

# Guía Rápida

## Swing Barrier-SBTL6000 Series

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Español

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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# 1 Introducción del Producto

## 1.1 Número de Modelo y Control de Acceso

Access Model	None	C3-200 and Two KR800E reader	InBio 260 and Two FR1500 reader	Two visible light products
SBTL6000	√			
SBTL6011		√		
SBTL6022			√	
SBTL6033				√
SBTL6200	√			
SBTL6211		√		
SBTL6222			√	
SBTL6233				√

## 1.2 Diseño y Dimensiones del Chasis

Serie SBTL6000 con carcasa SUS304 que proporciona un diseño simple y hermoso con protección contra la corrosión. Proporciona acceso legal a las personas y restringe el acceso de personal ilegal.

En caso de emergencia, asegura que el paso de evacuación funcione sin problemas y sea conveniente para el personal.

La apariencia y las dimensiones del SBTL6000 se muestran en la Figura 1-1:

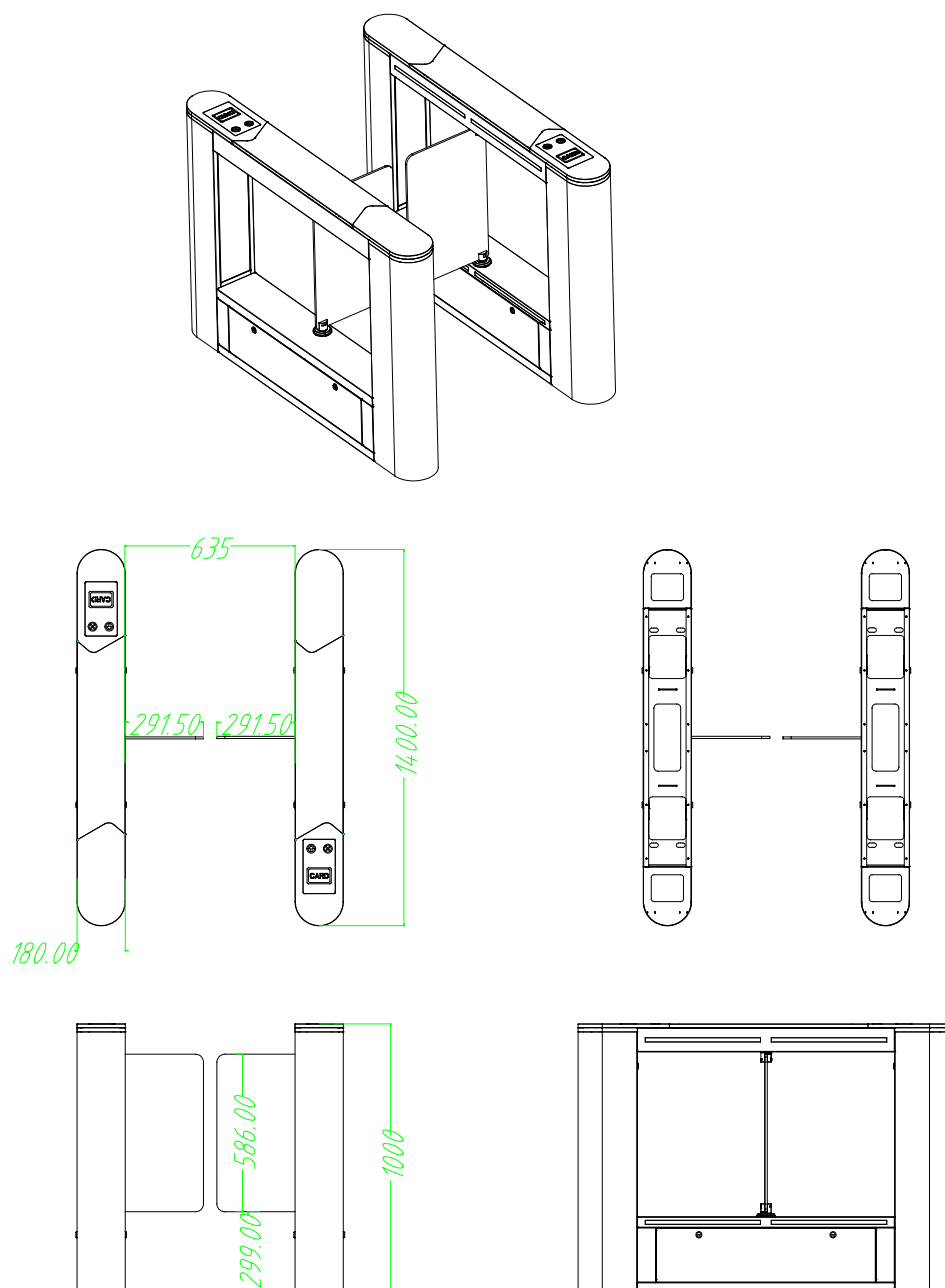


Figura 1-1

### 1.3 Sistema Mecánico de la Barrera Batiente

El sistema mecánico de un torniquete de barrera abatible incluye el chasis y el componente central.

El chasis es portador donde se instalan el indicador de dirección, el lector, el sensor de infrarrojos y la cerradura de la puerta. El componente principal consiste principalmente en el motor, el bastidor, la correa y el brazo oscilante.

### 1.4 Sistema de Control Electrónico

El sistema de control electrónico de un torniquete de barrera abatible está compuesto principalmente por el lector, el panel de control maestro, el sensor de infrarrojos, el indicador de dirección y la alarma.

**Lector:** El lector lee los datos de la tarjeta y los envía al controlador.

**Panel de control maestro:** El panel de control maestro es el centro de control del sistema que recibe señales del lector y el interruptor fotoeléctrico, realiza el juicio lógico y el procesamiento de estas señales y envía comandos ejecutivos al indicador de dirección, el motor eléctrico y la alarma.

**Sensor de infrarrojos:** Detecta la posición de un peatón y desempeña el papel de protección de seguridad.

**Indicador de dirección:** Este indicador muestra el camino de paso de peatones y les indica que pasen por el carril de una manera segura y ordenada.

**Alarma:** La alarma da voz si el sistema detecta cualquier entrada no autorizada al carril.

## 1.5 Principio de funcionamiento de la barrera giratoria

- ◆ Después de suministrar energía al dispositivo, el sistema se auto comprueba. El dispositivo se inicia normalmente si no se detecta ninguna falla. Si se detecta una falla, el sistema muestra mensajes relacionados en la pantalla LCD para que el usuario pueda tener un conocimiento rápido y resolver el problema.
- ◆ Cuando el lector detecta una tarjeta válida, el timbre le dará un aviso audible positivo al peatón, indicando que la tarjeta se está leyendo correctamente. Y luego, el lector envía señales al controlador de acceso para solicitar permiso para pasar por el carril. El controlador de acceso enviará la señal al panel de control maestro.
- ◆ Después de recibir la señal del controlador de acceso, el panel de control maestro envía señales de control válidas al indicador de dirección y al motor eléctrico. Por fin, la flecha de dirección se vuelve verde.
- ◆ Los peatones pasan por el carril de acuerdo con las señales indicadoras de dirección. Los sensores infrarrojos siguen detectando al peatón durante todo el proceso y continúan enviando señales al tablero de control maestro hasta que el peatón pasa completamente por el carril.
- ◆ Si el peatón ingresa al pasaje pero se olvida de mostrar la tarjeta, o si la tarjeta que tiene el peatón no es válida, el sistema emitirá una alarma sonora para detener y retirar al peatón del carril. El lector de tarjetas lee una tarjeta válida.

## 1.6 System Composition of the Product

The single-lane management system is composed of two single-core swing barriers. The multi-lane management system is composed of two single-core barriers and multiple dual-core barriers.

## Working modes of the system

To make the product more versatile, this system provides multiple working modes for the user, including normal working mode, normally open and normally close mode, testing mode.

After supplying power to the device, the LCD screen on control board will display a default state, which displays current work mode.

## 1.7 Specification

<b>Dimension(mm)</b>	SBTL6000 Series: L = 1400, W = 180, H =1000		
<b>Communication</b>	RS485	<b>Input voltage</b>	AC110~240V, 50-60Hz
<b>Input control signal</b>	Switching signal	<b>Output voltage</b>	DC 24V
<b>Time of opening/closing</b>	0.8 Sec (adjustable)	<b>Relative humidity</b>	20% - 95% (Non-condensing)
<b>Temperature</b>	-28°C to 60°C	<b>Passage rate</b>	Maximum 30/minute
<b>Infrared sensor</b>	6	<b>Working environment</b>	Indoor

## 2 Installation of the Product

### 2.1 Installation Notes

- 1) It is recommended that the swing barrier must be installed on a horizontal solid platform with a height of 50mm to 100mm.
- 2) It is also recommended that the swing barrier turnstile should not be used in corrosive environment.
- 3) Make sure the protective ground wire of the system is reliably connected to avoid personal injuries or other accidents.
- 4) After installation, check if the connection is done correctly at the connecting points of the protective ground wire, at the connector assemblies and wiring points of the circuits, as well as at each movable

part of the swing barrier turnstile. Any loose nuts, screws and other fasteners should be tightened in time to avoid swing barrier turnstile failures caused by longer operations.

## 2.2 Installation Position of the Swing Barrier

A distance of 100mm between the swing barrier turnstile and the wall needs to be reserved for ease of opening the top cover of the machine to perform maintenance and adjustment. The reference figure is shown below:

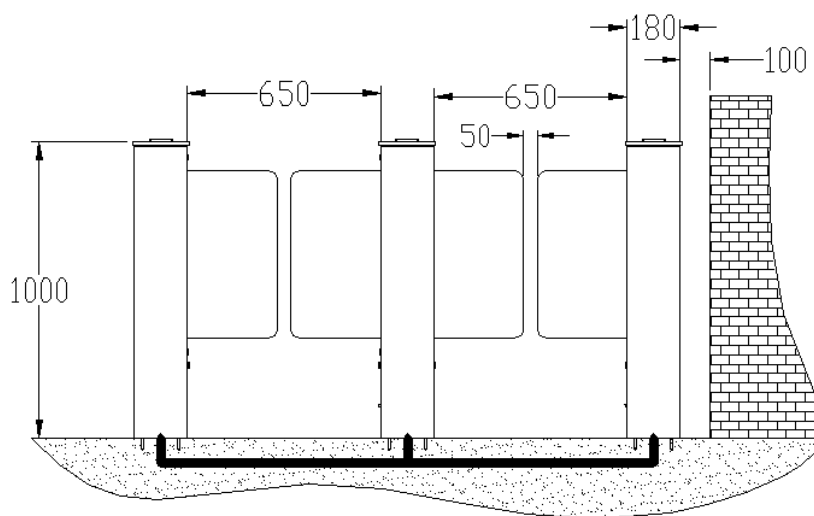


Figure 2-1 SBTL6000 series dual-lane

## 2.3 Cables Installation and Fixing

For the outlets of the concealed cables, please refer to the drawing indicating the mounting holes. The input voltage for this swing barrier turnstile is **AC100-120V/200-240V** and its master and slave are connected by a **5-core cable (signal)** and a **2-core cable (power)**. When installing the swing barrier turnstile, the user only needs to connect it to the corresponding ports. Note that the PVC conduits are laid **100mm** under the ground, with the height of the exposed part not exceeding **100mm**. In addition, the conduit outlet is bent back to prevent ingress of water into the conduit.

SBTL 6000 series installation holes and cabling positions is shown in Figure 2-2:

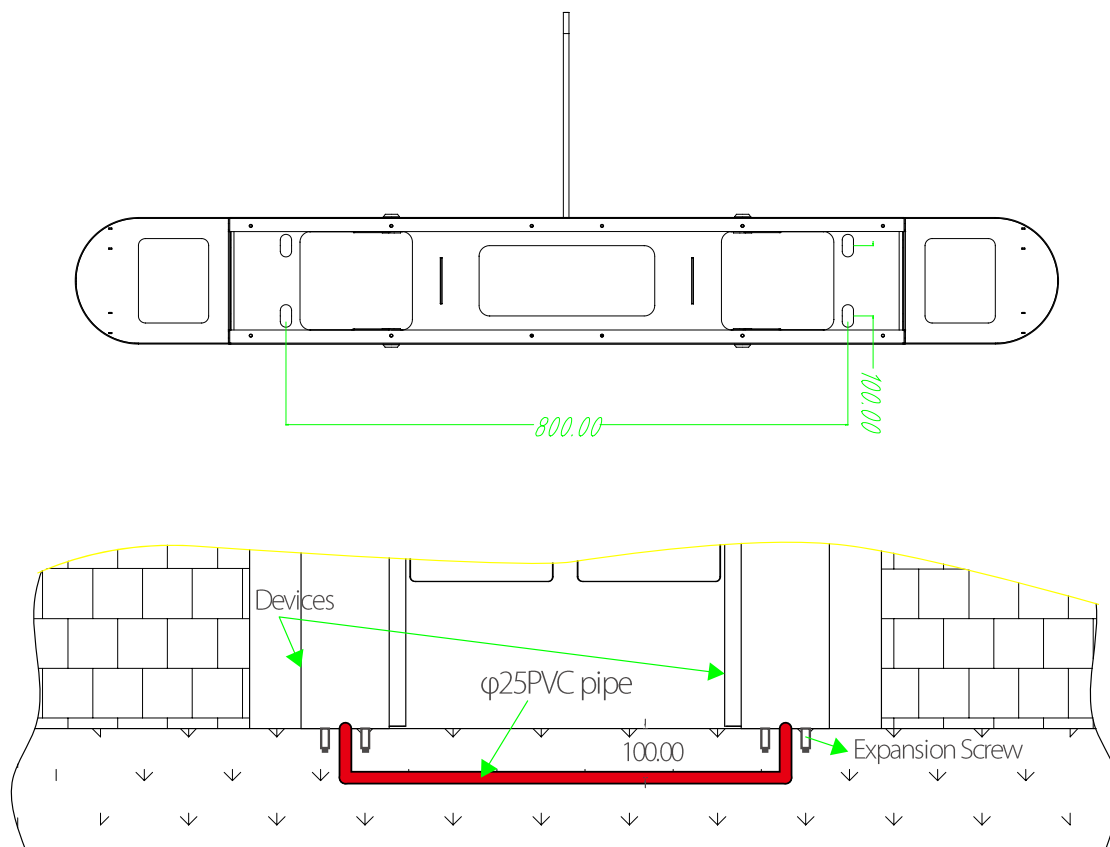


Figure 2-2

Mark the screw hole at the centre of the stand, and the edge of the chassis base on the ground according to the sizes as shown on the Figure 2-2. Use a hammer drill to make M12 screw holes and then install the screws. Place the swing barrier turnstile according to the sizes and positions as shown in the figure before installation and fixing. Connect the online cables and perform the power-on test. If the test is OK, tighten the screws. It is recommended that a warning line be marked on the ground after installing the device, so as to prompt the pedestrian to stand behind the warning line when swiping the card. As shown in Figure 2-3:

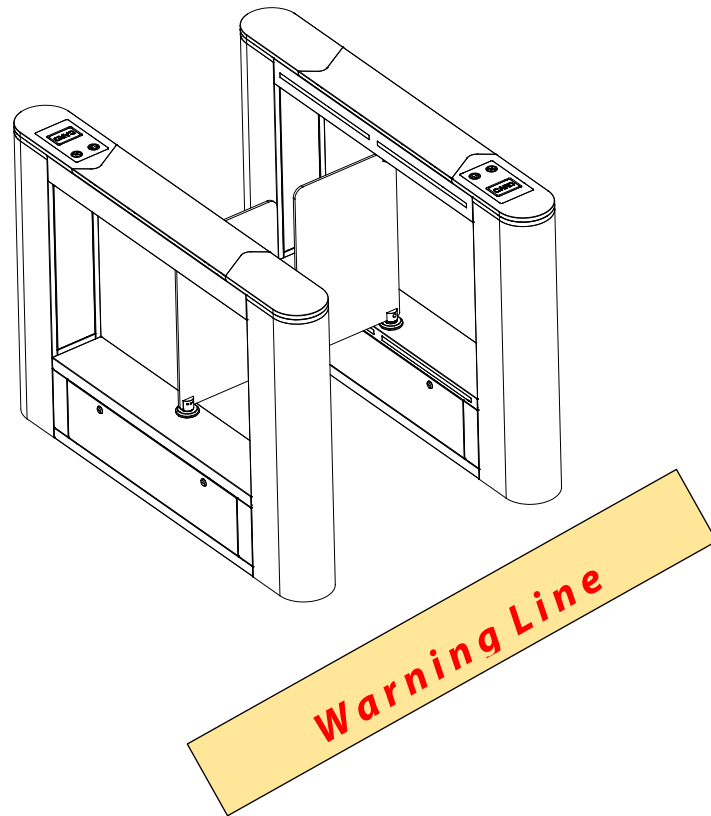


Figure 2-3

## 3 Menu Introduction

### 3.1 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.



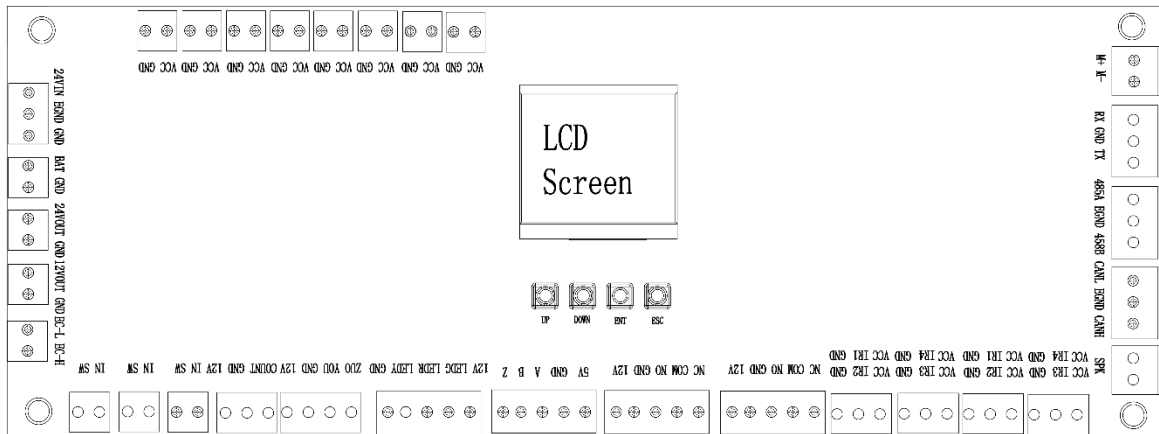


Figure 3-1

### 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.

## 3.2 Menu Introduction

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

The menu has the following options:

### 1. Barrier positioning

Zero position (Default).

Left opening position.

Right opening position.

### 2. Opening mode

Bi-direction swiping card. (Default)

Left free + Right swiping card.

Left swiping card + Right free.

Bi-direction control by IR sensor.

Left forbidden + Right swiping card.

Left swiping card + Right forbidden.

Left forbidden + Right free.

Left free + Right forbidden.

Bi-direction forbidden.

### **3. Open duration**

5~60s (The default is 10s).

### **4. False direction entry**

Close door and voice alarm.

Voice alarm (Default).

Alarm disabled.

### **5. Speed of barrier closing and opening**

Low speed.

Middle speed (Default).

High speed.

### **6. Anti-tailgate**

Alarm disabled.

Voice alarm (Default).

Close door and voice alarm.

### **7. Reset counter**

Exit counter (Default).

Entry counter.

Both.

### **8. Gate closing delay time**

0~10s (The default is 0).

### **9. Unlock brake**

Delay to unlock (Default).

Unlock after card swiping.

#### **10. Brake starting angle**

3~10° (The default is 3° ).

#### **11. Fire signal setting**

Right opening (Default).

Left opening.

Disable.

#### **12. System working mode**

Working mode (Default).

Test mode.

Factory reset.

#### **13. Volume setting**

Disable.

1~16 (The default is 5).

#### **14. Exchange voice of door opening**

No (Default).

Yes.

#### **15. IR anti-pinch setting**

Disable.

Stop turning for anti-pinch (Default).

Open the barrier for anti-pinch.

#### **16. Memory function**

Disable (Default).

Enable.

#### **17. Select anti-pinch area**

No anti-pinch (Default).

All IR areas for anti-pinch.

### **18. Master device speed compensation**

0~20 (The default is 0).

### **19. Slave device speed compensation**

0~20 (The default is 0).

### **20. Swiping card mode**

Allow to swipe card in passage (Default).

Not allow to swipe card in passage.

### **21. Version**

V6.0.4.

## 4 Troubleshooting

Number	Failure description	Analysis and solution
1	No response from direction indicator or indication is not correct.	Check whether the connection of the roof lamp is correct or not.
2	After swiping the card, there is only a swing arm action.	Check the master and slave machine type setting and the 5-core, 2-core connection line.
3	Delay in barrier opening doesn't close.	Check whether the time of the opening is too long or the IR sensor is covered.
4	Motor doesn't rotate, the resistance is much, or the belt is loose.	The motor works properly, but the rotated angle is not sufficient, so it may cause loosening of belt.
5	When powered ON, the swing doesn't return to the initial position.	Ensure that no obstacle is in the sensing area, then restart the equipment.

## 5 Product Maintenance

### 5.1 Chassis Maintenance

The chassis is made up of SAE 304 stainless steel. If it is in service for a longer period, then there may be rust stains on its surface, regularly sand the surface along the grain softly and carefully. Coat the surface with anti-rust oil, do not cover the infrared sensor.

### 5.2 Movement Maintenance

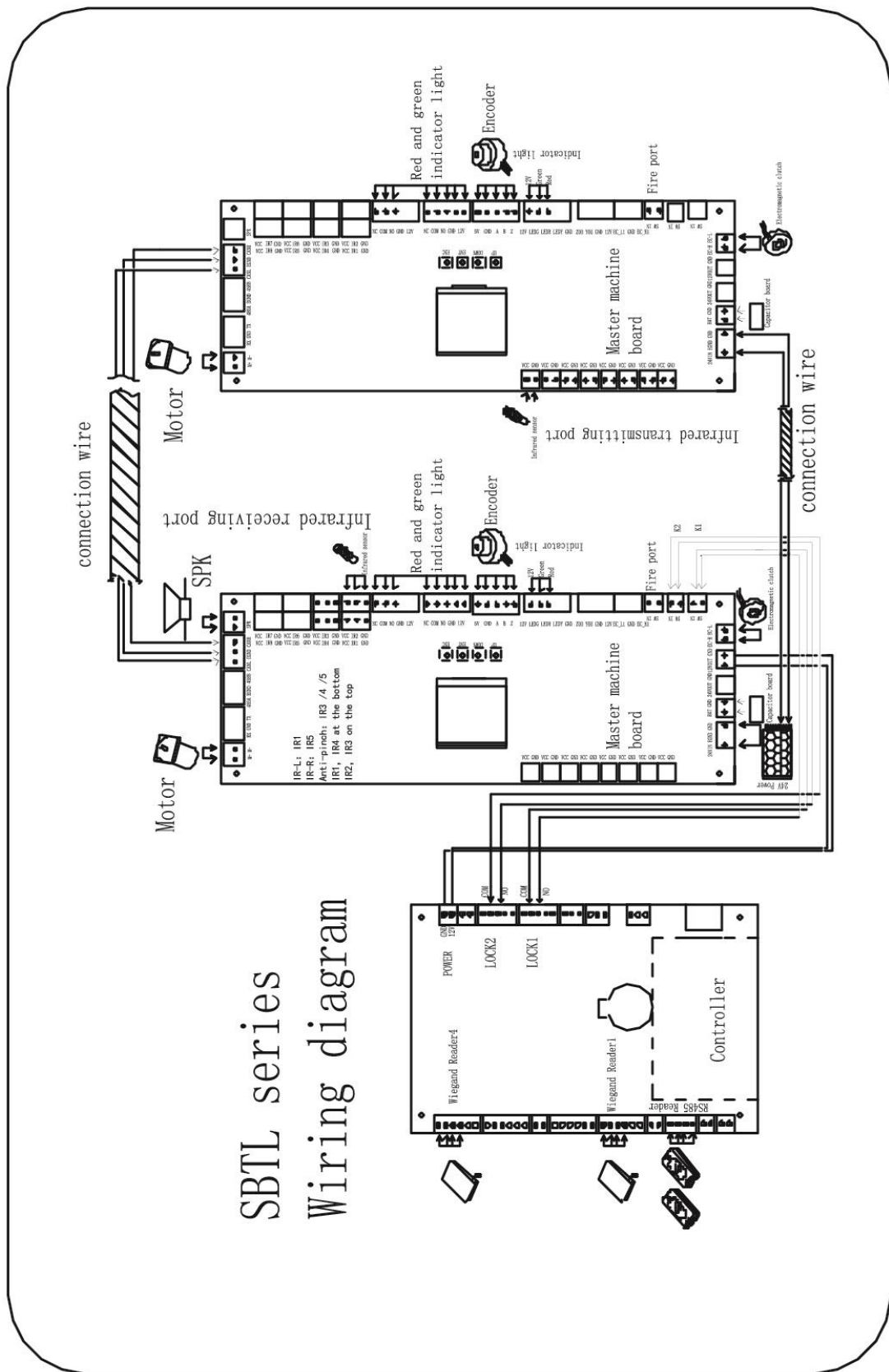
Switch off the power supply before maintenance. Open the door, clean surface dust, lubricate the transmission mechanism. Check the belt movement, if found loose, adjust the position of the motor to tighten the belt. Check and tighten others connection parts.

### 5.3 Power maintenance

Switch off the power supply before maintenance. Check the plug connection, if found loose, fix it properly. Do not change any connection position randomly. Check the external power supply insulation periodically. Do periodic check for any kind of leakage. Check if the technical parameters of interface are normal. Check the service life of the electronic components and replace accordingly.

**Caution:** Above mentioned maintenance method for swing barrier must be carried out by professional personnel. Especially the movement and the electric control part, first switch off the power supply, ensure the operation safety.

# Appendix Internal Wiring Diagram



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