# User Manual

## Applicable for

- Servo Sectional Door Operator
- Servo High-speed Door Operator



REV：01

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# 1. General Safety Information



- The door operator may only be used under the conditions described in these instructions. Any other usewill be considered improper usage and therefore dangerous. The manufacturer is not liable for damageresulting from improper, incorrect or inappropriate usage.

- Failure to observe the information contained in these instructions may lead to personal or material damage. Theinstructions must be passed on to all future users and operators of the door operator.

- Only use the door operator if no maintenance or adjustment measures are required to do so. Disconnectthe operator from the power supply for cleaning or maintenance.

- Only use the door operator if the entire area of movement is fully visible. During operation, be aware ofother people who may be within the operating range of the product or who may enter this area. Do notdrive or walk underneath the door while it is moving.

- Do not use the door operator to lift objects and/or people.

- Ensure that children are kept away from the area around the door.

- Keep remote controls and/or other controls out of reach of children to prevent the accidental activation ofthe door operator.

- Maintenance and upkeep must be carried out by trained or authorized professionals.

- Relevantinstallation personnel must strictly adhere to standards, be responsible for the accurate installation, especially comply with local safety standards and operate strictly according to these standards.

- Read and follow the safety instructions carefully.

## 2. Product Description

- The door operator has been developed for industrial doors and high-speed doors.

- The door operator can be equipped with the following additional safety devices, such as:
  - Photocells，Light curtains，Safety edges
  - Radar
  - Loop detector
  - Remote control，Push buttons，Pull switches
  - Traffic light，Warning light

- The door operator is operated via the control unit.

- You can choose different operating settings for the operator (e.g., automatic, semi-automatic or hold to run).

## 3. Technical Data

**Servo High-speed Door Operator:**

| **Type** | **Servo High-speed Door Operator** | | |
|---|---|---|---|
| **Model** | **SV40-HSD** | **SV75-HSD** | **SV100-HSD** |
| **Rated Voltage/Frequency** | 220-240VAC 50Hz | 220-240VAC 50Hz | 220-240VAC 50Hz |
| **Motor power in KW** | 0.4 | 0.75 | 1.0 |
| **Rated output torque in Nm** | 30 | 50 | 70 |
| **Max output torque in Nm** | 40 | 75 | 100 |
| **Speed in RPM** | 10-250 | 10-250 | 10-250 |
| **Diameter hollow shaft in mm** | 25/30/35mm | 25/30/35mm | 25/30/35mm |
| **Duty cycle** | 200 | 200 | 200 |
| **Emergency release** | Crank/Chain hoist | | |
| **Limit setting of door travel** | Absoluteencoder | | |
| **Torqueofmechanic albrake** | 8 N.m | 8 N.m | 8 N.m |
| **Max. door area in ㎡** | 9 | 16 | 25 |
| **Optional accessories** | Main power switch, Built-in WiFi, External WiFi, Extended function board, Remote control | | |

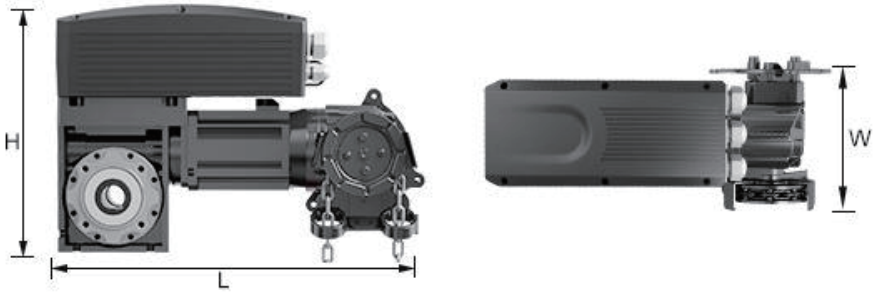
**Servo Sectional Door Operator:**

| **Type** | **Servo Sectional Door Operator** | | |
|---|---|---|---|
| **Model** | **SV80-ISD** | **SV120-ISD** | **SV140-ISD** |
| **Rated Voltage/Frequency** | 220-240V 50Hz | 220-240V 50Hz | 220-240V 50Hz |
| **Motor power in KW** | 0.4 | 0.75 | 1.0 |
| **Rated output torque in Nm** | 60 | 100 | 140 |
| **Max output torque in Nm** | 80 | 120 | 180 |
| **Speed in RPM** | 5-50 | 5-50 | 5-50 |
| **Diameter hollow shaft in mm** | 25.44/31.75mm | 25.44/31.75mm | 25.44/31.75mm |
| **Max cycles per hour** | 60c/h | 60c/h | 60c/h |
| **Max door area in ㎡** | 25 | 49 | 60 |
| **Emergency release** | Crank/Chainhoist | | |
| **Limit setting of door travel** | Absoluteencoder | | |
| **Optional accessories** | Main power switch, Built-in WiFi, External WiFi, Extended function board, Remote control | | |

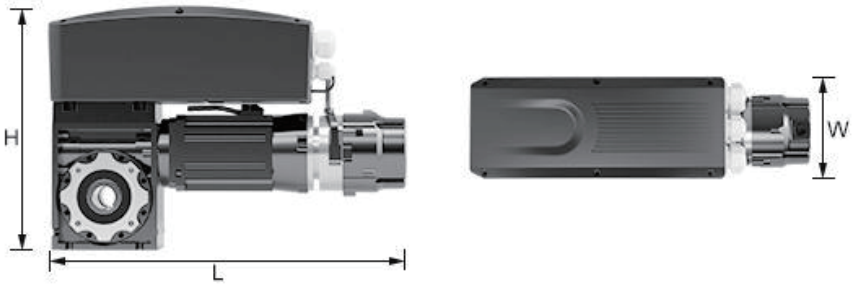
# 4. Drawing of appearance and dimension

| Type | Servo Sectional Door operator | | Servo High-speed Door operator | | |
|---|---|---|---|---|---|
| Model | SV80-ISD | SV120-ISD | SV40-HSD | SV75-HSD | SV100-HSD |
| Door operator L*W*H(mm) | 444*180*301 | 488*180*301 | 443*138*301 | 488*138*301 | 530*138*301 |
| Control box L*W*H(mm) | 420*122*162 | 420*122*162 | 420*122*162 | 420*122*162 | 420*122*162 |
| Packing L*W*H(mm) | 573*510*200 | 573*510*200 | 573*510*200 | 573*510*200 | 573*510*200 |
| Rough Weight (kg) | 21.895 | 26.54 | 22.175 | 25.095 | 28.405 |
| Net Weight (kg) | 20.155 | 24.8 | 20.435 | 23.355 | 26.665 |

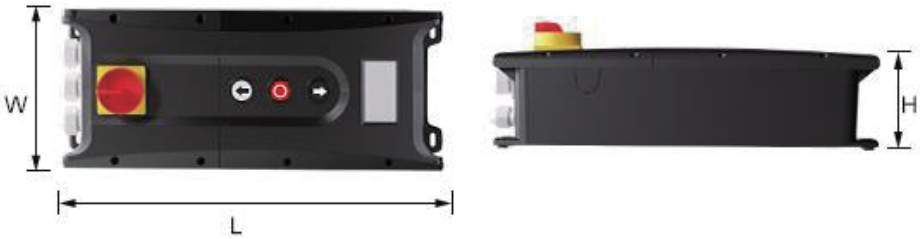
## Sectional door operator




## Highspeed Door operator




## Controlbox



## 5. Warnings –Symbols



Note: Technical information must be observed

**Fig.**



Caution: Warns of a risk to a person / risk of injury



Warning: Warns of a risk to material / risk of damage

## 6. Safety information of operation



The door may only operate if:

☒ Conformity in accordance with Machinery Directive 2006/42/EC was declared following assembly.

☒ The door complies with the standards EN 12605, EN 12604 and DIN EN 13241-1.

☒ The door operator has been assembled in accordance with EN 12453, EN 12445 and EN 12635.

☒ Any additionally installed safety equipment is functioning properly.

☒ There is an internally operated emergency release for garages that have no second access

☒ Any pass door set within the door is equipped with a safety device that prevents switch-on whilethe door is open.

☒ The emergency release cannot be caught on any vehicle parts (e.g. roof structures).

☒ It is insured that the installation is conform with the national safety regulations.

**Keep the instruction manual at a safe place!**

## 7. Safety information for installation

**Important:** 

The door must move easily and be functional and well-balanced in accordance with the manufacturer'sspecifications.

It must be possible to open and close the door by hand easily.

Assembly must be carried out by trained and specialized personnel.

Electrical installation work must only be performed by authorized and specialized personnel.

The suitability and bearing capacity of the supporting structure of the building in which the door operatoris to be installed must be checked and confirmed by expert personnel.



The door operator must be securely fastened at all the mounting points provided. The mounting materialmust be chosen according to the material characteristics of the supporting structure to ensure that aminimum tensile force of 900 N can be withstood.

If these requirements are not fulfilled, the door operator may fall down, or the door may move withoutcontrol. This means there is a risk of personal injury or material damage.

When mounting the door operator, it must be secured by appropriate means against falling until it iscompletely and safely attached.Observe the relevant occupational health and safety regulations during the installation.

## 8. Proper Use

**This door operator is suitable for use with balanced sectional/ high speed doors and sectional/ high speeddoors equipped with spring-break protection and/or safety catch.**

The maximum dimensions given in the technical data must be complied with.

Before installing the door operator, any existing locking mechanisms for the door must be disassembled or taken out of operation.

Use in an explosion-proof environment is not permitted.

Any other use above and beyond this is considered as improper use.

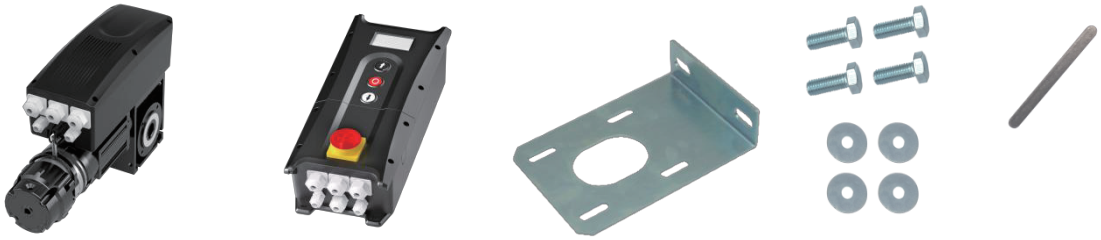
All of the below activities performed without the express written approval of the manufacturer:

- ☒ Expansions or modifications
- ☒ Use of non-original replacement parts
- ☒ Performance of repairs by persons or operators that have not been authorized by themanufacturer may result in the loss of the warranty.

No liability can be accepted for damages that result from the following causes:

- ☒ Technical defects on the door to be operated and structural deformations occurringduring operation
- ☒ Improper maintenance of the door
- ☒ Failure to observe the operating instructions

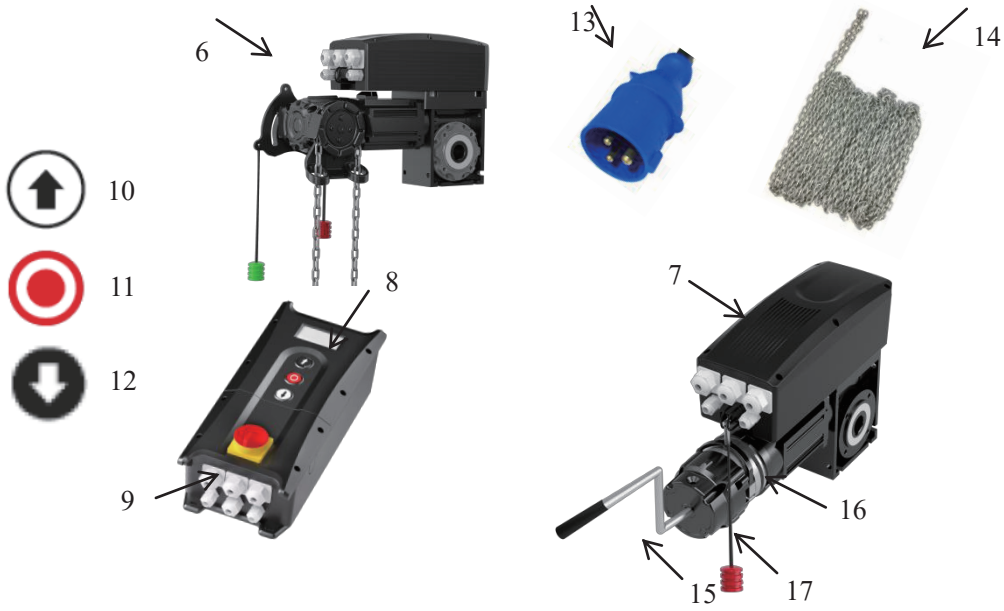
## 9. Standard configuration



**1** **2** **3** **4** **5**

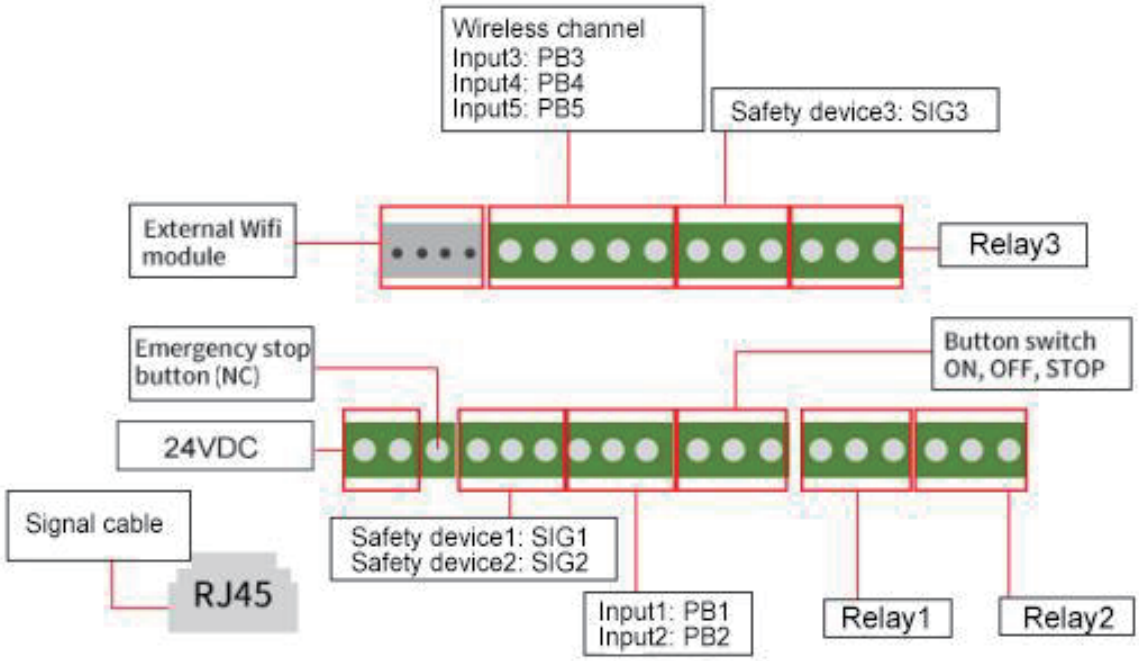
| | |
|---|---|
| 1 | Door operator with emergency release (chain or crank) |
| 2 | Control unit with main switch |
| 3 | Torque bracket |
| 4 | Assembly material |
| 5 | Key for shaft |

## 10. Table of components




| | |
|---|---|
| 6 | Servo door operator (for balanced sectional doors) |
| 7 | Servo door operator (for high-speed doors) |
| 8 | Display |
| 9 | Main power switch |
| 10 | “UP” button |
| 11 | “STOP” button |
| 12 | “DOWN” button |
| 13 | Industrial power plug |
| 14 | Chain (for emergency release) |
| 15 | Crank (for emergency release) |
| 16 | Brake (for high-speed operators) |
| 17 | Emergency release cord |

## 11. Layout of control unit




3 Safety device connectionsfor light curtain,light barriers,photocell, safety edge, etc.
5input connection forradar, loop detector, push button, pull switch, wireless receiver, etc.
3output relays for traffic light, warning light, Electric Door-Lock

# 12. Installation

**Preparation for installation**

Risk of personal injury and/or material damage due to electrical voltage. Have a specialized electrician to open and close the cover for the motor controller.

**Determine the installation location of the door operator**

The door operator must be positioned 100% above the door drive shaft.

Make sure that neither the emergency manual operation chain nor crank (depending on version)can impair the normal operation of the door (clearance) and that they can be used at any time.

**12.1 Install the torque bracket**

**Install the torque bracket (3) as shown in Fig. 1. Make sure that the drive shaft for the door can extend atleast 135 mm (dimension A) in the door operator to beinstalled.**

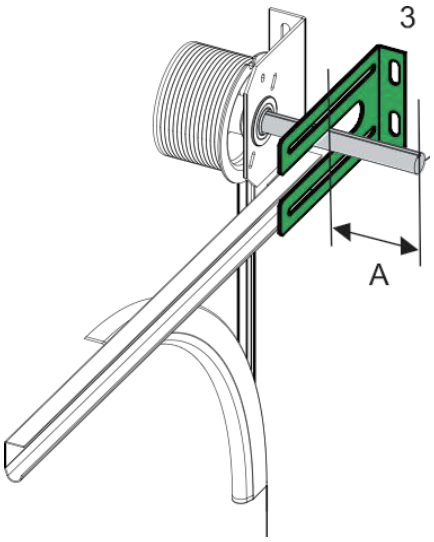



Fig 1

**12.2 Install the feature key**

**Install the key (8) in the groove of the drive shaft for the door so that is secured against movement in Fig2.**

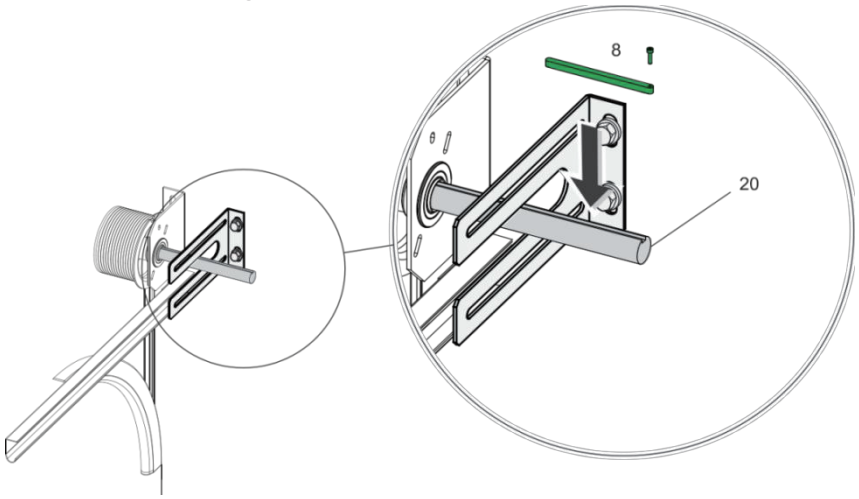



Fig2

The door operator is heavy, which may fall and causes personal injury and/or material damage. Asuitable hoist must be used to bring it into the installation location.

☒ Do not supply power to the door operator yet. Do not connect any plugs.

☒ Position the drive shaft for the door operator such that it is suitable for the position of the anti-twistdevice (key, position 8 in Fig. 2). To do this, turn the transmission via the emergency operation.

☒ Grease the drive shaft for the door such that the door operator can be easily connected.

**12.3 Secure the door operator**

**Slide the door operator onto the door drive shaft (20) in Fig. 2. Secure the door operator with the 4screws and washers (13) in Fig. 3.**

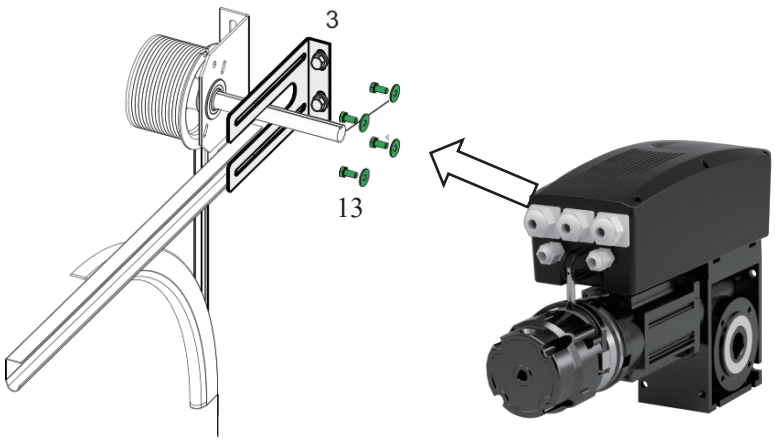



Fig 3

### 12.4 Install the emergency release cord

**Emergency release with chain**

- ☒ Secure the emergency release cord such that the emergency release can be activated by using the redemergency release cord.
- ☒ The emergency release is activated when the chain wheel (3) has been moved by pulling the redemergency release cord to the direction of the arrow in Fig. 4.
- ☒ Make sure that the emergency release can be deactivated again by pulling the black cord.

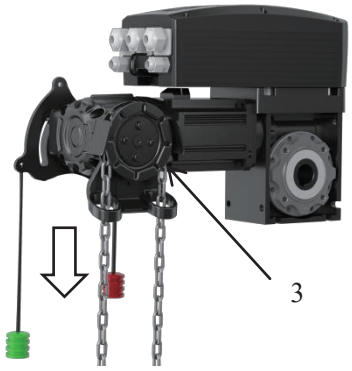



Fig 4

**Emergency release with crank**

- ☒ Secure the emergency release cord such that the emergency release can be activated by using the end of the cord with the "HAND" label on it.
- ☒ The emergency release is activated when the brake (1) is pulled by the cord (2) to the direction of arrow in Fig. 5.
- ☒ Make sure that emergency release can be deactivated again by loosening the cord.
- ☒ Insert the emergency crank (3) to hand crank housing in Fig. 5.

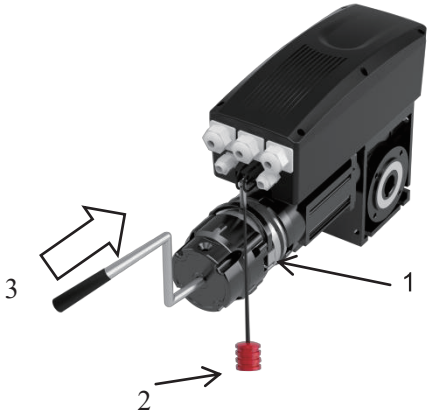



Fig 5

### 12.5 Check the emergency operation

Ensure to operate the emergency release device only in the event of a power outage, in order to prevent the risk of accidental mechanical injuries.

**Emergency release with chain**

Make sure that the door can be opened and closed without any problems by pulling on thechain (2) in Fig. 6.

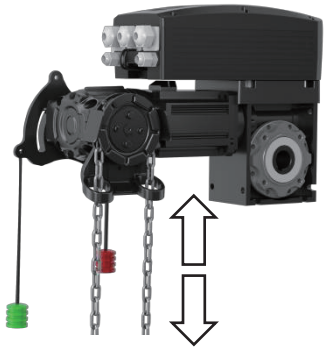


Fig 6

**Emergency release with crank**

Make sure that the door can be opened and closed by crank (3) or hands without any problems in Fig. 7.

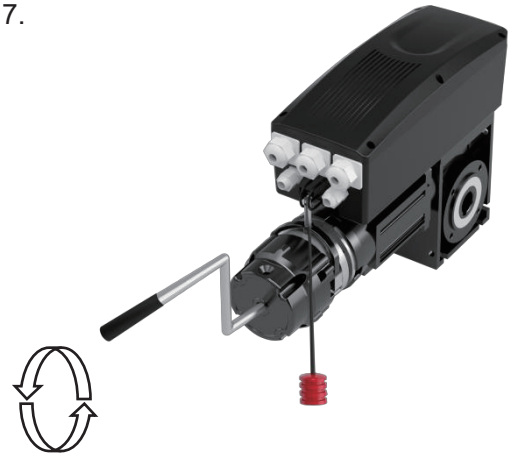
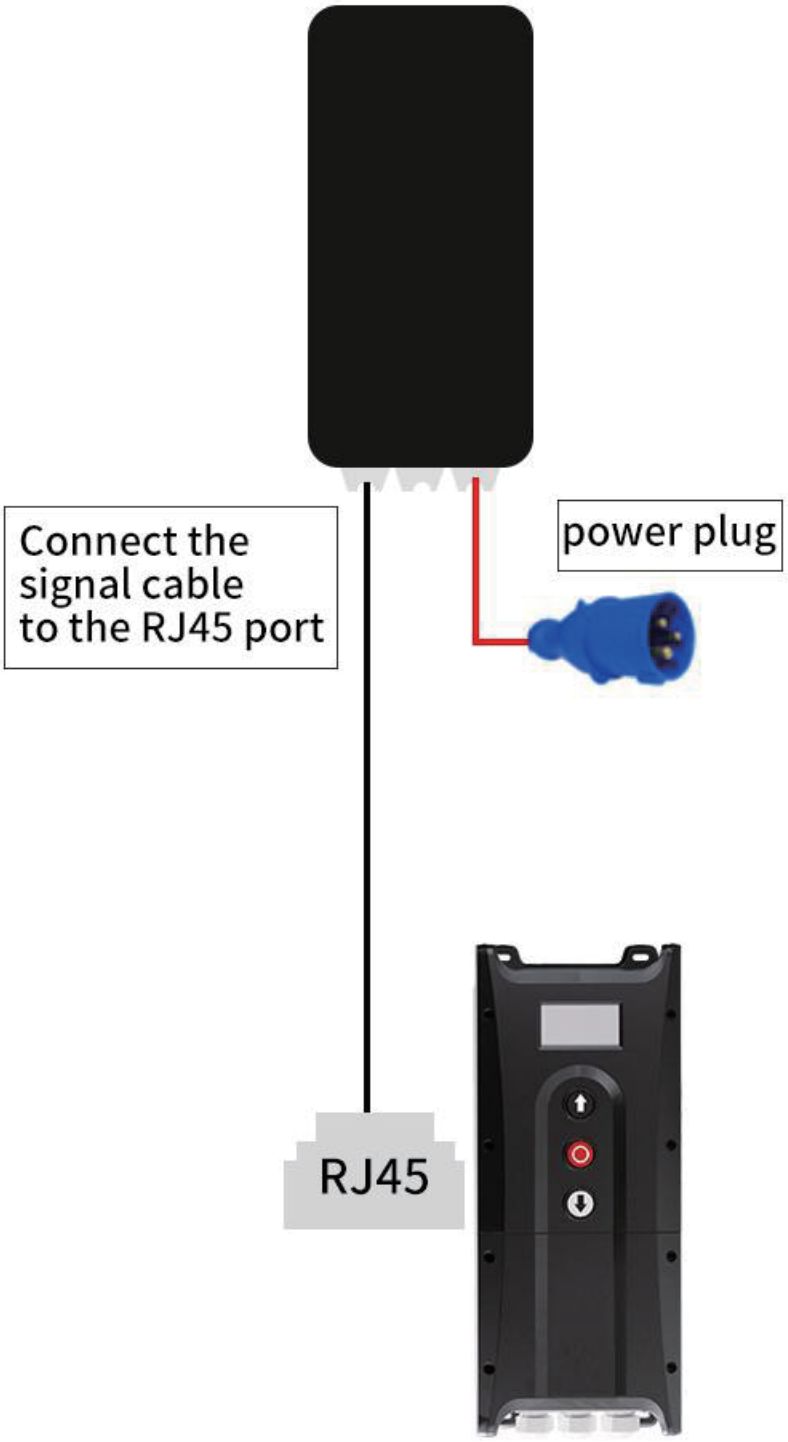


Fig 7

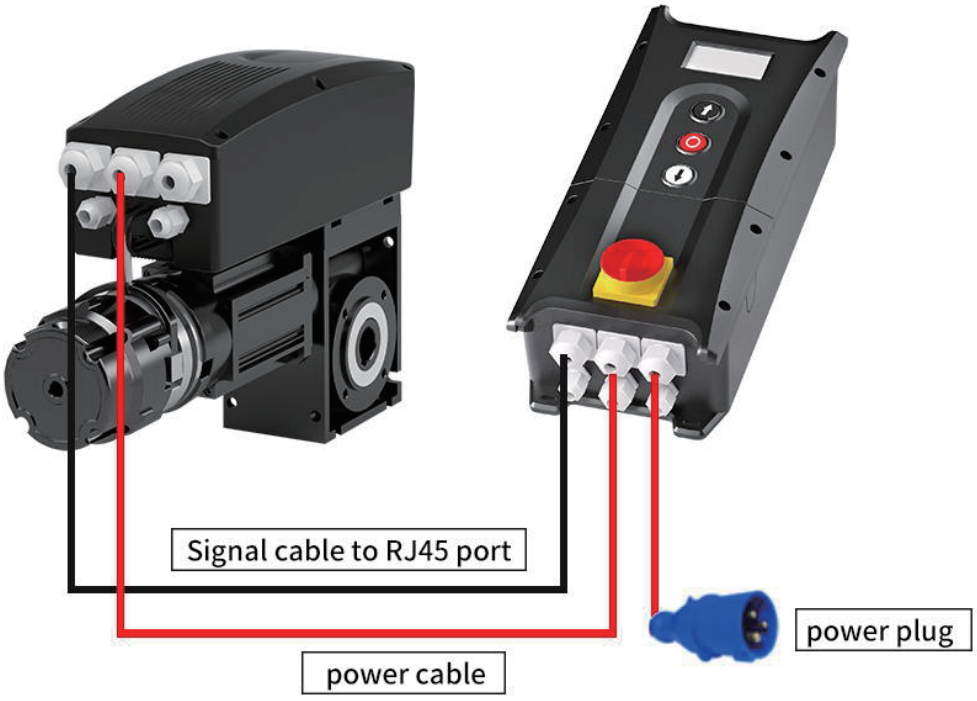
If the door can be opened and closed without any problems, this confirms the functional reliability of theemergency operation. The door operator can be commissioned.

## 13. Wiring

Control box without main power switch:



Control box with main power switch:



### 13.1 Additional accessories wiring guideline

Note:

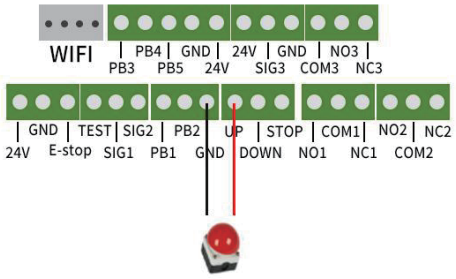
**Button (the wiring diagram shows the door opening button)**

Different buttons or switches can be used to control the opening and closing actions of the door.

For the button used to open the door, select the "UP" port when wiring (see the figure below);

Similarly, select the "STOP" port for stopping;

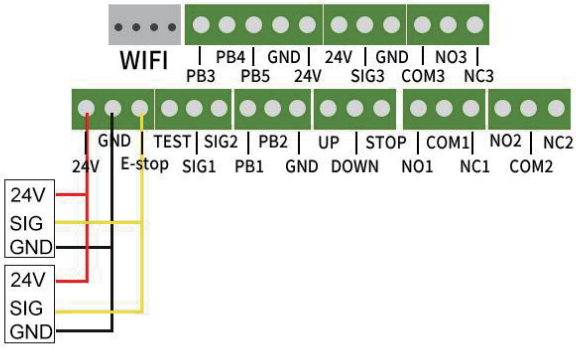
Similarly, select the "DOWN" port for closing the door.




**Light Curtain**

The light curtain serves as an external safety device. During the wiring process, you have the option to select from "SIG1", "SIG2", or "SIG3" ports. This selection should be made in accordance with the manufacturer's instruction manual.To set up the functionality of the light curtain, navigate through the menu options as follows: "Safety Device" → choose the respective "SAFETY1", "SAFETY", or "SAFETY3" based on your earlier selection → then select "Light Curtain".

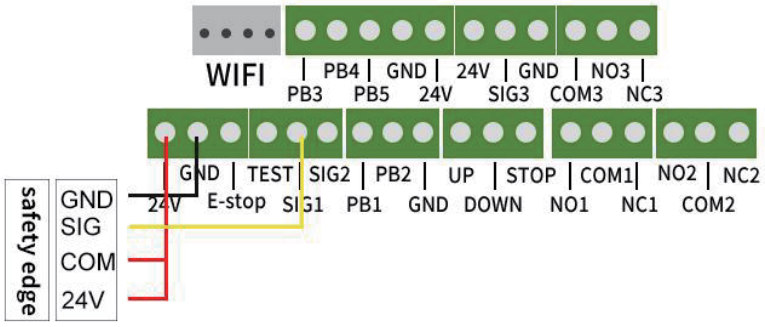
The "24V" port is typically connected to the power supply's positive pole and the COM/common.The "SIG" port is generally wired to the normally closed signal.The "GND" is ordinarily connected to the power supply's negative pole, or to 0V, or to GND.

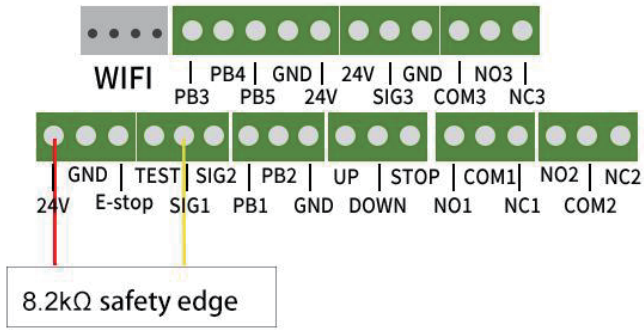


**Safety Edge**

The safety edge is an additional safety feature installed at the bottom of the door. During its installation, you have the option to select from "SIG1", "SIG2", or "SIG3" ports. This selection should be guided by the manufacturer's instruction manual.To configure the functionality of the safety edge, proceed as follows: navigate to the "Safety Device" menu → choose the respective "SAFETY1", "SAFETY2", or "SAFETY3" based on your previous selection → then select "Safety Edge".

The "24V" port is typically connected to the power supply's positive terminal and the COM/common.The "SIG" port is generally wired to the normally closed signal.The "GND" is ordinarily connected to the power supply's negative terminal, or to 0V, or to GND.

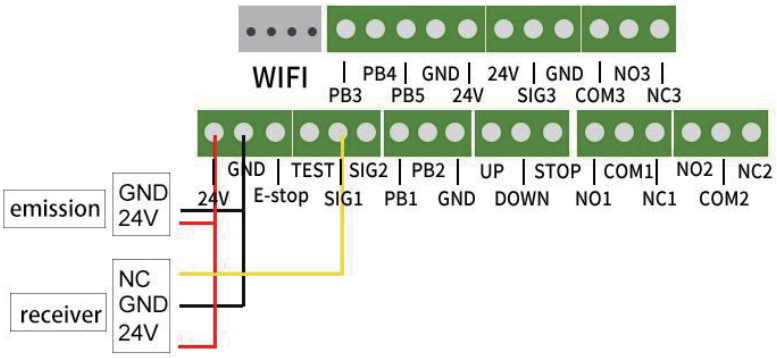


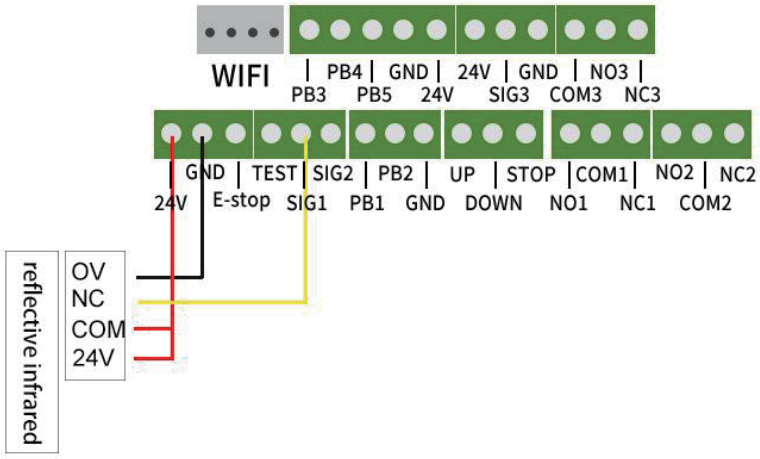
**Photocell**

The photocell serves as an external safety feature. During its installation, you have the choice of selecting from the "SIG1", "SIG2", or "SIG3" ports, based on the guidelines given in the manufacturer's instruction manual.To configure the functionality of the photocell, navigate through the menu options as follows: "Safety Device" → choose the respective "SAFETY1", "SAFETY2", or "SAFETY3" depending on your previous selection → then select "Photocell".

The "24V" port is typically connected to the power supply's positive pole and the COM/common.The "SIG" port is generally wired to the normally closed signal.The "GND" is usually connected to the power supply's negative pole, or to 0V, or to GND.

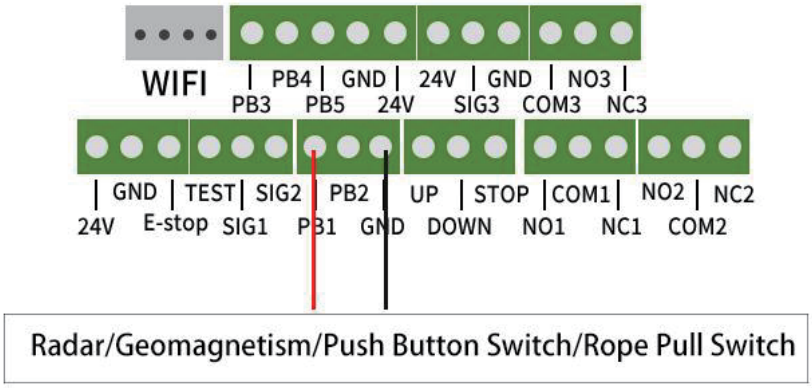


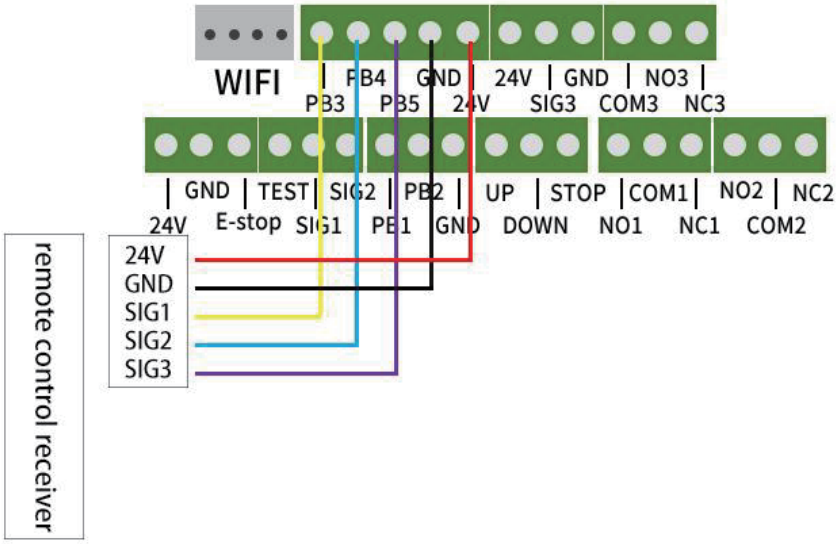

Retro-reflective Photocells：



**Radar / Loop Detector / Push Button / Pull Switch / Wireless Remote Receiver**

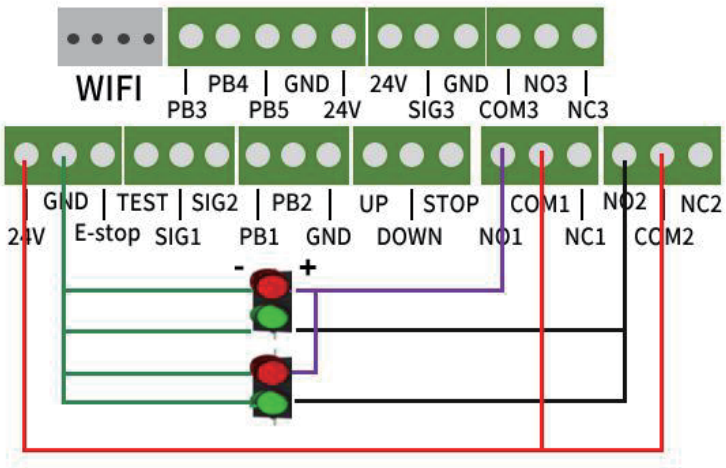
An input device can be used for object detection to operate door opening. During the wiring process, you may select from the "PB1", "PB2", "PB3", "PB4", or "PB5" ports, following the guidelines in the manufacturer's instruction manual.To configure the functionality of the input, navigate through the menu options as follows: "Input/Output" → "Input" → "PB1" or "PB2". Alternatively, you can adjust the settings through the menu "Input/Output" → "Wireless Channel".



**Traffic light**

Install a red and green light for entrance and exit indication. Connect the power and wiring as shown in the diagram. To configure the functionality of these lights, navigate through the menu options as follows: "Input Output" → "Output Port".




Examples：

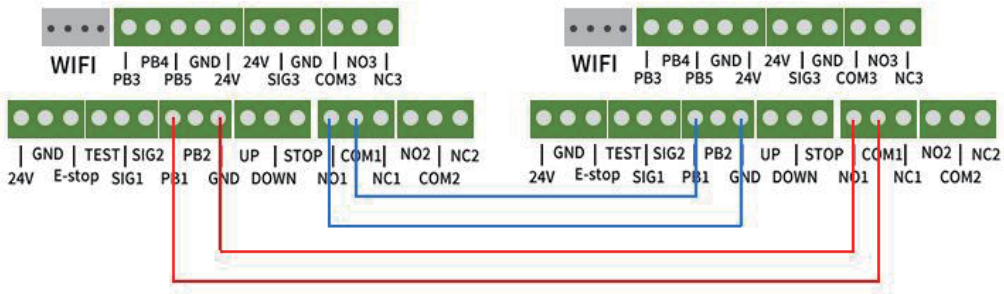
The green light is always on at the open end position, the red light is always on during operation, and the red light is always on at the close end position.

Green light setting steps:
Input and output → output port → port 1 → limit control → open end position

Red light setting steps:
Input and output → output port → port 2 → limit control → non-open end position limit

**Airlock**

The connection of two door openers as depicted in the diagram allows for an interlocking function: it is possible for both doors to be simultaneously in a closed state, but they are not designed to be open concurrently. Only one door can maintain an open state at a given time. Thus, the full closure of one door is a prerequisite for the opening of the other door. The functionality of this setup can be configured by navigating through the following menu options: "Input Output" → "Output Port" and "Input Port".




Setup steps:

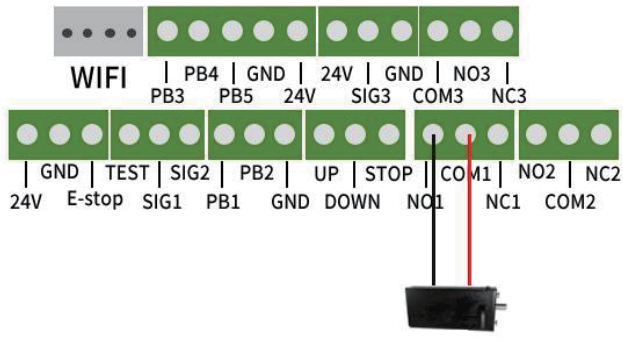
Input and output → output port → port 1 → limit control → non-close end position limit

Input Output → Input Port → Port 1 → Stop

**Note: Before setting, close the two door openers to the close end position limit, and the setting steps of the two door openers are the same**

**Electric Door-Lock**

In instances where the door is equipped with an electronic lock, the output port can be utilized to automate the control of the electronic door lock's opening and closing mechanism. The connection should be made following the diagram provided. The functionality of this setup can be configured by navigating through the menu options: "Input Output" → "Output Port" → "Port 1" or "Port 2".



# 14. OperatorConfiguration

## 14.1 QuickSetting

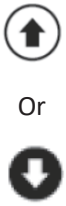
Upon the initial power-up or under default factory settings, the door operator will automatically enter the quick setup mode. Follow the guidance provided on the display screen to perform direction check, travel limit setting, speed setting and safety device setting. Once these steps have been followed as directed, the basic setup for the door operator will be completed.

**If automatic working mode is required, please connect an external safety device and enter the "Safety Device" menu to make corresponding settings.**

| Language Selection | |
|---|---|
| 1 | 中文 |
| 2 | ENGLISH |
| 3 | DEUTSCH |
| 4 | NEDERLANDS |
| 5 | FRANCAIS |

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| Check Direction |
|---|
| Press down/up to move the door |




| Check Direction | |
|---|---|
| 1 | Direction OK |
| 2 | Direction Wrong |
| 3 | Cancel |

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Note: Check whether the moving direction is consistent with the direction of the button, select "correct direction" if consistent, and select "wrong direction" if inconsistent.

| Close End Position |
|---|
| Position<br>123 |

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| Apply Change | |
|---|---|
| 1 | Confirm |
| 2 | Cancel |

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Press and hold the "up" or "down" button to move the door body to the lower limit position you need.

| Open End Position |
| --- |
| Position<br>123 |

| Apply Change | |
| --- | --- |
| 1 | Confirm |
| 2 | Cancel |

Press and hold the "up" or "down" button to move the door body to the upper limit position you need.

| Up Direction 1/3 |
| --- |
| Opening Speed |
| ·····..RPM |

| Up Direction 2/3 |
| --- |
| Acceleration Time |
| ·····..ms |

| Up Direction 3/3 |
| --- |
| Deceleration Time |
| ·····..ms |

| Apply Change | |
| --- | --- |
| 1 | Confirm |
| 2 | Cancel |

| Down Direction 1/3 |
| --- |
| Closing Speed |
| ·····..RPM |

| Down Direction 2/3 |
| --- |
| Acceleration Time |
| ·····..ms |

| Down Direction 3/3 |
| --- |
| Deceleration Time |
| ·····..ms |

| Apply Change | |
| --- | --- |
| 1 | Confirm |
| 2 | Cancel |

| Close Manually |
| --- |
| Open End Position |

### 14.2 Main Menu

**Press and hold( or ( for 3 sec. to enter menu.**

**Input the password "11113". Upon confirmation, the system will navigate to the main menu.**




Note: Use the up and down buttons to select the desired number.

| Main Menu | |
|---|---|
| 1 | Speed Settings |
| 2 | Safety Devices |
| 3 | Automatic Close |
| 4 | Door-positions |
| 5 | Operation Mode |
| 6 | Inputs / Outputs |
| 7 | Service |
| 8 | Language |
| 9 | Factory Setting |
| 10 | Advanced Settings |
| | Exit Menu |

**Password cannot be changed!**

### 14.3 Speed Setting

**Caution!**

Motor settings may only be operated by trained or authorized professionals! Any changes or wrong configuration may cause personal injury or property damage!

**Adjust the door opening and closing speed:**

| Main Menu | |
|---|---|
| 1 | Speed Settings |
| 2 | Safety Devices |
| 3 | Automatic Close |
| 4 | Door-positions |
| 5 | Operation Mode |
| 6 | Inputs / Outputs |
| 7 | Service |
| 8 | Language |
| 9 | Factory Setting |
| 10 | Advanced Settings |
| | Exit Menu |

| Speed Settings | |
|---|---|
| 1 | Up Direction |
| 2 | Down Direction |
| | Back |

| Up Direction 1/3 |
|---|
| Opening Speed |
| ·····..RPM |

| Up Direction 2/3 |
|---|
| Ramp up to fast speed |
| in ·····..ms |

| Up Direction 3/3 |
|---|
| Stop within |
| ·····..ms |

| Apply Change? | |
|---|---|
| 1 | CONFIRM |
| 2 | CANCEL |

Configure the Down Direction with the same process respectively.

### 14.4 Safety Devices:

The control unit provides three connection ports for external safety devices (such as infrared sensors, light curtains, and safety edges):
SAFETY1, SAFETY2, SAFETY3

**We strongly recommend to use always safety devices in order to ensure a safe operation of the door !**

**Example Safety Edge:**

| MainMenu | |
|---|---|
| 1 | Speed Settings |
| 2 | Safety Devices |
| 3 | Automatic Close |
| 4 | Door-positions |
| 5 | Operation Mode |
| 6 | Inputs / Outputs |
| 7 | Service |
| 8 | Language |
| 9 | Factory Setting |
| 10 | Advanced Settings |

| SafetyDevices | |
|---|---|
| 1 | SAFETY1 |
| 2 | SAFETY2 |
| 3 | SAFETY3 |
| | Back |

| Type | |
|---|---|
| 1 | Off |
| 2 | Safety-Edge |
| 3 | Retractable Photocell |
| 4 | Photocell |
| 5 | Light curtain |
| 6 | Stop-Switch |

| Test Mode | |
|---|---|
| 1 | Untested |
| 2 | **8K2 resister** |
| 3 | 8K2 Pneumatic |
| 4 | Pulsed (3Wire/OSE) |
| 5 | 4-Wire:Active Test (+) |
| 6 | 4-Wire:Active Test (-) |
| | CANCEL |

| Active Direction | |
|---|---|
| 1 | Down |
| | CANCEL |

| Reverse Mode | |
|---|---|
| 1 | Full Reverse |
| 2 | Partial Reverse |
| 3 | Stop |

| | |
|---|---|
| | CANCEL |

| Apply Change? | |
|---|---|
| 1 | CONFIRM |
| 2 | CANCEL |

1. Configuring the Safety Edge:It is important to determine the type of safety edge before configuration.

- For an 8.2KΩ safety edge, navigate tothe safety edge strip option first, then proceed to choose 8.2k resistor under test mode.

- For a pneumatic safety edge, navigate to the safety edge strip option first, then proceed to choose untested under test mode.

- For a wireless pneumatic safety edge, navigate to the safety edge strip option first, then proceed to choose untested under test mode.

- For a Retractable Photocell, navigate to Retractable Photocell option first, then proceed to choose pulse (3-wire/OSE) under test mode.

2. Configuring the photocell:
- Navigate to the photocell option and then proceed to choose untested under test mode.

3. Configuring the Light Curtain:
- Navigate to the light curtain option and then proceed to choose pulse (3-wire/OSE) under test mode.



For SAFETY 2 or other safety devices, re-do the configuration similarly as shown in above example.

Please pay attention:
1: Must use NC mode safety devices.
2: If only connect 1 single channel photocell, CDO will not work. Must connect 1 single channel photocelland another 1 safety edge or 1 light curtain.
3: "Stop-Switch" can be used to set door-in-door function



**The function of the safety devices before you set the door in operation!**

### 14.5 Automatic Close

It is mandatory to install a photocell before activating “automatic closing” !

Example:

“Closing on pass”：Upon passage of a pedestrian or object through the opendoor, the door automatically closes. This is triggered by the activation of theinfrared sensor when something passes through the door, which then initiates a countdown to close the door.

| Main Menu | |
|---|---|
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| 10 | Advanced Settings |



| Automatic Close | |
|---|---|
| 1 | Timed Close |
| 2 | Close on pass |
| | Back |



| Close on pass | |
|---|---|
| 1 | Enable |
| 2 | Disable |



| Closing Delay |
|---|
| Close door ____ Seconds after |
| pass-through |



| Apply Change? | |
|---|---|
| 1 | CONFIRM |
| 2 | CANCEL |

**The function “timed close” is programmed similar.**

### 14.6 Door Positions

In this menu you define the following parameters:

- ☒ Rotation direction of the motor (depending on your installation, it has to be changed)
- ☒ "Closed" and "Open" position of the door
- ☒ Position of partial opening
- ☒ Position of hiding photocell (e.g. at fast acting doors)
- ☒ Pre-End Position

| Main Menu | |
|---|---|
| 1 | Speed Settings |
| 2 | Safety Devices |
| 3 | Automatic Close |
| 4 | Door-positions |
| 5 | Operation Mode |
| 6 | Inputs / Outputs |
| 7 | Service |
| 8 | Language |
| 9 | Factory Setting |
| 10 | Advanced Settings |

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| Door-Positions | |
|---|---|
| 1 | Check Direction |
| 2 | Closed Endposition |
| 3 | Open Endposition |
| 4 | Partial Open Pos. |
| 5 | Blank Light barrier |
| 6 | Pre-end position |
| | Back |

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**Check Direction**

Press "UP" or "DOWN" button and keep pressed to move the door.

| Check Direction | |
|---|---|
| 1 | Direction OK |
| 2 | Direction Wrong |
| 3 | Cancel |

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Note: Check if the operating direction aligns with the key direction. If they are consistent, select "Direction OK". If they are inconsistent, select "Direction Wrong". This completes the setup process.

**Closed End Position (Door closed):**

| Door-Positions | |
|---|---|
| 1 | Check Direction |
| 2 | Closed Endposition |
| 3 | Open Endposition |
| 4 | Partial Open Pos. |
| 5 | Blank Light barrier |
| 6 | Pre-end position |
| | Back |

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| Closed Endposition |
|---|
| Position<br>123 |

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Press and hold the "Up" or "Down" button to move the door to the desired Closed Endposition.

| Apply Change? | |
|---|---|
| | CONFIRM |
| | CANCEL |

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**Open End position (Door open):**

➡ In the " Open Endposition" menu, repeat the steps as described above.

**Partial Open Position:**

Operate the door to reach the desired partially open position!

| Door-Positions | |
|---|---|
| 1 | Check Direction |
| 2 | Closed Endposition |
| 3 | Open Endposition |
| 4 | Partial Open Pos. |
| 5 | Blank Light barrier |
| 6 | Pre-end position |
| | Back |

| Partial Open Pos. | |
|---|---|
| 1 | Enable |
| 2 | Disable |
| | Back |

| Partial Open Pos. |
|---|
| position<br>123 |

Press and hold the "Up" or "Down" button to move the door to the highest opening position you need.

| Apply Change? | |
|---|---|
| | CONFIRM |
| | CANCEL |

**Blank light barrier:**

If you have a very fast acting door, it might be needed that you switch off the light barrier at a certain doorposition in order to avoid malfunction in obstacle detection by the photocell.

**Caution!**

**Before blanking the light barrier, ensure that a second safety device (light curtain, safety edgeetc.) is installed!**

| Door-Positions | |
|---|---|
| 1 | Check Direction |
| 2 | Closed Endposition |
| 3 | Open Endposition |
| 4 | Partial Open Pos. |
| 5 | Blank Light barrier |
| 6 | Pre-end position |
| | Back |

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| Safety Device | |
|---|---|
| 1 | SAFETY1 |
| 2 | ---- |
| 3 | ---- |
| | Back |

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| Blanking | |
|---|---|
| 1 | Enable |
| 2 | Disable |
| | Back |

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| Blank Light barrier | |
|---|---|
| Position 123 | ▶ ⬆ ⬇ |

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Press and hold the "Up" or "Down" button to move the door to a safe position where you want to disable the light barrier.

| Apply Change? | |
|---|---|
| | CONFIRM |
| | CANCEL |

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**Pre-end position**

When the safety edge surpasses this position, the logic of the obstruction switches from reverse to stop. This prevents safety edge of certain fast-reacting doors from reversing back when they impact the ground.

| Door-positions | |
|---|---|
| 1 | Check Direction |
| 2 | Closed Endposition |
| 3 | Open Endposition |
| 4 | Partial Open Pos. |
| 5 | Blank Light barrier |
| 6 | Pre-end position |
| | Back |

| Pre-end position |
|---|
| Position |
| 123 |

Press the "Up" or "Down" button to adjust the response distance of the safety edge strip.

| Apply Change? | |
|---|---|
| | CONFIRM |
| | CANCEL |

### 14.7 Operation Mode

Here you can choose between 3 different operation modes:

- ☒ Manual UP and DOWN (Hold to run mode)
- ☒ Automatic UP and DOWN
- ☒ Semi Automatic (automatic UP, hold to run DOWN)

**Caution!**

If choose Automatic UP/DOWN mode, do confirm that you have installed safety device( at least 1safety edge, or 1 light curtain, or 1 photocell + 1 safety edge / light curtain).

| Main Menu | |
|---|---|
| 1 | Speed Settings |
| 2 | Safety Devices |
| 3 | Automatic Close |
| 4 | Door-positions |
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| 8 | Language |
| 9 | Factory Setting |
| 10 | Advanced Settings |

| Operation Mode | |
|---|---|
| 1 | Manual UP/DOWN |
| 2 | Automatic UP/DOWN |
| 3 | Semi-Automatic |
| | Back |

| Apply Change | |
|---|---|
| 1 | CONFIRM |
| 2 | CANCEL |

### 14.8 Inputs/Outputs

The control unit has 3 protentional free relays contacts/ 5 GENERAL INPUTS, which can be used for different applications during door movement or when the door reached one of the endpositions.

You can choose in the menu how the relays should react.

Furthermore, the relays contacts can be used for the realization of red-green traffic light connections,warning light, eclectic Door-lock and Airlock.

**Outputs**

Example: Warning light just blinking while door closing (connect to NO1& COM1 on RELAY1)

| Main Menu | |
|---|---|
| 1 | Speed Settings |
| 2 | Safety Devices |
| 3 | Automatic Close |
| 4 | Door-positions |
| 5 | Operation Mode |
| 6 | Inputs / Outputs |
| 7 | Service |
| 8 | Language |
| 9 | Factory Setting |
| 10 | Advanced Settings |



| Inputs / Outputs | |
|---|---|
| 1 | Relay Outputs |
| 2 | Inputs |
| 3 | Radio channels |
| 4 | Stop button logic |
| | Back |



| Relay outputs | |
|---|---|
| 1 | Relay 1 |
| 2 | Relay 2 |
| 3 | Relay 3 |
| | Back |

| Relay Function | |
|---|---|
| 1 | Off |
| 2 | Door- Movement |
| 3 | Endposition |
| 4 | Electrical Door-Lock |
| 5 | Radio Remote |
| 6 | Fault Indication |
| | Back |

| Direction | |
|---|---|
| 1 | Opening |
| 2 | Closing |
| 3 | Both directions |

| During Movements | |
|---|---|
| 1 | Blinking |
| 2 | RelayOn |

| Pre-Run Delay | |
|---|---|
| 1 | Closing |
| 2 | Seconds |

| Apply Change? | |
|---|---|
| 1 | CONFIRM |
| 2 | CANCEL |

For the programming of relays 2+3 you redo the steps above

**Inputs**

External devices can be connected to the input port (PB1, PB2). These devices can control the action of the door operatorwiththeir output signal.

Example: Control door opening with input signal (connect to GPI01 & COM on GENERAL INPUTS)

| Inputs / Outputs | |
|---|---|
| 1 | Relay Outputs |
| 2 | Inputs |
| 3 | Radio channels |
| 4 | Stop button logic |
| | Back |

| Inputs | |
|---|---|
| 1 | Input PB1 |
| 2 | Input PB2 |
| | Back |

| GPIN Function | |
|---|---|
| 1 | Off |
| 2 | Impulse |
| 3 | Open |
| 4 | Open to part.position |
| 5 | Close |
| 6 | Stop |
| | Back |

| Apply Change? | |
|---|---|
| 1 | CONFIRM |
| 2 | CANCEL |

**Radio Channels**

The GPI03, GPI04, GPI05 ports on the control unit circuit board can be connected to a wireless remote-control receiver. This connection allows for wireless remote control of the door opening. These ports can also be connected to a radar or loop detector for wireless door operation, or can function similarly to the GPI01 or GPI02 ports, allowing for the connection of switch signal controls for door operation. Refer to the setup steps for the "GPI01 or GPI02" ports for further guidance.

**Stop button logic**

Here you can choose the control logic for the "Stop" button of the switch, whether it should be normally open or normally closed. If you choose normally closed, this port must be short-circuited for the door machine to operate normally.

### 14.9 Service

In the service menu you can show up all information that is related to the door and operator. You candefine service intervals, store service contacts etc.

| Main Menu | |
|---|---|
| 1 | Speed Settings |
| 2 | Safety Devices |
| 3 | Automatic Close |
| 4 | Door-positions |
| 5 | Operation Mode |
| 6 | Inputs / Outputs |
| 7 | Service |
| 8 | Language |
| 9 | Factory Setting |
| 10 | Advanced Settings |



| Service | |
|---|---|
| 1 | System Information |
| 2 | Door Information |
| 3 | Service Done |
| 4 | Service Contact |
| 5 | Service Interval |
| 6 | Error Log |
| | Back |

1. “System Information”:
shows model of control unit and software release

2. “Door information”:
Shows total number of door cycles and cycles from and until next service

3. “Service done”:
Here you confirm that you made service

4. “Service contact”:
Here you can store a service contact and phone number

5. “Service interval”:
Here you define the no. of cycles for next service

6. “ErrorLog”
Shows the recent error the system encountered.

**Please respect your local regulations in terms of safety of automatic doors !**

## 14.10 Language

**Choose the language you want to use.**

| Main Menu | |
|---|---|
| 1 | Speed Settings |
| 2 | Safety Devices |
| 3 | Automatic Close |
| 4 | Door-positions |
| 5 | Operation Mode |
| 6 | Inputs / Outputs |
| 7 | Service |
| 8 | Language |
| 9 | Factory Setting |
| 10 | Advanced Settings |



| Language | |
|---|---|
| 1 | 中文 |
| 2 | ENGLISH |
| 3 | DEUTSCH |
| 4 | NEDERLANDS |
| 5 | FRANCAIS |



| Apply Change? | |
|---|---|
| 1 | CONFIRM |
| 2 | CANCEL |



### 14.11 Factory Setting

After restoring to factory settings, previous settings will be erased. Upon re-powering the device, quick setup or other configurations can be performed.

| Main Menu | |
|---|---|
| 1 | Speed Settings |
| 2 | Safety Devices |
| 3 | Automatic Close |
| 4 | Door-positions |
| 5 | Operation Mode |
| 6 | Inputs / Outputs |
| 7 | Service |
| 8 | Language |
| 9 | Factory Setting |
| 10 | Advanced Settings |



| Factory Setting | |
|---|---|
| 1 | CONFIRM |
| 2 | CANCEL |
| | |



## 14.12 Advanced Settings



**Caution!**

Only trained or authorized professionals are allowed to operate motor settings! Any changes or incorrect configurations could potentially lead to personal injury or property damage!