VISIONIS®

Electric Automatic Door Opener
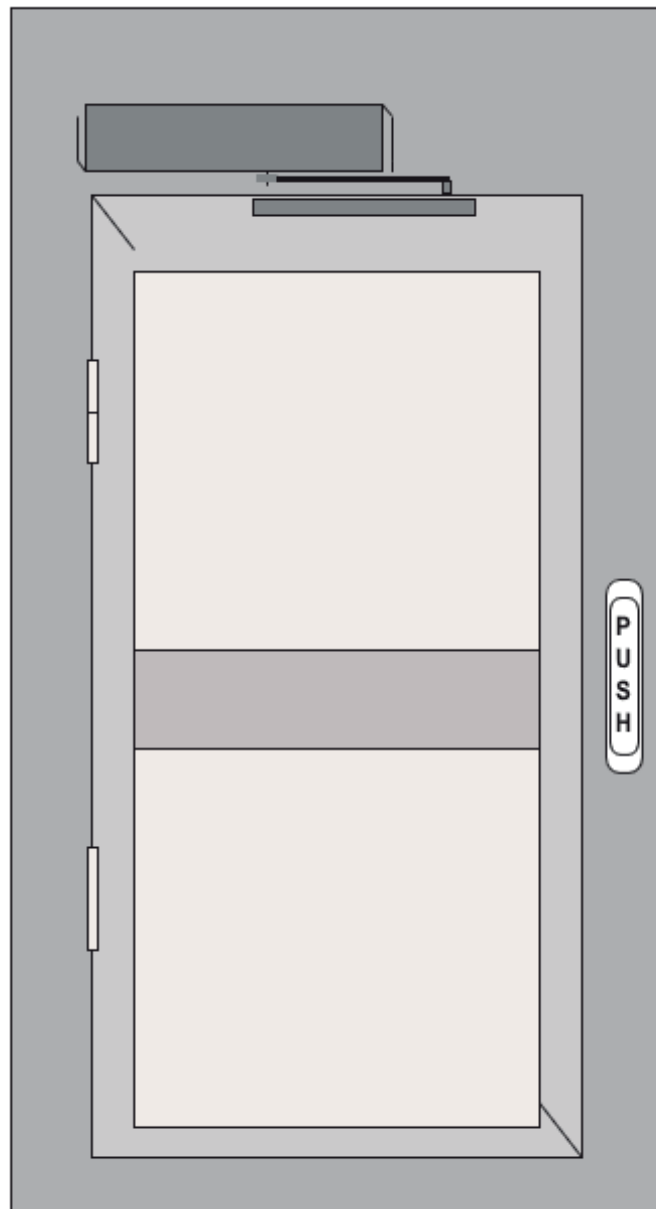
VIS-440 Series
Installation Manual

www.visionistech.com - Call Us: 1-888-504-3318

This manual applies for the model numbers below:

VIS-440A-SLIM   VIS-440B-SLIM

VIS-440A-SLIM-BL   VIS-440B-SLIM-BL

⚠ **CAUTION**

We are not responsible for any improper installation of athis product it is suggest for a professional to install this automatic door opener.

• Safety devices should be in place and operational.
• Have door adjusted as recommended in Owner's Manual if necessary.
• Have door inspected at least annually by a certified technician.

TYPICAL USED TOOLS

If you choose to use no locks or any other type of locks that is not a door strike, this latch must be remove for proper operation.

Content

1. Introduction of Product

Application: Suitable for wooden doors, metal doors and framed doors. Frameless door needs to be installed with the glass clamp.

Speed/opening time/open degree/ close force adjustable

Door width: ≤ 1200mm

Door weight: ≤ 440lbs

Open degree: Max 110°

**Installation:** Open to inside (Pull arm) /open to outside (Push arm)

Voltage: AC100V-240V, Output 24 DC

Opening Accessories: Function remotes (standard), Wireless push button, access keypad etc.

Working times: About 2 million cycles.

Suggested products:

1 VIS-440-SLIM Automatic Door Opener
2 VIS-EL104 Electric Strike or
   VIS-ML600LED Electromagnetic Lock
3 VS-AXESS-ETL y VS-AXESS-DLX
   Access Controllers
4 VIS-7013 Exit Button
5 VIS-8016 Remote control
6 VIS-3000, VIS-3003, VIS-3004, VIS-3005
   Keypad/Card Reader
7 VIS-8015 Wireless push button
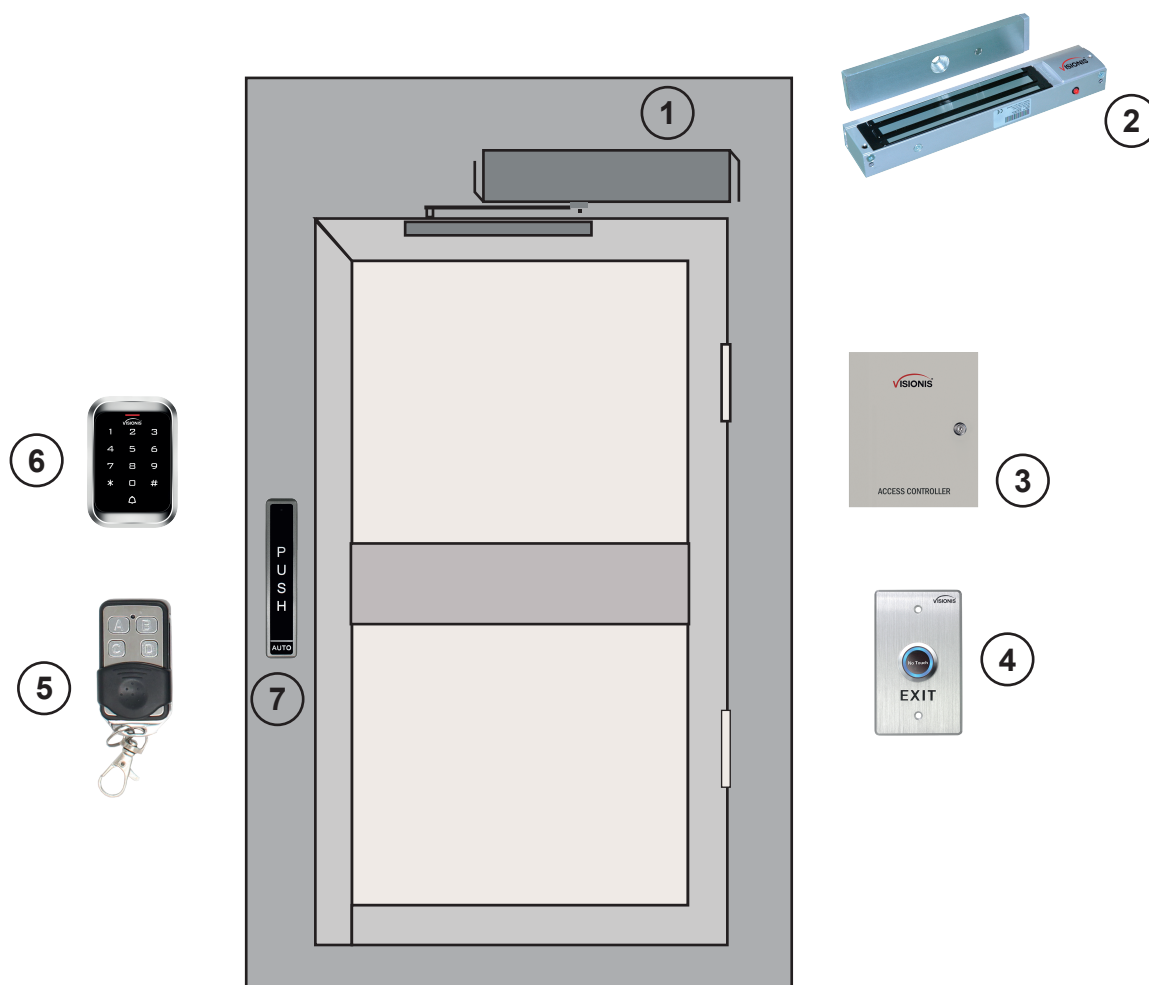
1. 55W high speed DC brushless motor, long service life, low noise.

2. In main and slave mode. Sequence will not change because of encounter an obstacle.

3. Double gear box design, high speed ratio, high strength, can work with doors up to 440lbs.

4. Push and go function.

5. The voltage of the controller is AC100V-240V, which is applicable worldwide.

6. The magnetic lock can be connected directly to the controller without the need for additional power supply.

7. The controller has added the anti-interference function of the sensor, and the sensor can be directly connected inside and outside the operator.

2.Technical Parameters

Power: AC 100V-240V

Active open time: 3-7s/90°

Hold open time: 0 - 20s

Temperature: -20°C ~ 55°C (-4°F ~ 131ºF)

Protection class: IP21

Product weight: 12.2lbs

Product size: 475*81*98mm (18.70*3.19*3.87 inches)

Max open angle: 110°

mm = Door width

Lbs = Door weight
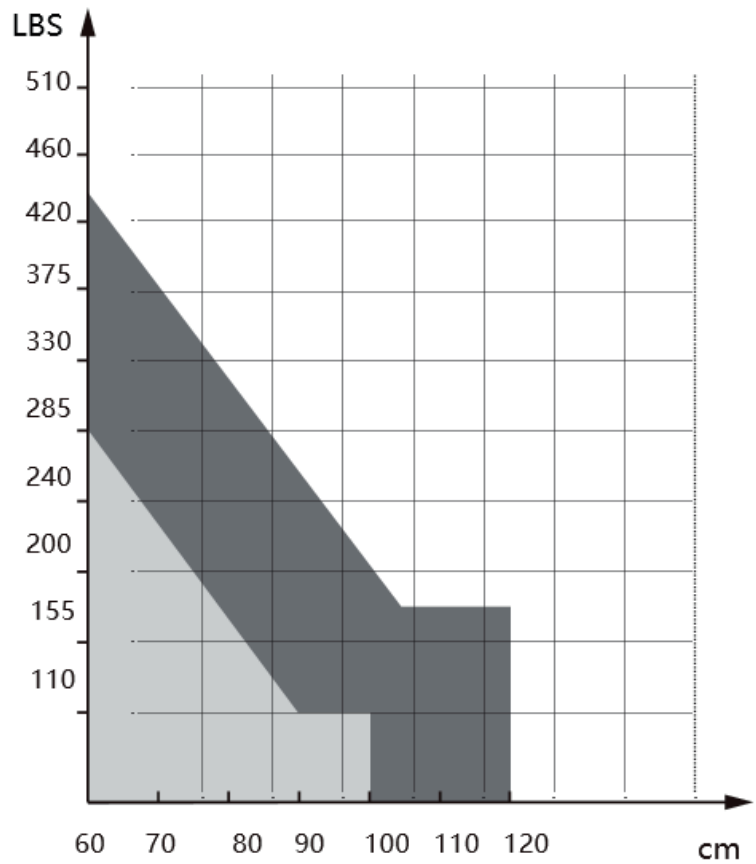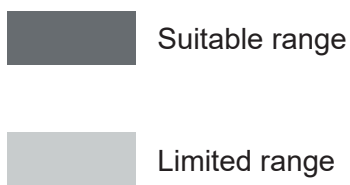
3.Swing Door Mechanism

Design for Barrier-Free accessibility and convenient for disabled and children.

Swing door mechanism

Dimension: mm (inches)

475mm (18.70in.)

81mm (3.19in.)

39.5mm (1.56in.)

7.5mm (0.30in)

230mm (9.06in)   230mm (9.06in)   20mm (0.79in.)

500mm (19.69in)

98mm (3.86in.)

143mm (5.63in.)   81mm (3.19in.)

Pull Bar

98mm (3.86in.)

81mm (3.19in.)   120mm (4.72in)

316mm (12.44in)

Push Bar

4. Components

Side Cover

Controller

Side cover（with power switch）

Motor

Pull bar

100-240V power input
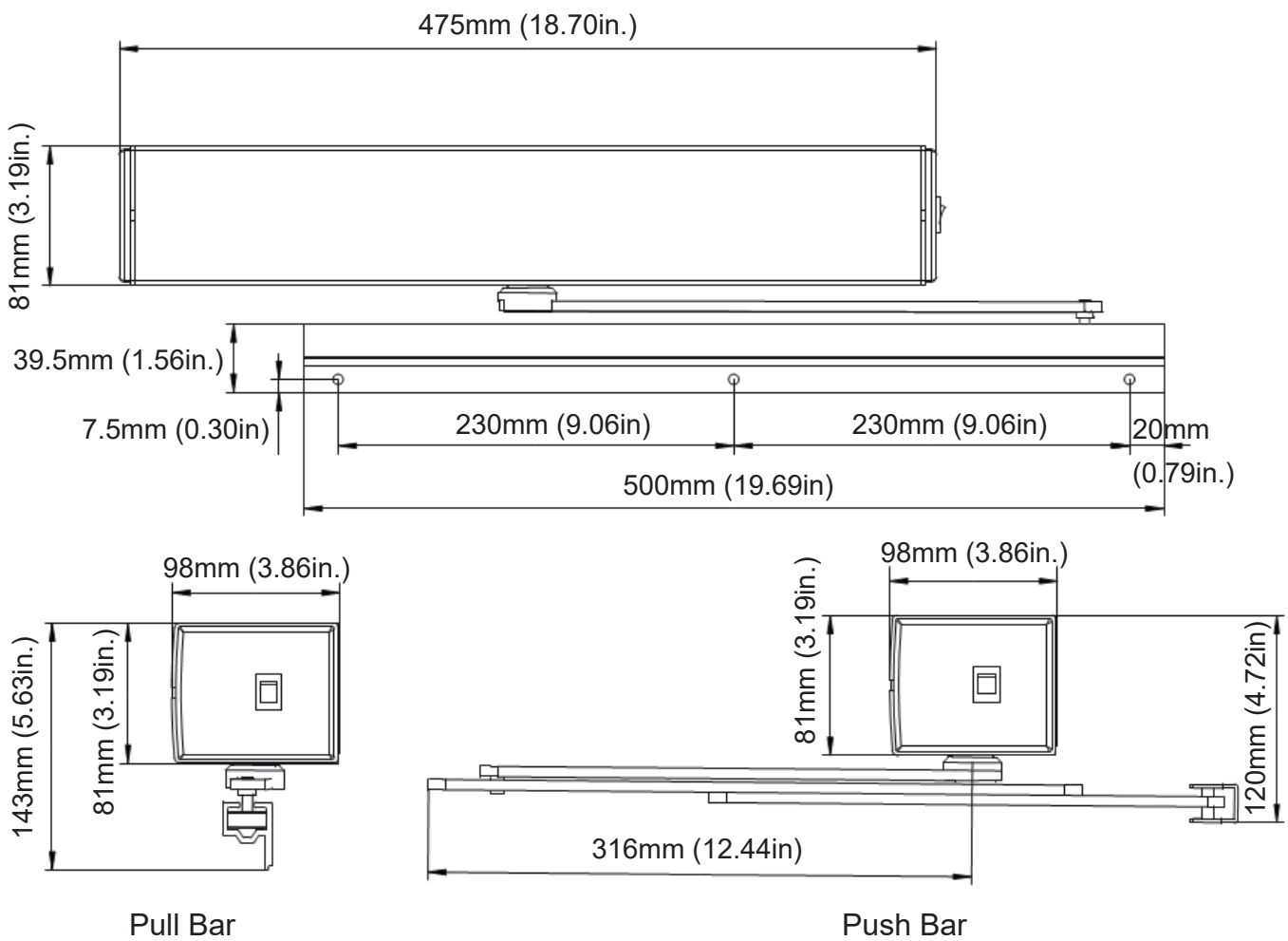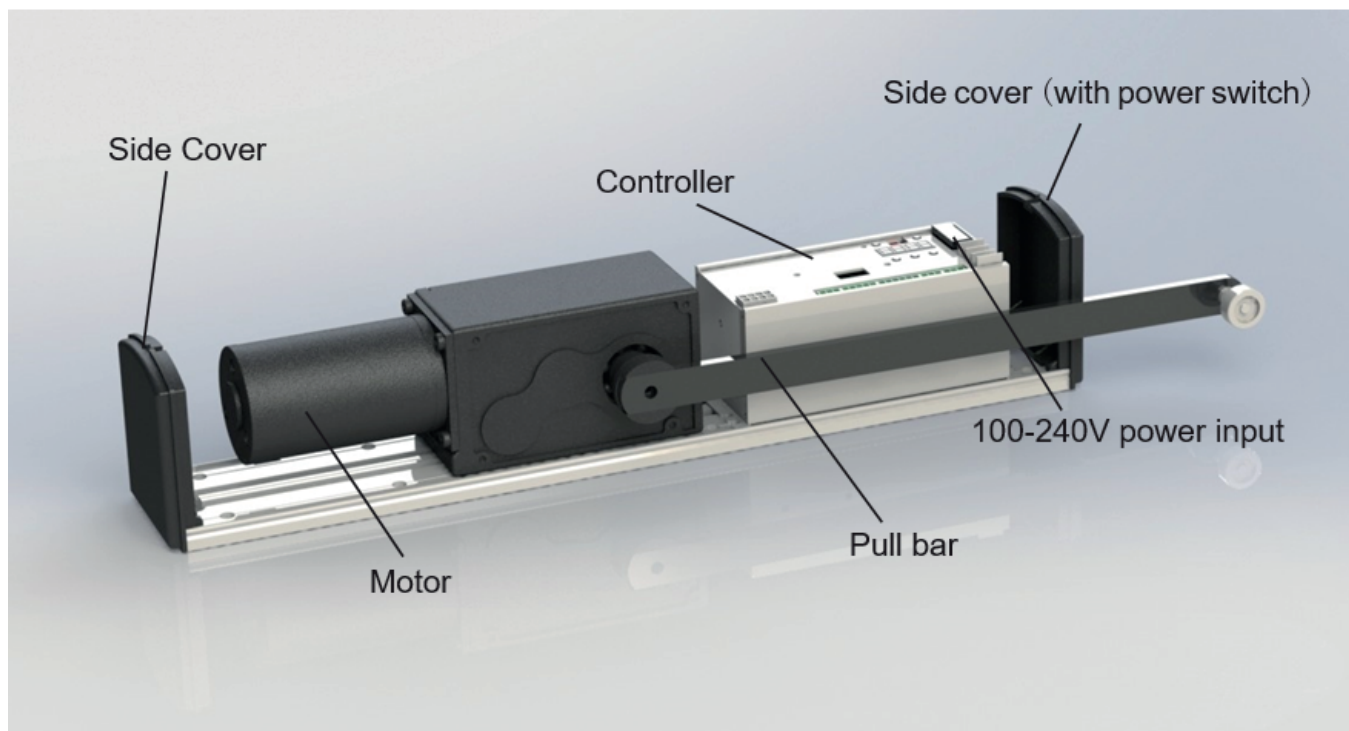
VIS-440-SLIM

	Base
	Pull bar
	Push arm
	Cover
	Slide rail
	Door operator
	Extensions 25mm (0.9843 inches) 50mm (1.9685 inches)

5. Installation Step

5.1 Installation demonstration

Installation of PULL BAR type, suited for inswing doors (mechanism is inside).

Opening direction
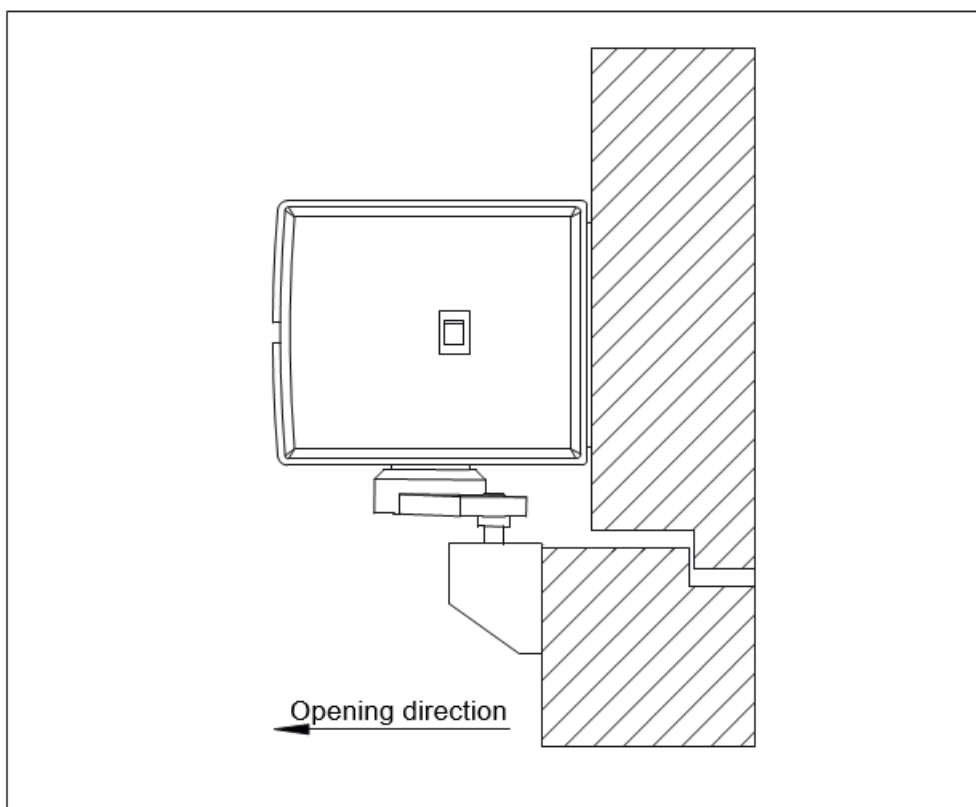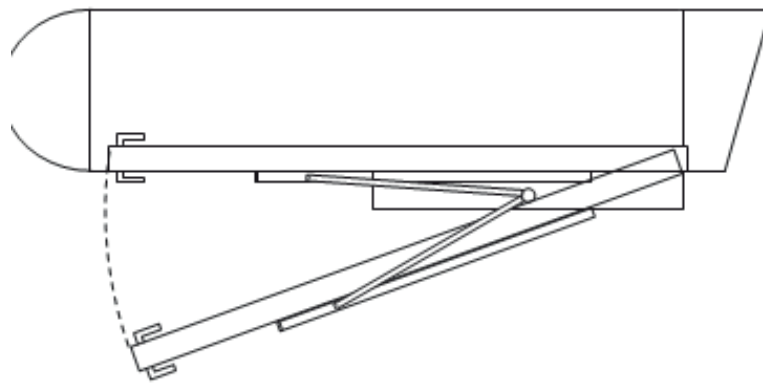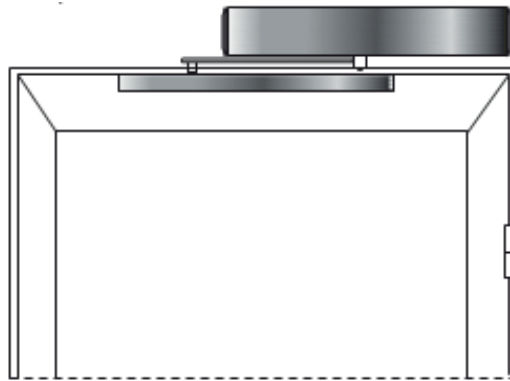
5. Installation Step

5.1 Installation demonstration

Installation of PUSH BAR type, suited for outswing doors (mechanism is inside).

Opening direction

5. Installation Step

5.2 Installation of bottom plate

Installation of pull bar type.

Power liner   Sensor liner

41 | 125 | 120 | 125 | 41

452

52

28

As the picture shows, fix the bottom plate on the frame with eight countersunk head screw.

Operator at right position.

Power liner   Sensor liner

41 | 125 | 120 | 125 | 41

452

52

28

As the picture shows, fix the bottom plate on the frame with eight countersunk head screw

Operator at left position.

5. Installation Step

5.2 Installation of bottom plate

Installation of push bar type.

Power liner   Sensor liner

The distance between the
bottom of the mounting plate
and the door hole is 6mm

41   125   120   125   41   52

452

As the picture shows, fix the bottom
plate on the frame with eight countersunk
head screw.

Operator at right position.

Frame

Bottom
plate

Power liner   Sensor liner

41   125   120   125   41   52

The distance between the
bottom of the mounting plate
and the door hole is 6mm

452

As the picture shows, fix the bottom
plate on the frame with eight countersunk
head screw.

Operator at left position.

Frame

Bottom
plate

5. Installation Step

5.3 Installation of pull bar

mm (inches)

98mm (3.86in.)

Wall

122mm (4.80in.)

52mm (2.05in.)

37mm (1.46in.)

81mm (3.19in.)

0-30

Door leaf

Open direction

1. Open the door to 90°, slide the pull guide roller into track.
2. Fix the Pull bar plate as shown.
3. Move the plate ensure the wheel at the middle position of track as shown.
4. Hold the plate position, fix the first screw near center of the shaft.
5. Close the door, repeat step 3, fix another screw on the other side.
6. Manually move the door to ensure pull bar work smoothly, adjustment is required if any resistance is shown during the operating.
7. Fix the last screw.
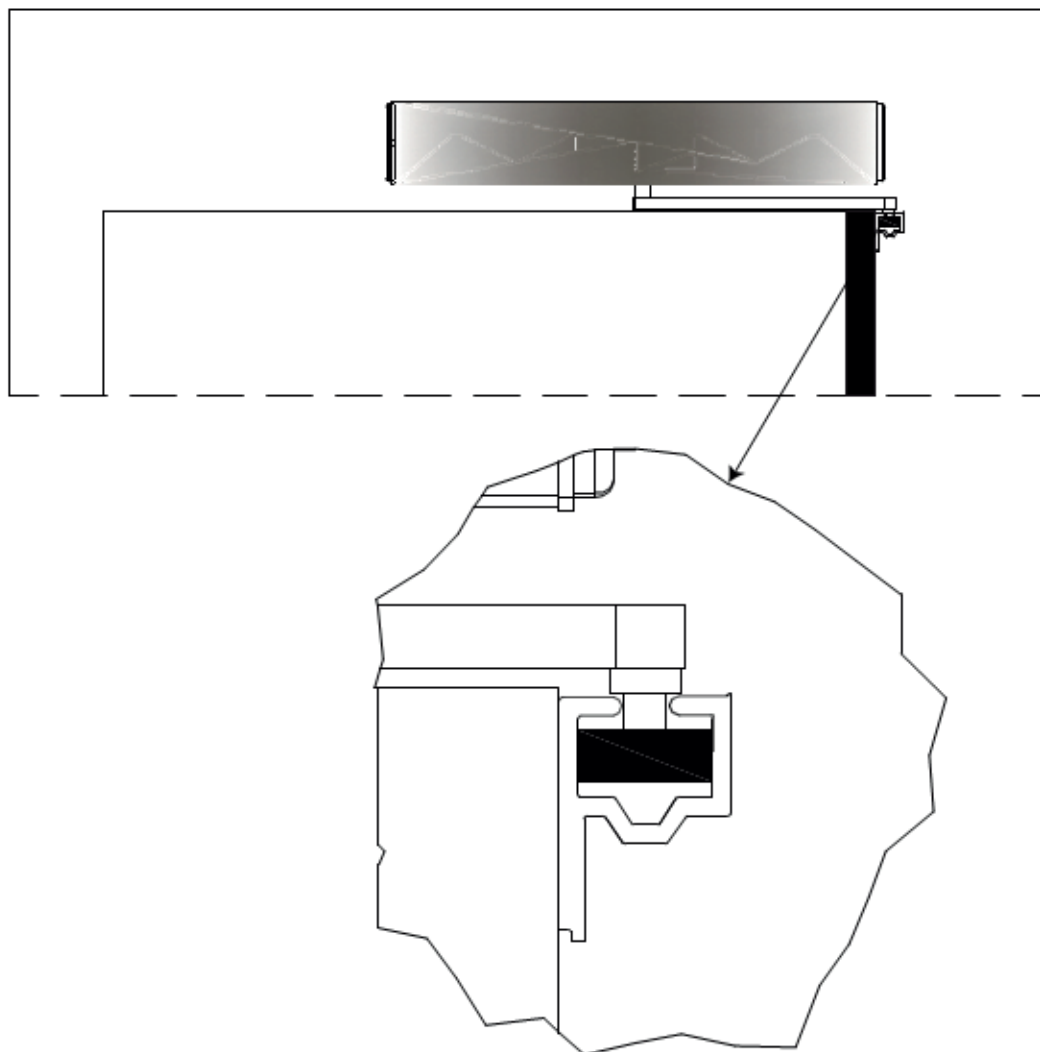
5. Installation Step

5.3 Installation of pull bar guider (Right position)

Installation of pull bar guider

230   230   20   120   30

Fix the pull bar on door leaf with
3 pcs self-tapping screw

Adjust the opening
angle by position
stopper.
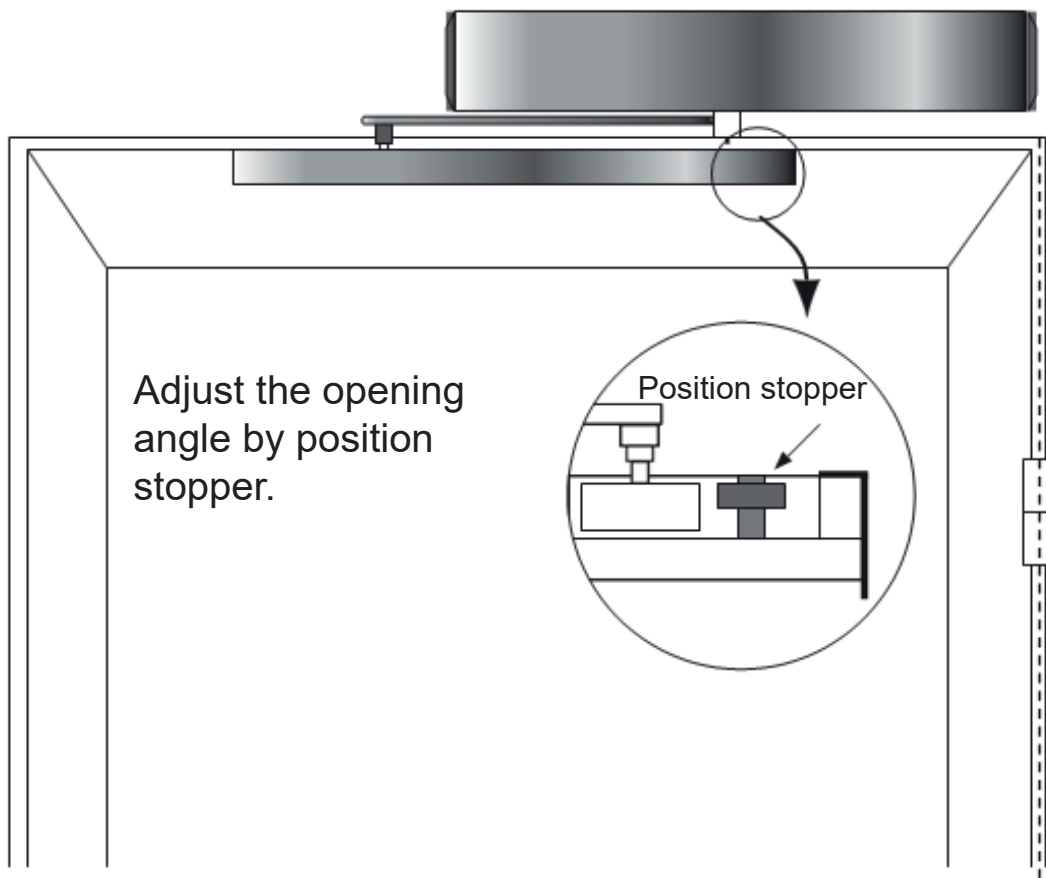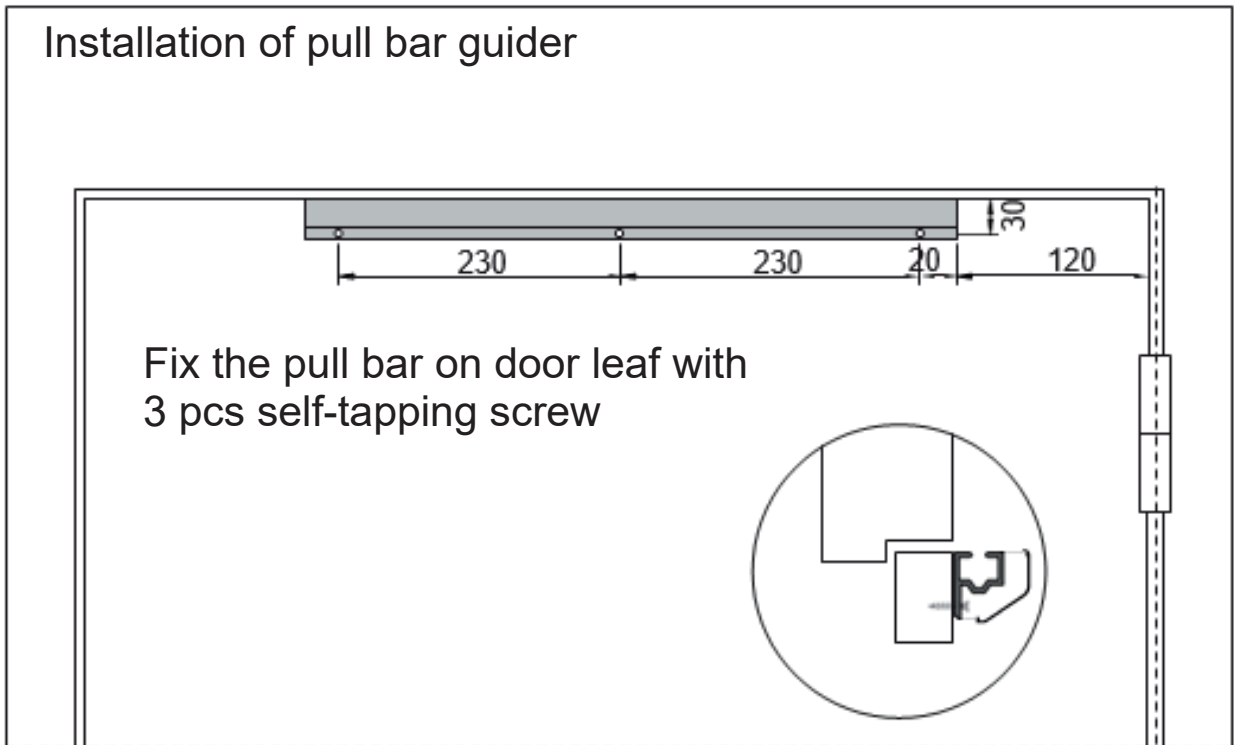
Position stopper

5. Installation Step

5.3 Installation of pull bar guider (Left position)

Installation of pull bar guider

30

120   230   230

20

Fix the pull bar on door leaf with
3 pcs self-tapping screw

Position
stopper

Adjust the opening
angle by position
stopper.
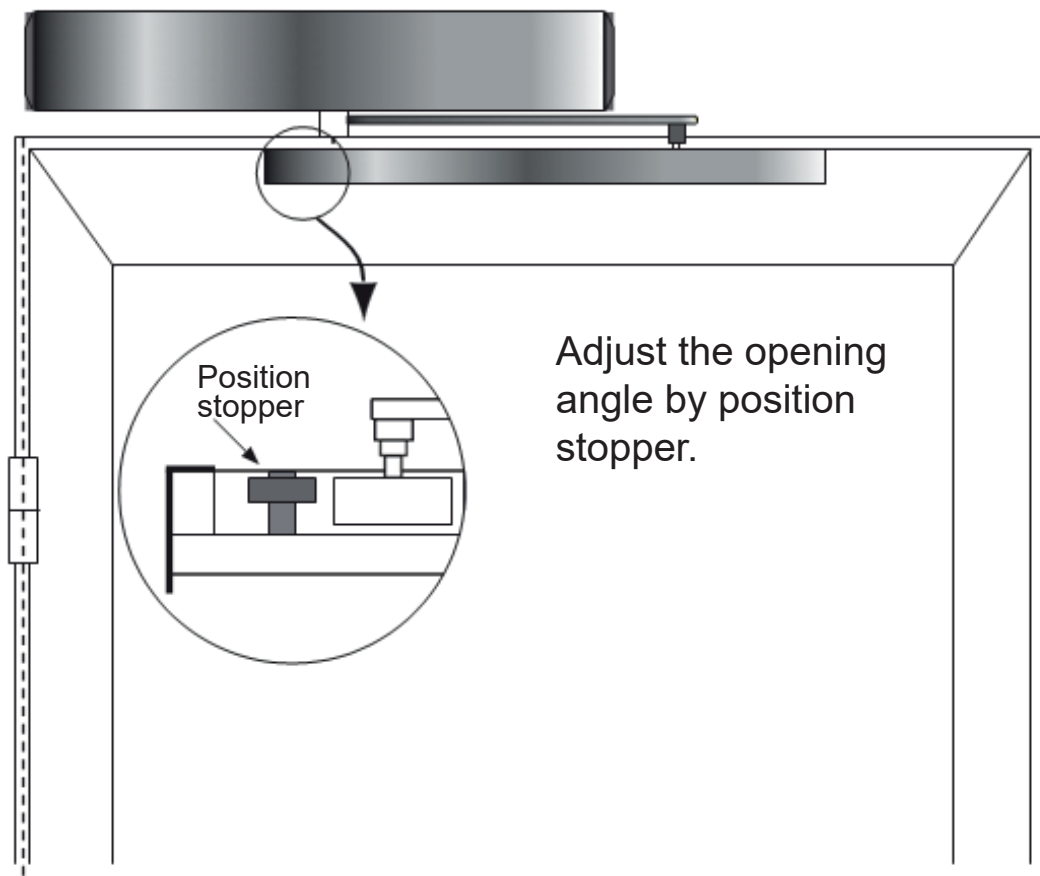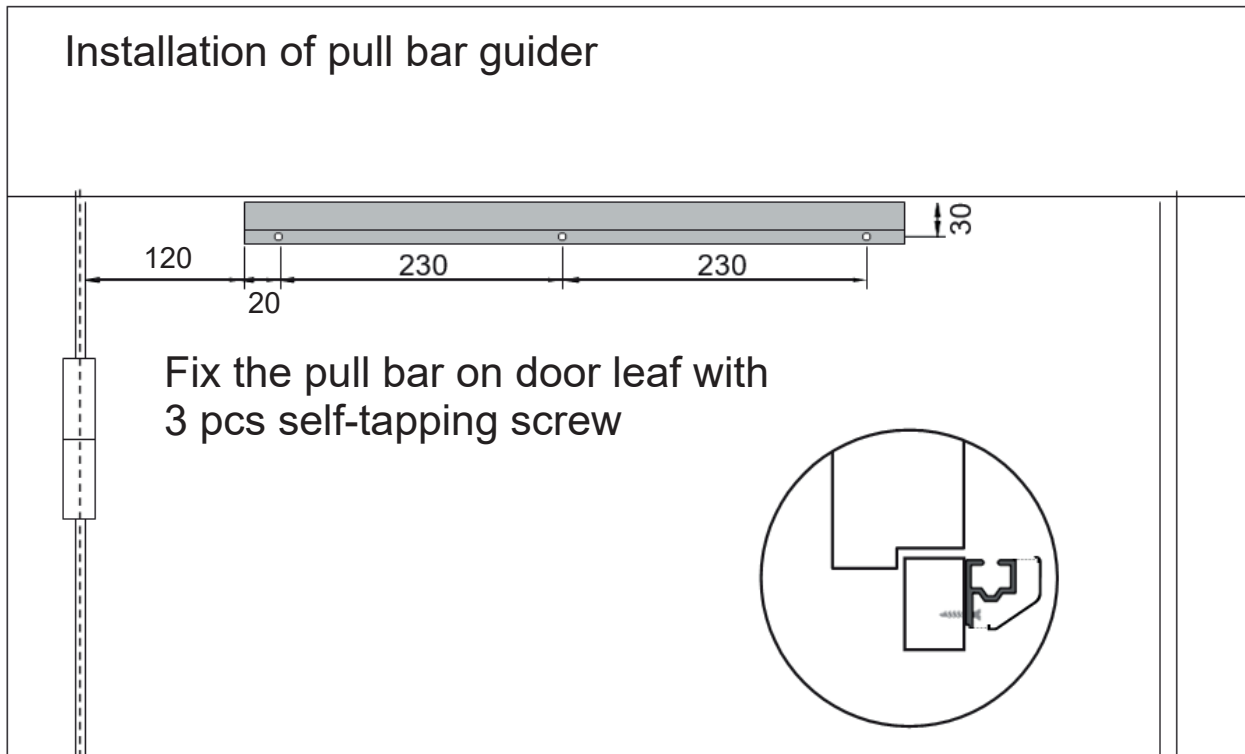
5. Installation Step

5.4 Installation of pull bar for glass door

mm (inches)

500mm (19.68in)

130 mm (5.12in.)

25mm (0.98in.)
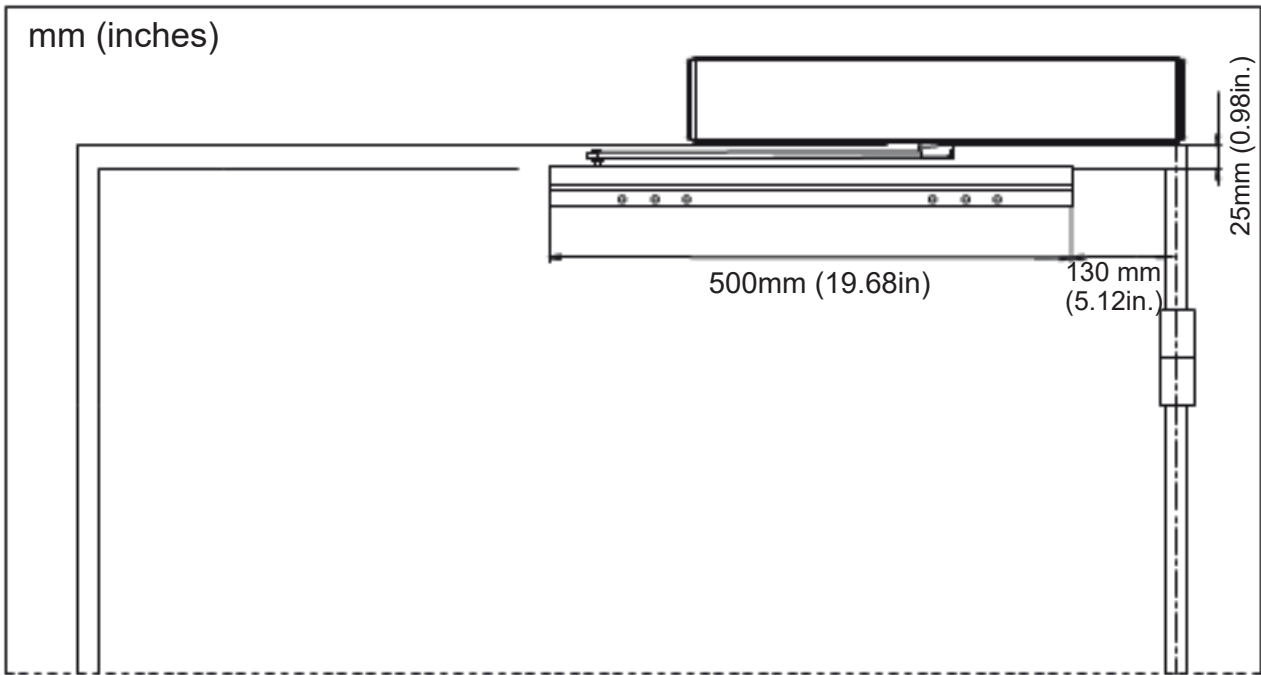
Tip: Ensure 25mm space for glass top to door frame bottom (Glass door installation).

98mm (3.86in.)

mm (inches)

81mm (3.19in.)
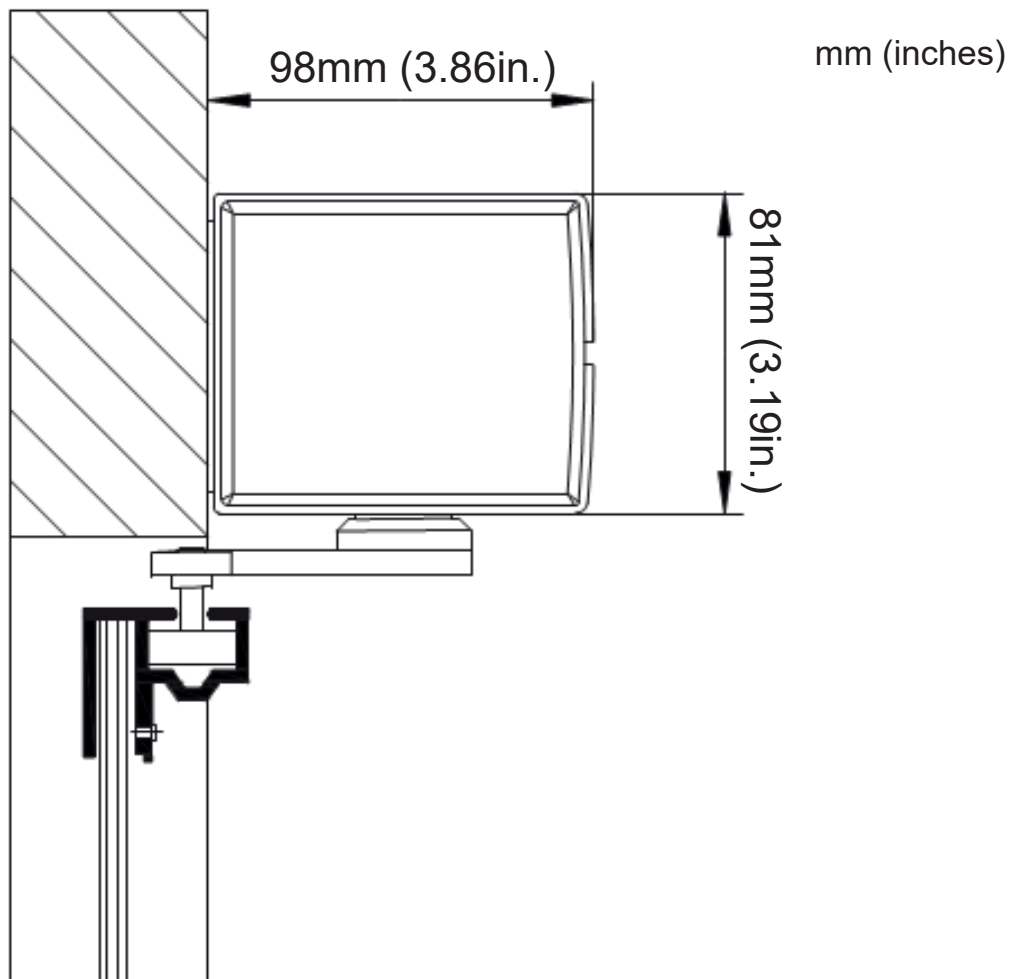
5. Installation Step

5.5 Installation of push bar

mm (inches)

98mm (3.86in.)

Wall

93.5mm (3.68in.)

52 (2.05)

15 (0.59)

≤250

Door leaf
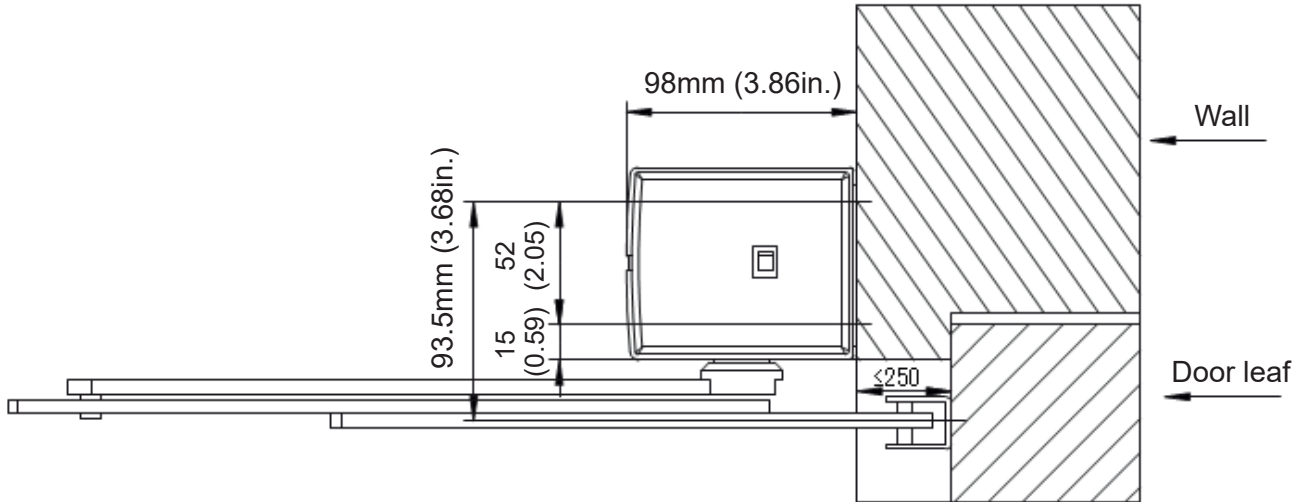
5.5.1 Installation of push bar for glass door

L≤250mm
9.84 inches
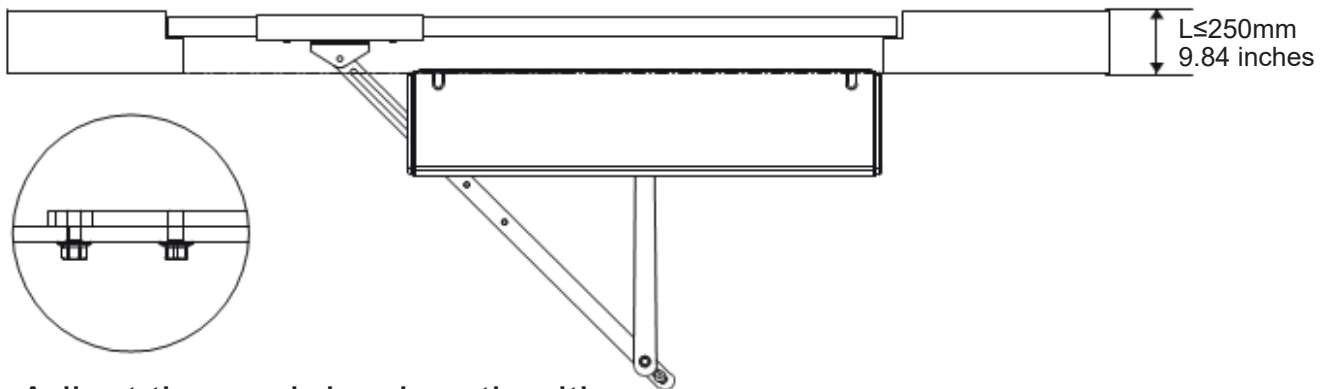
Adjust the push bar length with
the two screws according to the
door frame depth(L).

Automatic door right installation

5. Installation Step

5.6 Installation of extensions (Pull Arm)
5.6.1. 25mm (0.9843in.) short extension shaft

1. The standard installation height of the operator is 35mm (1.3779in.).
2. Short extension shaft installation height: 35mm+25mm=60mm
3. Mark a line from 60mm (2.3622in.) of the door head.

60mm (2.3622in.)   25mm (0.9843in.)
35mm (1.3779in.)

4. Uneven edges facing up.
5. The bottom plate goes flush with the bottom edge.

0.9843in.
25mm
1.3779in.

5. Installation Step

5.6 Installation of extensions (Pull Arm)
5.6.1. 25mm (0.9843 in.) short extension shaft

6. Tighten the screws to fix the bottom plate.

Screws

0.9843in.

25mm

7. Hang up the machine.
8. Tighten the screws to fix the unit.
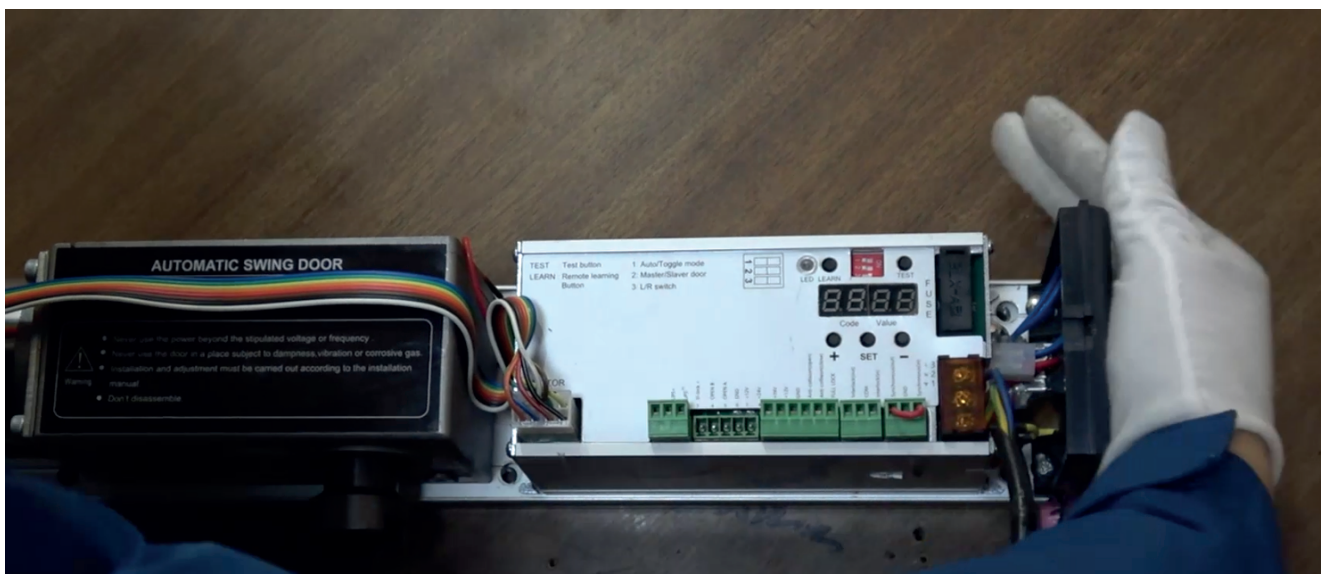
AUTOMATIC SWING DOOR

5. Installation Step

5.6 Installation of extensions (Pull Arm)
5.6.1. 25mm (0.9843 in.) short extension shaft

9. Fix the pull arm.
10. Tighten the screws.
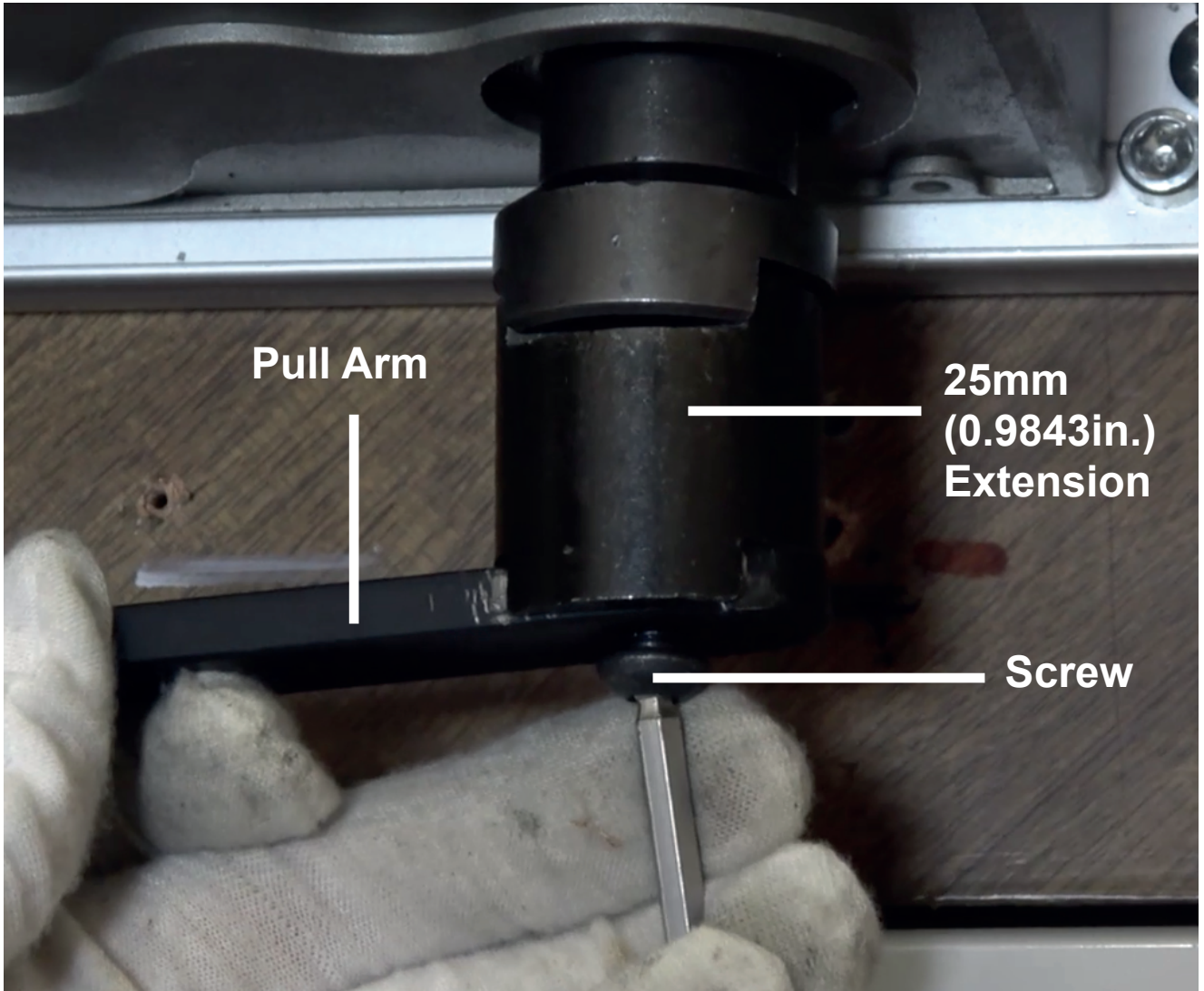
5.6.2. 50mm (1.9685 in.) long extension shaft

1. Long extension shaft installation height: 35mm+50mm=85mm
2. Mark a line from 85mm (3.3464in.) of the door head.

5. Installation Step

5.6 Installation of extensions (Pull Arm)
5.6.2. 50mm (1.9685 in.) long extension shaft
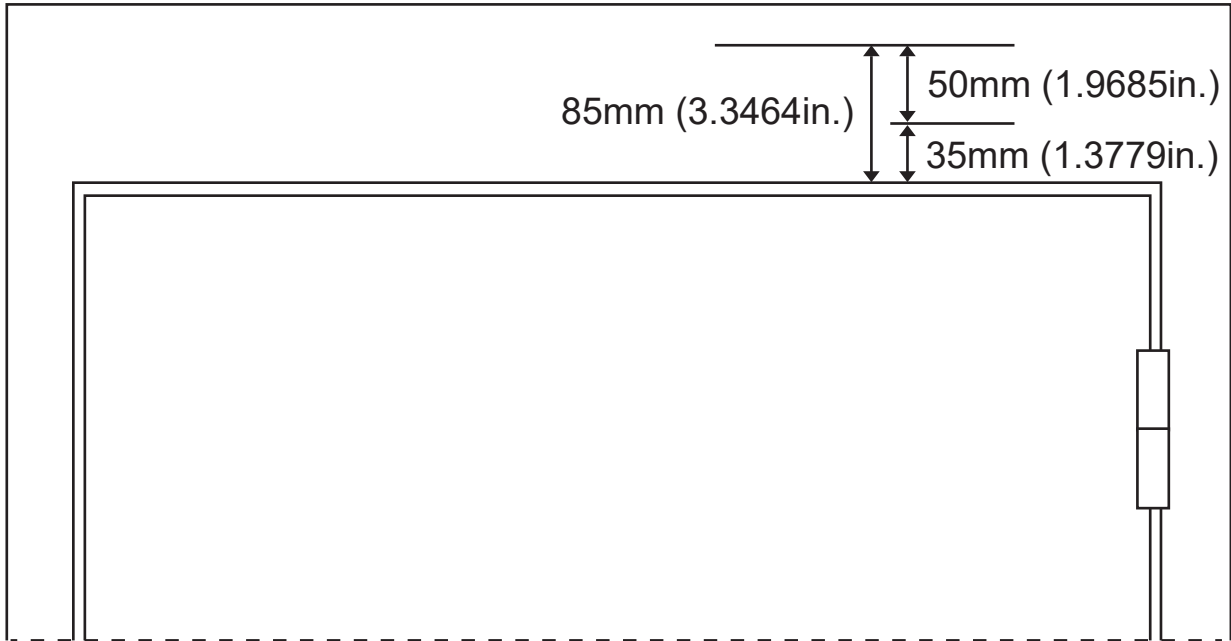
85mm (3.3464in.)　　50mm (1.9685in.)

35mm (1.3779in.)

3. Follow the steps from 4 to 10 from the section 5.6.1.
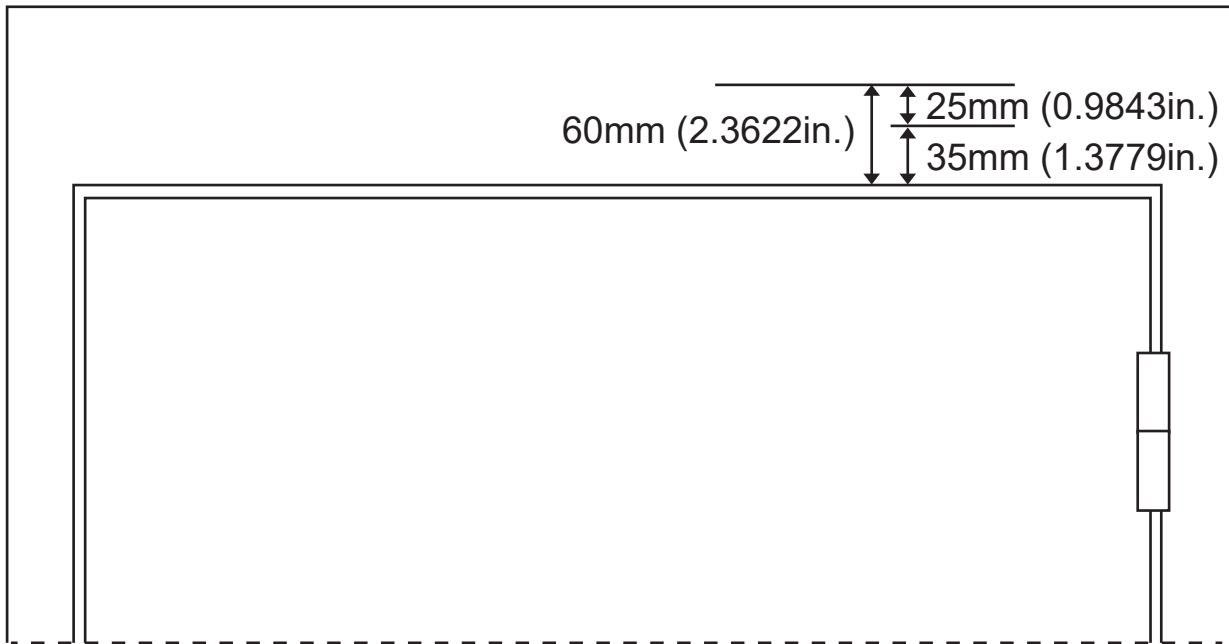
50mm (1.9685in.) Extension

Pull Arm

Screw
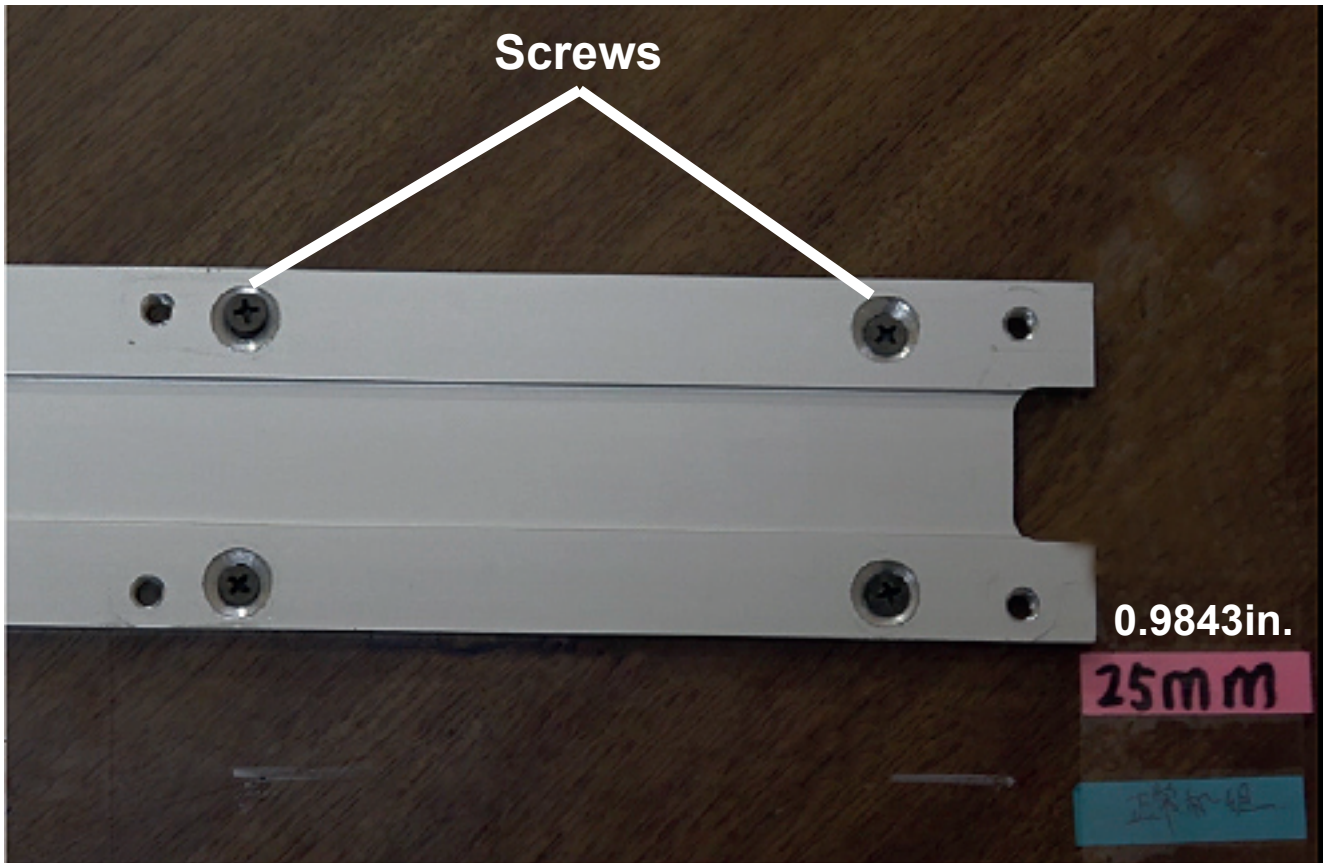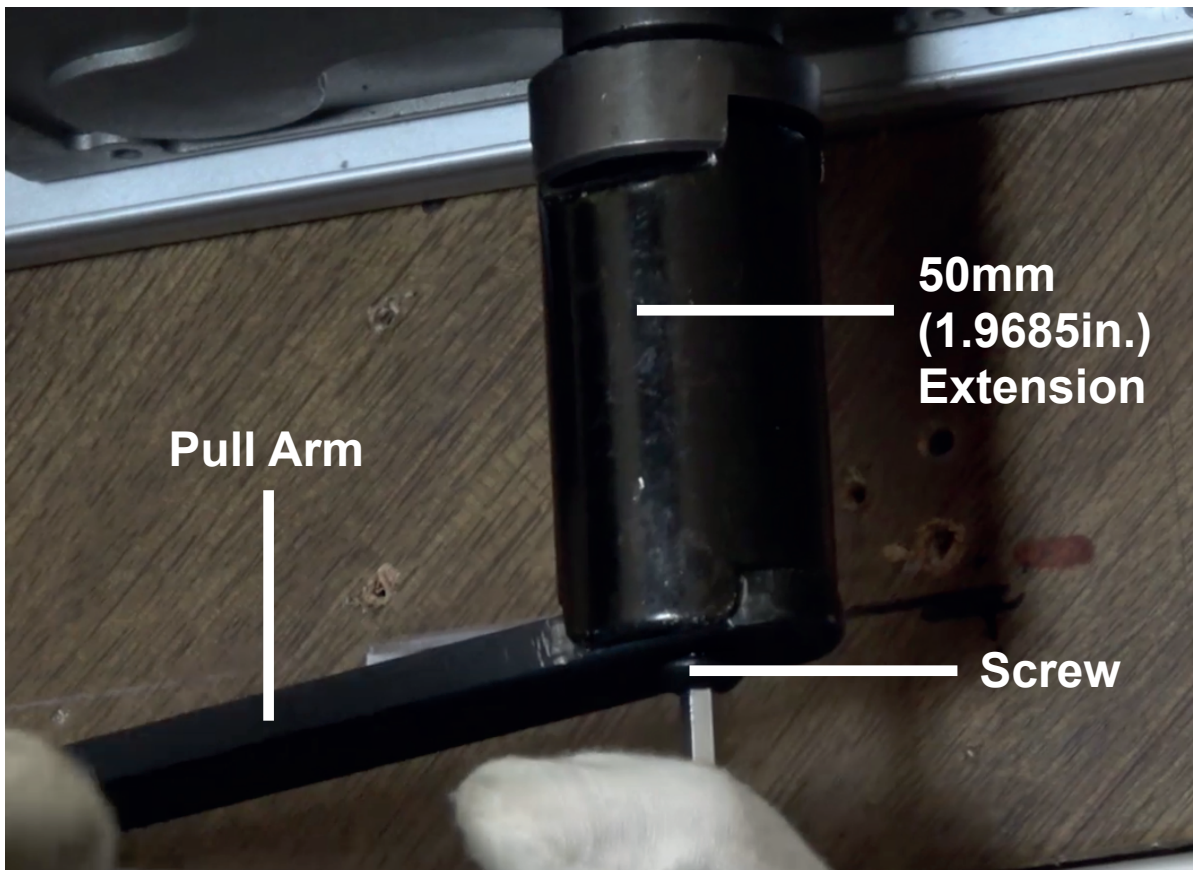
5. Installation Step

5.7 Installation of extensions (Push Arm)
5.7.1. 25mm (0.9843in.) short extension shaft

1. The standard installation height of the operator is 6mm (0.2362in.).
2. Short extension shaft installation height: 6mm+25mm=31mm
3. Mark a line from 31mm (1.2205in.) of the door head.
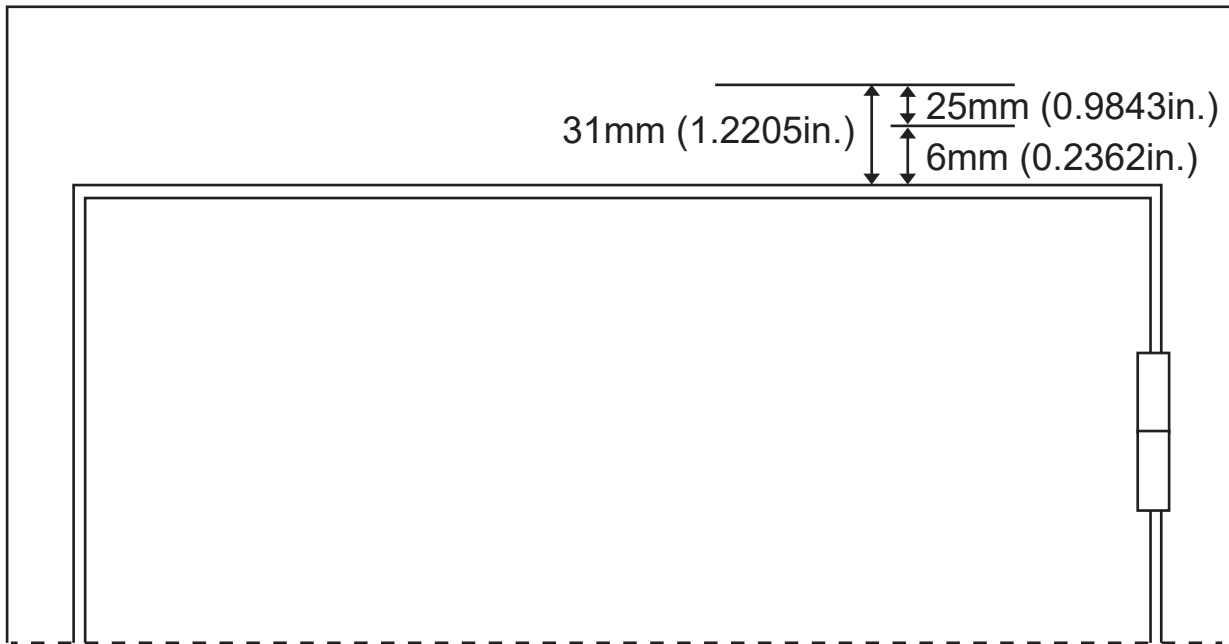
3. Follow the steps from 4 to 10 from the section 5.6.1.
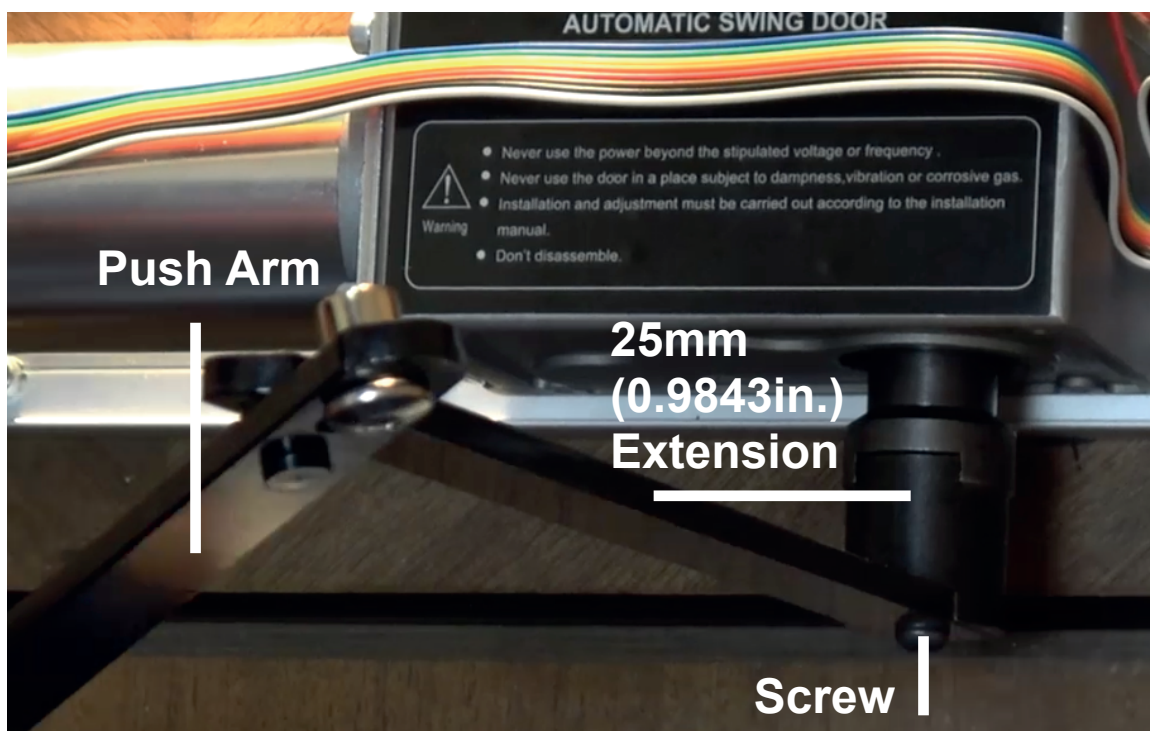
5. Installation Step

5.7 Installation of extensions (Push Arm)
5.7.2. 50mm (1.9685 in.) long extension shaft

1. The standard installation height of the operator is 6mm (0.2362in.).
2. Long extension shaft installation height: 6mm+50mm=56mm
3. Mark a line from 56mm (2.2047in.) of the door head.

3. Follow the steps from 4 to 10 from the section 5.6.1.

5. Installation Step

5.7 Mechanism installation
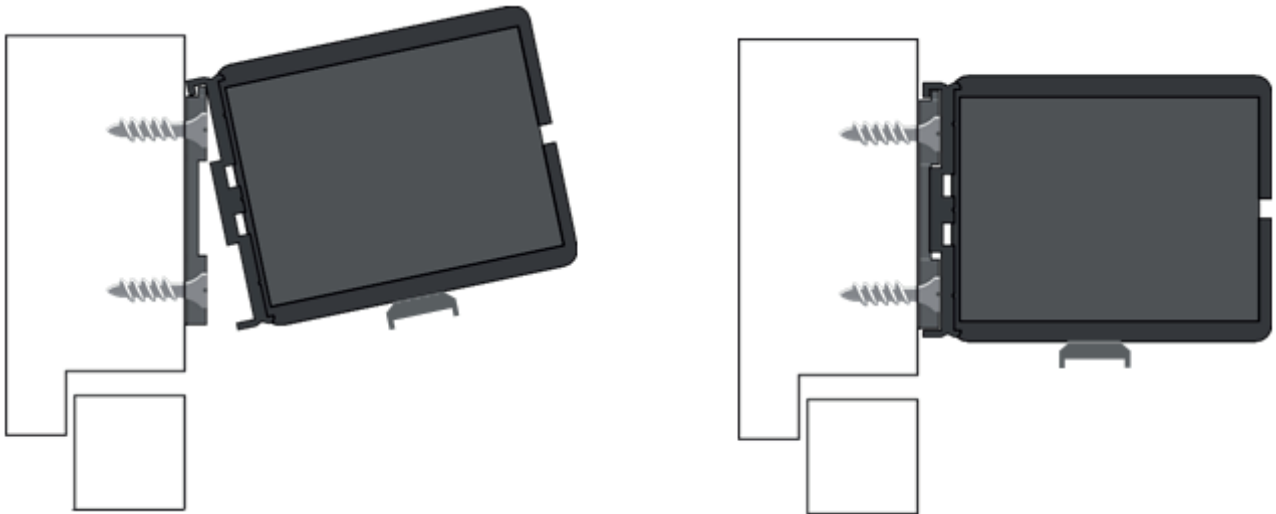
Hang the mechanism on the fixed base cover with screws.

Assemble and disassemble of the mechanism. Cover slides up.

cover
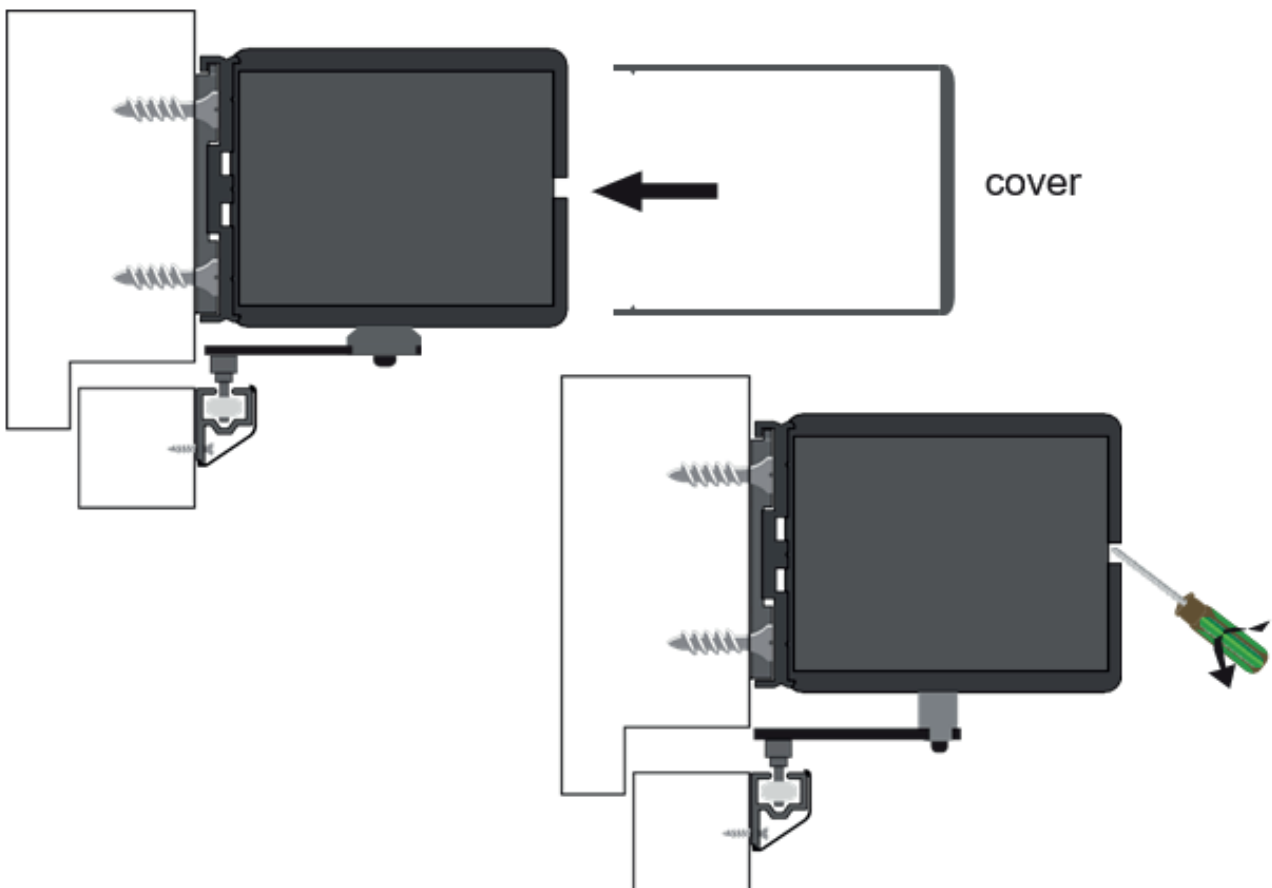
6. Wiring Diagram

Terminal Details

1: Left--Normal model; Right--Toggle model

2: Left--Master drive; Right--Slave

Note: After adjusting the DIP switch, the function will not take effect until the power is turned off and restarted

LEARN: Remote learning Button

MOTOR

LED LEARN   TEST

Code   Value

F
U
S
E

+   **SET**   **−**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
UPS+	UPS-	El-lock +	OPEN B	OPEN A	GND	+12V	+24V	+24V	+12V	GND	Anti-collision(open)	Anti-collision(close)	FULL LOCK	Interlock(out)	COM	Interlock(in)	Synchronous(out)	GND	Synchronous(in)

L 3
N 2
1

Note: After adjusting the DIP switch, the function will not take effect until the power is turned off and restarted.

1. Left--Normal model; Right--Toggle model
2: Left--Master drive; Right--Slave drive (For double open system)
3: Select direction of the door opening
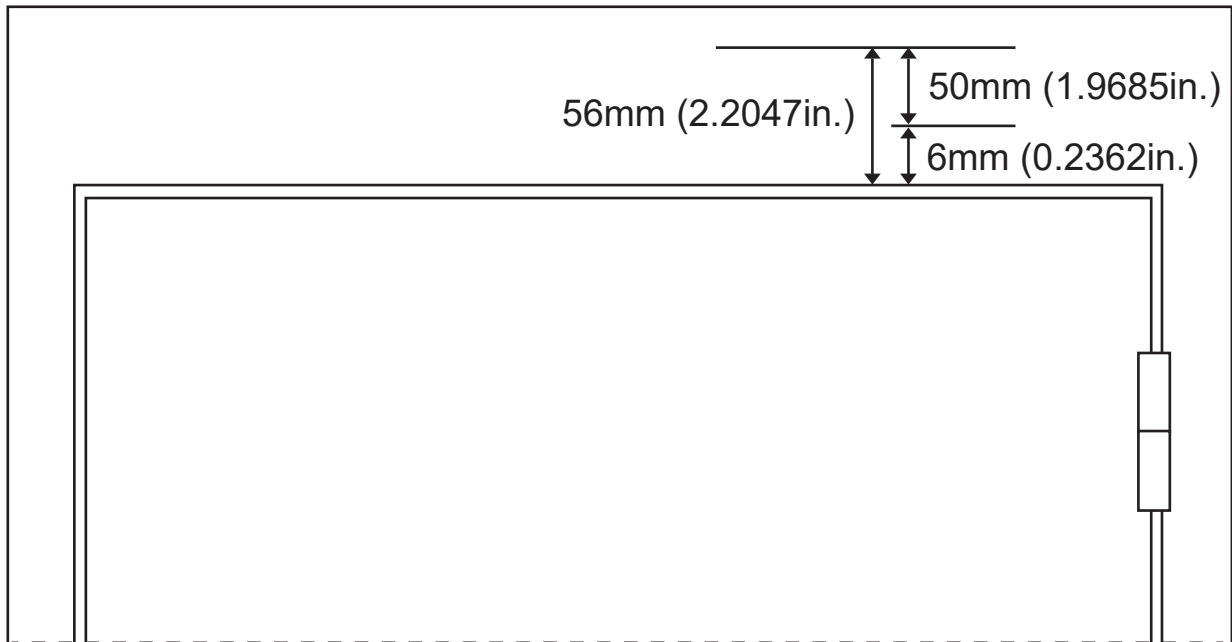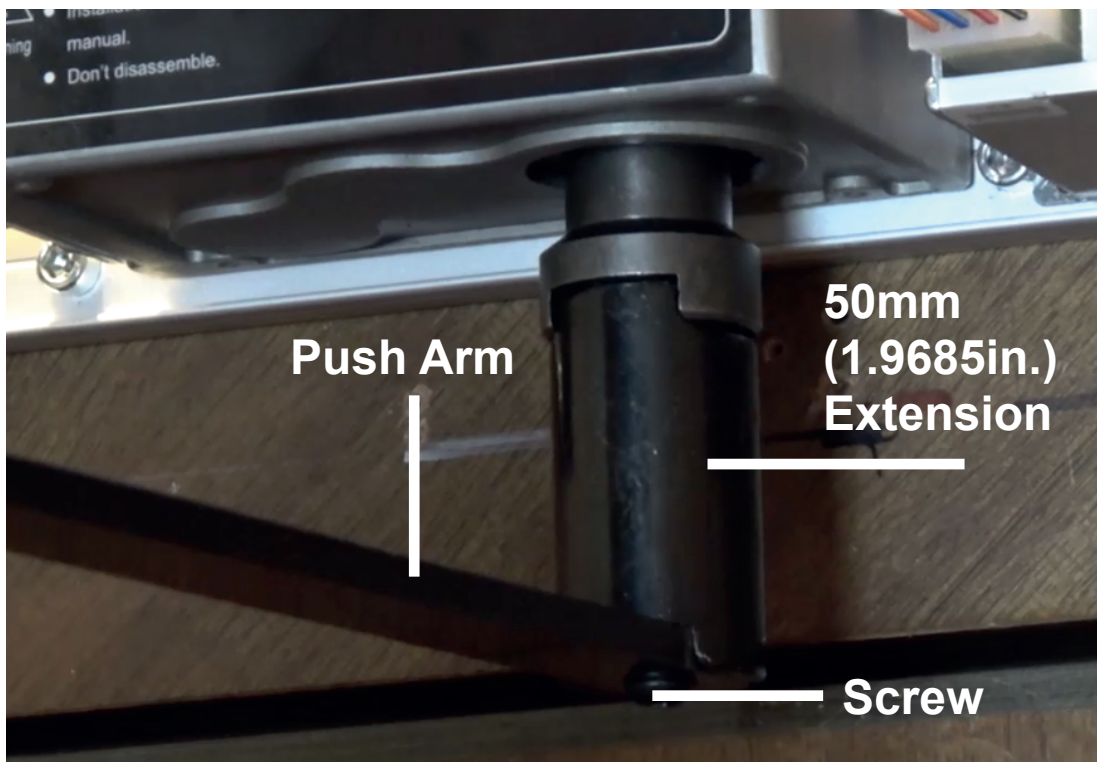(Learning methods: Push the door to half open and switch on the power. If the door opens slowly and then closes slowly, then there is no need to adjust this DIP switch; If not, adjust the DIP switch and repeat the operation)

Button

Test: Testing button, press one time, the door open and close one time
Learn: Learning wireless accessories (remotes or wireless push button); One short press of the button can eliminate the sound of the controller buzzer, and another short press can restore the sound of the controller buzzer.

LED Indicator Light
L1. Wireless accessories learning (blue)
L2. Master door LED, when setting the master door, flash after 4 seconds (Red)
L3. Slave door LED, when setting the Slave door, flash after 4 seconds (Green)

TEST   : Test button   1: Auto/Toggle mode
LEARN : Remote learning   2: Master/Slaver door
          Button   3: L/R switch

LED LEARN   TEST

F
U
S
E

Code   Value

+   **SET**   **−**

MOTOR

6. Wiring Diagram

Inter-lock

17. inter-lock signal (IN)
16. COM
15. inter-lock signal (OUT)

17. inter-lock signal (IN)
16. COM
15. inter-lock signal (OUT)

Door A   Door B

Synchronous

20. Synchronous (IN)
19. COM
18. Synchronous (OUT)

20. Synchronous (IN)
19. COM
18. Synchronous (OUT)

Door A   Door B
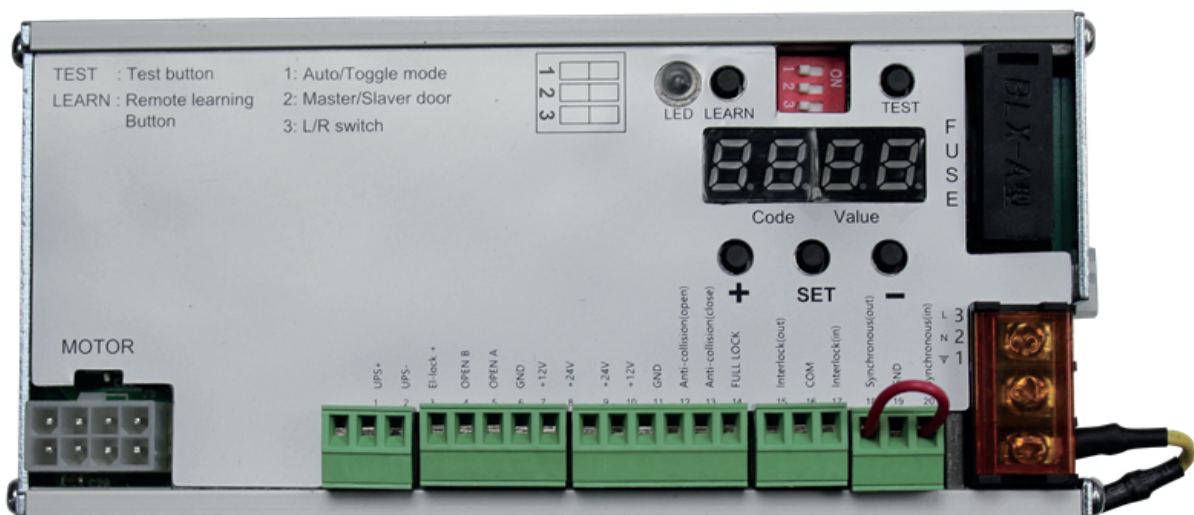
Tip: Er03 mean synchronous cable not well connect

In single open mode: Bridge connect terminal 18 and 20

20. Synchronous (IN)
19. COM
18. Synchronous (OUT)
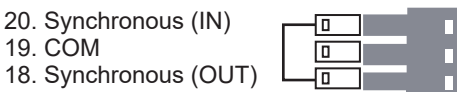
Tip：Dr12 Dr 13 mean not bridge connection

Exit Button

Red ———————— 7. 12V
Black ———————— 6. GND

NO ———————— 4. OPEN-B
COM ———————— 6. GND
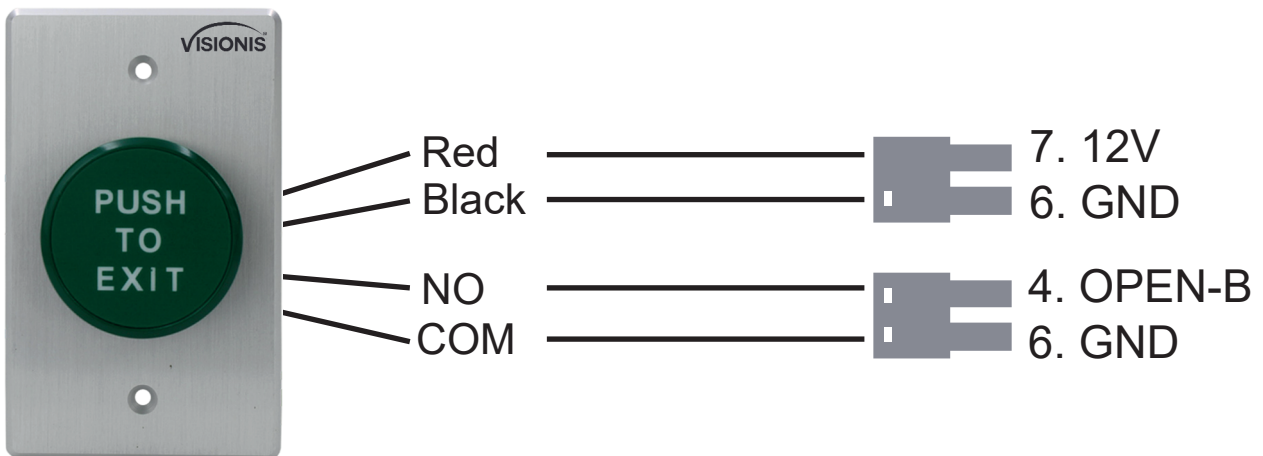
6. Wiring Diagram

Foot Kick Switch

8. 24V
6. GND

4. OPEN-B
6. GND

Copper wire in blue wire
Emission
1 E

White wire in blue wire

Blue wire (Emission)

Receive
1 R

White wire in red wire

Copper wire in red wire

Red wire (receive)

White wire in red wire

Receive
2 R

Copper wire in red wire

Red wire (Receive)

Emission
2 E

Copper wire in blue wire

White wire in blue wire

Blue wire (Emission)

Photocell

9 +24V
10 +12V
11 GND
12 Anti-collision (open)
13 Anti-collision (close)

Receive
2 R

Emission
2 E

Copper wire in blue wire
Emission
1 E

White wire in blue wire

Blue wire (Emission)

Receive
1 R

White wire in black wire

Copper wire in Black wire

Black wire (Receive)

6. Wiring Diagram

Access Keypad

Keypad	Wire Color	Connector
BELL_A	pink	
BELL_B	pink	8 +24V
D0	green	7 +12V
D1	white	6 GND
ALARM	grey	4 Open B
OPEN	yellow	
D_IN	brown	
+12V	red	
GND	black	
NO	blue	
COM	purple	
NC	orange	

Connect

E-lock and Magnetic lock

Black wire-
Red wire +
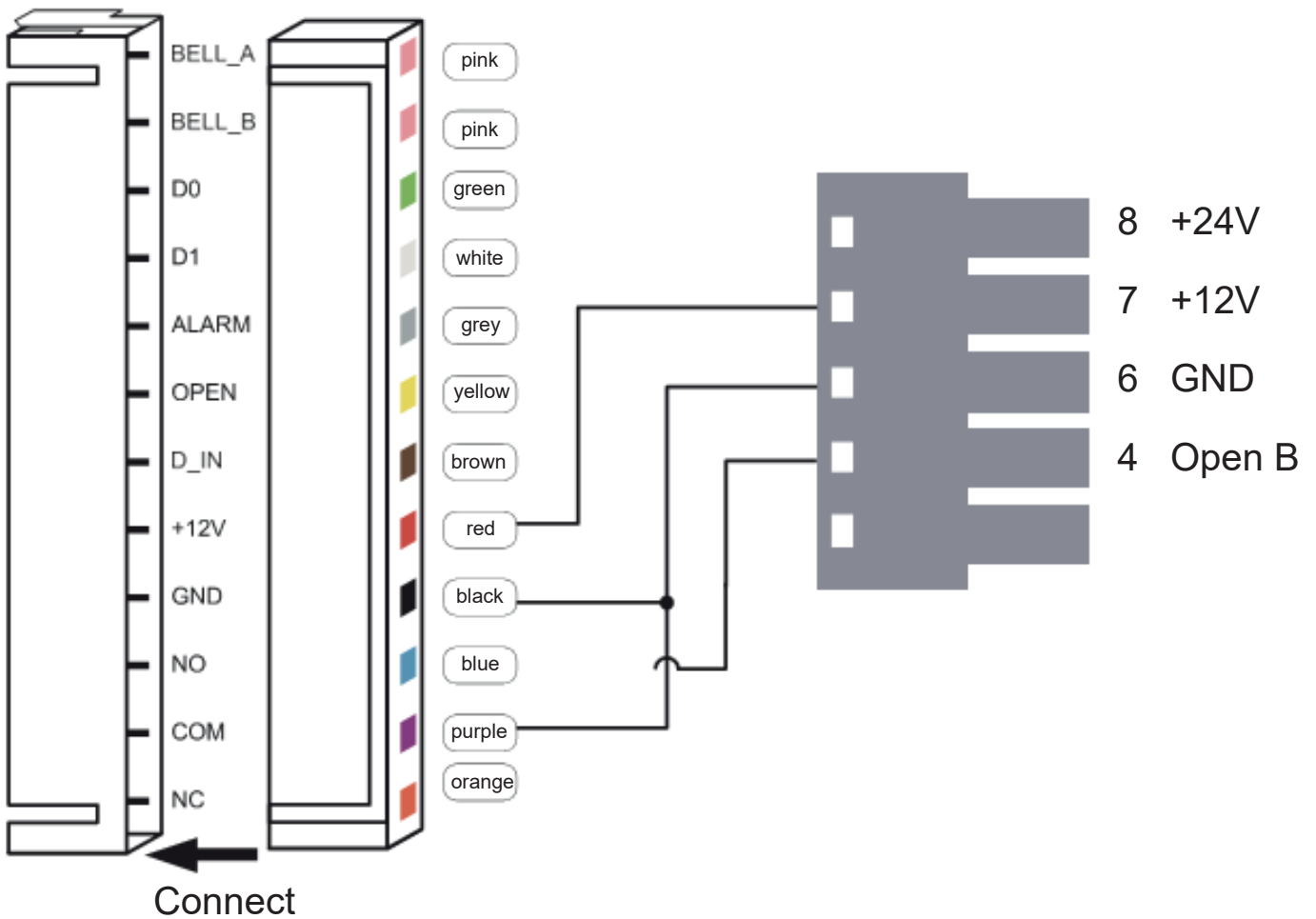
2 UPS-
3 E-LOCK+
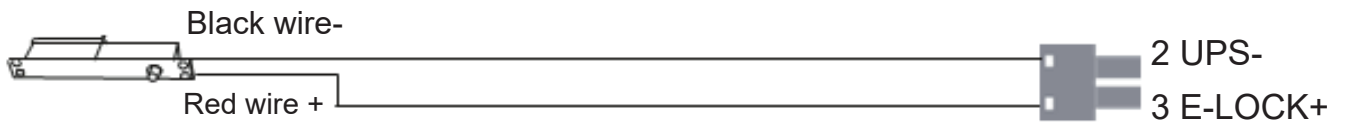
Electric Lock or Strikes

Black wire-
Red wire +

2 UPS-
3 E-LOCK+
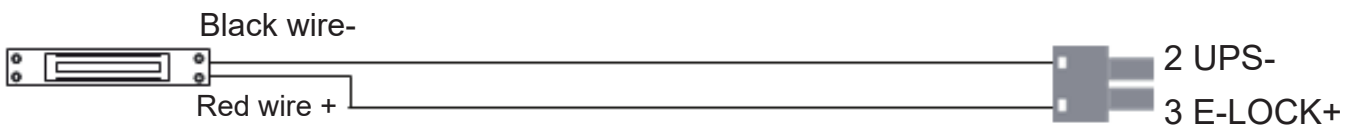
Magnetic Lock

6. Wiring Diagram

NO
COM
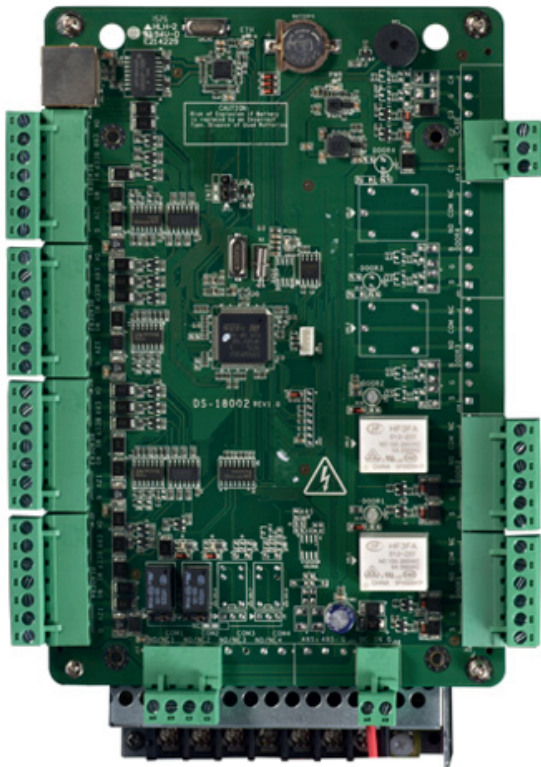
4. OPEN-B
6. GND

Anti-collision of Top Scan

Anti-collision (Open) (optex: OA-EDGE T)

Power
12~24VAC/DC
Safe/Test output 2
C relay

Pulse-inversion (Close side)
Safe/Test output 1
C relay

Stop pulse (Open side)
Output test
Optical coupler/
Voltage: 10~30VDC

	(+)
	(-)
	COM
	NC
	NO
	COM
	NC
	NO
	(+)
	(-)

1. White
2. Brown
3. Green
4. Yellow
5. Grey
6. Pink
7. Blue
8. Red
9. Black
10. Purple

9   +24V
10 +12V
11 GND
12 Anti-collision (open)
13 Anti-collision (close)

Anti-collision (Close)

Power
12~24VAC/DC
Safe/Test output 2
C relay

Pulse-inversion (Close side)
Safe/Test output 1
C relay

Stop pulse (Open side)
Output test
Optical coupler/
Voltage: 10~30VDC

	(+)
	(-)
	COM
	NC
	NO
	COM
	NC
	NO
	(+)
	(-)

1. White
2. Brown
3. Green
4. Yellow
5. Grey
6. Pink
7. Blue
8. Red
9. Black
10. Purple

9   +24V
10 +12V
11 GND
12 Anti-collision (open)
13 Anti-collision (close)

7. Data Setting

Operation of Function remote

A: Always open
B: Automatic
C: Open and close one time
D: Full lock

Add remote:
1. Keep pressing the learning button LEARN, release the button A till LED become yellow, then press any button on remote, remote will been added after led flash and buzzer rings.

2. Keep pressing any button on remote, and keep pressing button LEARN on remote at same time, release button LEARN till LED become yellow, remote will been added after led flash and buzzer rings.

Delete remote:
Keep pressing learning button A 5 seconds, all remote memory will delete after LED flash 3 times.
(Tip: Ensure keep pressing learning button when delete remote memory)
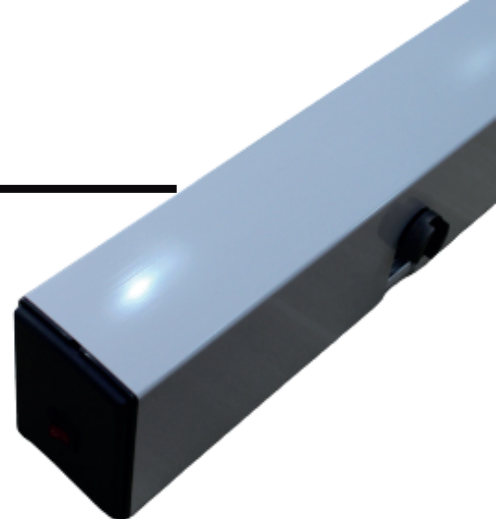Wireless push button learning and delete methods same as remotes.

Type A

Please check the DIP switch if it's same as the image shown (during setting process)
DIP 1, 2, 3 on the left, DIP 4 on the right

Notes:
1. Receiver has been built-in. It can be connected wireless accessories directly.
Tip: Wireless push button can't be locked, If need to lock, it need to connect to an external receiver.
2. Exit only function: Connect outside sensor or button to terminal "Open-B", connect inside sensor or button to terminal "Open-A". Then press "full lock" button on remote.
3. When double open, synchronous cable must be connect refer to manual. Power on, ensure the setting on both controller is same. If speed is different during operating, please slightly adjust open/close speed, open/close braking speed, opening time.
4. When double open, remote control must learn both controller, in order to control two door at same time.
5. In double open mode accessories should connect to both controller (parallel connection).

7. Data Setting

Code	Setting Range	Default	Description
01	20-99	50	Opening speed (velocity open)
02	20-99	40	Closing speed (velocity close)
03	2-20	5	Braking opening speed
04	2-20	5	Braking closing speed
05	10-50	30	Braking opening angle
06	10-50	30	Braking closing angle
07	0-60	2	Hold-open time（0-60s）
08	1-8	3	Starting delay time（1-4s, 1=0.5s, when lock function working)
09	0-8	2	Locking delay time（0-4s, 1=0.5s)
10	0.1	0	Locking type (0: lock by remote; 1: auto lock when closed)
11	0.1	1	Push and go function（0: working 1: not working)
12	1-5	2	Obstacle detection optimized for exterior (wind loads)
13	1-5	2	Holding force-closed
14	1-5	3	Anti-collision force
15	5-30	15	Auto-learning speed
16	0-30	10	Setting master door start/close wait Angle. (Only in the double open case) When door opening, Master door opens at the set Angle, and the slave door will follow open. When the door closing, the slave door closes first. Master door shuts off at the set angle, and Master door does not follow after the slave door is completely closed.
17	0.1	0	Anti-collision (open) and Anti-collision (Close) Access signal selection, 00:NO 01: NC
18	0.1	0	Sensor anti-interference function. 00: not working, 01: working (After function is turned on, when door closing, sensor not working)

8. LED Display Feedback

Single Opening

LED display	Details
Dr11	No problem
Dr12 or Dr13	Terminal 11 and 13 are not connected. (They should be connected when single opening)
Er01	Over current protection for controller
Er02	Motor has problem

Double Opening

LED display	Details
Dr12	Master door
Dr13	Slave door
Er01	Over current protection for controller
Er02	Motor has problem
Er03	Synchronous wired problem
Er04	Master door and slave door se ng problem

9. Trouble Shooting

Symptoms	Causes	Items Checked	Remedies
Door opened or closed un-smoothly	Opening/closing speed is set too slow	Check the opening/ closing speed	Speed up the opening/ closing speed
	Learning speed is too fast	Check the learning speed	Slow down the learning speed
	Too much resistance	Check whether there is something on the door's working way	Clear the obstacle away
Hit the door frame suddenly when closing, door stop suddenly when opening	Buffer speed when opening/closing is too fast		Slow down the buffer speed when opening/ closing
	Position stopper is loosen		Fix the stopper
Door doesn't work	No power	Check the power switch, connection terminal from motor to controller	Connect the power
	Learning speed is too slow		Speed up the learning Speed
	Door is locked	Check whether the door is locked	Un-lock the door
	Obstacle in the pull bar's guider	Check the pull bar guider	Remove the obstacle
	Resistance force is too strong		Power off, push the door leaf. Make sure the door work smoothly
Door cannot open	There's an obstacle in the path		Remove the obstacle
	Learning speed is too slow		Adjust the learning speed fasters