

INSTALLATION MANUAL

100SW LOW ENERGY OPERATOR





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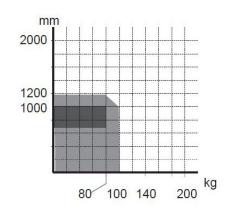
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PRODUCT SPECIFICATIONS

Manutina	Cf
Mounting:	Surface applied, single leaf.
Minimum frame face:	1-3/4"
Minimum clearance from Top of door to ceiling:	7"
Standard finish:	Clear anodized.
Optional finishes:	Powder coating, any color.
Basic Features:	Obstacle detection during cycle.
	Adjustable opening and closing speed.
	Adjustable hold open time.
	Adjustable opening angle.
Optional:	Low energy operation
	Remote control.
	Backup battery.
	Two door synchronization
	function.
	Two door interlock function.
	Auxiliary sensing device.
Limited door weight:	225lbs.
Limited door width:	48".
Power voltage:	110 VAC, 1-phase to 24VDC
Dimensions:	21" L x 4-1/4" H x 3-1/4" W
Supply Voltage:	100-240V
Power Consumption:	50W
Opening Time:	1-30s
Hold Open Time:	1-3
Max. Door Frame Depth:	18"
Max. Opening Angle:	120°
Environment Temperature:	-20°C - 50°C
Protection Class:	IP12D
Product Weight:	14.33 lbs





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COMPONENTS

OPERATOR



COVER



BASEPLATE



PUSH ARM





INSTALLATION

1.1 Installation Example

Pull Arm:

Pulls the door towards the person. Operator is placed on the inside.



Push Arm:

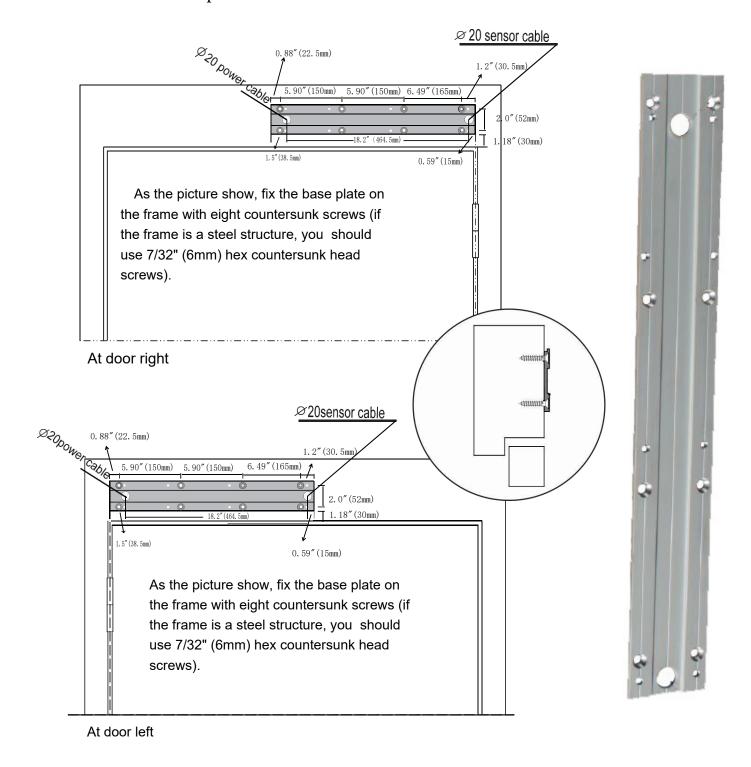
Pushes the door away from the person. Operator is placed on the outside.





PULL ARM INSTALLATION

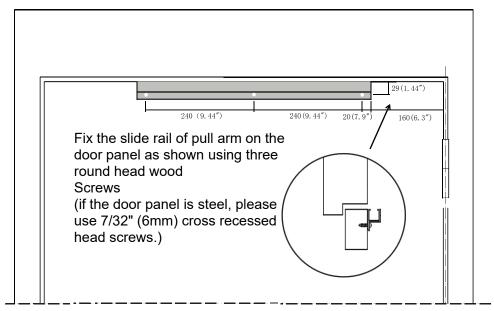
2.1 Installation of Baseplate for Pull Arm



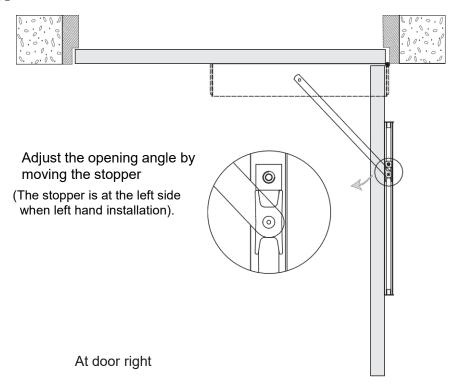


PULL ARM INSTALLATION

2.1 Installation of Baseplate for Pull Arm



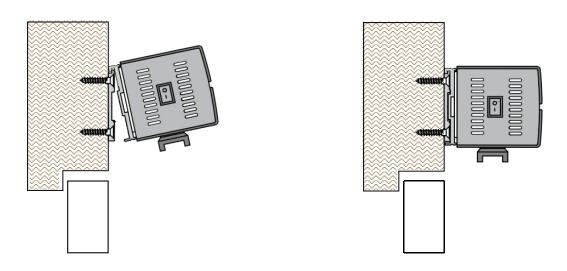
2.2 Adjusting Angle on Stopper for Pull Arm





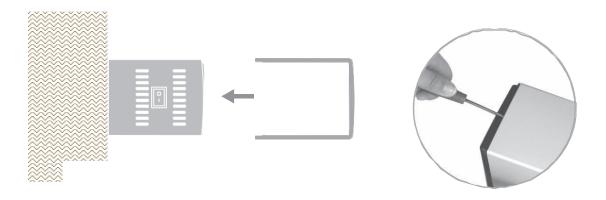
PULL ARM INSTALLATION

2.3 Installing Operating System for Pull Arm



Hook the operating system on the finished base plate as shown, fix it with eight hexagon socket head screws

2.4 Installing Cover for Pull Arm

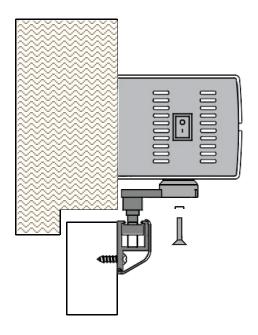


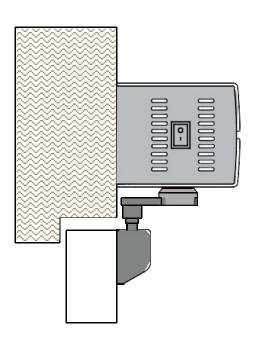
Opening the cover



PULL ARM INSTALLATION

2.5 Connecting the Operation System and the Pull Arm

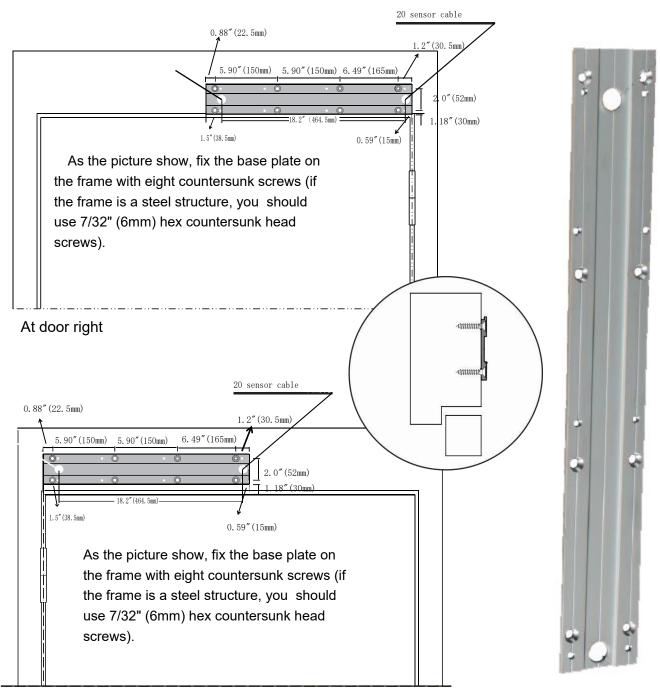






PUSH ARM INSTALLATION

3.1 Installation of Baseplate for Push Arm

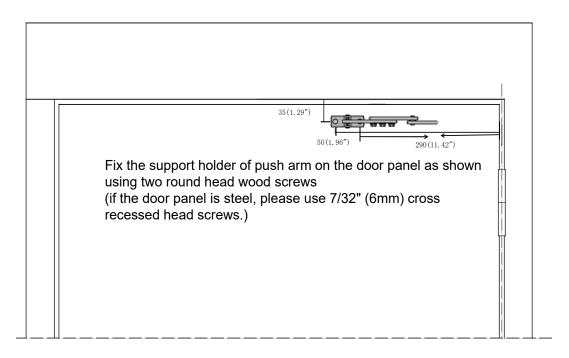


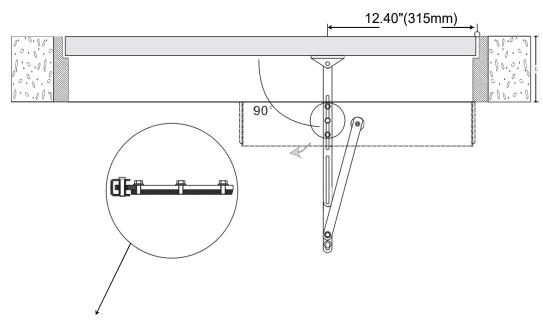
At door left



PUSH ARM INSTALLATION

3.1 Installation of Baseplate for Push Arm





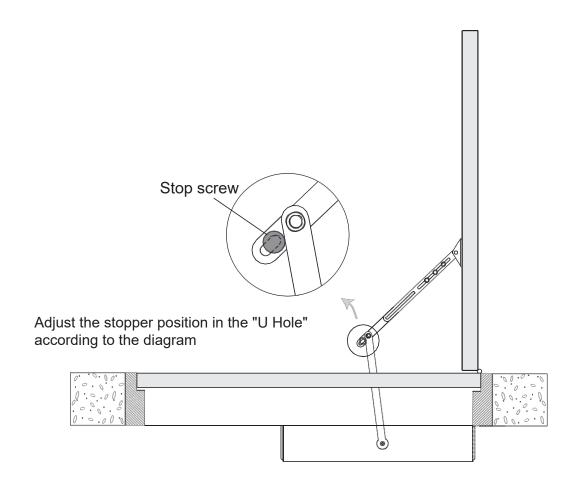
Loosen these **three** bolts and adjust the push arm length according to the door depth(L) until the angle between the push arm and the door panel is 90°.

At door right



PUSH ARM INSTALLATION

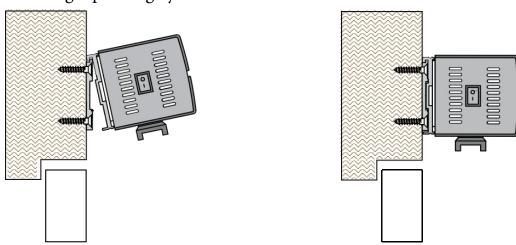
3.2 Adjusting Angle on Stopper for Push Arm





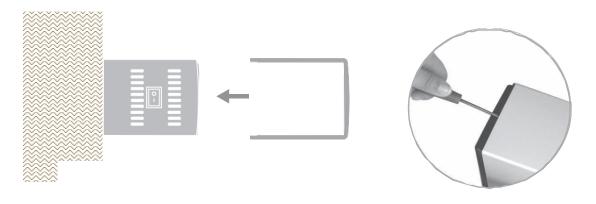
PUSH ARM INSTALLATION

3.3 Installing Operating System for Push Arm



Hook the operating system on the finished base plate as shown, fix it with eight hexagon socket head screws

3.4 Installing Cover for Push Arm

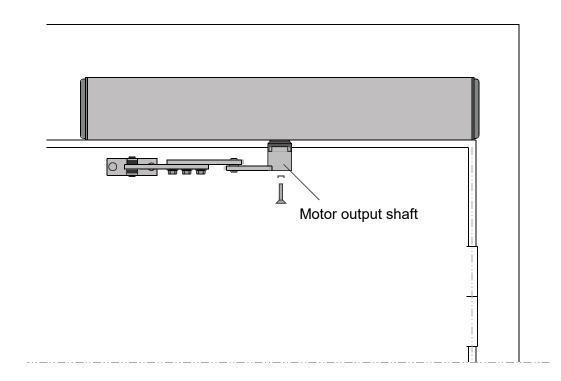


Opening the cover



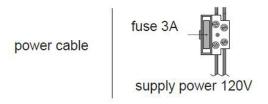
PUSH ARM INSTALLATION

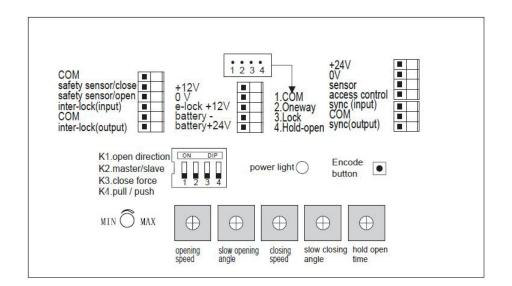
3.5 Connecting the Operation system and the Push Arm



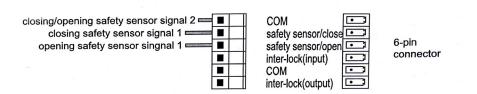


ELECTRICAL CONNECTION

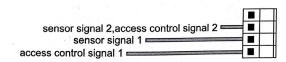




Safety Sensor

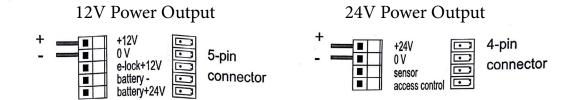


Sensor and Access Control

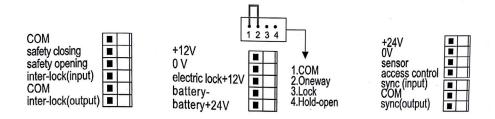




ELECTRICAL CONNECTION



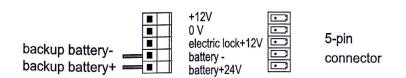
Electric Lock (Automatic Lock)
The door will be locked everytime while it is fully closed



Electric Lock (Remote Control Lock)
When the door is fully closed, press "lock" button on remote control for locking



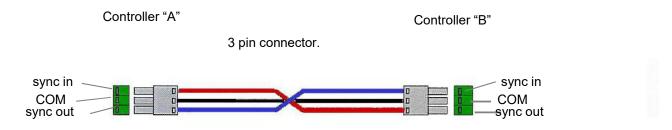
Backup Battery



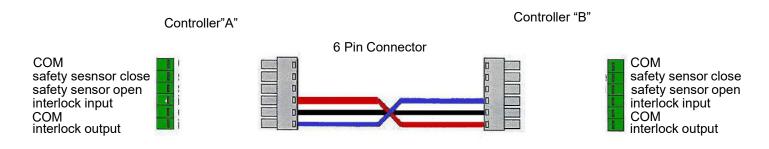


ELECTRICAL CONNECTION

Double-Door Synchronous



Inter-lock

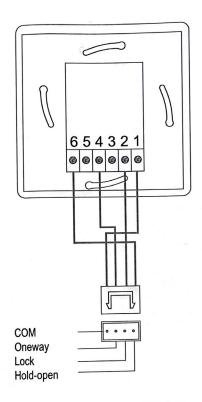


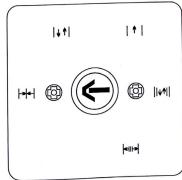
Note: Two doors share same sensor or same signal source, both doors may hold open, in this case, exchange two signal wires of the sensor which is connected with the same controller, it doesn't matter controller A or B.

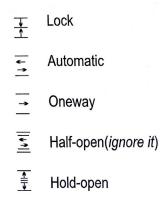


ELECTRICAL CONNECTION

Optional: Functional Key Switch





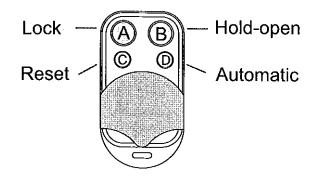


- 1. When the key switch is set "Oneway", the sensor signal is shielded but the access control works normally.
- 2. When the key switch is set "Lock", both the sensor signal and access control are shielded.



ELECTRICAL CONNECTION

Optional: Remote Control



Encode remote control with the door controller:

- 1. Delete all: long press the button "Encode" until the sound of buzzer disappears, loosen the button.
- 2. Encoding: Press the button "Encode", the buzzer sounds. Then press any button of the remote control, the buzzer stops sounding which means encoding successfully. When use the remote control, the buzzer sounds for 2 seconds.
- 3. Note: When use the remote control, if the buzzer "deep" twice, it means encoding failed, so please repeat above step 2.
- 4. Press button "Automatic" one time, the door will open and close one time.
- A: Lock: The sensor signal is sheilded, but the access control works normally;
- B: Hold-open: The door will open and hold-open until press button C to release;
- C: Reset: Cancel A,B,D setting;
- D: Auto: Both the sensor signal and access control are effective



PARAMETERS ADJUSTMENT

COM safety sensor/close safety sensor/open inter-lock(input) COM inter-lock(output)	+12V 0 V e-lock +12V battery - battery+24V	1.COM acce 2.Oneway sync	
K1.open direction K2.master/slave K3.close force K4.pull / push	DIP PON	ver light Enc	ode on
MIN MAX	opening slow opening angle	closing speed slow closing angle	hold open time

1. Set the DIP switch (K1-K4): after setting, power off and restart.

K1: Set opening direction: power on, the door goes to closing direction, if not, turn K1 up (ON) (turn to opposite);

K2: Set master/slave door: when double-door synchronous, master door turn K2 down (OFF), slave door turn K2 up (ON);

K3: Set closed force: no closed force, turn K3 down (OFF), want closed force, turn K3 up (ON);

K4: Choose pull arm or push arm: pull arm, turn K4 down (OFF), push arm, turn K4 up (ON).

2. User Adjustment:

1. Opening speed	turn clockwise, speed increase
2. Slow opening angle	turn clockwise, angle bigger
3. Closing speed	turn clockwise, speed increase
4. Slow closing angle	turn clockwise, angle bigger
5. Hold-open time	turn clockwise, time longer

Turn anticlockwise, means decrease.