User Manual

Flap Barrier-FBL6000 Pro Series

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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.

For further details, please visit our Company's website www.zkteco.com.

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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 **FBL6000 Pro Series** product.

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

Document Conventions

Conventions used in this manual are listed below:

GUI Conventions

For Software	
Convention	**Description**
Bold font	Used to identify software interface names e.g. **OK**, **Confirm**, **Cancel**
>	Multi-level menus are separated by these brackets. For example, File > Create > Folder.
For Device	
Convention	**Description**
< >	Button or key names for devices. For example, press <OK>
[ ]	Window names, menu items, data table, and field names are inside square brackets. For example, pop up the [New User] window
/	Multi-level menus are separated by forwarding slashes. For example, [File/Create/Folder].

Symbols

Convention	Description
📝	This implies about the notice or pays attention to, in the manual
💡	The general information which helps in performing the operations faster
⭐	The information which is significant
🛑	Care taken to avoid danger or mistakes
⚠️	The statement or event that warns of something or that serves as a cautionary example.

Table of Contents

1 Product Introduction

The wing gate is composed of the chassis, core component, wing arms, a PCB (printed circuit board), infrared sensors, a reader, and the access control system.

The system uses standard electric interfaces. It meets fire fighting passage requirements and is equipped with dedicated fire control linkage interfaces. The entire system complies with the same quality standard to ensure reliability, stability, and smoothness of the system during running.

The wing gate is applicable to work attendance, access control, consumption management, and special passage control of enterprises and institutional organizations. It is conducive to the management of ticket check passages in stations, wharves, convention and exhibition centres, and swimming pools.

1.1 Product Appearance and Dimensions

Below is the design and dimensions of FBL6000 Pro:
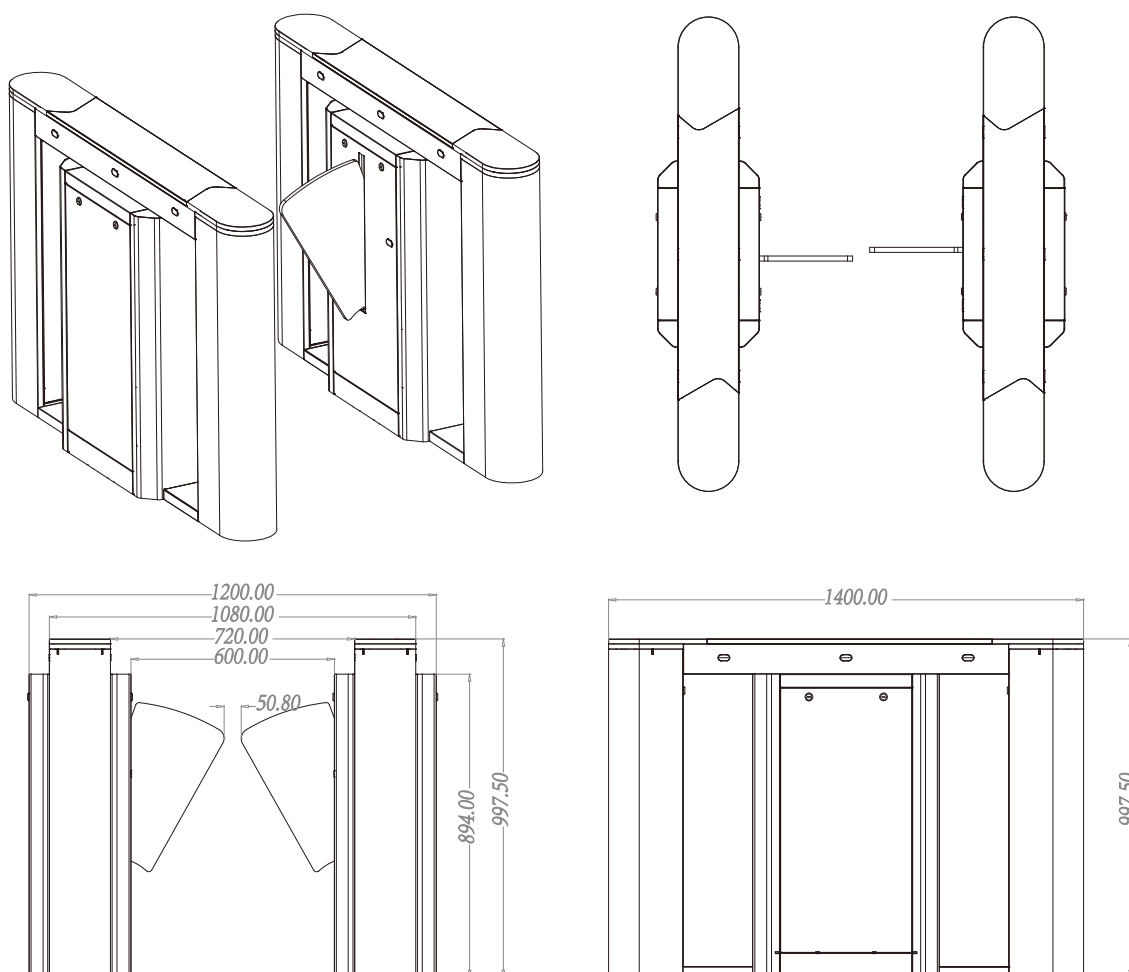
1.2 Technical Parameters

Dimension (mm)	FBL6000 Pro: L = 1400, W =300, H = 1000		
Lane width	600mm	Input voltage	AC110 ~ 240V; 50 - 60Hz
Input control signal	Switching signal	Output voltage	DC24V
Time of opening/closing	1 second (adjustable)	Relative humidity	5% - 80%
Temperature	-28℃ to 60℃	Passage rate	Maximum 30/minute
Infrared sensor	5	Working environment	Indoor

1.3 Model Number and Access Control

Access / Model	None	C3-200 and 2*Wiegand reader	inBio 260 and 2* FR1500/ID reader	2*Facedepot 7B device
FBL6000 Pro	√			
FBL6011 Pro		√		
FBL6022 Pro			√	
FBL6033 Pro				√
FBL6200 Pro	√			
FBL6211 Pro		√		
FBL6222 Pro			√	
FBL6233 Pro				√

2 Power-on Test Prior to Installation

Test Procedure:

1. Connect a temporary test cable to the device and supply the input power of AC100-240V adaptive to the device (Note that a ground cable must be connected.)

2. Wait 30 seconds till the wing gate completes the self-test procedure.

3. Start the air switch inside the wing gate to check whether the wing gate functions properly and check whether the LED indicators function properly. If they all function properly, start the civil installation. If an exception occurs, contact your sales agent.
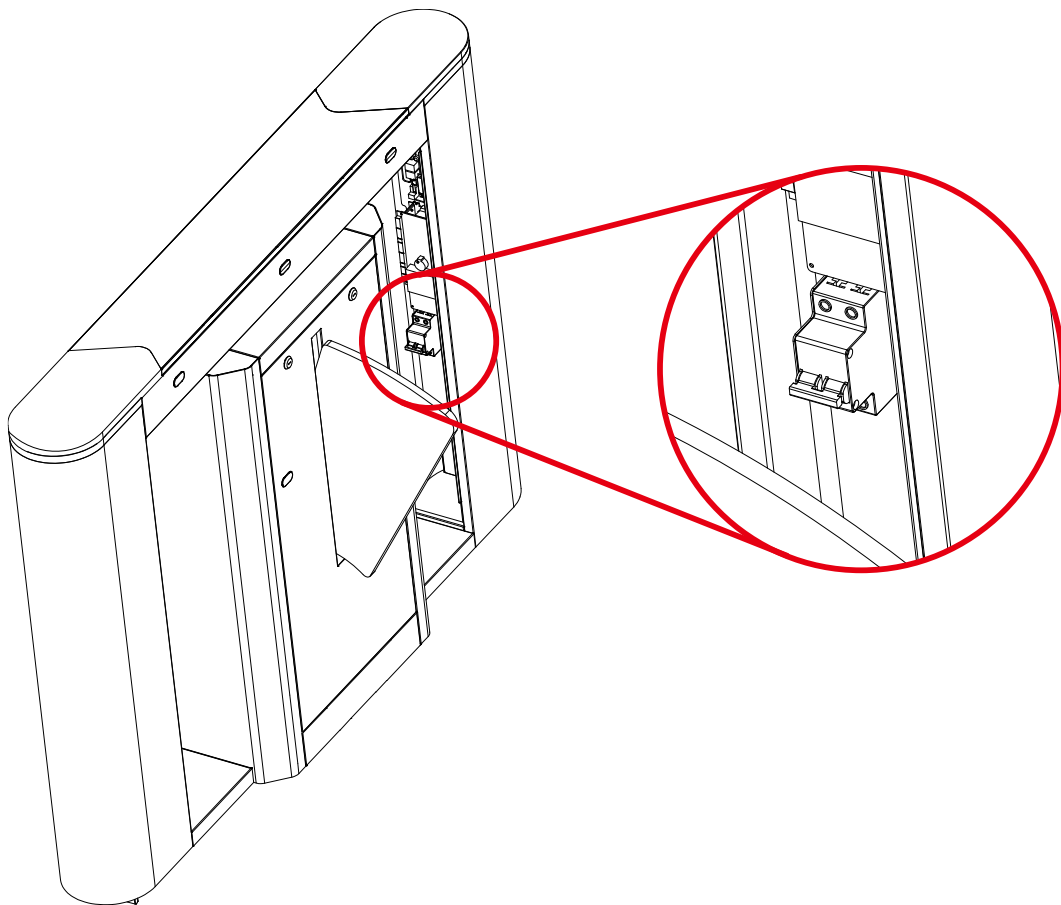

Figure 2-1 Air Switch

3   Electric and Civil Installation

1.   Device installation conditions

The location where the device is installed must be a concrete flat surface so that the expansion screws can be fastened firmly. If the planned foundation does not meet this criterion, consult professional building or decoration personnel and create stable conditions for firmly fastening of the wing gate.

2.   Determination of the location of device installation

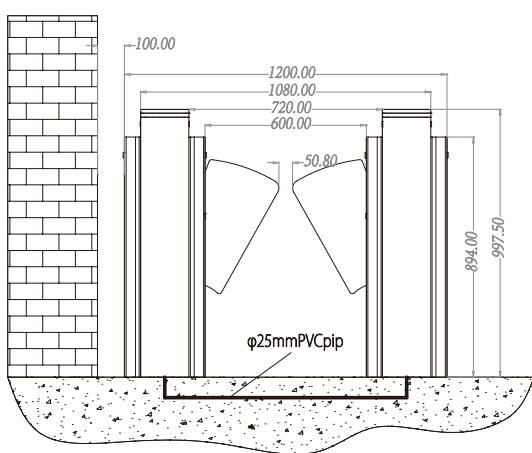Decide the installation location based on the space needed as illustrated in Figure 3-1A and Figure 3-1B.

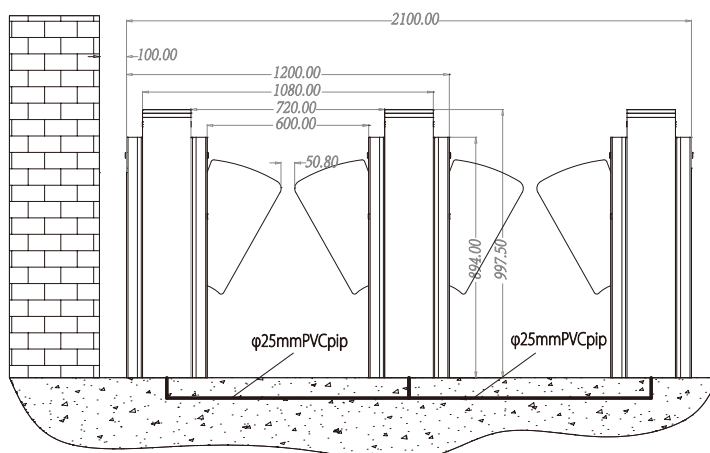Figure 3-1A Single-Passage Wing Gate   Figure 3-1B Dual-Passage Wing Gate

3.   Cable connection

For the location of the hole where the cables come out, please refer to Figure 3-2 below.

4.   Device installation

a)   Turn on the master machine and slave machine, adjust the wing arms to ensure that the wing arms are in the same line and the distance between wings is 50 mm. Turn the wings to the OFF state.

b)   Test whether the infrared rays transmitted by infrared sensors on both sides align with each other.

c)   Make marks: Mark the screw hole of the base and chassis base edges on the ground.

d)   Drill holes: Get ready a hammer drill and a 14 mm drill bit, vertically drill a hole with the depth of 80 mm in the screw hole centre marks.
Alternatively, drill holes according to installation hole positions, see Figure 3-2 for installation hole positions. The unit of the figures in the drawings is mm.
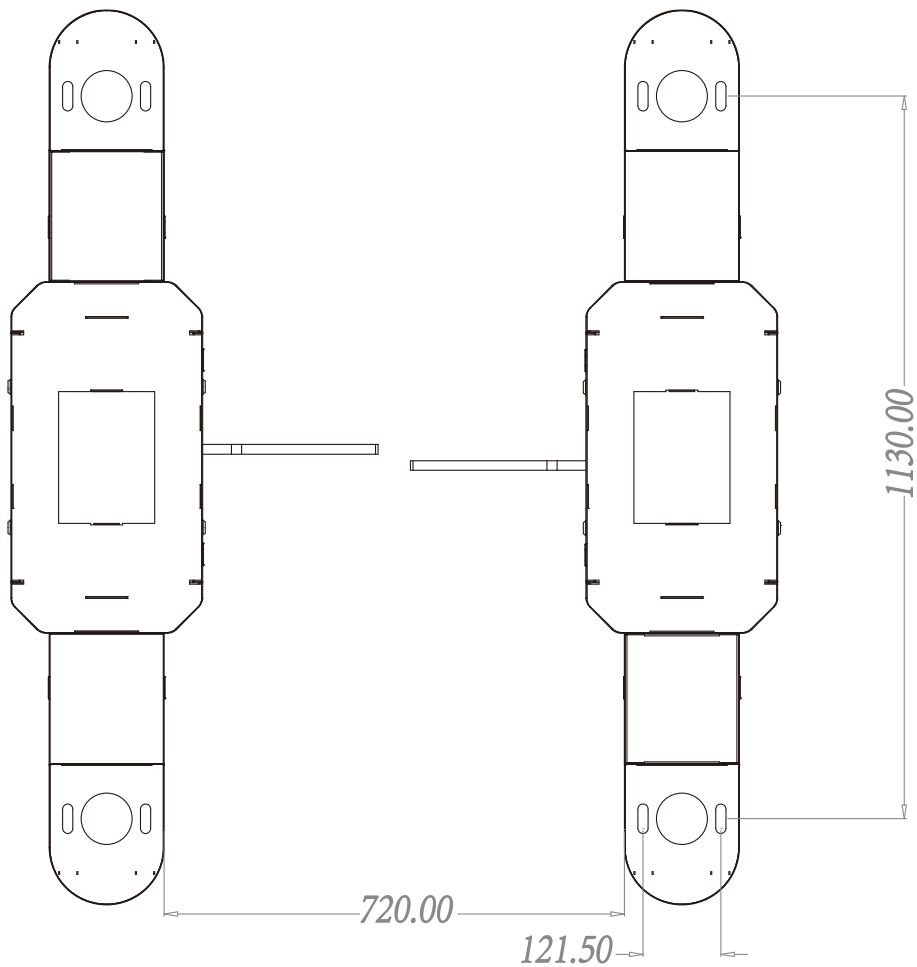
Figure 3-2

e) Apply screw glue to the outer surface and threads of the expansion screws, insert expansion screws, and put the master machine and slave machine in the marked positions. Use a level to check whether the installation ground foundation is level. If not, use a pad for adjustment.

Note: Eight expansion screws must be completely inserted, as shown in Figure 3-3.
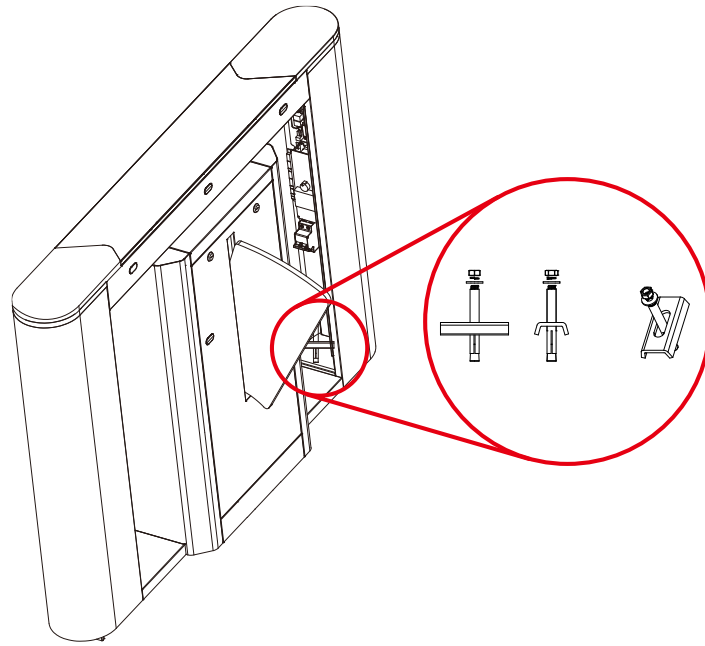
Figure 3-3

5.   Card Swiping Warning Lines

It is recommended that a warning line is set to prompt users to swipe cards outside the warning lines, as shown in Figure 3-4.
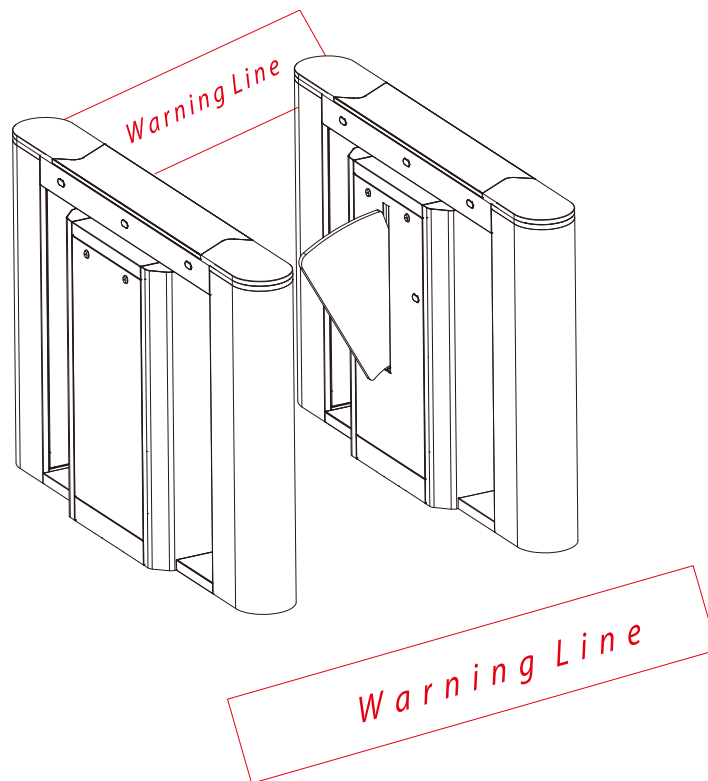

Figure 3-4

4   Menu Introduction

4.1   Function Introduction

1.   After powered on, the LCD screen on the control board will display the default state showing the current working mode.

2.   There are 4 buttons on the control board: **UP**, **DOWN**, **ENT**, and **ESC**, show as Figure 3-1:

UP: to move upwards or increase the value.

DOWN: to move downwards or decrease the value.

ENT: to enter a menu setting item or confirm the current modified value.

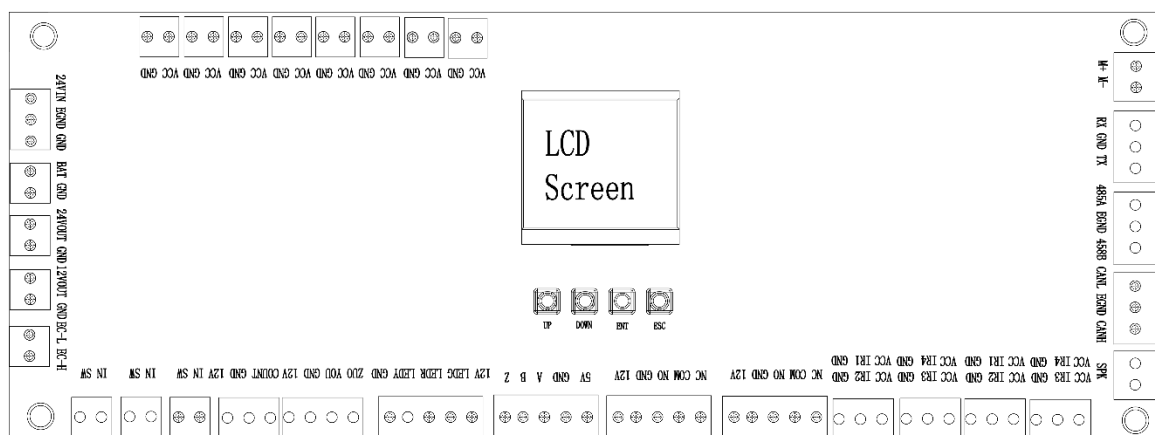**ESC**: to return to the previous menu or cancel the current operation.

Figure 4-1

3.   Operation and instruction of menu

Press the **ENT** button and enter the password input interface. The default password is: **UP**, **UP**, **DOWN**, **DOWN**, **DOWN**, **DOWN**. You may press the **ESC** button to erase the last input. After entering the menu, press **UP** or **DOWN** to choose a menu item, then press **ENT** to enter the interface and adjust such function or value.

There are four keys on the control panel, including "UP", "DOWN", "ENT", and "ESC". Press "ENT" to modify settings, press "UP" and "DOWN" button to select a function, and press "ESC" to exit.

4.2   Menu Introduction

After input correctly password then press "OK" and the menu operation interface is displayed.

The menu has the following options:

1. **Passing mode**

   Two-way swipe (default)

   Left free, Right swipe

   Left swipe, Right free

   Two-way free

   Left prohibit, Right swipe

   Left swipe, Right prohibit

   Left prohibit, Right free

   Left free, Right prohibit

   Two-way prohibit

2. **Opening speed**

   Low speed

   Medium speed (default)

   High speed

3. **Closing speed**

   Low speed

   Medium speed (default)

   High speed

4. **Volume setting**

   Volume: off

   The value ranges from 1 to 16 (default 5).

   1 is the minimum value; 16 is the maximum value.

5. **Opening duration**

   After the gate is opened, it will be automatically closed if no one passes through within a certain duration. The default value is 10 seconds. The value ranges from 5 to 60.

6. **Reset the counter**

   Exit counter

   Entry counter

   All (default)

7. **Gate closing delay time**

   Time: 0~10s (default 0s)

8. **Trailing alarm detection**

   Mode: Close the door and audio alarm

   Audio alarm only (default)

   Disable the alarm function

9. **Swiping mode**

    Method: Allow card swiping in the channel (default)

    Do not allow card swiping in the channel

10. **False direction entry**

    Mode: Close the door and audio alarm

    Audio alarm only (default)

    Disable the alarm function

11. **Set fire signal**

    Enable (default)

    Disable

12. **Exchange voice of door opening**

    Yes
    No (default)

13. **Speed compensation of master machine**

    Compensation value: 000

    1~20 (default: 000)

14. **Speed compensation of slave machine**

    Compensation value: 000

    1~20 (default: 000)

15. **Gate closing mode**

    Out of the anti-pinch area, close the gate. (default)

    Out of the channel, close the gate.

16. **Memory opening**

    Whether to open: No (default)

    Yes

17. **System working mode**

    Mode: Working mode (default)

    Test mode

    Restore to factory

18. **Version number**

    Version: V7.0.3

5 Wiring Diagram

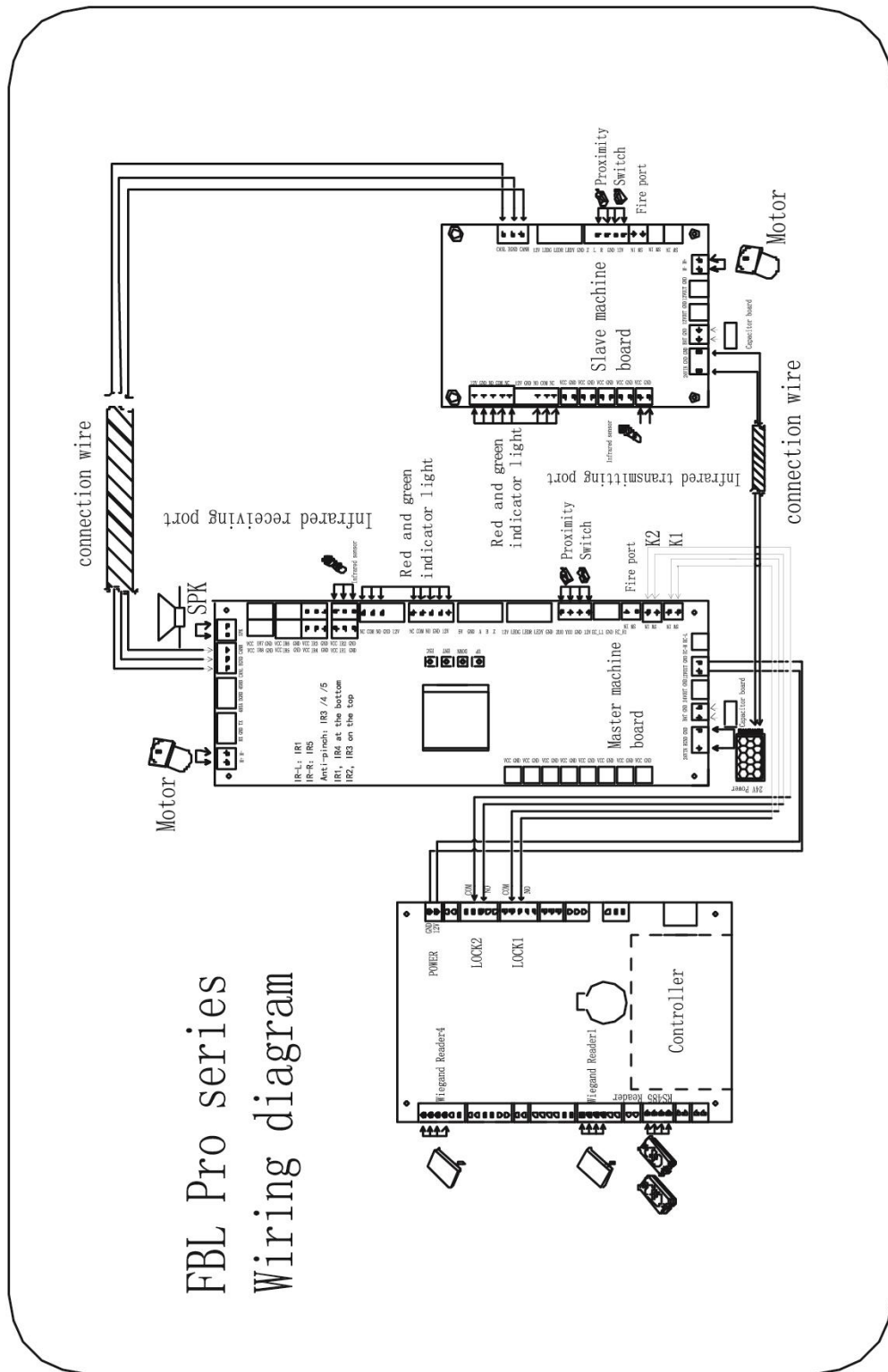**Below is the wiring diagram:**

Figure 5-1

6   Product Maintenance

6.1 Chassis

The chassis is made of SAE 304 stainless steel. When the device has been used for a long period, there may be rust or stain on the surface of the chassis. Remember to regularly sand the surface along the grain softly and carefully, then coat the surface with anti-rust oil. Avoid covering the infrared sensors.

6.2 Movement

Cut off the power supply before maintenance. Then, open the door, wipe off the dust on the surface, and lubricate the transmission mechanism. Check and tighten other connection parts.

6.3 Power

Cut off the power supply before maintenance. Check the plug connection; if anything is loose, fix it. Do not randomly change any connection positioning. Check the external power insulation regularly. Do periodic check for any kind of leakage. Check if the technical parameters of each interface are normal. Check the service life of the electronic components.

Caution: The above-mentioned maintenance method of the swing gates, especially the movement and the electric control maintenance, must be carried out by professional personnel. Always remember to cut off the power supply before maintenance and repair.

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