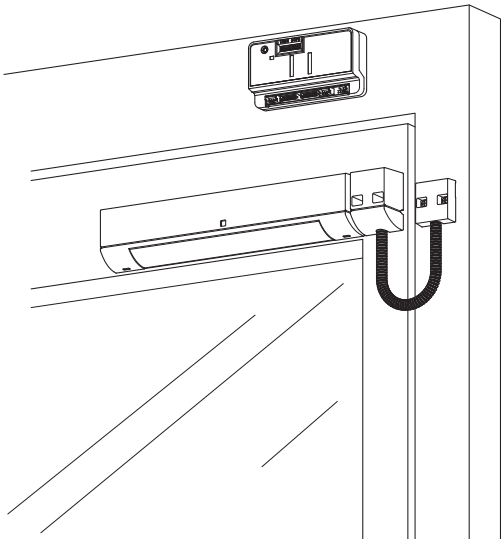
ELITE PRO
ELITE PRO2
ELITE PRO LE

Sensors for full-energy and low-energy automatic swing doors

Packaged combinations of
Swing Door Sensor Head
OA-607 T

Swing Door Sensor Controller
OC-907C T

Instruction Manual



Contents

Manufacturer's statement

Read this operation manual carefully before use, to ensure proper operation of this product.
Failure to read this operation manual may cause improper operation and may result in serious injury or death of a person.
The meanings of the symbols are as follows.

⚠ **WARNING**	Failure to follow the instructions provided with this indication and improper handling may cause injury and/or property damage.
⚠ **CAUTION**	Failure to follow the instructions provided with this indication and improper handling may cause death or serious injury.
NOTE	Special attention is required to the section of this symbol.

1. Set door speeds and verify proper operation of door manufacturer's equipment prior to applying power to the sensor system.
2. Do not install the sensor where it might be directly sprayed with rainwater.
3. Verify proper wiring prior to applying power to the sensor system to prevent damage to equipment.
4. When setting the sensor's area pattern, make sure there is no traffic around the installation site.
5. Do not attempt to rebuild or repair sensor heads or control unit. Contact the address in this manual for replacement products.
6. Only use the sensor as specified in the supplied instructions.
7. Walk test the installation to verify operation is in compliance with all local laws, codes and standards of your country.
8. Upon completion of installation and adjustments, instruct the owner/operator on proper operation of the door and sensor system.
9. Identify any switches/breakers that will place the door out of service when unsafe or improper operation is identified.

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Overview

This product is an activation and safety sensor which uses active infrared reflection to support swing type full energy and low energy doors.
OA-607 T is the sensor head. OC-907C T is the sensor controller.

■ Model

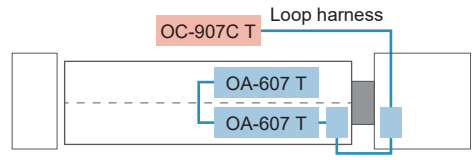
Connect OA-607 T to the sensor controller OC-907C T.
The lineup and names are as below.

Model name	Configuration
ELITE PRO	Package of OC-907C T × 1 and OA-607 T × 2
ELITE PRO2	Package of OC-907C T × 1 and OA-607 T × 4
ELITE PRO LE	Package of OC-907C T × 1 and OA-607 T × 1

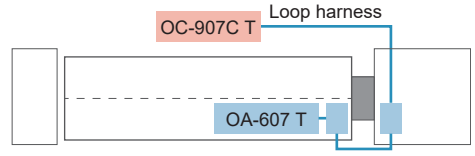
Door type and connection pattern support are as below.

■ For single swing door

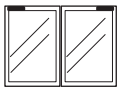
• Full energy doors

Connection pattern	
Model name	ELITE PRO

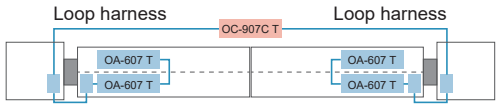
• Low energy doors

Connection pattern	
Model name	ELITE PRO LE

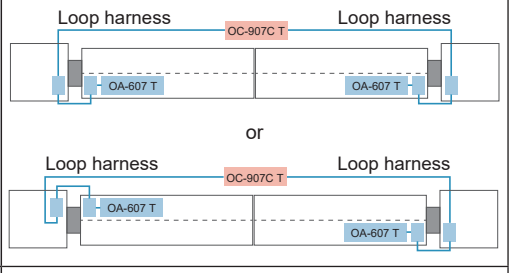
■ For double swing door (including double egress door)



• Full energy doors

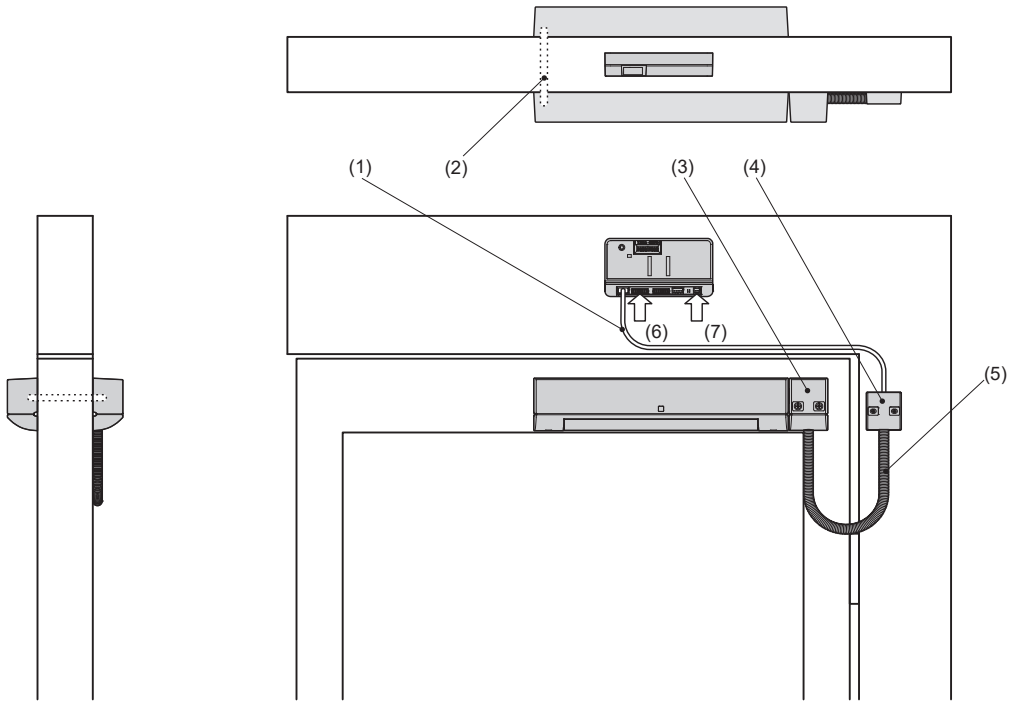
Connection pattern	
Model name	ELITE PRO2

• Low energy doors

Connection pattern	
Model name	ELITE PRO

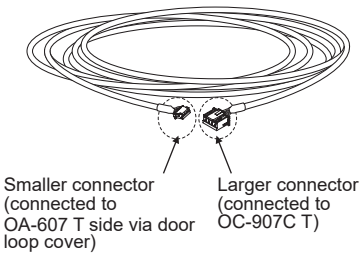
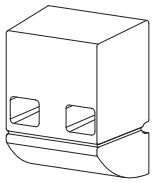
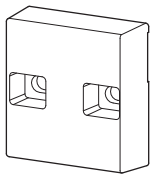
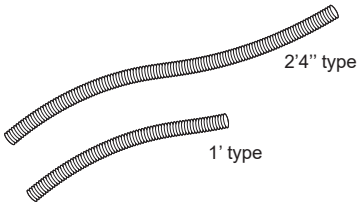
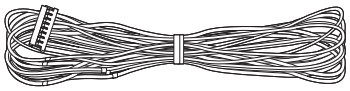
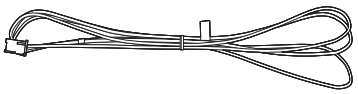
See the right column under Accessories below for each model's standard accessories.

Accessories



■ Standard accessories

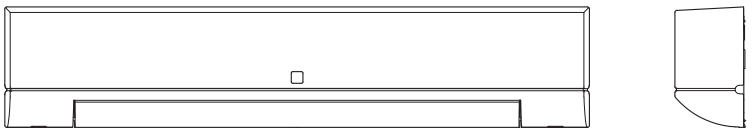
Number differs by package

No.	Part name		Appearance	Description	Number per package		
					ELITE PRO LE	ELITE PRO	ELITE PRO2
(1)	Loop harness (cable between OC-907C T and OA-607 T)			For connecting the sensor controller and OA-607 T (via door loop cover), length 7'3" (2200 mm)	1	2	2
(2)	Pass-through harness between OA-607 T and OA-607 T			For connection between door front/back (inner/outer) OA-607 T, length 210 mm	0	1	2
(3)	For door loop	Door loop cover		Door loop cover through which the loop harness passes. The loop harness is connected from there on the side of OA-607 T.			
(4)		Jamb cover		Installed on the jamb side, this cover conceals the loop harness takeout hole from the jamb side while the harness is run through.	1	2	2
(5)		Corrugated tube		The loop harness runs through this tube between the jamb cover and the door loop cover. The following two lengths are included. • 2'4" type: For door loop with concealed wiring • 1' type: For door loop with exposed wiring • The longer 2'4" type is intended for standard concealed wiring applications. • The shorter 1' type is intended for exposed wiring applications (wiring exposed rather than embedded from the jamb cover within the jamb).			
(6)	I/O harness Signal line between OC-907C T and door controller, 12-pole cable			Signal line for connection between door controller and OC-907C T, length 4'3" (1300 mm)	1	2	2
(7)	Power harness Power line between OC-907C T and door controller, 2-pole cable			Power line for connection between door controller and OC-907C T, length 3' (920 mm) **NOTE** No polarity.	1	1	1
-	Mounting screws	For OA-607 T		Mounting screws for OA-607 T Color: Silver	2	4	8
-		For door loop cover or Jamb cover		Mounting screws for door loop cover and jamb cover Color: Black	4	8	8
-	Mounting templates	For OA-607 T		Templates for OA-607 T mounting holes, door leaf front/back through holes, and door loop cover Set of door leaf (R) and (L)	1	2	2
-		For Jamb cover		Template for jamb cover	1	2	2
-	T-tap connector (male/female)			A voltage line branch connector for confirming whether there is output voltage from the door controller to the connected motor	2	4	4
-	Hook-and-loop fastener			Double-sided tape for mounting OC-907C T	1	1	1

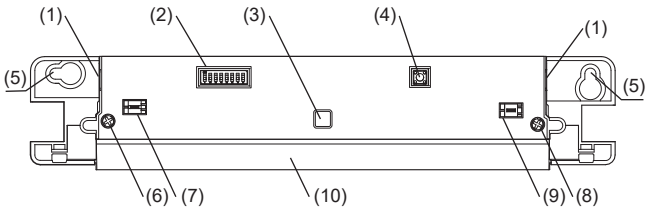
Part names

■ OA-607 T

• With cover

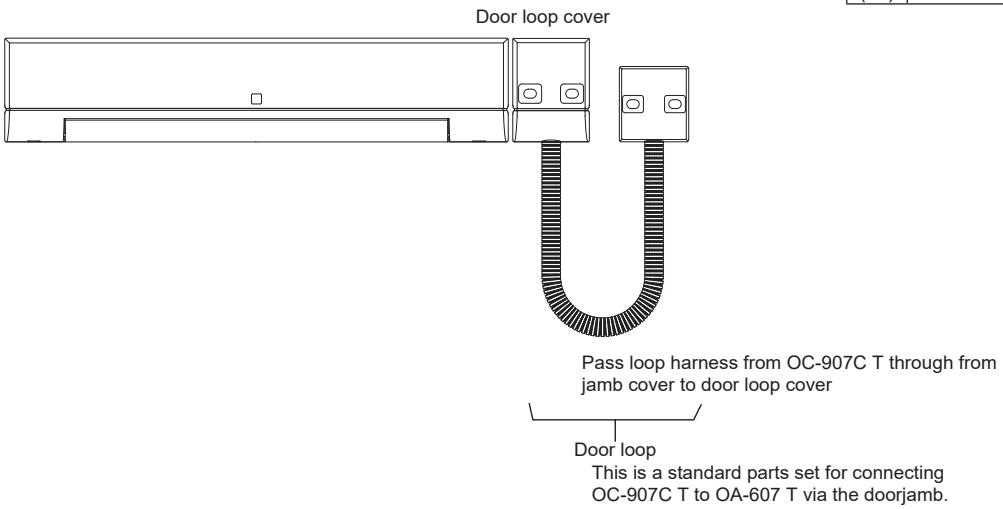


• Without cover

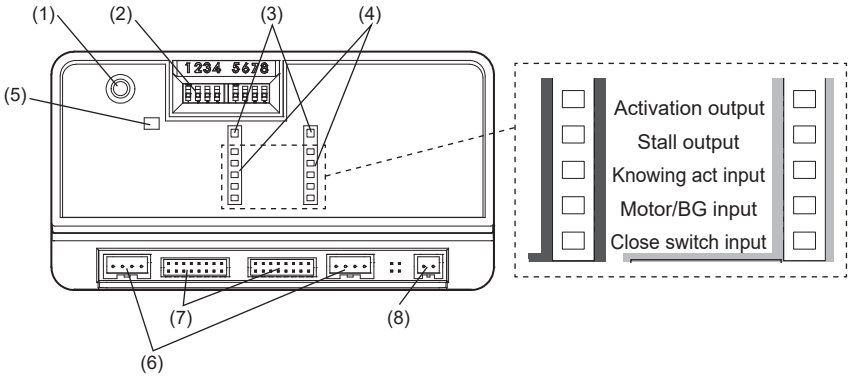


No.	Name
(1)	Connector
(2)	Dipswitches
(3)	Operation indicator
(4)	Function switch
(5)	Mounting holes
(6)	Threshold area angle screw
(7)	Threshold area angle gauge
(8)	Swing area angle screw
(9)	Swing area angle gauge
(10)	Detection window

• When combined with door loop



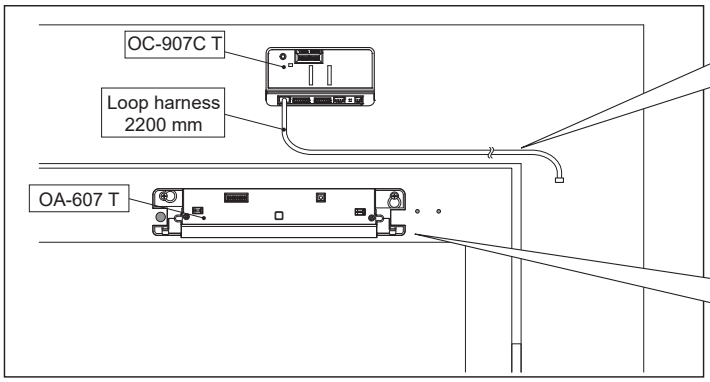
■ OC-907C T part names



No.	Name	
(1)	Reset switch	
(2)	Dipswitches	
(3)	Operation indicator	
(4)	Interface indicator	From the top, knowing act input, activation output, stall output, BodyGuard/motor voltage input, close switch input
(5)	Wi-Fi status indicator	
(6)	Sensor connector	
(7)	Door controller connector	
(8)	Power connector	

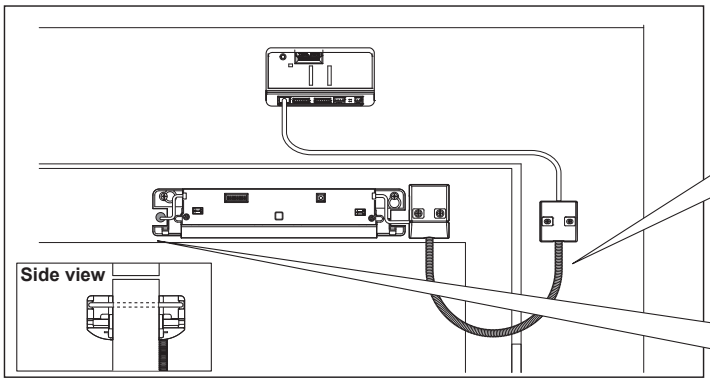
Installation

Install in the order of OC-907C T, OA-607 T, door loop.
Below is a configuration example with the ELITE PRO.



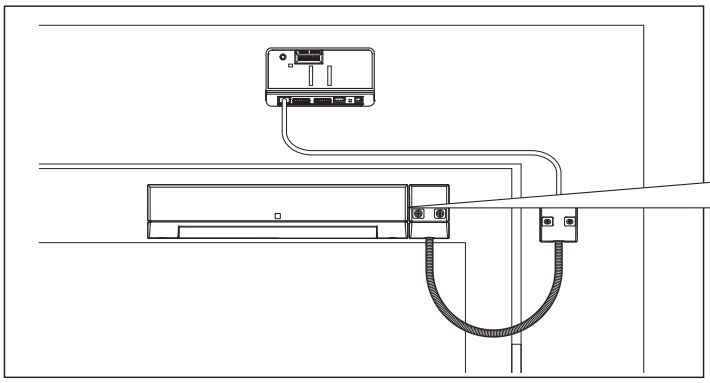
Step 1) Installing OC-907C T and connecting the loop harness
- Connect the loop harness connector to the OC-907C T.

Step 2) Installing OA-607 T
- Drill the following holes
  - OA-607 T mounting holes
  - Door loop cover mounting holes
  - Through hole



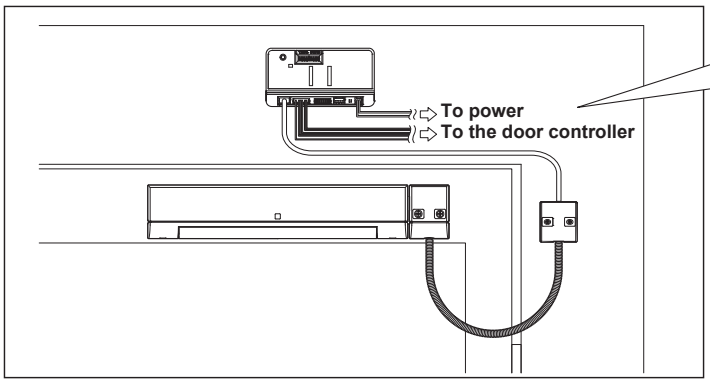
Step 3) Installing the door loop
- Drill the following holes
  - Jamb cover mounting hole
  - Wiring hole (concealed)

Step 4) Connecting the door front/back OA-607 T



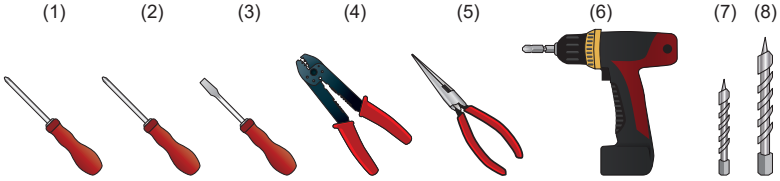
Step 5) Setting the OA-607 T threshold area angle screw and swing area angle screw

Step 6) Fitting the cover on OA-607 T



Step 7) OC-907C T and door controller I/O wiring and OC-907C T power wiring

Prepare the tools required in advance.
Example:



(1) #1 Phillips head screwdriver
(2) #2 Phillips head screwdriver
(3) Flat head screwdriver
(4) Crimping tool
(5) Pliers
(6) Drill
(7) 1/8” drill bit
(8) 3/8” drill bit

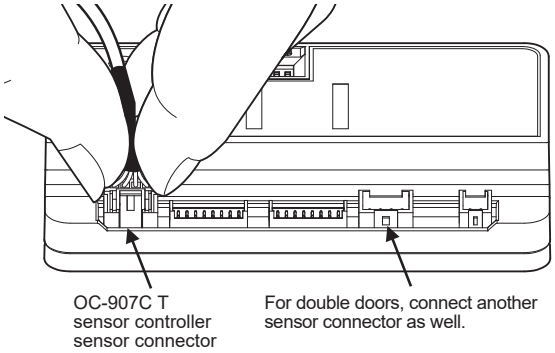
⚠ WARNING

Danger of electric shock
Before starting the procedure, make sure that the power is turned OFF.
When passing the cable through the hole, do not tear the shield otherwise it may cause electric shock or breakdown of the sensor.

■ Step 1) Installing OC-907C T and connecting the loop harness

1 **Using the hook-and-loop fastener included as standard, attach OC-907C T to the transom.**

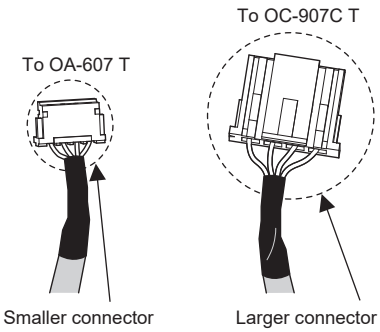
2 **Connect the larger loop harness connector to the OC-907C T sensor connector.**



NOTE

With regard to the sensor connector, for single swing doors the OA-607 T can be connected to either the right or left sensor connector. For double swing doors, the OA-607 T installed on left/right doors can be connected to either the right or left sensor connector (note that left/right must be aligned for the door controller connector).

Loop harness 2200 mm



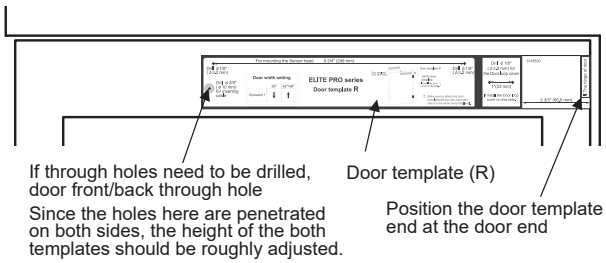
3 **Pass the loop harness through the transom and jamb.**

To do so, drill a 3/8” hole in the transom.
* Later (see step 3-3), a hole will be drilled in the jamb for the loop harness to emerge.

■ Step 2) Installing OA-607 T

1 **Decide in advance which side of the door (swing side or approach side) to install the door loop on.**

2 **Positioning the door template**
Position the template edge at the door edge.

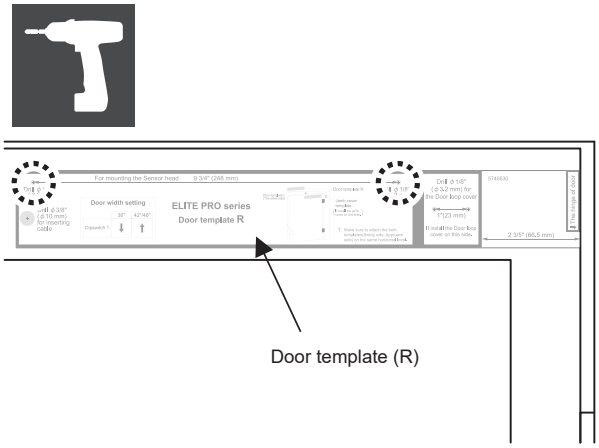


The door front/back through hole position should match on both sides of the door.
Door front/back through hole Since the holes here are penetrated on both sides, the height of the both templates should be roughly adjusted.

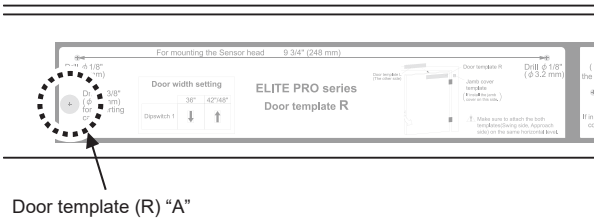
3 **Paste the door template on.**

The template top should be between 6’7” and 8’2” from the ground.
When the template is accurately positioned, align the 3/8” through hole so that it matches on both sides of the door.

4 **Drill 1/8” (3.2 mm) left and right mounting holes for OA-607 T on each side of the door leaf (in accordance with the door template).**

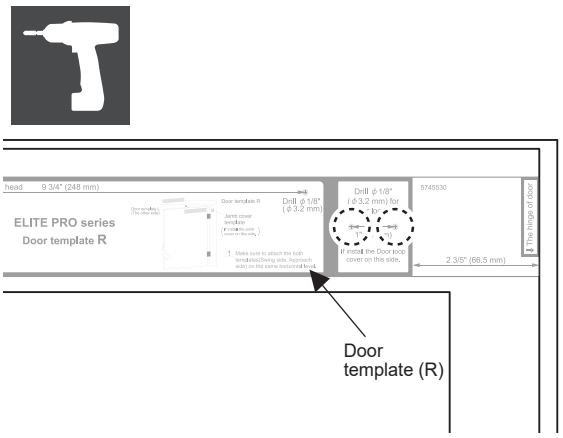


5 **Drill a 3/8” cable door through hole.**

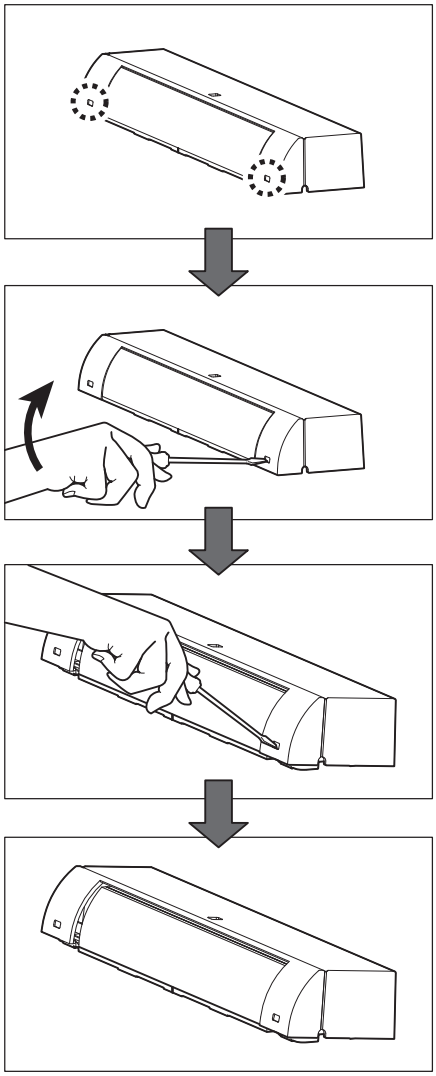


The approach side template hole “A” must be perfectly aligned with the swing side template hole “A”.

6 **(Only on the door loop mounting door side)**
Drill 1/8” (3.2 mm) holes at the door loop cover right and left (in accordance with the door template) (one side of the door leaf only).

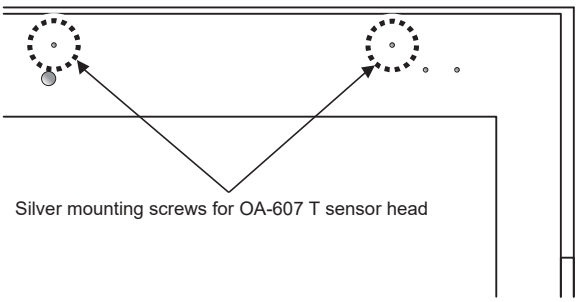


Removing the cover
Insert a flathead screwdriver into the left/right holes on the cover bottom and push up to remove.

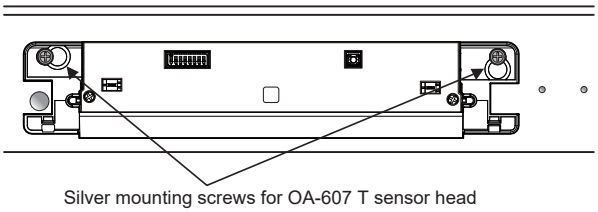


7 **Remove the template.**

8 **With two of the six screws included as standard, mount the Silver mounting screws loosely.**



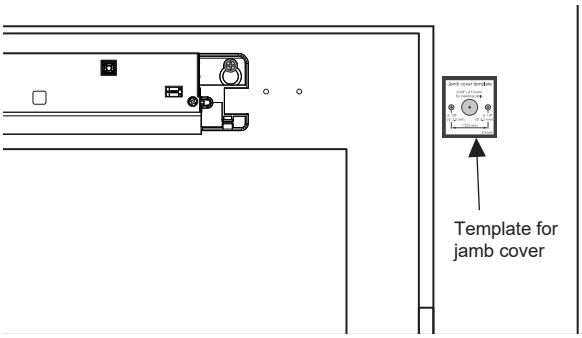
9 **After fixing OA-607 T to the door, tightly fasten the Silver mounting screws.**



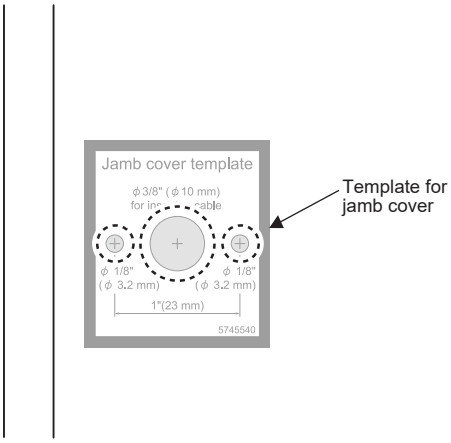
10 **Position OA-607 T on the other side of the door as well.**

■ Step 3) Installing the door loop (only on the door loop mounting door side)

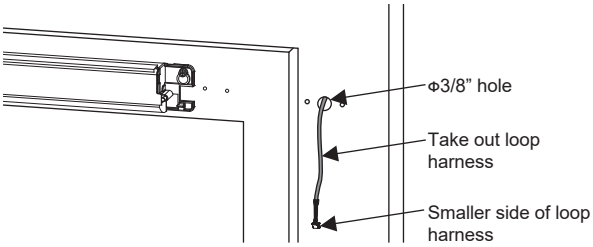
1 **Paste the jamb cover template on the jamb.**



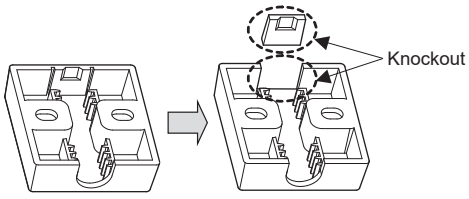
2 **Drill two 1/8” (3.2 mm) mounting holes in the jamb for the jamb cover (in accordance with the template).**
For concealed wiring, drill an additional 3/8” (10 mm) cable exit hole in the middle.
For exposed wiring, the 3/8” holes are not necessary.



3 **For general concealed wiring, bring the smaller loop harness connector through from the jamb 3/8” (10 mm) cable hole.**

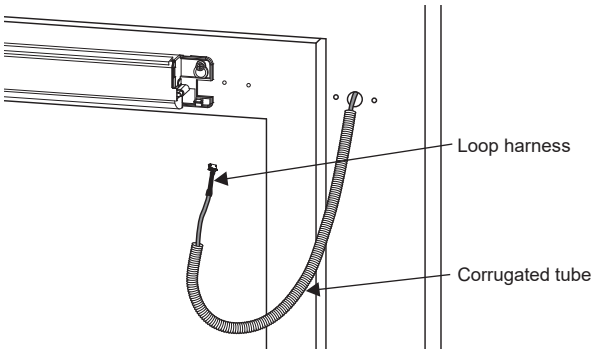


For exposed wiring, use the jamb cover knockout. Wrap the wiring in the longer corrugated tube included as standard.



4 **Pass the loop harness taken out through the longer corrugated tube included as standard.**

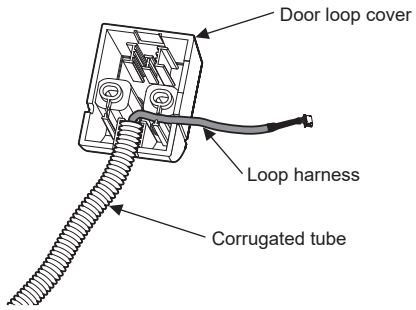
5 **Open and close the door and adjust the protruding loop harness and corrugated tube length.**



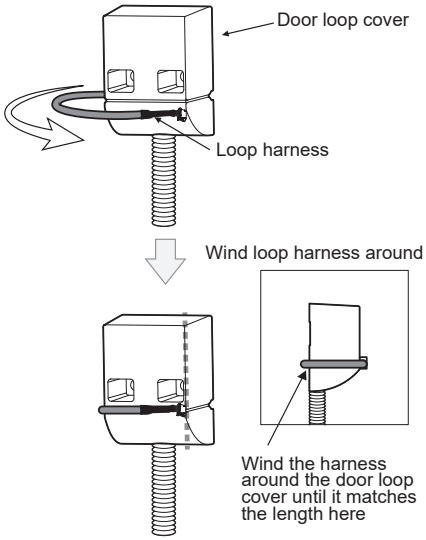
Cut the corrugated tube so that the door loop itself does not enter the detection area, and at the same time put the excess loop harness back into the jamb.

When the door loop is mounted on the swing side, make sure that it will not contact the door panel while the door is moving.

6 **Pass the door loop cover through the corrugated tube along with the loop harness.**



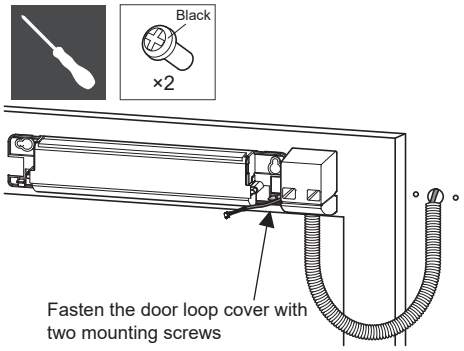
Insert the corrugated tube along the guide of the loop cover.



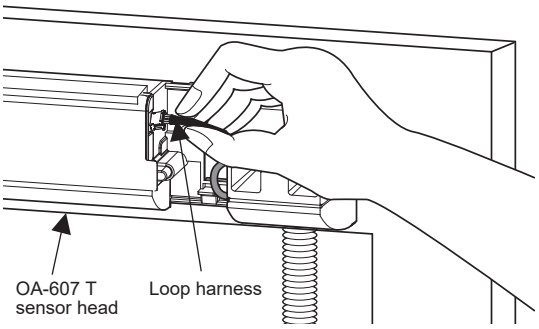
NOTE

As in the figure at right, wrap the loop harness around the door loop cover to adjust its length.

7 **Fasten the door loop cover securely to the door leaf with two Black mounting screws.**

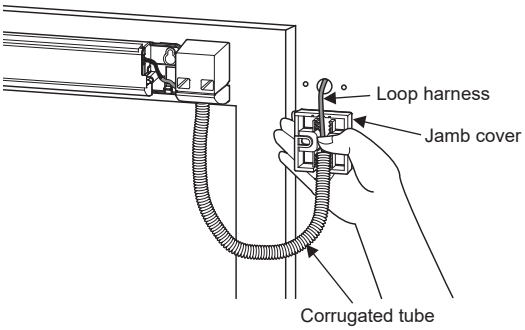


8 **Connect the loop harness to the side of OA-607 T.**



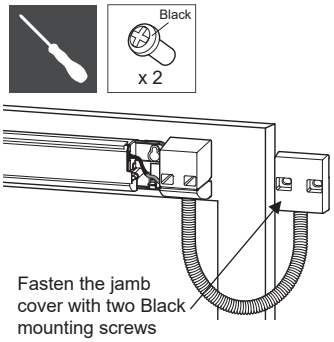
* Insert the connector firmly to the base. If the insertion is loose, a communication error with OA-607 T may result. When a communication error is generated, the sensor operation indicator will blink Orange twice.

9 **After adjusting the protruding loop harness and corrugated tube length, prepare the jamb cover to be mounted to the jamb.**



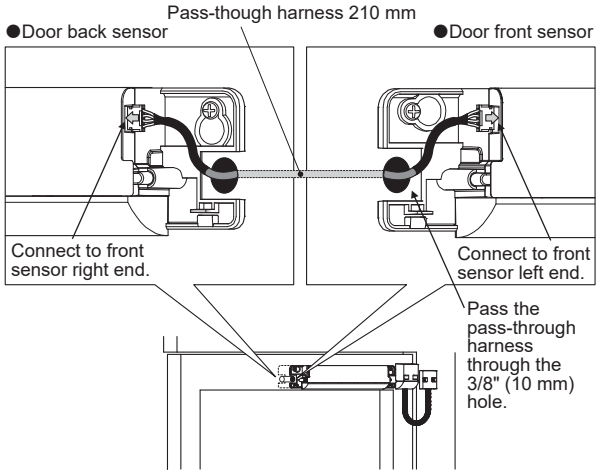
Insert the corrugated tube along the guide of the loop cover.

10 **Fasten the jamb cover securely to the jamb with two Black mounting screws.**



■ Step 4) Connecting the door front/back OA-607 T

1 **Connect the pass through harness to the left end of the door front OA-607 T and pass it through the 3/8" (10 mm) hole.**
Connect the pass through harness to the right end of the door back OA-607 T.



* Insert the connector firmly to the base. If the insertion is loose, a communication error with OA-607 T may result. When a communication error is generated, the sensor operation indicator will blink Orange twice.

■ Step 5) Setting the OA-607 T dipswitches and adjustment of detection angle

Make the following settings for OA-607 T.
- Dipswitches
- Detection angle

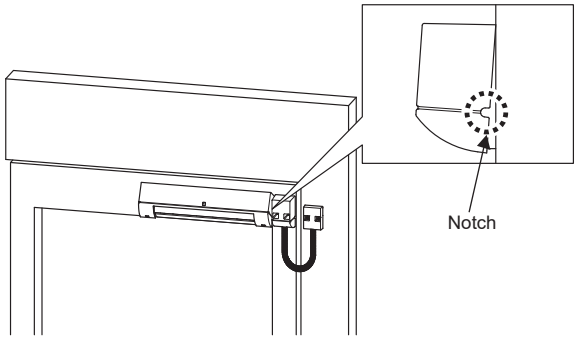
See Function settings.
See Detection area adjustment.

NOTE

Make sure that the detection angle is +5°.
If the detection angle needs to be changed, see Detection area adjustment.

■ Step 6) Fitting the cover on OA-607 T

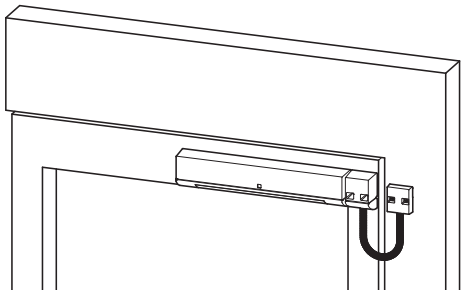
1 **Put the cover on from above and fit it in.**



Pass the loop harness through the notch on the cover side.

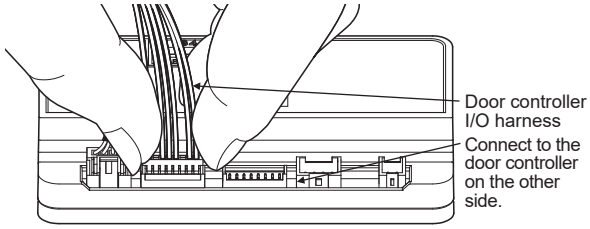
* Be careful not to disconnect the cable with the cover.

2 **Install the remaining sensors similarly.**



■ Step 7) OC-907C T and door controller I/O wiring and OC-907C T power wiring

1 **Connect I/O wiring between the OC-907C T door controller connector and the door controller.**



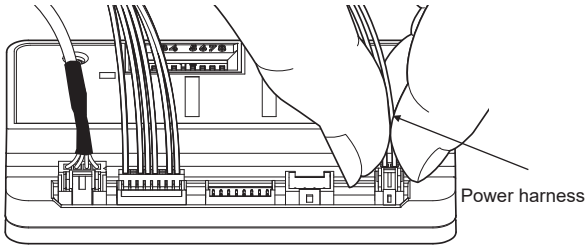
NOTE

With regard to the door controller connector, for single swing doors the door controller can be connected to either the right or left sensor connector. For double swing doors, the door controller installed on left/right doors can be connected to either the right or left connector (note that left/right must be aligned for the sensor connector).

⚠ WARNING

Wire in accordance with the door controller specifications.

2 **Connect power wiring to the OC-907C T power connector.**



NOTE

The power connector is connected to 12 to 30 VDC with a power harness.

Wiring

Wire the OC-907C T.

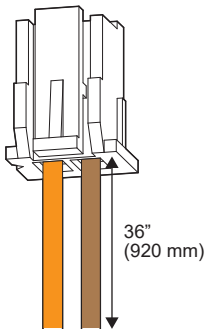
⚠ CAUTION

Do not turn the power on while wiring. Otherwise, electric shock or device damage may result.

■ OC-907C T

Power harness × 1 and door controller interface × 2 (for double door left and right sides) are included.

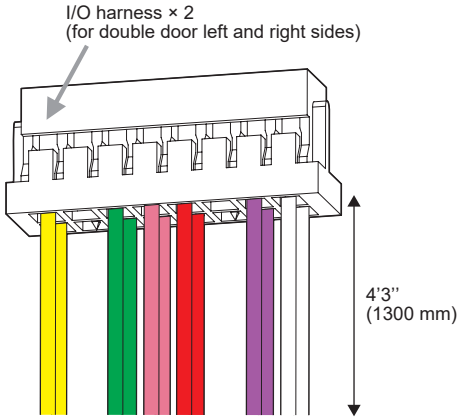
- Power harness



	Name	Color	Specifications
1.	Power (*1)	Orange	12 to 30 VDC
2.	Power (*1)	Brown	

*1: No polarity.

- **I/O harness**

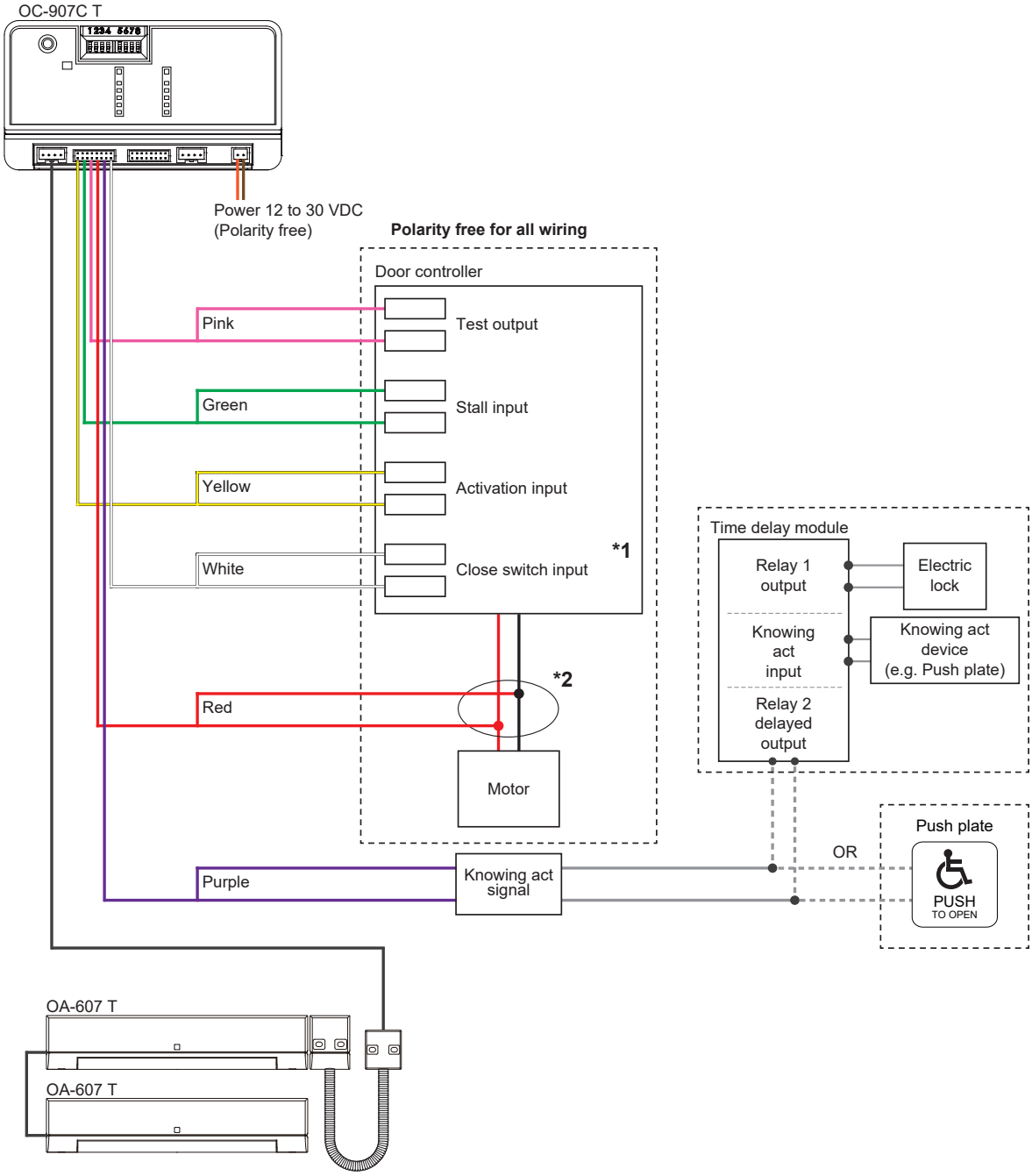


	Name	Color	I/O	Specifications
1.	Activation output	Yellow	Output	Form A relay 50 V, 0.3 A (resistance load) At power OFF: Open At stand-by: Open, at detection: Close
2.	Activation output	Yellow	Output	
3.	None	-	-	-
4.	None	-	-	
5.	Stall output	Green	Output	Form A or B relay 50 V, 0.3 A (resistance load) Set form A or B with the setting app. When setting N.O. At power OFF: Close At stand-by: Open At detection: Close When setting N.C. At power OFF: Close At stand-by: Close At detection: Open
6.	Stall output	Green	Output	
7.	Test input	Pink	Input	Optocoupler voltage 5 to 30 VDC, current 6 mA max. (30 VDC) (no polarity)
8.	Test input	Pink	Input	
9.	BodyGuard input or Motor voltage input	Red	Input	Optocoupler voltage 5 to 160 VDC, 5 to 120 VAC, 60 Hz (no polarity)
10.	BodyGuard input or Motor voltage input	Red	Input	
11.	None	-	-	-
12.	None	-	-	
13.	Knowing act input	Purple	Input	Dry contact input Connect push plate, etc.
14.	Knowing act input	Purple	Input	
15.	Close switch input	White	Input	Dry contact input Connect a device recognizing door fully closed status (a magnet switch, etc.).
16.	Close switch input	White	Input	

■ Wiring door operators from various manufacturers

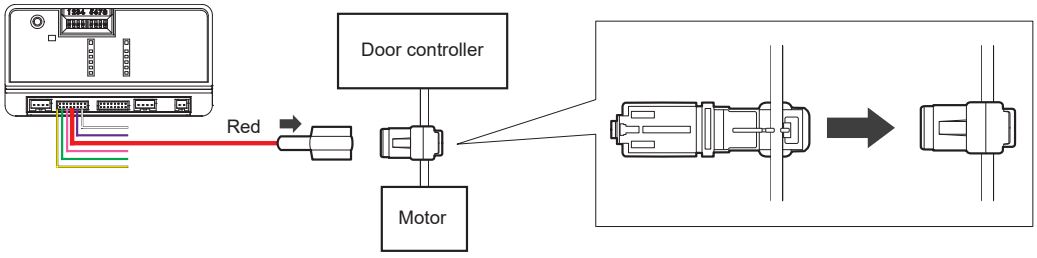
● Wiring (monitored door)

- Wiring example for single swing door

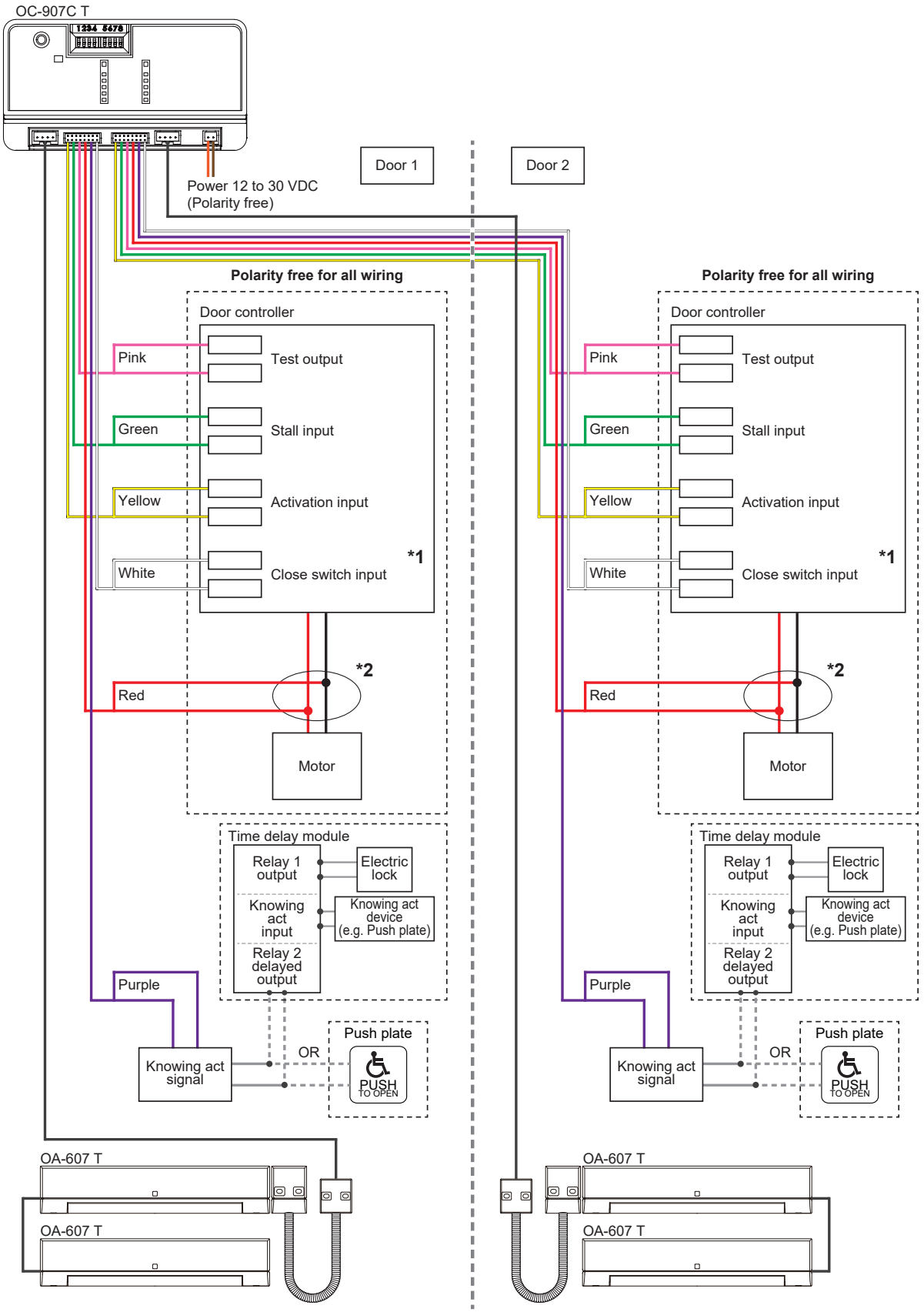


*1 Do not wire for not monitored door.

*2 How to connect Motor/BG input. (Red wire)

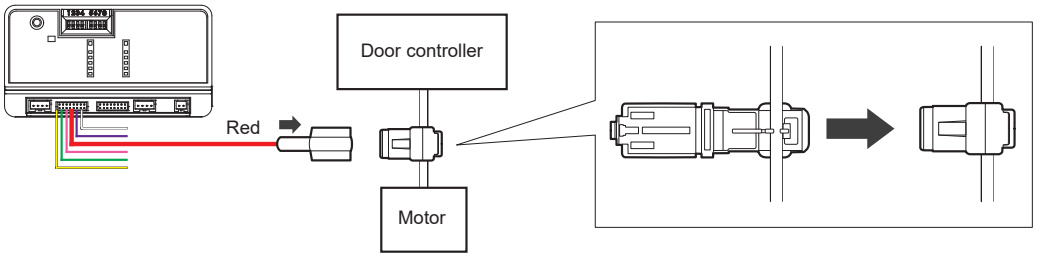


• Wiring example for double swing door

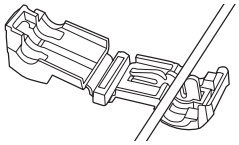
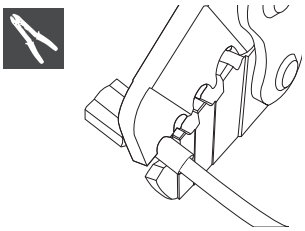
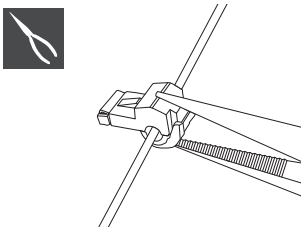
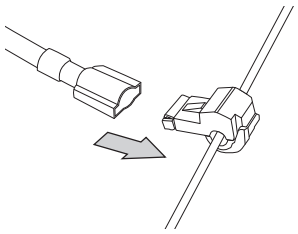
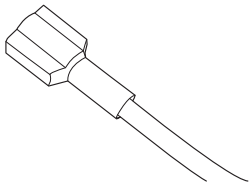


*1 Do not wire for not monitored door.

*2 How to connect Motor/BG input. (Red wire)



● Using the T-tap connector (male/female) included as standard

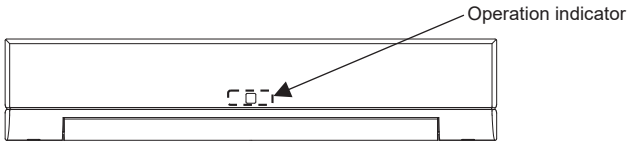
1		Put the wire in the connector.	4		Insert the wire into the terminal and crimp it down to secure the wire.
2		Use the pliers to fold the connector over the wire.	5		Plug the terminal directly into the connector.
3		Squeeze the connector together until it locks.			

Power on

Turn on power of 12 to 30 VDC to the OC-907C T.

Indicator confirmation

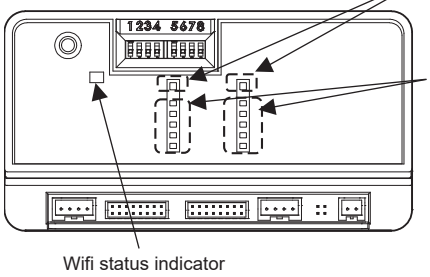
■ OA-607 T indicator



● Operation indicator

Procedures	Color	Indicator diagram	Status	Meaning
Before initial setup	Orange		Blinking (0.5 s intervals)	Configuration error within setting error
During initial setup	Orange		Blinking fast (0.1 s intervals)	Auto configuration start
	Green		Solid	Auto configuration normally completed (stand-by)
	Orange		Blinking (0.5 s intervals)	Auto configuration abnormally completed
During auto area learn	See Automatic settings and auto area learn.			
During normal operation	Green		Solid	Stand-by
	Red		Blinking fast (0.1 s intervals)	1st row detection
	Red		Solid	2nd/3rd row detection
Error or warning generated	See Troubleshooting.			
Sensor setting via Wi-Fi	See Function settings.			

■ OC-907C T indicator



Operation indicators

NOTE

Left corresponds to left side connector and right to right side connector.

Interface indicators

- ☐ Activation output indicator
- ☐ Stall output indicator
- ☐ Motor voltage/Bodyguard input indicator
- ☐ Knowing Act input indicator
- ☐ Close switch input indicator

NOTE

Left row corresponds to left side connector and right row to right side connector.

● Operation indicator

Procedures	Color	Indicator diagram	Status	Meaning
Before initial setup	Orange		Blinking (0.5 s intervals)	Configuration error within setting error
During initial setup	Orange		Blinking fast (0.1 s intervals)	Auto configuration start
	Green		Solid	Auto configuration normally completed
	Orange		Blinking (0.5 s intervals)	Auto configuration abnormally completed
During auto area learn	See Automatic settings and auto area learn.			
During normal operation	Green		Solid	Door fully closed
	Orange		Solid	Door closing
	Red		Solid	Door fully closed
	Red		Blinking fast (0.1 s intervals)	Door opening
Error or warning generated	See Troubleshooting.			
Sensor setting via Wi-Fi	See Function settings.			

● Interface indicator

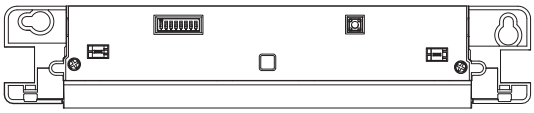
Indicator name	Color	Indicator diagram	Status
Activation output	Solid Orange		Outputting
Stall output	Solid Green		Outputting
Motor voltage/Body-Guard input	Solid Red		Door fully closed
Knowing act input	Solid Yellow		Inputting
Close switch input	Solid White		Door fully closed
Wi-Fi/BLE status	Solid Blue		Wi-Fi ON

Function settings

Set the OA-607 T and OC-907C T.
For setting, use the dipswitches for each device or the setting app. For more detailed settings, use the setting app.

■ OA-607 T

For setting OA-607 T, use the dipswitch or the setting app.



● Dipswitch settings

☐ (thick-bordered box): Factory default settings

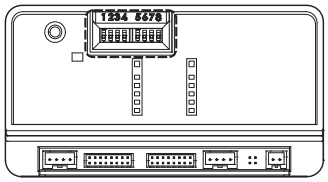
SW	Function	Setting			
1	Door width	↑	42”/48”	↓	36”
2	Not used			↓	OFF
3	Sensitivity	↑	Low	↓	Normal
4	Immunity	↑	ON	↓	OFF
5	Not used			↓	OFF
6					
7					
8					

NOTE

1: Dipswitch settings can be switched with conductivity status.
2: When the sensor controller dipswitch #1 (priority setting) is OFF (dipswitch priority), #1 to #8 above are enabled.
3: For detailed setting, set the sensor controller dipswitch #1 (priority setting) to ON (setting app priority) and the sensor controller dipswitch #2 (Wi-Fi setting) to ON (using Wi-Fi communication), and set from the setting app.

■ OC-907C T

For setting OC-907C T, use the dipswitch or the setting app.



Reset switch
2 s press: Reset password (after 2 s, the operation indicator will turn off and return to normal operation).
10 s press: Reset settings to factory defaults (after 10 s, the operation indicator will turn off and return to normal operation).

● Dipswitch settings

☐ (thick-bordered box): Factory default settings

SW	Function	Setting			
1	Setting priority	↑	App	↓	Dipsw
2	Wi-Fi	↑	ON	↓	OFF
3	Knowing act	↑	Enable	↓	Disable
4	Test output (Activation)	↑	Enable	↓	Disable
5	Mandatory			↓	OFF
6					
7					
8					

NOTE

1: Dipswitch settings can be switched with conductivity status.
2: When the sensor controller dipswitch #1 (priority setting) is OFF (dipswitch priority), #2 to #8 above are enabled.
3: For detailed setting, set this dipswitch #1 (priority setting) to ON (setting app priority) and dipswitch #2 (Wi-Fi setting) to ON (using Wi-Fi communication), and set from the setting app.

■ Detailed settings

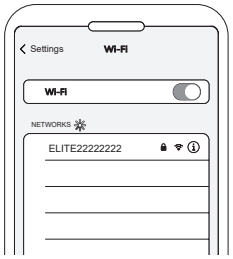
Detailed settings can be done from a smart device browser.
Set the sensor controller SW1 (priority setting) to ON (setting app priority) and the SW2 (Wi-Fi setting) to OFF (using Wi-Fi communication) (factory default).

1 From the Wi-Fi setting screen, find the Wi-Fi name (ELITEXXXXXXXX) and connect.

NOTE

XXXXXXXX is the serial number of the OC-907C T.
The initial password is 12345678. The password must be changed at initial connection.

For iPhone



For Android

2 After connection, read the code below or connect to http://192.168.3.3/ via the Web browser. This enables access to the setting screen.

3 The indicator status is as below.

• OA-607 T operation indicator

Color	Status	Indicator diagram	Meaning
Green/Blue	Blinking among colors (0.5 s intervals)		Sensor setting via Wi-Fi

• OC-907C T operation indicator

Color	Status	Indicator diagram	Meaning
Green/Blue	Blinking among colors (0.5 s intervals)		Sensor setting via Wi-Fi

Screenshots are under development. Actual specifications may vary.

Setting items

Items	Value	Dipswitch setting possible	
		OA-607 T dipswitch	OC-907C T dipswitch
1st row sensitivity	0 (Low) / 1 / 2 / 3 / 4 (Middle) / 5 / 6 / 7 (High)	○	-
2nd row sensitivity	0 (Low) / 1 / 2 / 3 / 4 (Middle) / 5 / 6 / 7 (High)		
3rd row sensitivity	0 (Low) / 1 / 2 / 3 / 4 (Middle) / 5 / 6 / 7 (High)		
Immunity	ON / OFF	○	
Area setting	Independently adjustable	None	
Sensor side	Approach side / Swing side	None	
Hinge side	Right hand / Left hand	None	
Snow mode	ON / OFF	None	
Presence timer	15 s / 30 s / 60 s / 120 s	None	
Operation indicator	ON / OFF / Stand-by OFF	None	
Knowing act	Enable / Disable	-	○
Test output (Activate)	Enable / Disable		○
Wi-Fi off timer	10 min / 30min / 1h / 3h / ∞		None
Stall relay contact	N.O. / N.C.		None
Stall output hold time	0.5 s to 10 s (0.5 s step)		None
Test input	Enable / Disable		None
Test input polarity	High / Low		None

Detection area adjustment

The first row from the door (row in diagonal line) is called the threshold area and the 2nd and 3rd rows the swing area; the depth angle for each can be set separately.

With the angle adjustment screws for the threshold and swing areas on the OA-607 T front, each area's depth angle (angle seen from side) can be independently adjusted between -5 and +5° (respectively SHALLOW and DEEP).

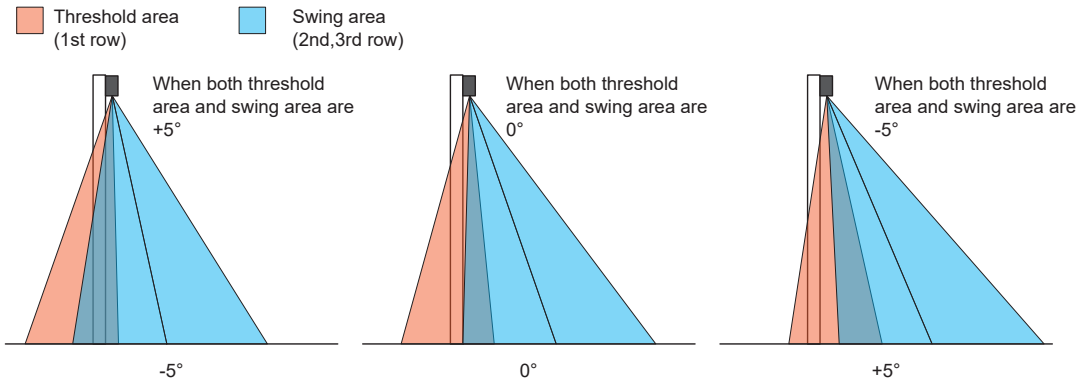
NOTE

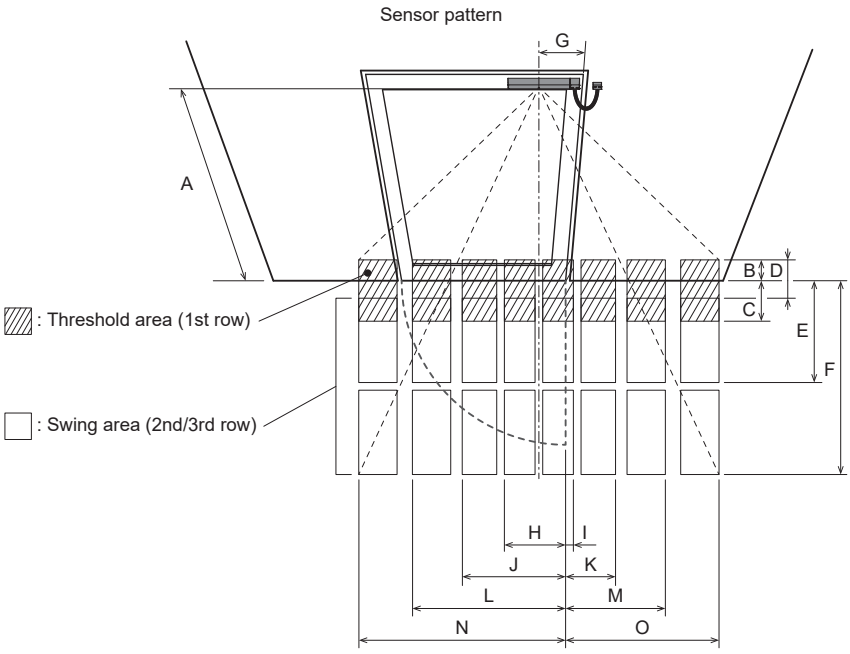
Recommended detection angle setting: +5°

⚠ CAUTION

Adjust the areas in accordance with ANSI 156.10.

Side view





Value dimensions for each door angle [feet (mm)]

Door angle	Door fully closed		30° Open		45° Open		60° Open		Door fully opened	
A	6'7" (2000)	7'6" (2300)								
B	7" (186)	8" (214)								
C	1'2" (360)	1'4" (414)								
D	6" (152)	7" (175)								
E	2'9" (840)	3'2" (966)								
F	5'5" (1650)	6'2" (1898)								
G	10" (252)									
H	1'11" (593)	2'1" (645)								
I	3" (89)	6" (141)								
J	3' (911)	3'4" (1010)								
K	1'4" (407)	1'8" (506)								
L	4'2" (1275)	4'8" (1428)								
M	2'6" (770)	3' (924)								
N	5'6" (1684)	6'3" (1900)								
O	3'10" (1180)	4'7" (1395)								

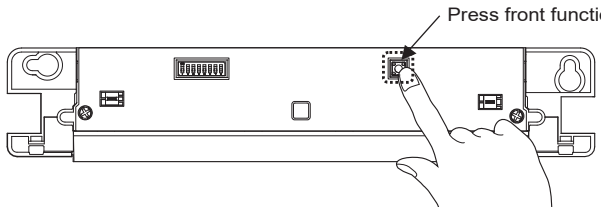
Automatic settings and auto area learn

Execute the following with the function switch on the OA-607 T front or with the setting app.
Auto configuration:
ELITE PRO has an advance learning system that can recognize the following system configuration and status and set the related parameters properly and automatically for easy and quick settings.
After parameter settings, it automatically starts auto area learn to setup the area for each OA sensor heads to complete auto configuration.

- Test input (Enable or Disable)
- Test input polarity (High or Low)
- Stall output (N.O. or N.C.)
- Sensor side (Approach or Swing side)
- Hinge side (Right Hand or Left hand)

Auto area learn:
OA has a learning system that check the condition of floor surface for door opening angles.

■ OA-607 T function switch operation



Check in advance that the door is fully closed.

⚠ WARNING

The door opens and closes automatically, so move away from it after starting.

Procedure	Conditions for operation	Operation	Result	
			Operation	Indicator
				OA-607 T operation indicator / OC-907C T operation indicator
During initial setup	Door fully closed	Hold down the front function switch (more than 2 s)	Auto configuration start	Blinking fast in Orange (0.1 s intervals) = Auto configuration start
			Execute auto configuration The door will open and close two or three times automatically (*1).	Solid Green after normal completion = Setup complete (stand-by)
			Upon failure, after checking the wiring, execute auto configuration again. If there is no problem with the wiring, manual setting from a smart device is also possible. After installation is complete, leave the power on for at least 30 minutes in order to achieve stable operation during use.	Upon failure: Blinking Orange (0.5 s intervals) (= Setting error)
When adjusting the angle or changing the settings after auto configuration	None in particular	Briefly press the front function switch (more than 0.3 s, no more than 2 s) once	Start auto area learn only	Blinking fast in Yellow (0.1 s intervals) = Start auto area learn only
			Execute auto area learn only	Solid Green after normal completion = Setup complete (stand-by)
			Other	If the door is prevented from opening by an obstacle or the power is cut just after auto area learn is complete: blinking alternately Yellow and Red (0.1 s intervals) = Incomplete

*1: Twice or three times in accordance with the door controller signal input setting (combination of stall signal and test signal, etc.) during auto configuration.

NOTE

Before executing auto configuration, the connection between the door controller and the OC-907C T sensor controller must be complete. Auto configuration must be started with the door fully closed. Otherwise, a setting error will be generated.

■ Smart device operation

Auto configuration and auto area learn can be executed from the setting app.

Walk test

1. **The approach side sensor detects entrance into the area while the door is fully closed, fully open, or opening/closing and checks that the door is open or will open again.**
2. **The swing side sensor detects entrance into the area while the door is fully closed or opening and checks that the door stops or creeps.**

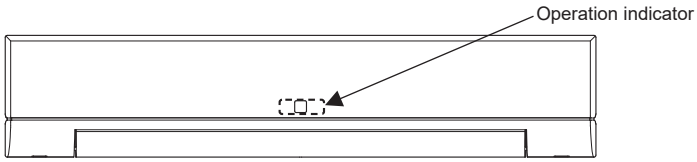
Upon failure, confirm the following.
- Detection area (→ see Detection area adjustment)
- Door controller wiring (→ see Wiring)
- Function settings (dipswitches or smart device) (→ see Function settings)
- Background learning again (→ see Automatic settings)

Inform building owner/operator of the following items

1. **When turning the power ON, stay clear of detection area for a minimum of 10 s, and then conduct a walk test in detection area to ensure proper operation.**
2. **Always keep the detection window clean. If dirty, wipe the window with a damp cloth (do not use any cleaner or solvent).**
3. **Do not wash the sensor with water.**
4. **Do not disassemble, rebuild or repair the sensor yourself, otherwise electric shock may occur.**
5. **Contact your installer or the sales engineer if you want to change the settings.**
6. **Do not place an object that moves or emits light in the detection area. (ex. plant, illumination etc.)**
7. **Do not paint the detection window.**

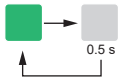
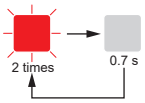
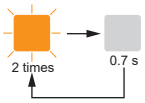
Troubleshooting

■ Indicators in the event of trouble



● OA-607 T operation indicator

Procedures	Color	Indicator diagram	Status	When installed on approach side	When installed on swing side
Before initial setup	Orange		Blinking (0.5 s intervals)	Configuration error within setting error	
During initial setup	Orange		Blinking (0.5 s intervals)	Auto configuration abnormally completed	
During auto area learn	Red/Yellow		Blinking among colors (0.1 s intervals)	Auto incomplete When auto area learn is incomplete at activation, or has failed for some reason	

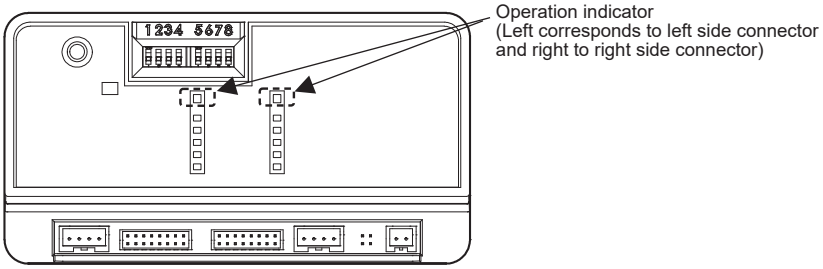
Procedures	Color	Indicator diagram	Status	When installed on approach side	When installed on swing side
Error or warning generated	Green		Blinking (0.5 s intervals)	Signal saturation (*1)	
			Solid/off (0.5 s only)	ANSI 500 ms OFF When solid Green during stand-by, the indicator will go off for 0.5 s when the door controller test signal is input, and then light up Green again	
	Green		Blinking fast (0.1 s intervals)	Sensor failure (self-monitoring) or sensitivity too low	
	Orange		Blinking (0.5 s intervals)	Setting error (includes auto configuration incomplete (at initial startup))	
	Orange/Green		Blinking among colors (0.5 s intervals)	Position error (includes shift to auto configuration when door is not fully closed)	
	Red		Blinking twice (0.1 s interval) (0.7 s unlit)	Wiring error (*2)	
	Orange		Blinking twice (0.1 s interval) (0.7 s unlit)	Communication error (*3)	

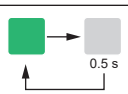
*1: Includes mounting position too low and wall or other object in detection range. The OA-607 T threshold value angle can be set at depth +5° or less.

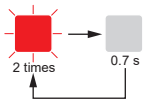
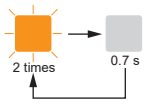
*2: One of the wiring errors below on the sensor controller side: Activation output (Yellow wire), stall output (Green wire), test input (Pink wire), BodyGuard or motor voltage input (Red wire), close switch input (White wire).

*3: Connected with sensor cable, but communication is unstable. Sensor cable may be disconnected or connector insertion may be loose.

● OC-907C T operation indicator



Procedures	Color	Indicator diagram	Status	Meaning
Before initial setup	Orange		Blinking (0.5 s intervals)	Configuration error within setting error
During initial setup	Orange		Blinking (0.5 s intervals)	Auto configuration abnormally completed
During background learning	Red/Yellow		Blinking among colors (0.1 s intervals)	Auto area learn Incomplete When auto area learn is incomplete at activation, or has failed for some reason
Error or warning generated	Green		Blinking (0.5 s intervals)	Signal saturation
			Solid/off (0.5 s only)	When solid Green during stand-by, the indicator will go off for 0.5 s when the door controller test signal is input, and then light up Green again
	Green		Blinking fast (0.1 s intervals)	Sensor failure (self-monitoring) or sensitivity too low
	Orange		Blinking (0.5 s intervals)	Setting error (includes auto configuration incomplete (at initial startup))
	Orange/Green		Blinking among colors (0.5 s intervals)	Position error (includes shift to auto configuration when door is not fully closed)

Procedures	Color	Indicator diagram	Status	Meaning
Error or warning generated	Red		Blinking twice (0.1 s interval) (0.7 s unlit)	Wiring error One of the wiring errors below with OC-907C T. Activation output (Yellow wire), stall output (Green wire), test input (Pink wire), BodyGuard or motor voltage input (Red wire), close switch input (White wire). Displayed if the necessary wiring for auto configuration has been judged incomplete, or if the wiring is temporarily disconnected during operation.
	Orange		Blinking twice (0.1 s interval) (0.7 s unlit)	Communication error

■ List of symptoms/causes/countermeasures

Symptom		Possible cause	Possible countermeasures
Auto configuration will not start	OC-907C T indicators are not solid	Improper power supply	Correct power problem.
		Power harness connection is unsuitable	Connect the power harness correctly.
	OC-907C T indicators blinking Orange twice (communication error) and no indicators solid on OA-607 T	Loop harness connection is unsuitable	Connect the loop harness correctly.
		Pass through harness connection is unsuitable	Connect the pass through harness correctly.
		Loop harness or pass through harness is disconnected	Replace as necessary.
	OC-907C T indicators blinking Orange twice	More than two OA-607 T have been connected per door	Refer to Wiring and connect OA-607 T suitably.
	OC-907C T/OA-607 T indicators blinking Blue	OC-907C T dipswitch setting is incorrect	Check OC-907C T dipswitch setting.
Auto configuration failure	After executing auto configuration, OC-907C T indicator blinks Orange twice (wiring error)	Activation output (Yellow wire) is not connected correctly	Refer to Wiring and connect activation output (Yellow wire) suitably.
		Stall output (Green wire) is not connected correctly	Refer to Wiring and connect stall output (Green wire) suitably.
	After executing auto configuration, OC-907C T indicator blinks Orange (0.5 s intervals) (setting error)	Automatic recognition (door angle information, what configuration and position sensors are installed in) fails because door does not operate smoothly	Set installation positions individually with the setting app.
Intermittent recycle (ghosting) or intermittent stalling		After initial setup door ghosts several times on first activation	Happens in 15% of installations; stopping after first activation means system is OK.
		OA-607 T sensor head not mounted flush on door	Head may be resting on top of door loop cover; reposition head flush on panel.
		Improper threshold or swing area angle adjustment	Set threshold and swing area angles at +5 degrees (Deep).
		Motor voltage input, BodyGuard input, or close switch input is unsuitable	Refer to Wiring and connect motor voltage input, BodyGuard input, and close switch input suitably.
		Stalling caused by traffic just outside of swing path or objects near guide rails	Adjust the detection area via area depth in the setting app.
		OA-607 T dipswitch door width setting or setting app area setting is unsuitable	Verify proper settings.
		Objects that move or emit light in the detection area	Remove the objects.
		The detection area overlaps with that of another sensor	Change the OA-607 T frequency setting with the setting app.
		Water droplets on the detection window	Install in a location protected from water droplets.
		Sensitivity is too high	Set the sensitivity lower with the setting app.
		Raining or snowing	Enable immunity or snow mode from the setting app.
No activation and/or no reactivation on closing cycle	OA-607 T sensor detects (solid or blinking Red indicator) (flashing: 1st row detection, solid: 2nd/3rd detection) but door does not open	Improper connection of OC-907C T (Yellow wires) to door controller or ON/OFF/hold switch	Verify proper connection and output of activation output (Yellow wires).
		On Knowing act applications poor or improper connection of knowing act input (Purple wire) from OC-907C T to the activation device	Verify proper connection.
		Auto configuration failure (configuration recognition failure) or incorrect setting	Check the suitable settings with the setting app.
	OA-607 T no detection (indicator solid Green) (stand-by)	Sensitivity is too low	Set the sensitivity higher with the setting app.
		OA-607 T detection window is dirty	Wipe the detection window with a damp cloth.
	OA-607 T indicator is blinking Orange (configuration error within setting error)	Auto configuration is incomplete	Execute auto configuration (hold down function switch for 2 s or more).
	OA-607 T indicators are blinking Red and Yellow alternately (incomplete)	Power went off immediately after auto area learn completion (before auto-saving the settings)	Execute auto area learn (press function switch briefly).
		Door failed to open due to obstacle during auto area learn	Remove the obstacle and then execute auto area learn (press function switch briefly).

Symptom		Possible cause	Possible countermeasures
No safety on swing side when door fully closed/ When a person is standing in the door opening direction, their presence should be detected and the door should stall, but instead it opens	OA-607 T sensor detects (solid or blinking Red indicator) (blinking: 1st row detection, solid: 2nd/3rd detection) but door opens anyway	Improper connection of stall output (Blue wires) from OC-907C T to activation device	Verify proper connection of stall output (Blue wires).
	OA-607 T no detection (indicator solid Green) (stand-by)	OA-607 T dipswitch door width setting or setting app area setting is unsuitable	Verify proper settings.
Door remains open		On Knowing act applications poor or improper connection of knowing act input (Purple wire) from OC-907C T to activation device	Verify proper connection.
		Improper wiring of door equipment ON/ OFF/hold switch	Verify proper wiring of ON/OFF/hold switch.
		Auto configuration recognition failure or incorrect setting	Check the suitable settings with the setting app.
Indicators do not go to stand-by	OC-907C T indicators blinking Orange twice (communication error)	More than two OA-607 T have been connected per door	Refer to Wiring and connect OA-607 T suitably.
		Loop harness or pass through harness is disconnected	Replace as necessary.
	OC-907C T/OA-607 T indicators blinking Blue	OC-907C T dipswitch setting is incorrect	Check OC-907C T dipswitch setting.
	OA-607 T indicator is blinking Orange (setting error)	Auto configuration is incomplete	Execute auto configuration (hold down function switch for 2 s or more).
	OA-607 T indicators are blinking Red and Yellow alternately	Power went off immediately after auto area learn completion (before auto-saving the settings)	Execute auto area learn (press function switch briefly).
		Door failed to open due to obstacle during auto area learn	Remove the obstacle and then execute auto area learn (press function switch briefly).
	OA-607 T indicator is blinking Green slowly (0.5 s intervals) (signal saturation)	Signal saturation	Remove highly reflective objects from the detection area, lower the sensitivity, or change the area depth angle for AIR area.
	Blinking fast in Green (sensor failure (self-monitoring) or sensitivity too low)	Sensor failure	Contact your installer or service engineer.
		Sensitivity is too low	Set the sensitivity higher with the setting app.

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E-mail: oss-distribute@optex.co.jp

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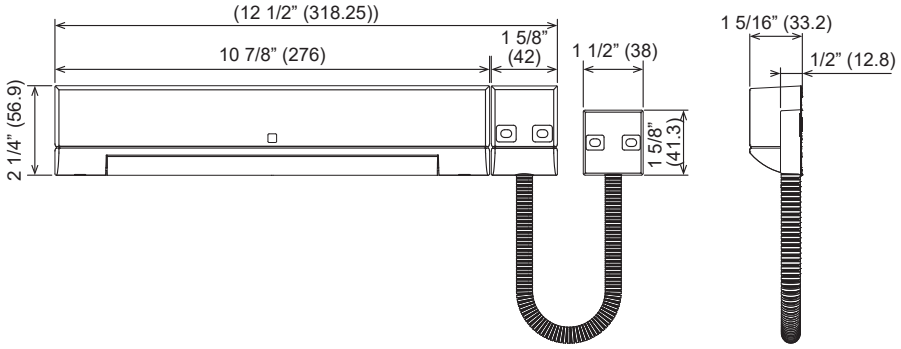
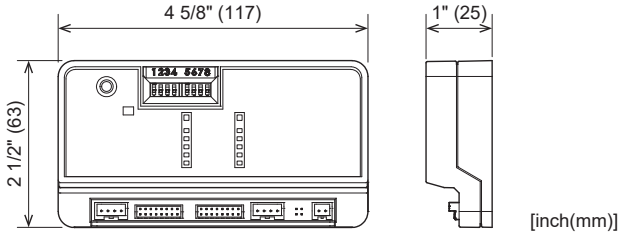
Dimensions

■ OA-607 T and loop harness



[inch(mm)]

■ OC-907C T



[inch(mm)]

Specifications

Door in use	Swing type automatic doors
Product lineup	ELITE PRO (OA-607 T × 2, OC-907C T × 1): For Double Low Energy or Single Full Energy ELITE PRO2 (OA-607 T × 4, OC-907C T × 1): For Double Full Energy ELITE PRO LE (OA-607 T × 1, OC-907C T × 1): For Single Low Energy
Usage location	OA-607 T: Indoors, semi-outdoors OC-907C T: Indoors
Mounting location	OA-607 T: Door mount OC-907C T: Inside transom
Supply voltage	12 to 30 VDC
Power consumption	OA-607 T: 1.0 W or less OC-907C T: 3.0 W or less OC × 1 + OA × 4: 5.5 W or less
Detection method	Active infrared reflection (Presence detection type)
Detection area	Threshold area: 8 lines × 1 row Swing area: 8 lines × 2 and 3 rows
Detection angle adjustments	Threshold area: -5 to +5° (inside and outside) Swing area: ±5° (inside and outside)
Operation indicator	See Indicator confirmation.
Settings	Browser setting tool Dipswitches
Wi-Fi	802.11 b/g/n
Input specifications	Test input: Optocoupler voltage 5 to 30 VDC, current 6 mA max. (30 VDC), no polarity BodyGuard input or motor voltage input: 5 to 160 VDC, 5 to 115 VAC, no polarity Knowing act input: Dry contact input Close switch input: Dry contact input
Output specifications	Activation output: Form A relay 50 V, 0.3 A (Resistance load) Stall output: Form B relay 50 V, 0.3 A (Resistance load)
Mounting height	6'7" to 8'2" (2.0 to 2.5 m)
Minimum door speed	2°/s
Response time	< 0.3 s
Operating temperature	-4 to 131°F (-20 to +55°C)
Protection class	OA-607 T: IP44 OC-907C T: IP40
Color	OA-607 T: Black OC-907C T: White
Weight	OA-607 T: 8.2 oz (230 g) OC: 3.7 oz (105 g)

FCC and ISED Statement

This device complies with part 15 of FCC Rules and Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Le présent appareil est conforme à la partie 15 des règles de la FCC et aux normes des CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

FCC CAUTION
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC NOTICE
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

FCC/ISED Radiation Exposure Statement
This equipment complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the ISED radio frequency (RF) Exposure rules as this equipment has very low levels of RF energy.
Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles les radioélectriques (RF) de la FCC lignes directrices d'exposition et d'exposition aux fréquences radioélectriques (RF) CNR-102 de l' ISDE puisque cet appareil a une niveau tres bas d'energie RF.

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