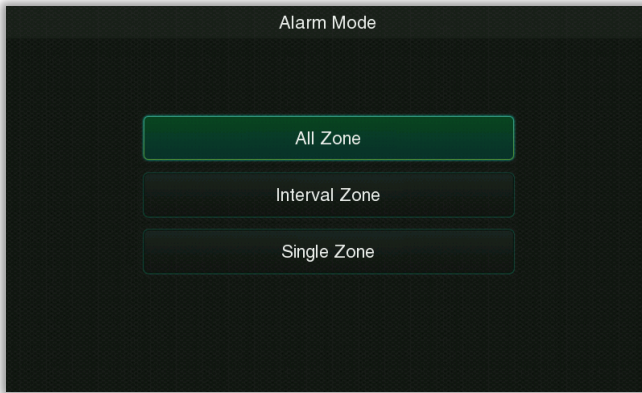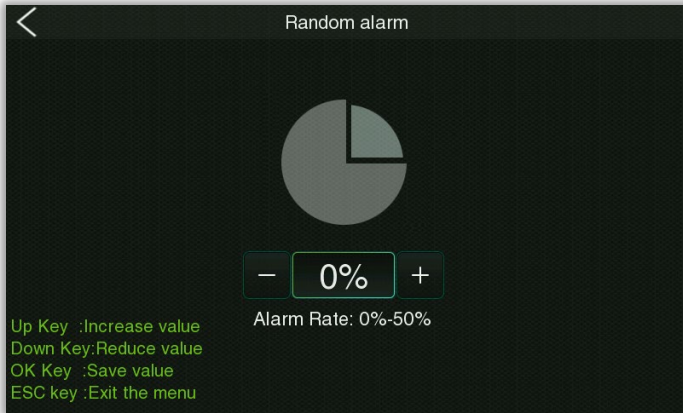

Under normal circumstances, the alarm is generated when the amount of metal signal reaches the set sensitivity threshold, while it can pass normally when it is less than the threshold. When a random alarm value is set, there will be a n% probability that a normal pass without alarm will be turned into an alarm, so that it can be checked and confirmed again manually.

Operation: Press the **[OK]** button to enter the random alarm setting interface, then press the **[▲]/ [▼]** button to set the value, press **[OK]** button to save and exit to the upper menu after finishing, directly press **[↵]** button to exit to the upper menu without saving the current value.

8.7 Auto Testing

Select **Auto Testing** on the **Main Menu** interface, and press **OK** to enter this option where the system self-checks its functions. As shown in the following:
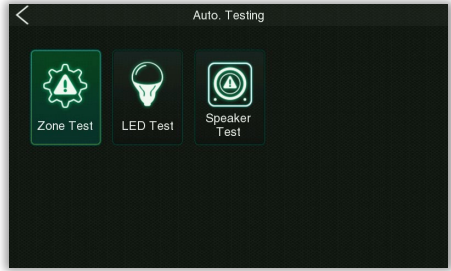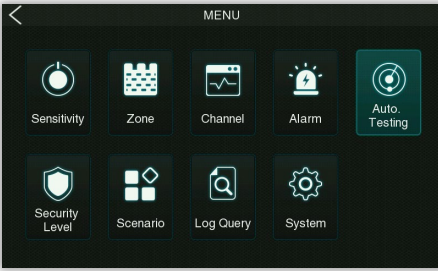
● **Zone Test**

Select **Zone Test** on the Alarm setting interface, and press **OK** to enter the partition test. The test example is shown below.
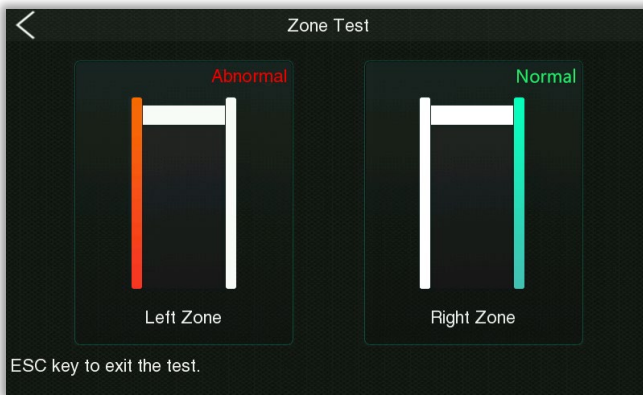
Operation: Press the **[OK]** button to enter the partition test, then press **[⏎]** button to exit to the upper menu.

● **LED Test**

Select **LED Test** on the Alarm setting interface, and press **OK** to enter the lighting test. The test example is shown below.
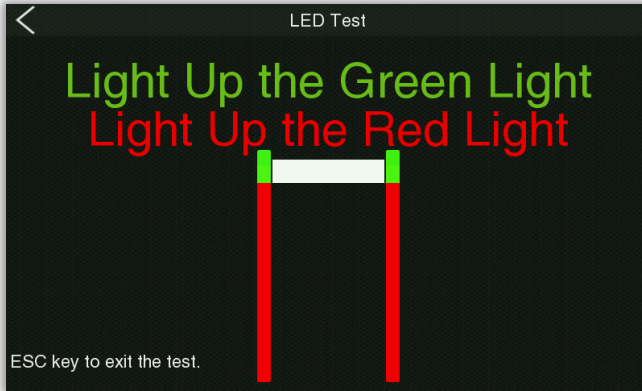
Operation: Press the **[OK]** button to enter the lighting test, then press the **[▲]**/ **[▼]** button to select the test content. When "Light Up the Green Light" is selected, the green light of the light bar around the door panel will light up immediately, and when "Light Up the Red Light" is selected, the red light of the light bar around the door panel will light up immediately. It means that this function is normal, press the **[↵]** button to exit to the upper menu.

● **Speaker Test**

Select **Speaker Test** on the Alarm setting interface, and press **OK** to enter the voice test. The test example is shown below.

Operation: Press the **[OK]** button to enter the voice test. Then continue to press the [OK] button to play 5 voice content one by one, press the **[↵]** button to exit and return to the previous menu.

8.8   Security Level

Select **Security Level** on the **Main Menu** interface, and press **OK** to enter the security level setting interface, as shown in the following:
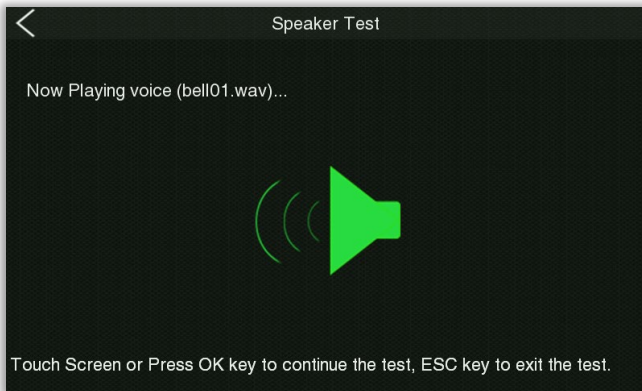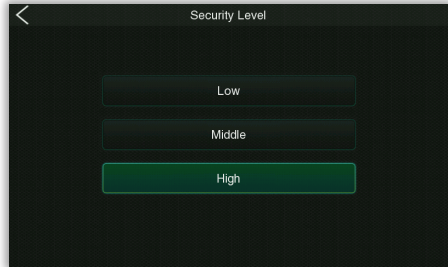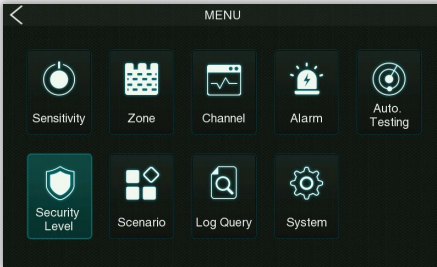

Three security levels can be set as Low, Middle and High. The higher the security level, the higher the corresponding sensitivity.

***

Operation: Press the **[OK]** button to enter the security level setting interface, then press the **[▲]/ [▼]** button to select, press **[OK]** button to save and exit.

***

8.9   Scenario

Select **Scenario** on the **Main Menu** interface, and press **OK** to enter the application scenario setting interface, as shown in the following:
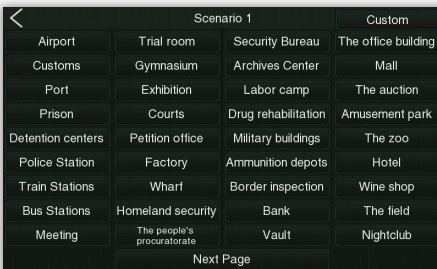
The user can select different scenarios in Scenario 1 and Scenario 2, or can choose a Custom scenario.

***

Operation: Press the **[OK]** button to enter the application scenario setting, then press the **[▲]/ [▼]** button to select the scenarios, press **[OK]** button to save and exit.

***

● **Custom scenario**

In the Scenario setting interface, the user can enter the custom setting interface by clicking the

| Custom | icon in the upper right corner of the screen or pressing the power button. There are 50 custom scenes in total, as shown in the following:

‹	Scenario 1			Custom
Airport	Trial room	Security Bureau	The office building	
Customs	Gymnasium	Archives Center	Mall	
Port	Exhibition	Labor camp	The auction	
Prison	Courts	Drug rehabilitation	Amusement park	
Detention centers	Petition office	Military buildings	The zoo	
Police Station	Factory	Ammunition depots	Hotel	
Train Stations	Wharf	Border inspection	Wine shop	
Bus Stations	Homeland security	Bank	The field	
Meeting	The people's procuratorate	Vault	Nightclub	
	Next Page			

‹	Custom			Scenario
Custom1	Custom11	Custom21	Custom31	Custom41
Custom2	Custom12	Custom22	Custom32	Custom42
Custom3	Custom13	Custom23	Custom33	Custom43
Custom4	Custom14	Custom24	Custom34	Custom44
Custom5	Custom15	Custom25	Custom35	Custom45
Custom6	Custom16	Custom26	Custom36	Custom46
Custom7	Custom17	Custom27	Custom37	Custom47
Custom8	Custom18	Custom28	Custom38	Custom48
Custom9	Custom19	Custom29	Custom39	Custom49
Custom10	Custom20	Custom30	Custom40	Custom50

‹	Zone Sensitivity
	Zone 06 : 300
	Zone 05 : 300
	Zone 04 : 300
	Zone 03 : 300
	Zone 02 : 300
	Zone 01 : 300

‹	Zone Sensitivity	
	Zone 06 : 300	
−	Zone 05 : 300	+
	Zone 04 : 300	
	Zone 03 : 300	
	Zone 02 : 300	
	Zone 01 : 300	

Operation: Click the custom scene icon in the upper right corner of the screen or press the power button to enter the setting interface. Click on the screen to select a custom scene, click on the zone to set in the zone sensitivity setting interface that pops up, click on the screen ＋－icon or press the **[▲]/[▼]** button to set the value, click on the zone again to confirm, and then click the screen 〈 return icon to save and exit.

8.10 Log Query

Select **Log Query** on the **Main Menu** interface, and press **OK** to enter the log query interface, as shown in the following:

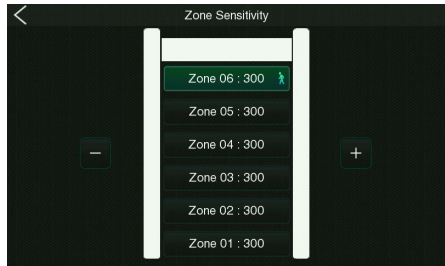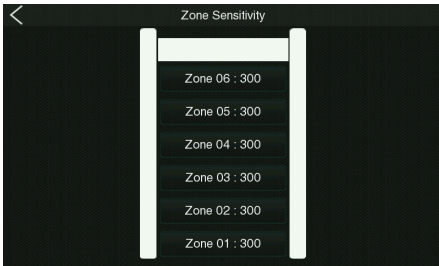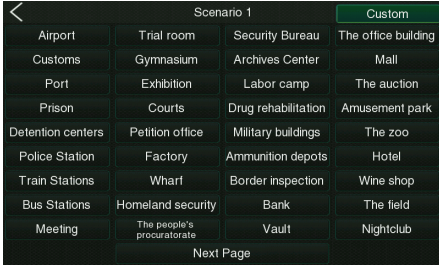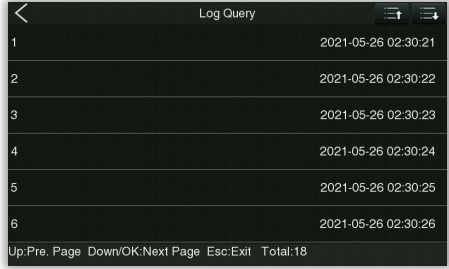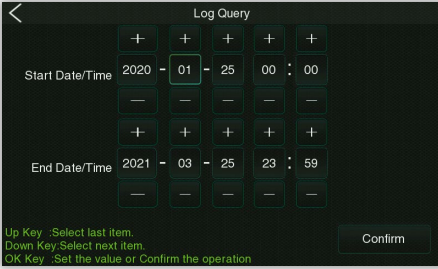Each page of the query result displays 6 historical alarm records, and the total number of alarm records can be viewed at the lower right corner of the page.

Operation: Press the **[OK]** button to enter the log query interface, then press the **[▲]/ [▼]** button to select, press **[OK]** button to set the Start Day/Time and End Day/Time of the query and confirm the query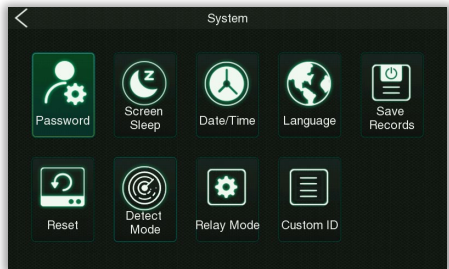. On the query result page, when there are many records, you can press the **[▲]/ [▼]** button or click the [icon] button on the screen to turn the page to view. Press the **[↵]** button to exit the record query.

8.11   System Settings

Select **System** on the **Main Menu** interface, and press **OK** to enter the system settings interface, as shown in the following:
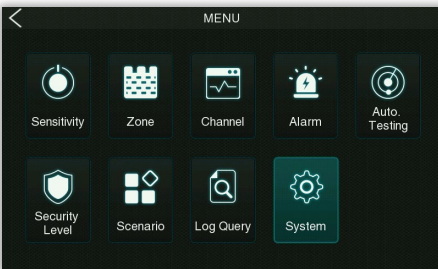
It is used to set the relevant parameters of the system so that the device can maximize the user requirements in terms of function, display, etc.

● **Password**

Select **Password** on the System setting interface, and press **OK** to enter the password setting interface, as shown in the following:
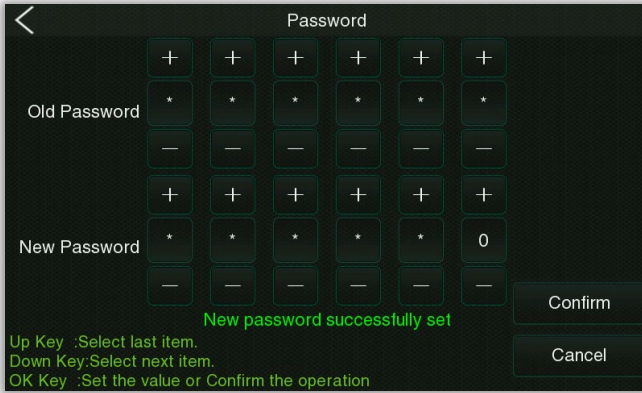
Operation: Press the **[OK]** button to enter the password setting interface, then press the **[▲]**/ **[▼]** button to select. Press **[OK]** button to set the value, after inputting the old password and new password, select "Confirm" and press **[OK]** button to save and exit.

● **Screen Sleep**

Select **Screen Sleep** on the System setting interface, and press **OK** to enter the screen hibernation setting interface, as shown in the following:

You can set the screen hibernation duration here, there are 0s, 10s, 20s, 40s, 60s and 120s optional. **Note:** The 0s means the screen will not hibernation.

Operation: Press the **[OK]** button to enter the screen hibernation setting, then press the **[▲]**/ **[▼]** button to select. Press **[OK]** button to save and exit to the upper menu after finishing.

● **Date/Time**

Select **Date/Time** on the System setting interface, and press **OK** to enter the system Date & Time setting interface, as shown in the following:

Operation: Press the **[OK]** button to enter the system Date & Time setting, then press the **[▲]/ [▼]** button to select. Press **[OK]** button to set the value, select "Confirm" and press the **[OK]** button to save and exit.
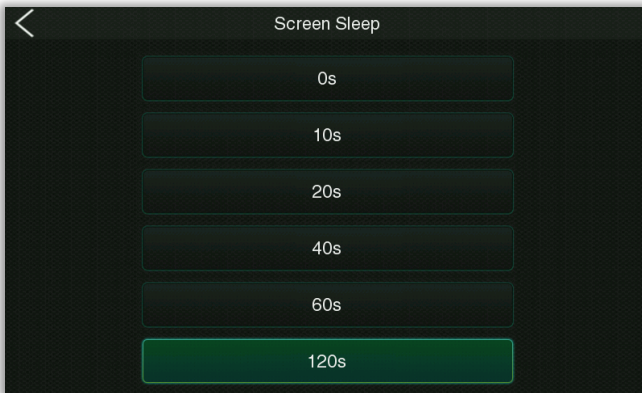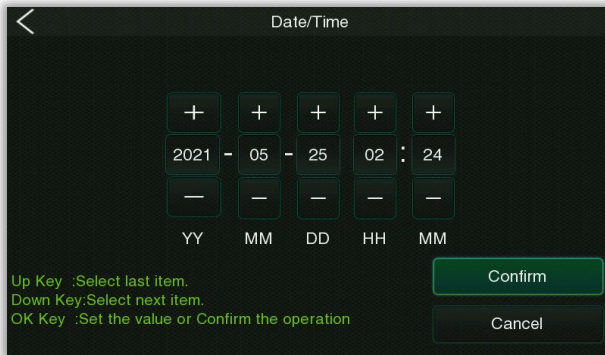
● **Language**

Select **Language** on the System setting interface, and press **OK** to enter the language setting interface, as shown in the following:

Operation: Press the **[OK]** button to enter the language setting, press the **[▲]/ [▼]** button to switch languages. Select "Confirm" in the pop-up confirmation window and press the **[OK]** button to confirm, the device will automatically restart, and the set language interface will be displayed after completion.

● **Save Records**

Select **Save Records** on the System setting interface, and press **OK** to enter the setting interface, as shown in the following:

It is used to set whether to save the number of alarm records after the device is turned off, select "Yes" to save and select "No" to clear.

***

Operation: Press the **[OK]** button to enter the setting interface, then press the **[▲]**/ **[▼]** button to select. Press **[OK]** button to save and exit to the upper menu.
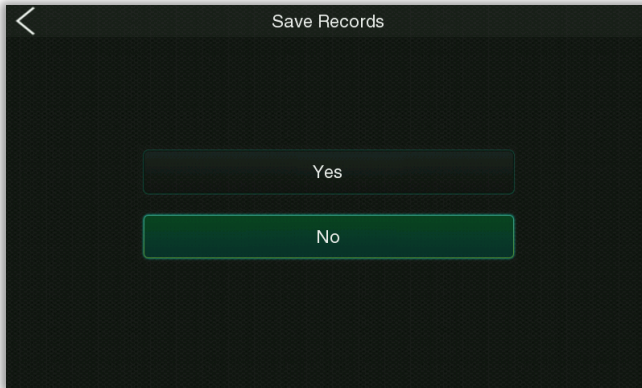
***

● **Reset**

Select **Reset** on the System setting interface, and press **OK** to enter the restore factory settings interface, as shown in the following:
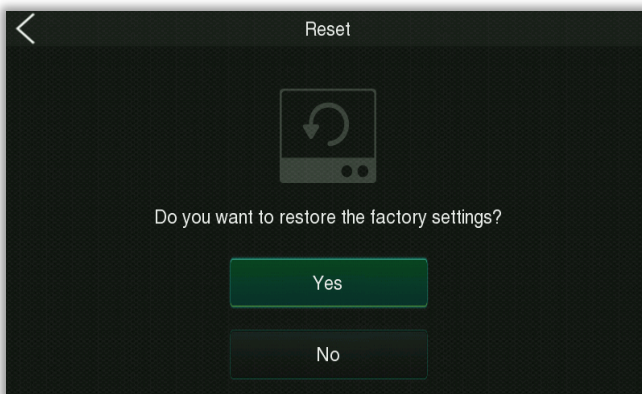
Operation: Press the **[OK]** button to enter the restore factory settings, then press the **[▲]/ [▼]** button to choose whether to restore factory settings. When you select **Yes**, a confirmation window will pop up, select "Confirm" and press the **[OK]** button. And then the device will automatically restart and restore to factory settings.

● **Detect Mode**

Select **Detect Mode** on the System setting interface, and press **OK** to enter the detect mode setting interface, as shown in the following:
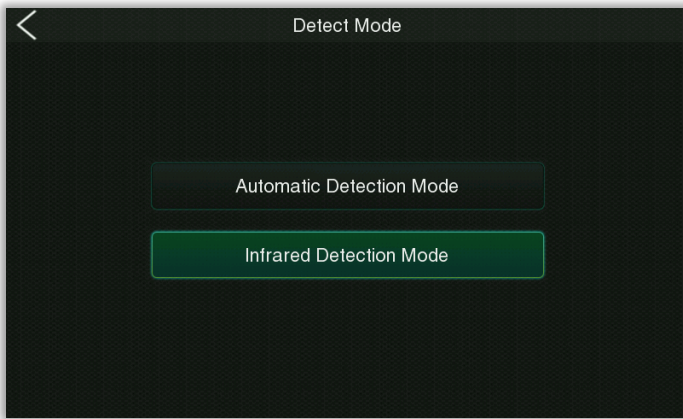

Function Description

Menu	Descriptions
Automatic Detection Mode	In this mode, an alarm is generated when the amount of metal signal reaches the set sensitivity threshold, and no counting statistics are performed.
Infrared Detection Mode	In this mode, when the infrared detector is triggered and the amount of metal signal reaches the set sensitivity threshold, an alarm will be generated, and counting statistics will be performed.

Operation: Press the **[OK]** button to enter the detect mode setting interface, then press the **[▲]/ [▼]** button to select, press **[OK]** button to save and exit.

● **Relay Mode**

Select **Relay Mode** on the System setting interface, and press **OK** to enter the relay control setting interface, as shown in the following:
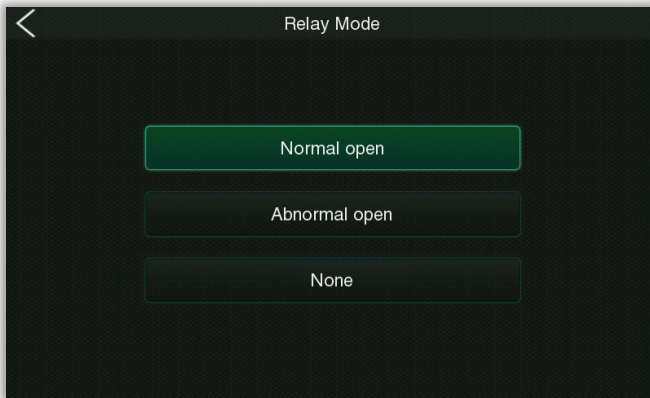
Function Description

Menu	Descriptions
Normal open	In this mode, when the metal content carried is less than the alarm threshold, the relay will be triggered to output a switch signal when the machine does not alarm;
Abnormal open	In this mode, when the metal content exceeds the alarm threshold, the machine will trigger the relay to output a switch signal when the machine alarms;
None	Means that the relay is always in the off state and does not output a switch signal.

Operation: Press the **[OK]** button to enter the relay mode setting interface, then press the **[▲]/ [▼]** buttonto select trigger setting, press **[OK]** button to save and exit.

● **Custom ID**

Select **Custom ID** on the System setting interface, and press **OK** to enter the custom ID setting interface, as shown in the following:

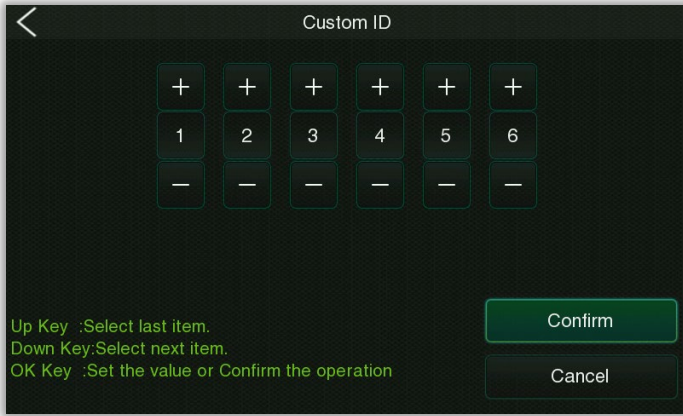The ID is the device ID (the default value is 123456).

Operation: Press the **[OK]** button to enter the custom ID setting interface, then press the **[▲]/ [▼]** button to select setting item. Press the **[OK]** button to set the value of 0 to 9, select "confirm" and press the **[OK]** button to save and exit.

8.12   Default Parameters

Parameter	Default Value
Default password	100000
Alarm Duration	1s
1- 33 Zone Sensitivity	475
Overall Sensitivity	475
Screen Hibernation	120s
Alarm Bell	Ring Tone 1
Security Level	High
Detection Mode	Infrared Detection Mode
Device ID	123456
Language	English

Troubleshooting

What to do if an error is prompted during the auto testing?

a)   When the message "EFT ZONE ERROR RIGHT ZONE ERROR" is prompted during the auto testing, please pay attention to whether the left and right signal cable plugs are inserted tightly.

b)   When it prompts "The infrared receiving error", please check whether the left and right signal wires of the door panel are connected properly, whether the infrared sensors are connected properly, and whether the two sets of infrared sensors are blocked.

What to do if the Sensor could not count?

a)   Check whether the probe cables are connected firmly with the door panels.

b)   Check whether there is any infrared interference beside the device, such as infrared surveillance system, infrared remote control, outdoor sunlight, etc.

c)   If both, condition **a** and condition **b** are OK, then the issue is with the infrared sensor and need to be replaced.

What to do if the detector gives a false alarm?

If the device gives false alarms frequently after installation, perform the following steps:

a)   Firstly, check the installation environment. Make sure there are no movable or stationary large metal objects around 1.5 meters from the detector. If there is any metal object, try to place the device away from the large metal objects.

b)   Make sure that the installation location is firm and stable and free from physical movements. If not, change the installation location.

c)   If the false alarm is not caused by environmental interference, then reduce the sensitivity level of all zones.

d)   Change the frequency.

Packing List

The package consists of the following items:

No	Component	Quantity
1	L Side Panel	1 set
2	R Side Panel	1 set
3	Front Beam	1 pc
4	Rear Beam	1 pc
5	Accessory Box	1 pc
6	Universal Wheel (Optional)	4 pcs
7	Transparent Rainproof Canopy (Optional)	1 pc

Accessory Box List

No	Component	Quantity
1	Host	1 pc
2	Adjustable Metal Bracket	1 set
3	Power Adapter	1 set
4	Remote Control	1 pc
5	Bolt	10 pcs
6	Torx Screwdriver	1 pc
7	Allen Screw	4 pcs

<u>Warranty Card</u>

1. Please keep this card safe and produce the same during maintenance.

2. This card will be invalid without the signature or stamp of the designated dealer.

3. This card will be regarded as invalid if the details are not filled in guarantees column and the acknowledgment of the receipt. Please confirm whether the data filled in the guarantees column and acknowledgment of receipt is correct or not when purchasing it, and then hand it over to the dealer.

4. This card will not be issued again if it is lost.

Model Number	
ID	
Date of Acquisition	
User	
Post Code	
Address	
User's Phone Number	
Fax	

Date of Maintenance	Record of Maintenance	Technician

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