Heimdall 200

CONTENTS

Chapter 1 Safety guide

⚠ Warning

Beware of electric shock and fire

★ During installation and adjustment, please follow this manual;

★ Don't allow to decompose, transform or repair the components;

★ Input supply power AC 220V, make sure the Ground wire is connected;

★ Whole process of the installation, the power must be disconnected.

Beware of electric injure and malfunction

★ When the door is under working, don't cut off the power;

★ There is person or block in the door, don't turn on the power;

★ Power failed, you can open the door by hand, please take care of your finger;

★ If open by hand, please make sure the door is running in the right trajectory;

★ Don't allow to disassemble the gear box from motor, because the spring fly
   out may hit you.

DC 24V output is for sensor (please don't use other power for the sensor)

⚠ Note:

Before installation, please read this manual carefully and fully understand it,
then do the installation. (If you didn't follow this manual, any problem
happened will be responsible by yourself.)
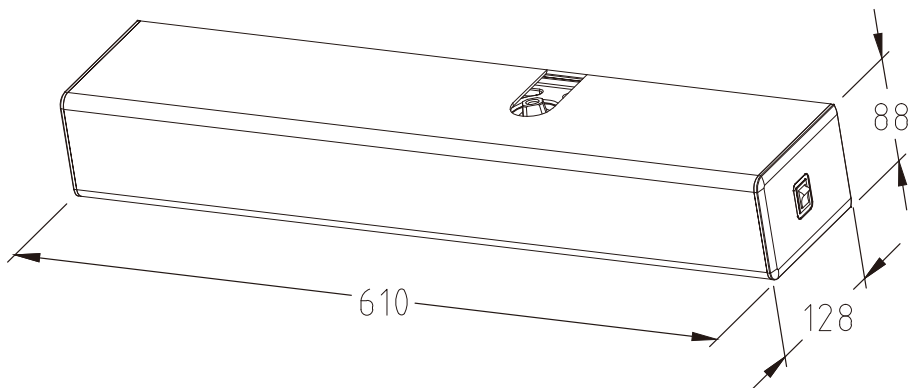
Chapter 2   Technical Data

1. Technical data

Supply power: 220V AC ±10%，50/60Hz
Power consumption: 100W (max)
Drive unit: 24V DC Motor
Anti- press device: STD
Open angle: 80°-100°
Opening time（speed）:   3-7Sec. (adjustable)
Closing time（speed）:   3-7Sec. (adjustable)
Hold-open time: 0.5-30Sec. (adjustable)
Drive arm: pull arm(inward open) / push arm(outward open)
Environment temperature: -20°C-45°C
Relative humidity: ≤85%

2. Door width and weight:
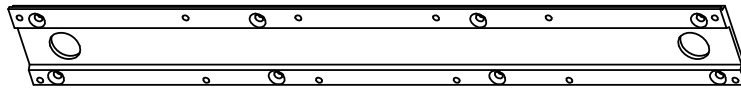

3. Product dimension (mm):

Chapter 3 Components

Description(1)

Base plate

motor · power transformer · power switch S1 · function switch S2 · signal interface · controller · AC 220V input
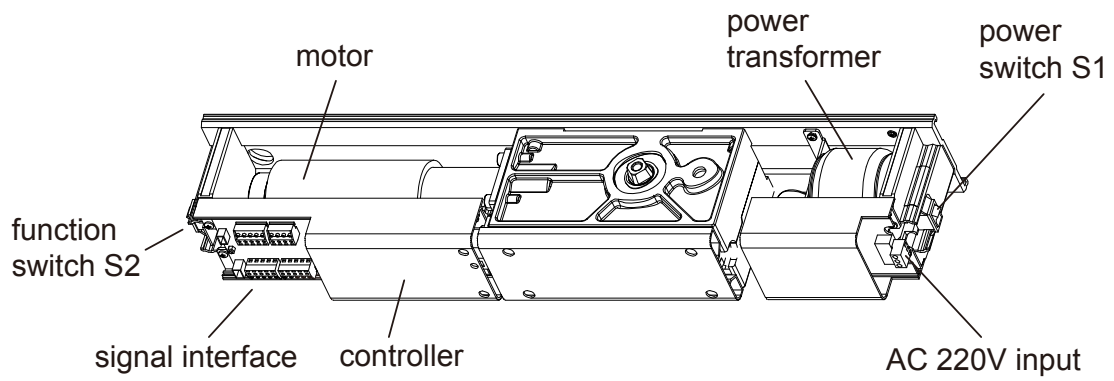
Drive device
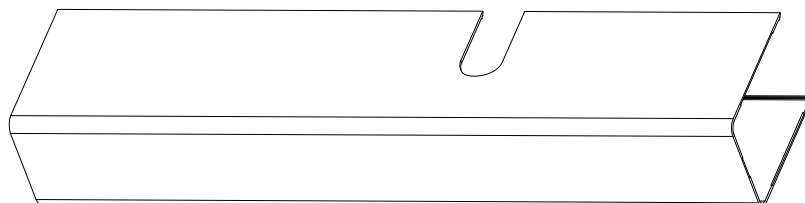
Cover

Description(2)

end caps（1 pair）

Spline housing
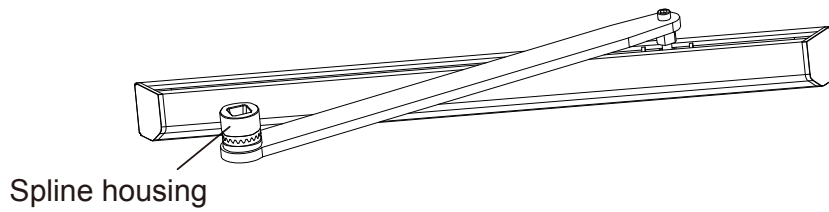
Pull arm (alternative with push arm)

Extended Spline housing
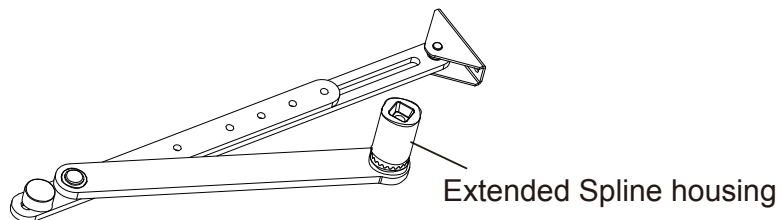
Push arm (alternative with pull arm)

Chapter 4 Installation

1. Application of Pull arm or Push arm

Application of pull arm mounting

(for example, right mounting)

Suitable for inward open doors (the drive is inside), door leaf width min. 680mm.

≥680

opening direction

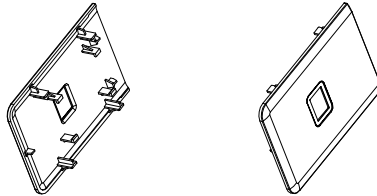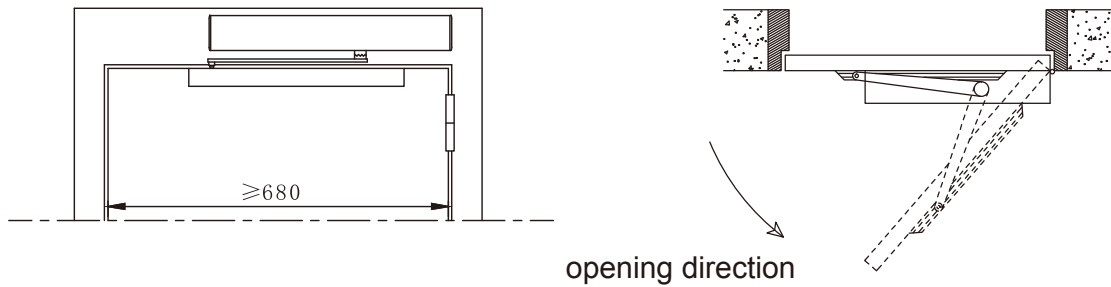Application of push arm mounting

(for example, right mounting)

Suitable for outward open doors (the drive is inside), the depth between the door face and the opposite wall should be less than 180mm.

opening direction

≤180
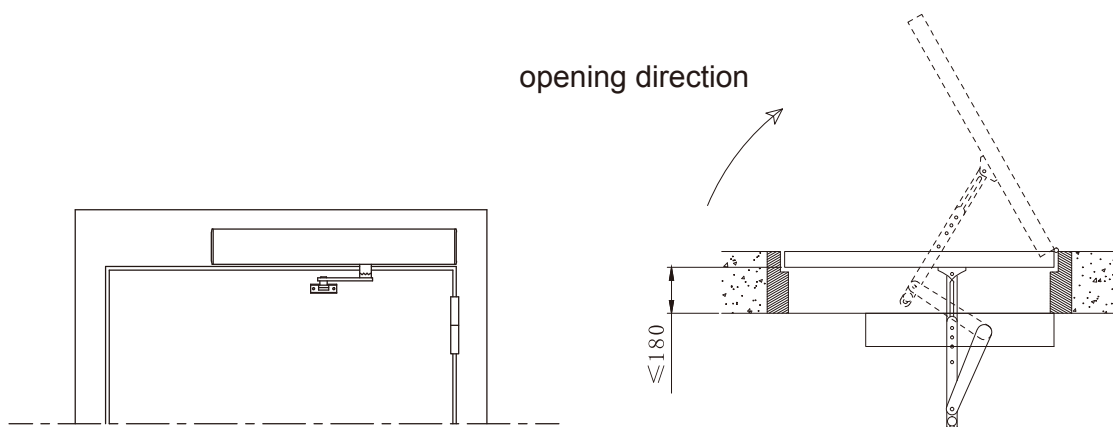
2. Installation with pull arm

1. Base plate and slide rail
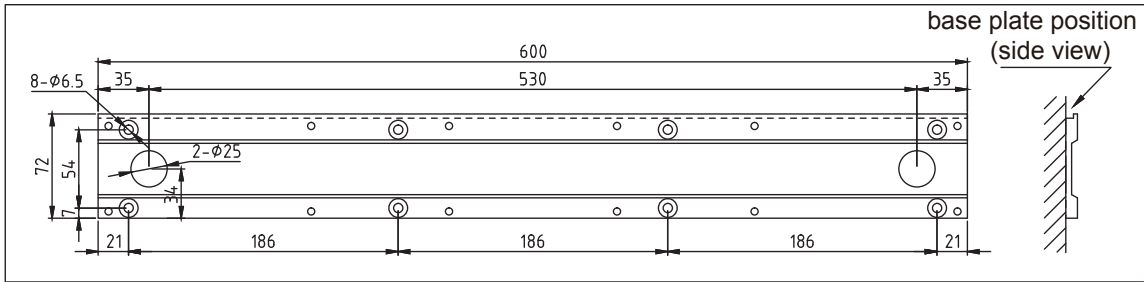
base plate position (side view)
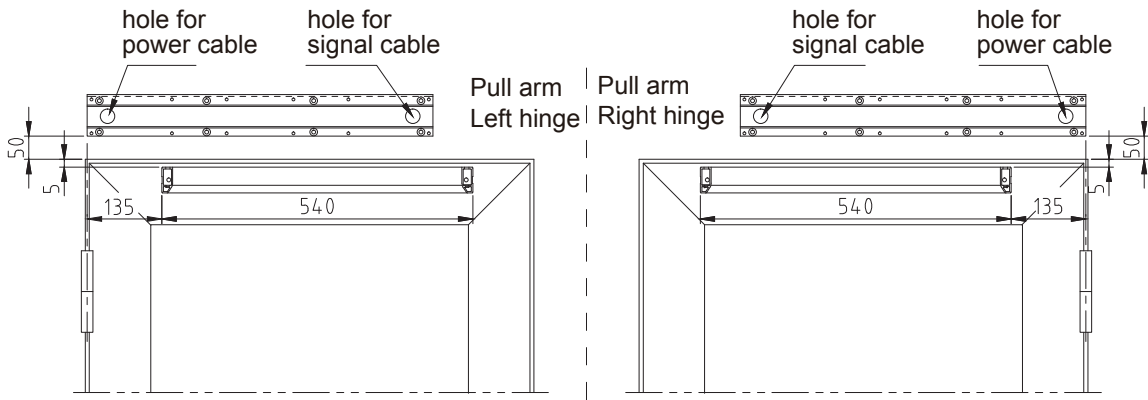
600

530

35   35

8-φ6.5

72   54   7

2-φ25

21   186   186   186   21

base plate dimension

hole for power cable   hole for signal cable

Pull arm Left hinge | Pull arm Right hinge

hole for signal cable   hole for power cable

50   5

135   540

540   135   50

2. Drive device

Hang the drive device onto the base plate and tighten with 8pcs bolts M6x12.

(230)　(370)　Drive shaft

(370)　(230)　Drive shaft

Pull arm
Left hinge

Pull arm
Right hinge
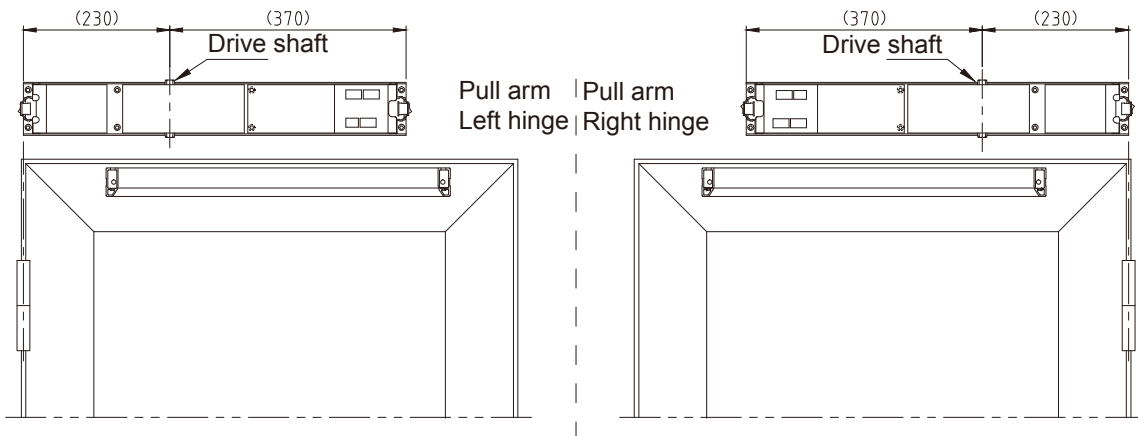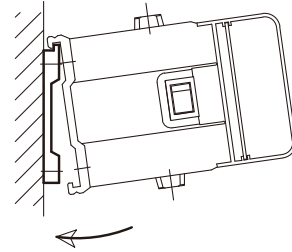
3. Install pull arm

Take the Right hinge assembly as an example, according to the diagram, assemble the spline housing, the pull arm and the drive shaft together, Fasten the M8 bolts and tight torque is 15 N.m. The position of the stopper is adjusted according to the actual full opening Angle.

drive shaft
spline housing
pull arm
bolt M8

stopper
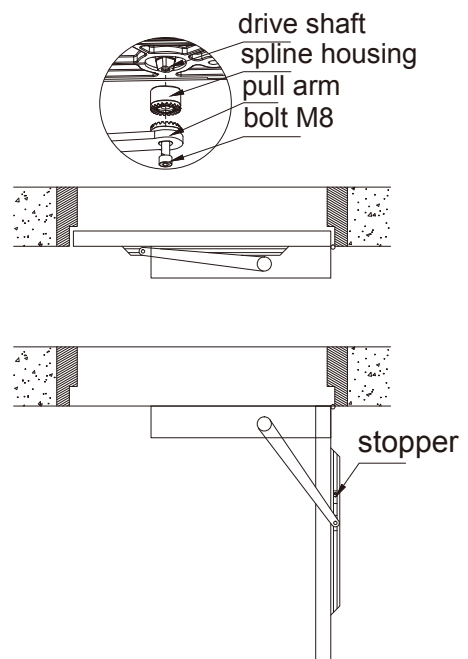
3. Installation with push arm

1. Base plate and fixed seat of push arm

Base plate dimension is on P6 (base plate and slide rail installation).
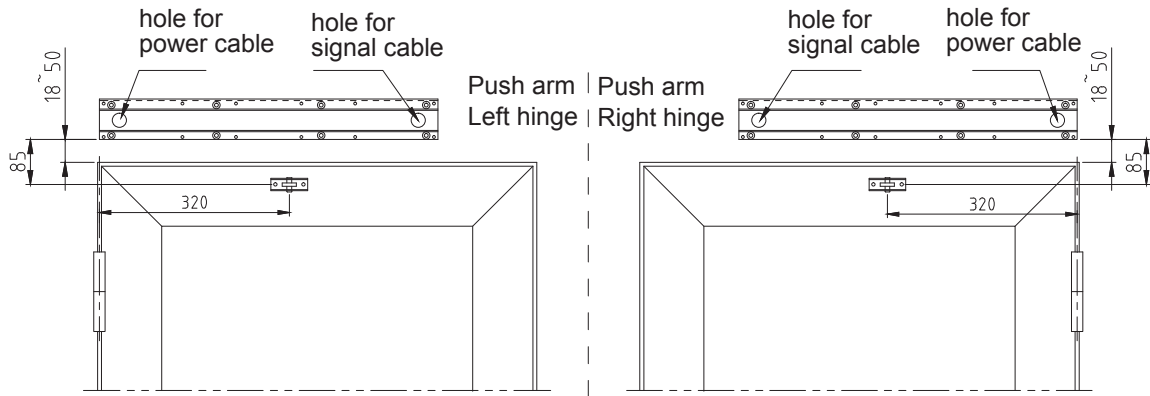
hole for power cable　　hole for signal cable
18~50　85　320

Push arm Left hinge | Push arm Right hinge

hole for signal cable　　hole for power cable
18~50　85　320

2. Drive device

Hang the drive device onto the base plate and tighten with 8pcs bolts M6x12.

（230）　（370）
Drive shaft

（370）　（230）
Drive shaft

Push arm Left hinge | Push arm Right hinge

08
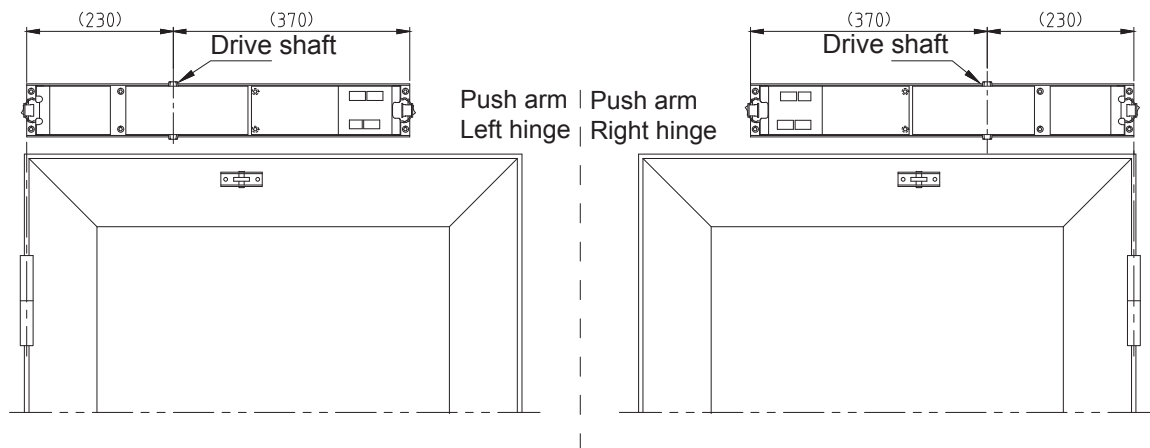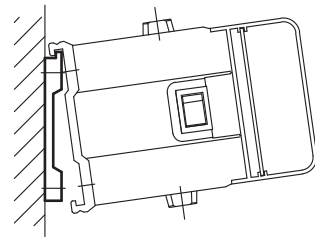
3. Install push arm

Take the Right hinge assembly as an example, according to the diagram, assemble the spline housing, the push arm and the drive shaft together.
Fasten the M8 screws and tight torque is 15 N.m.

drive shaft
spline housing
pull arm
screw M8
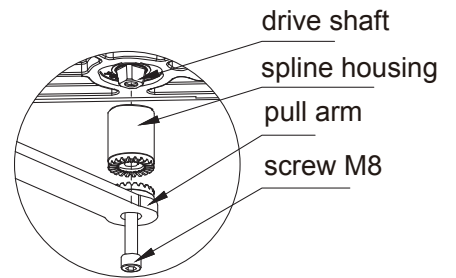
Install the linked arm and adjust the length of it so that it is perpendicular to the door body at the door closed position.

90°

linked arm   push arm
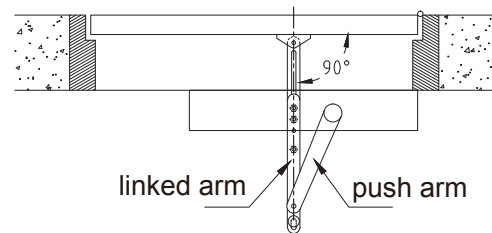
The position of the stopper is adjusted according to the full opening angle of the door.

stopper
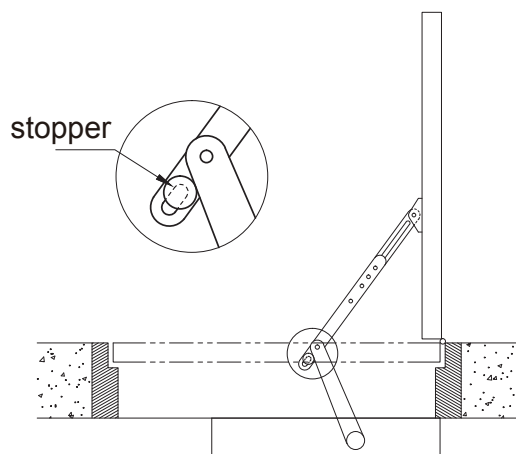
4. Cable connection

The power cable and signal cable are connected to their respective terminals go through the position shown in the figure. Please refer to P14 " Electronic connection " for the wiring of signal cables.

signal interface

Power socket
AC 220V input

signal cable

power cable
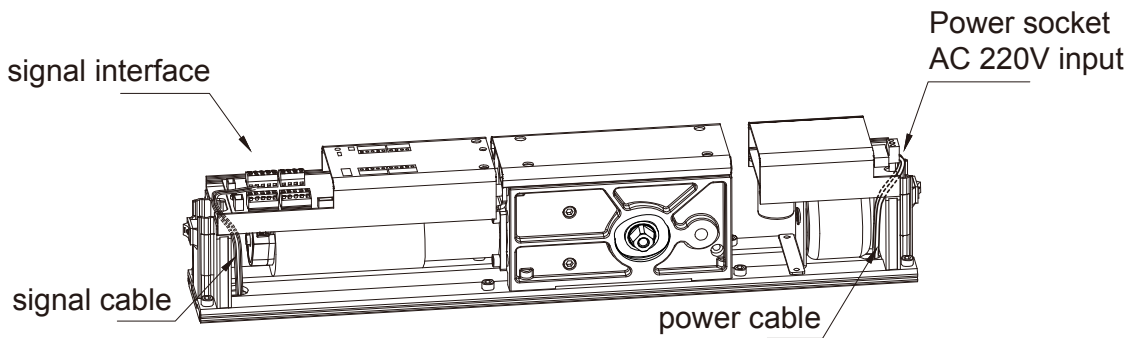
5. Cover and end caps

After all debugging, put on the cover and end caps.

put on the cover

insert end caps
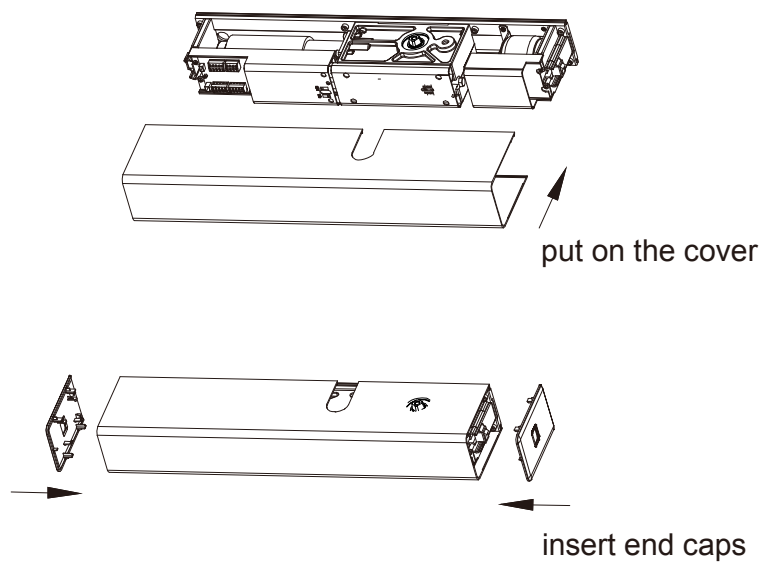
Chapter 5 Debugging

1. Parameter setting

```
                          ┌──────────────────┐
                          │  Connect setting │
                          │  panel, power on │
                          └──────────────────┘
                                   │
                                   ▼
                          ┌──────────────────┐
                          │    Displaying    │
                          │       ---        │
                          └──────────────────┘
                                   │ MOD
                                   ▼
```

Operation data F--1	▲ ▶ / ◀ ▼	Door data F--2

Operation data (F--1) branch — SELECT:

Parameter		Range
opening speed oS:04	▲/▼ ►	opening speed Max：06 Min：00
closing speed cS:03	▲/▼ ►	closing speed Max：06 Min：00
open time ot:02	▲/▼ ►	open time Max：30 Min：00
unlock delay Lt：03	▲/▼ ►	unlock delay Max：10 Min：00
closed force qc：00	▲/▼ ►	closed force Max：07 Min：00

Door data (F--2) branch — SELECT:

Parameter		Options
Single door/ Double door n:01	▲/▼ ►	Single/Double Single：01 Db./Master：2Z Db./Slave：2c
Double door linked open t：F	▲/▼ ►	Db. open mode First/Second：F SYNC：-
Hand open o：o	▲/▼ ►	Hand open o：push , open n：push, not open
Lock mode L：d	▲/▼ ►	Lock mode Lock from S2：d Auto lock：L
Block reaction H：o	▲/▼ ►	meet block o：door return S：door stop
Installation mode F：H	▲/▼ ►	Choose arm H：pull arm t：push arm

SETTING PANEL

MOD SELECT ▲ ▲ TEST

MOD：Press MOD enter into menu

▲ / ▼ ： increase / decrease

SELECT：confirm

TEST：After debugging, test before confirm

11

2. Initialization Setting

LED

LEARN button

```
┌─────────────────────────────────┐
│ Mechanical installation finished,│
│   fully close the door by hand   │
└─────────────────────────────────┘
                 │
                 ▼
      ┌──────────────────────┐
      │ connect setting panel,│
      │  power on, check door │
      │   opening direction   │
      └──────────────────────┘
                 │
                 ▼
┌──────────────────┐      ╱──────────────╲
│change installation│◄─ N ─┤  door close   │
│  mode: pull /push │      │  automatically │
└──────────────────┘      ╲──────────────╱
         │                         │
         │                         Y
         │                         ▼
         │                 ┌──────────────┐
         └────────────────►│  full closed  │
                           └──────────────┘
                                   │
                                   ▼
                          ╭──────────────────╮
                          │ first start is done│
                          ╰──────────────────╯
```
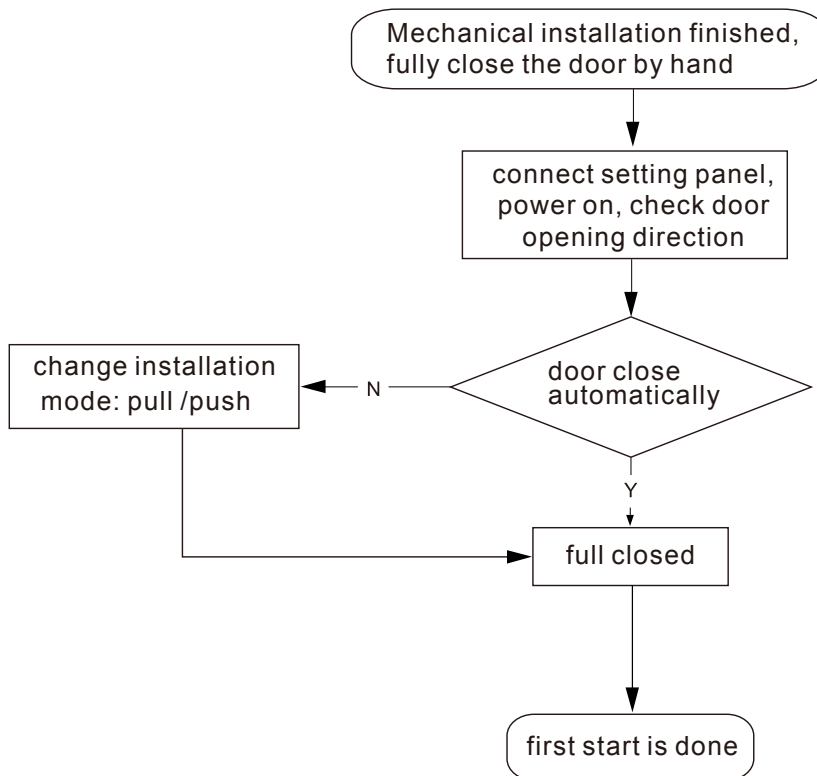
12
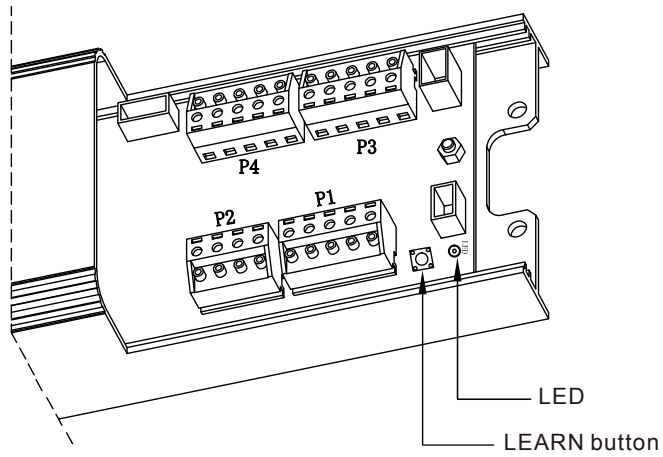
3. State setting

Choose door state from function switch S2:
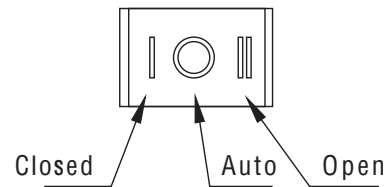
Closed: sensor signal is shielded, electric lock automatically lock, but access control signal is effective .
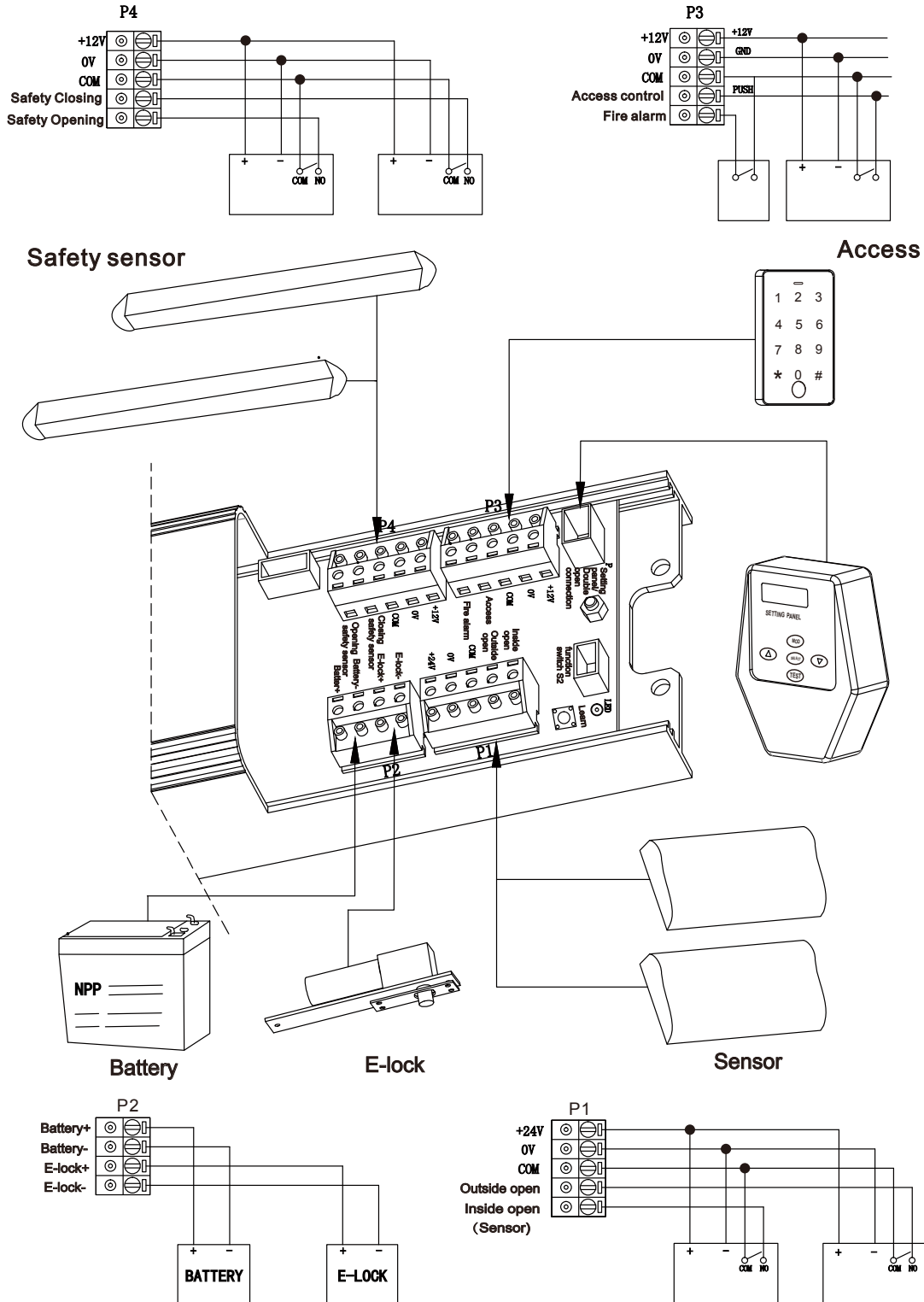
Open: the automatic door keep fully open.

Automatic: all signal inputs are valid.

4. Electronic connection

P4
- +12V
- 0V
- COM
- Safety Closing
- Safety Opening

+ − COM NO + − COM NO

P3
- +12V — +12V
- 0V — GND
- COM — PUSH
- Access control
- Fire alarm

+ −

Safety sensor

Access

```
1 2 3
4 5 6
7 8 9
* 0 #
```

SETTING PANEL

P4   P3

+12V
0V
COM
Access
Fire alarm

Setting
Double
open
connection

Closing safety sensor
Opening safety sensor
Battery+
E-lock-
E-lock+
+24V
0V
COM
Outside open
Inside open

function
switch S2

LED
Learn

P2   P1

NPP

Battery

E-lock

Sensor

P2
- Battery+
- Battery-
- E-lock+
- E-lock-

BATTERY   E-LOCK
+ −   + −

P1
- +24V
- 0V
- COM
- Outside open
- Inside open
  (Sensor)

+ − COM NO   + − COM NO

14

5. Double open connection (optional)

Master door
set n : 2Z

SYNC cable

Slave door
set n : 2C