## ELITE PRO ELITE PRO2 ELITE PRO LE

Sensors for full energy and low energy automatic swing doors

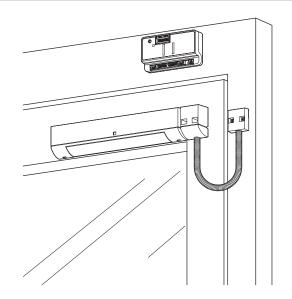
Packaged combinations of swing door sensor head

**OA-607 T** 

Swing door sensor controller

OC-907C T

## Instruction manual



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## Manufacturer's statement

Read this instruction manual carefully before use, to ensure proper operation of this product.

Failure to read this instruction manual may cause improper operation and may result in serious injury or death of a person.

The meanings of the symbols are as follows.

<b>!</b> WARNING	Failure to follow the instructions provided with this indication and improper handling may cause injury and/or property damage.			
<b>⚠</b> 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.

## Overview

This product is a reactivation and safety sensor which uses active infrared reflection to provide protection for swing type full energy and low energy doors. OA-607 T is the sensor head. OC-907C T is the sensor controller.

#### ■ Model

The lineup and names are as below.

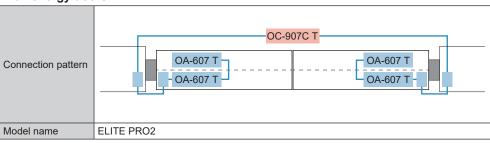
Model name	Configuration			
ELITE PRO	Package of OC-907C T × 1 and OA-607 T × 2			
ELITE PRO2	Package of OC-907C T × 1 and OA-607 T × 4			
ELITE PRO LE	Package of OC-907C T × 1 and OA-607 T × 1			

Door type and connection pattern support are as below. (Illustrations show the door from above.)

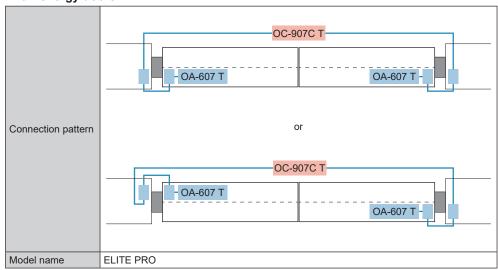
## ■ For double swing door (including double egress door)



• Full energy doors



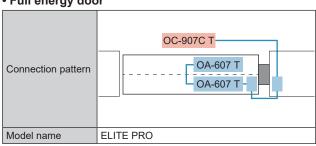
#### Low energy doors



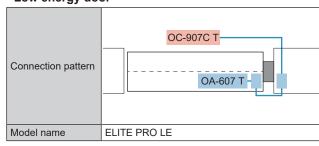
## ■ For single swing door



#### Full energy door



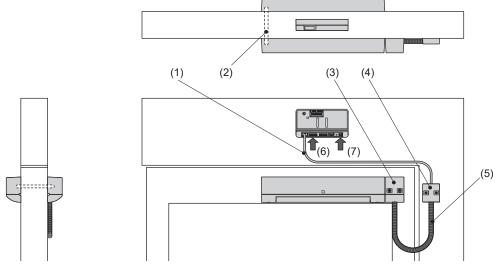
## Low energy door



For standard accessories for each model, see "Accessories" in the next section.

# Accessories

Number differs by package.



					Number per package		
No.		Part name	Appearance	Description	ELITE PRO	ELITE PRO2	ELITE PRO LE
(1)	1) Loop harness			For connecting OC-907C T and OA-607 T (via door loop), length 7'3" (2200 mm).		2	1
(2)	Pass-throu	ugh harness		For connection between door front/back (inner/outer) OA-607 T, length 8" (210 mm).	1	2	0
(3)	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.	2	2	1
(4)	Door loop	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.	2	2	1
(5)		Corrugated tube	2'4 (700mm) 1' (300mm)	• 2'/"(700 mm): Intended for standard concealed wiring	2	2	1
(6)	S) I/O harness			Signal line for connection between door controller and OC-907C T, length 4'3" (1300 mm).	2	2	1
(7)	) Power harness			Power line for connection between door controller and OC-907C T, length 3' (920 mm).	1	1	1
	Mounting	For OA-607 T	Silver		4	8	2
-	screws				8	8	4
	Mounting	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).	2	2	1
-	templates	For jamb cover	· • • •	Template for jamb cover.	2	2	1
-	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.	4	4	2
	Hook-and-	loop fastener		Double-sided tape for mounting OC-907C T.	1	1	1

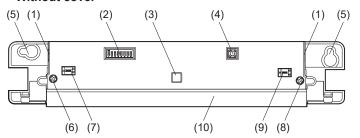
## Part names

### ■ OA-607 T

#### • With cover

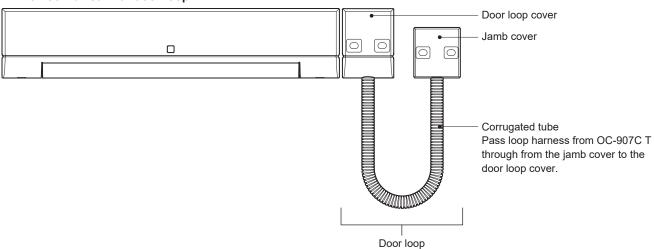


#### • Without cover



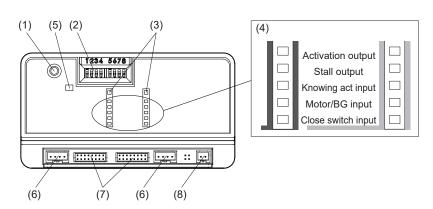
No.	Name			
(1)	Connector			
(2)	Dipswitches			
(3)	Operation indicator			
(4)	Function switch			
(5)	Mounting holes			
(6)	Threshold area angle screw			
(7)	Threshold area angle gauge			
(8)	Swing area angle screw			
(9)	Swing area angle gauge			
(10)	Detection window			

#### • When combined with door loop



This is a standard parts set for connecting OC-907C T to OA-607 T via the door jamb.

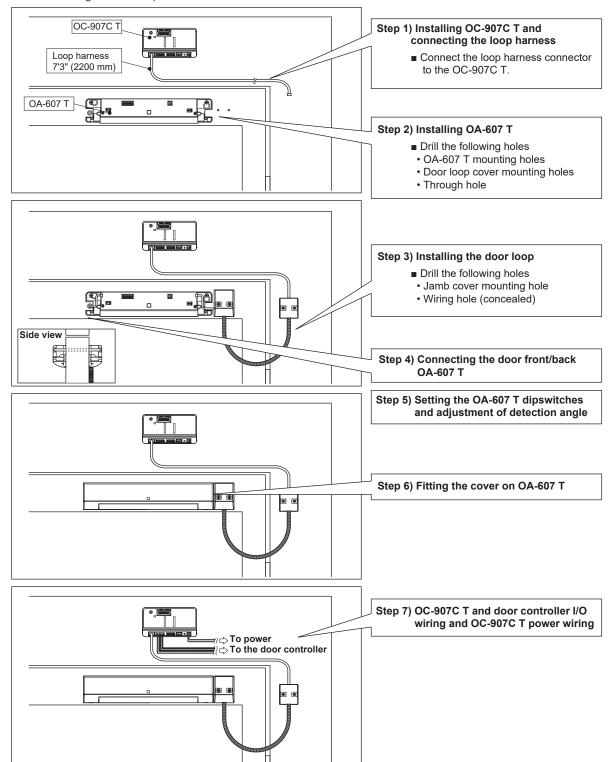
### ■ OC-907C T



No.	Name
(1)	Reset switch
(2)	Dipswitches
(3)	Operation indicator
(4)	Interface indicator
(5)	Wi-Fi status indicator
(6)	Sensor connector
(7)	Door controller connector
(8)	Power connector

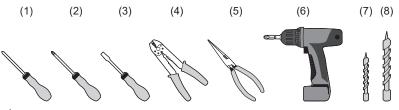
## Installation

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



Prepare the tools required in advance.





- (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

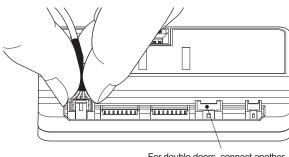
#### Danger of electric shock

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

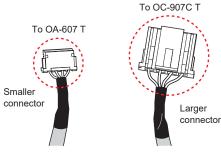
- 1 Using the hook-and-loop fastener included as standard, attach OC-907C T in the header.
- 2 Connect the larger loop harness connector to the OC-907C T sensor connector.



For double doors, connect another sensor connector as well.

## NOTE

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



Loop harness 7'3" (2200 mm)

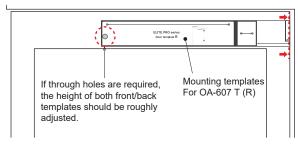
3 Pass the loop harness through the transom and jamb.

To do so, drill a 3/8" (10 mm) 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

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

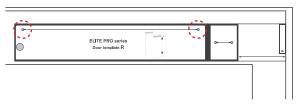
#### 3 Apply the door template to the door panel.

The template top should be between 6'7" (2.0 m) and 8'2" (2.5 m) from the ground.

When the template is accurately positioned, align the 3/8" (10 mm) 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 mounting template).





5 If through holes are required, drill a 3/8" (10 mm) cable door through hole.

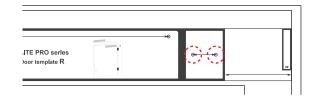




The approach side template hole must be perfectly aligned with the swing side template hole.

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).

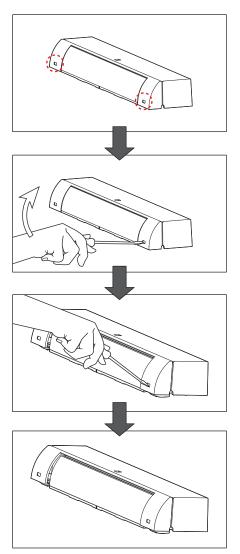




Removing the cover.

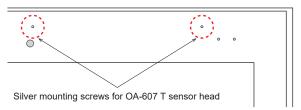
Insert a flathead screwdriver into the right/left holes on the cover bottom and push up to remove.





- 7 Remove the template.
- With two of the four mounting screws included as standard, mount the Silver mounting screws loosely.



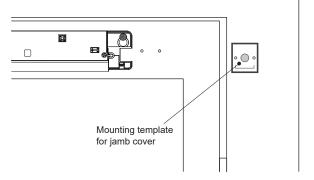


9 After fixing OA-607 T to the door, tightly fasten the Silver mounting screws.

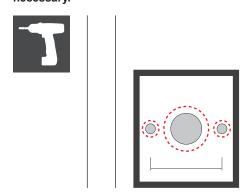




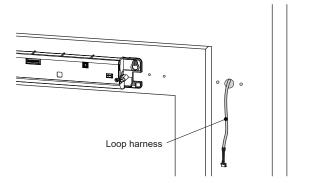
- 10 Position OA-607 T on the other side of the door as well.
- Step 3) Installing the door loop (only on the door loop mounting door side)
- 1 Apply the jamb cover template on the jamb.



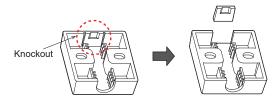
Drill two 1/8" (3.2 mm) mounting holes in the jamb for the jamb cover (in accordance with the template). For concealed wiring, drill an additional 3/8" (10 mm) cable exit hole in the middle. For exposed wiring, the 3/8" (10 mm) holes are not necessary.



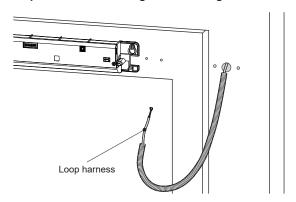
For general concealed wiring, bring the smaller loop harness connector through from the jamb 3/8" (10 mm) cable hole.



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



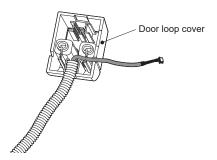
- Pass the loop harness taken out through the longer corrugated tube included as standard.
- Open and close the door and adjust the protruding loop harness and corrugated tube length.



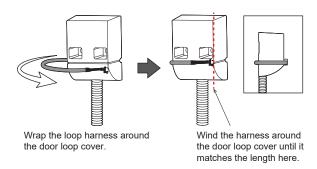
Cut the corrugated tube so that the door loop itself does not enter the detection area, and at the same time put the excess loop harness back into the jamb.

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.



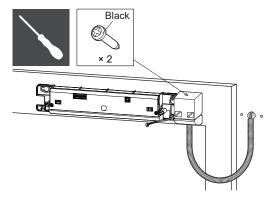
Insert the corrugated tube along the guide of the loop cover.



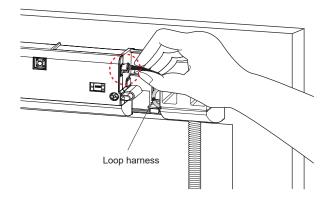
## NOTE

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

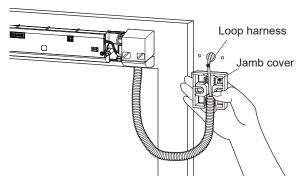
7 Fasten the door loop cover securely to the door leaf with two Black mounting screws.



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

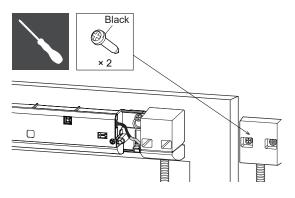


- \* Insert the connector firmly to the base. If the insertion is loose, a communication error with OA-607 T may result. When a communication error is generated, the sensor operation indicator will blink Orange twice.
- 9 After adjusting the protruding loop harness and corrugated tube length, prepare 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.

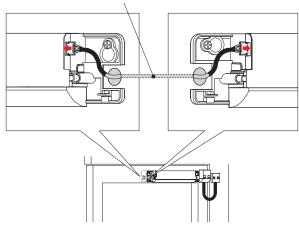


### ■ Step 4) Connecting the door front/back OA-607 T

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.

Pass-through harness 8" (210 mm)



\* 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.

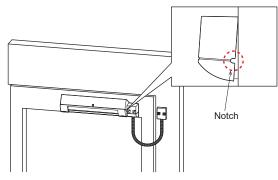
- Dipswitches ( $\rightarrow$  see "Settings".)
- Detection angle (→ see "Detection area adjustment".)



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

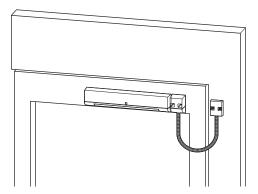
1 Put the cover on from above and fit it in.



Pass the loop harness through the notch on the cover side

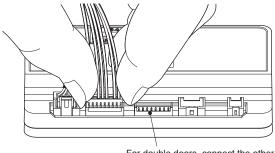
\* Be careful not to disconnect the cable with the cover.

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 harness between the OC-907C T door controller connector and the door controller.



For double doors, connect the other I/O harness connector as well.

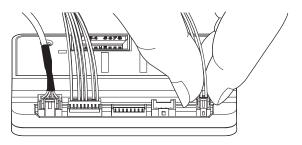
## NOTE

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

### **!** WARNING

Wire in accordance with the door controller specifications.

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



## NOTE

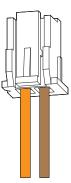
The power connector is connected to 12 to 30 VDC with a power harness.

# Wiring

## **A**CAUTION

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

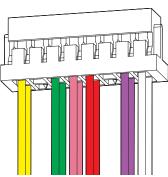
#### Power harness



	Name	Color	Specifications
1	Power (*)	Orange	12 to 30 VDC
2	Power ( )	Brown	1 12 10 30 VDC

<sup>\*1:</sup> Polarity free.

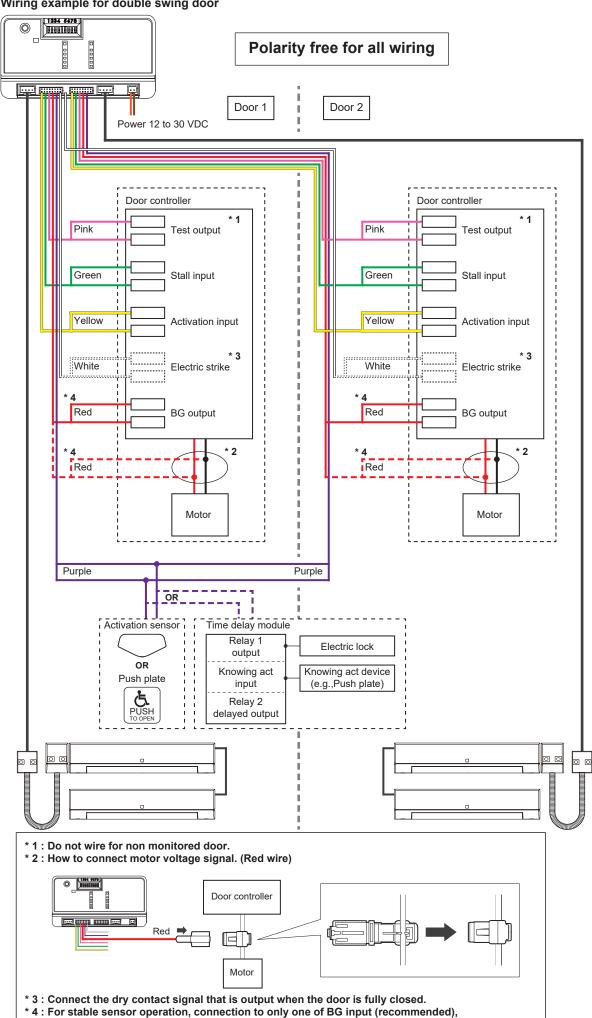
### • I/O harness



	Name	Color	I/O	Specifications
2	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
3	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 stand-by: Close At detection: Open
7 8	Test input	Pink	Input	Optocoupler voltage 5 to 30 VDC, current 6 mA max. (30 VDC) (polarity free)
9	Motor/BG input	Red	Input	Optocoupler voltage 5 to 160 VDC, 5 to 120 VAC, 60 Hz (polarity free)
11 12	None	-	-	-
13 14	Knowing act input	Purple	Input	Dry contact input Connect push plate, etc.
15 16	Close switch input	White	Input	Dry contact input Connect a device recognizing fully closed status (a magnet switch, etc.).

### ■ Wiring door operators from various manufacturers

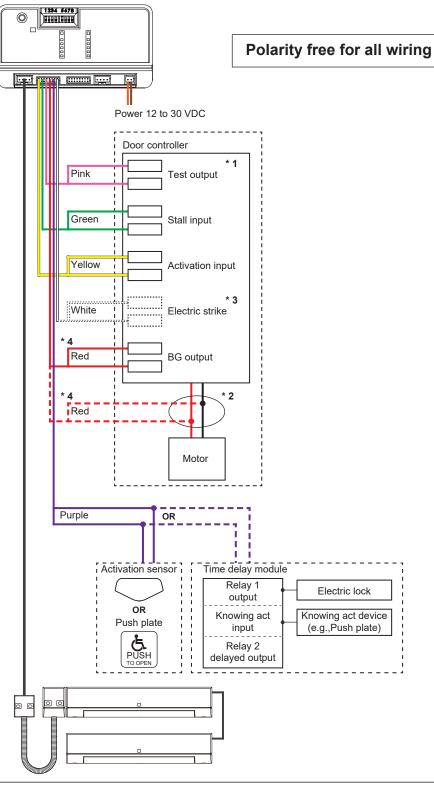
Wiring example for double swing door



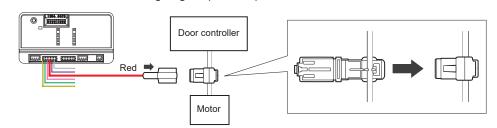
motor voltage input, or close switch input is recommended.

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- \* 1 : Do not wire for non monitored door.
- \* 2 : How to connect motor voltage signal. (Red wire)



- $^{\ast}$  3 : Connect the dry contact signal that is output when the door is fully closed.  $^{\ast}$  4 : For stable sensor operation, connection to only one of BG input (recommended), motor voltage input, or close switch input is recommended.

## • 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**

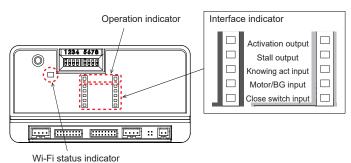
## ■ OA-607 T indicator



## Operation indicator

Procedures	Color	Indicator diagram	Status	Meaning	
Before initial setup	Orange		Blinking (0.5 s intervals)	Configuration error within setting error	
	Orange		Blinking fast (0.1 s intervals)	Auto configuration start	
During initial setup	Green		Solid	Auto configuration normally completed (stand-by)	
	Orange	-	Blinking (0.5 s intervals)	Auto configuration abnormally completed	
During auto area learn	See "Settings -	See "Settings - Automatic settings and auto area learn"			
	Green		Solid	Stand-by	
During normal operation	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 "Settings - Detailed settings"				

### ■ OC-907C T indicator



### NOTE

In both the operation indicator/interface indicator, the left column corresponds to the left-side connector and the right corresponds to the 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		
	Orange		Blinking fast (0.1 s intervals)	Auto configuration start		
During initial setup	Green		Solid	Auto configuration normally completed		
	Orange		Blinking (0.5 s intervals)	Auto configuration abnormally completed		
During auto area learn	See "Settings -	See "Settings - Automatic settings and auto area learn"				
	Green		Solid	Door fully closed		
During normal	Orange		Solid	Door closing		
operation	Red		Solid	Door fully opened		
	Red		Blinking fast (0.1 s intervals)	Door opening		
Error or warning generated	See "Troubleshooting"					
Sensor setting via Wi-Fi	See "Settings - Detailed settings"					

#### • Interface indicator

Indicator name	Color	Indicator diagram	Status
Activation output	Solid Orange		Outputting
Stall output	Solid Green		Outputting
Motor/BG input	Solid Red		Door fully closed
Knowing act input	Solid Yellow		Inputting
Close switch input	Solid White		Door fully closed

### • Wi-Fi status indicator

Indicator name	Color	Indicator diagram	Status
Wi-Fi status	Solid Blue		Wi-Fi ON

## **Settings**

### ■ Automatic settings and auto area learn



Please check the dipswitch settings and detection area before executing.

- Dipswitch (→ see "Dipswitch settings")
- Detection area (→ see "Detection area adjustment")

Execute the following with the function switch on the OA-607 T front or with the setting app.

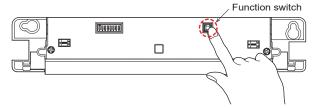
Auto configuration : ELITE PRO has an advance learning system that can recognize the following system configuration and status and set

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-607 T sensor heads to

complete auto configuration.

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

Auto area learn: OA-607 T has a learning system that check the condition of floor surface for door opening angles.



Check in advance that the door is fully closed.

## **!** WARNING

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

	Conditions			Result	
Procedure for Operation operation		Operation	Operation	OA-607 T operation indicator	OC-907C T operation indicator
			Auto configuration start	Blinking fast in O = Auto configurat	range (0.1 s intervals) ion start
			Execute auto configuration The door will open and close two or three times automatically (*1).	Solid Green after = Setup complete	normal completion e (stand-by)
During initial Door fully setup	Hold down the function switch (more than 2 s)	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 min in order to achieve stable operation during use.	Upon failure: Blinking Orange (= Setting error)	(0.5 s intervals)	
			Start auto area learn only	Blinking fast in Ye = Start auto area	ellow (0.1 s intervals) learn only
When adjusting the angle or changing the settings after auto configuration		Briefly press the	Execute auto area learn only	Solid Green after = Setup complete	normal completion e (stand-by)
	front function switch (more than 0.3 s, no more than 2 s) once	Upon failure, before execution, check that there are no obstacles to the door and execute auto area learn again. As well, the power must not go off immediately after auto area learn completion (before auto-saving the settings).	by an obstacle or auto area learn is	vented from opening the power is cut just after s complete: ly Yellow and Red	

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

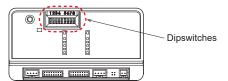


Before executing auto configuration, the connection between the door controller and the OC-907C T sensor controller must be complete. Auto configuration must be started with the door fully closed. Otherwise, a setting error will be generated.

### ■ Dipswitch settings

For automatic settings, check the " \*\*\* " mark below for the dipswitch settings for the OC-907C T and OA-607 T.

#### • OC-907C T



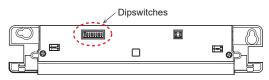
Factory default settings

SW	Function	Set	ting
1	Priority setting	Dipsw	Арр
2	Wi-Fi	<b>↓</b> OFF	n on
3	Knowing act ***	Disable	Enable
4	Test output (activation) ***	Disable	Enable
5 to 8	Mandatory	<b>↓</b> OFF	↑ ON



When the OC-907C T dipswitch 1 is OFF, the setting in the " \*\*\* " is enabled.

#### • OA-607 T



Factory default settings

SW	Function	Set	ting			
1	Door width	36"	42"/48"			
2	Not used	<b>↓</b> OFF	ON			
3	Sensitivity ***	Normal	Low			
4	Immunity ***	<b>↓</b> OFF	ON			
5 to 8	Not used	<b>↓</b> OFF	ON			



When the OC-907C T dipswitch 1 is OFF, the setting in the " \*\*\* " is enabled.

#### ■ Detailed settings

Detailed settings can be done from a smart device browser.

Set the OC-907C T dipswitch 1 (priority setting) to ON (setting app priority) and the dipswitch 2 (Wi-Fi setting) to ON (using Wi-Fi communication).

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











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

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.

Color	Indicator diagram Status		Meaning		
Color	indicator diagram	Status	OA-607 T operation indicator	OC-907C T operation indicator	
Green/Blue	-	Blinking among colors (0.5 s intervals)	Sensor setting via Wi-Fi		







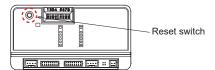


The specifications herein are subject to change without prior notice due to improvements.

## • Setting items

Item	Value	Dipswitch se	etting possible
item	value	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)	0	
3rd row sensitivity	0 (Low) / 1 / 2 / 3 / 4 (Middle) / 5 / 6 / 7 (High)		
Immunity	ON/OFF	0	
Area setting	Independently adjustable	None	
Sensor side	Approach side / Swing side	None	] -
Hinge side	Right hand / Left hand	None	
Snow mode	Snow / Normal	None	
Presence timer	15 s / 30 s / 60 s / 120 s	None	
Operation indicator	ON / OFF / Stand-by OFF	None	
Knowing act	Enable / Disable		0
Test output (activation)	Enable / Disable		0
Wi-Fi off timer	10 min / 30 min / 1h / 3h / Infinity		None
Stall reray 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
External input	Motor or BG input / Close switch input / None		None
External input polarity	High / Low		None

## ■ Reset



Function	Operation	Operation indicator
Password reset	Hold down the reset switch for 2 s.	When the operation is complete, the operation indicator will turn off and return to normal operation.
Reset settings to factory defaults	Hold down the reset switch for 10 s.	When the operation is complete, the operation indicator will blink and return to before initial setup.

## Detection area adjustment

The 1st 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).

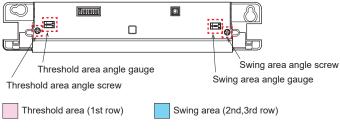
## NOTE

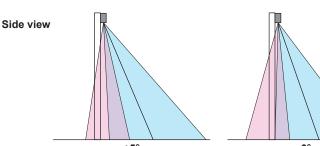
Recommended detection angle setting: +5°

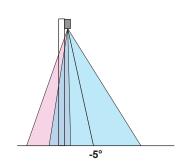
## **A**CAUTION

Adjust the areas in accordance with ANSI 156.10.

#### ■ OA-607 T

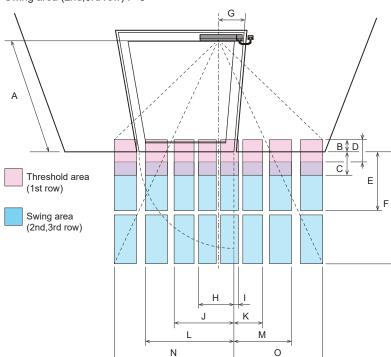






Charts show the values in the following angle adjustment settings;

Threshold area (1st row): +5° Swing area (2nd,3rd row): +5°



			[feet,inch (mm)
Α	6'7" (2000)	7'6" (2300)	8'2" (2500)
В	7" (186)	8" (214)	9"(233)
С	1'2" (360)	1'4" (414)	1'6"(450)
D	6" (152)	7" (175)	7"(190)
Е	2'9" (840)	3'2" (966)	3'5"(1050)
F	5'5" (1650)	6'2" (1898)	6'9"(2063)
G		10" (252)	
Н	1'11" (593)	2'1" (645)	2'3"(678)
- 1	3" (89)	6" (141)	7"(174)
J	3' (911)	3'4" (1010)	3'6"(1076)
K	1'4" (407)	1'8" (506)	1'11"(572)
L	4'2" (1275)	4'8" (1428)	5'(1531)
M	2'6" (770)	3' (924)	3'4"(1027)
N	5'6" (1684)	6'3" (1900)	6'8"(2042)
0	3'10" (1180)	4'7" (1395)	5'1"(1538)

## NOTE

When the sensor system performs an initial setup to its operating environment detection areas may vary slightly from this chart.

## 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")
- Settings (dipswitches or smart device) (→ see "Settings")
- Background learning again (→ see "Automatic settings and auto area learn")

## Inform building owner/operator of the following items

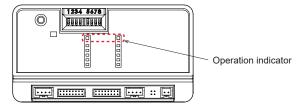
- 1 When turning the power ON, stay clear of detection area for a minimum of 10 s, and then conduct a walk test in detection area to ensure proper operation.
- 2 Always keep the detection window clean. If dirty, wipe the detection window with a damp cloth (do not use any cleaner or solvent).
- 3 Do not 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**

#### ■ OA-607 T



#### ■ OC-907C T



#### Operation indicators in the event of trouble

Indicator diagram	Symptom	Procedures	Possible cause	Possible countermeasure
Configuration	Power ON uration	Before initial setup		
		Changed sensor composition after auto configuration	Execute auto configuration	
Orange	Orange error (System setting)	Start auto configuration	Executed auto configuration except the door fully close	Execute auto configuration at fully close position
	After door fully	Abnormal sensor position	Verify proper install the sensor	
		closed	Failure sensor position recognition	Adjust door open/close speed or set by setting app

Indicator diagram	Symptom	Procedures	Possible cause	Possible countermeasure
		Power ON	Detection area has not been saved	Execute auto area learn
		Setting by app	Change the sensor position	Execute date area rearri
-			Improper wiring of activation output (Yellow wires)	Verify proper wiring
Red/Yellow	Area learning error	Auto area	Improper wiring of door equipment ON/OFF/HOLD switch	Verify proper wiring of ON/OFF/HOLD switch
blinking fast (0.1 s intervals)		learning	Not complete the door cycle within a certain time	Adjust door open/close speed
			Improper stall relay contact of OC-907C T	Verify proper setting
			Abnormal door position recognition	Verify proper wiring and replace sensor as needed
Green blinking (0.5 s intervals)  * Only OC-907C T	Initializing	Power ON	Initializing	Wait a while the door position is stable without detection
				Remove highly reflecting objects from the detection area
Green blinking	Signal saturation	Operation	Signal saturation	Lower the sensitivity
(0.5 s intervals)  * Only OA-607 T				Adjust threshold and swing area angles
			Sensor failure(self-monitoring)	Contact your installer or service engineer
	Sensor failure	Any		Higher the sensitivity
Green blinking fast (0.1 s intervals)	Sensor failure	Any	Sensitivity too low	Adjust threshold and swing area angles
			Door opened to opposite side	Double following and the state of the state
	Position error	Operation	Door opened over fully opened angle	Back to fully close position and wait a while
Orange/Green blinking (0.5 s intervals)	r osition enoi	Operation	Abnormal door position recognition	Verify proper wiring and replace sensor as needed
(0.0 2)		Auto	Executed auto configuration except the door fully close	Execute auto configuration at fully close position
		configuration (at start)	Improper wiring of motor/BG input (Red wires)	
			Improper wiring of activation output (Yellow wires)	Verify proper wiring
			Improper wiring of stall output (Green wires)	
-			Improper wiring of test input (Pink wires)	For monitored door in ANSI 156.10
2 times 0.7 s		Auto	Not match setting between sensor and	Verify test output (activation) setting as needed
<u> </u>	Wiring error	configuration	door controller	Verify self-diagnosis setting of the door controller
Twice Red blinking		(at end)	Door start opening while stall is output  Not complete the door cycle within a	Adjust door open/close speed or set by setting app
(0.1 s interval)			certain time	Adjust door open/close speed or set by setting app
(0.7s unlit)			Abnormal door position recognition	Verify proper connection and replace sensor as needed
			No connection of motor/BG input (Red wires) or close switch input (White wires)	Not abnormal, but the operation may stable if it is to connect
		Operation	Improper wiring of motor/BG input (Red wires)	Verify proper wiring
		Operation	Improper of setting either motor/BG input or close switch input	Verify proper settings
2 times 0.7 s  Twice Orange blinking (0.1 s interval) (0.7 s unlit)	Communication error	Any	Improper wiring loop harness or pass through harness	Verify proper connection of loop harness or pass through harness and replace sensor as needed

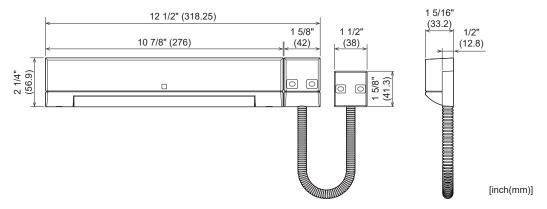
Indicator diagram	Symptom	Procedures	Possible cause	Possible countermeasure
			Improper power supply	Correct power problem
_	Power failure	Power ON	Improper wiring of power harness	Verify proper wiring
Unlit			Sensor failure	Contact your installer or service engineer
Unlit * Only OA-607 T	Power failure	Power ON	Improper loop harness or pass through harness	Verify proper wiring
0.5 s Solid/Off (0.5 s only)	ANSI 500 ms OFF	Operation	Test signal is input from door controller	This is normal operation

## • List of symptoms/causes/countermeasures

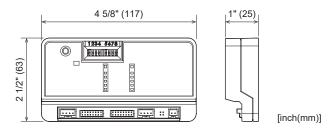
Category	Symptom		Possible cause	Possible countermeasure
		Unlit Wi-Fi	Dipswitch #2 of OC-907C T is OFF	Turn ON the dipswitch #2 of OC-907C T
		status indicator of OC-907C T	Certain time elapsed the state setting app has not been connected since power ON	Turn OFF the dipswitch #2 of OC-907C T and turn ON
	Setting app can	Solid Wi-Fi	Another smart device is connecting	Disconnect Wi-Fi of another smart device
not connect			Poor signal environment	Approach the OC-907C T
		status indicator	No compability a version (OS or web brouser) of the smart device	Retry with another smart device
		OC-907C T	Not match with login password	Reset login password
			Wrong selected Wi-Fi name	Check the serial number of OC-907C T
Installation		The screen is not displayed properly		Check Wi-Fi is connected
		The screen is not updated and can not operate	Failure communication between OC- 907C T and smart device	
	Can not operate and set after type an IP	Not reflect settings to sensor		Update screen or close and open the web brouser
	address into web brouser	Sensor status is not shown on status screen		
		Can not start auto area learn	Not complete auto configuration	Execute auto configuration
		Can not do area setting		
			OA-607 T sensor head not mounted flush on door	Head may be resting on top of loop mounting bracket reposition head flush on panel
			Improper threshold or swing area angle adjustment	Adjust threshold and swing area angles
			Stalling caused by traffic just outside of swing path or objects near guide rails	Adjust area depth
	Intermittent		Improper wiring of motor/BG input or close switch input	Verify wiring of either motor/BG input or close switch input
	recycle (ghosting) or		Improper setting of motor/BG input or close switch input	Verify proper setting
	intermittent stalling		Improper setting of door width and area of OA-607 T	
			Objects that move or emit light in the detection area	Remove the objects
Operation			The detection area overlaps with that sensor on another ELITE system	Change frequency setting
			Waterdrops on the detection window	Install in a place keeping the waterdrops off  Lower sensitivity
			Sensitivity is too high Raining or snowing	Turn ON immunity and snow mode
			Improper wiring of activation/stall output or ON/OFF/HOLD switch	Turn On minimum y and show mode
	No activation/ No reactivation	OA-607 T sensor detects	Improper wiring of knowing act input (Purple wires) to activation device	Verify proper wiring
	on closing cycle	(Solid or blinking	On knowing act applications poor	
	No safety/	fast Red)	Improper stall relay contact of OC-907C T	
	No stall on opening cycle		Failure auto configuration or wrong setting	Verify proper setting
	Door remains	OA 007 T	Sensitivity is too low	Higher sensitivity
	open	OA-607 T no detection	Dirty detection window of OA-607 T	Wipe the detection window with damp cloth
'		(Solid Green)	Improper setting of door width and area of OA-607 T	Verify proper settings

# **Dimensions**

## ■ OA-607 T and loop harness



## ■ OC-907C T



# Specifications

Doguin	Cruin a trus a critamentia de que
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
	OA-607 T : Indoors, semi-outdoors
Usage location	OC-907C T: Indoors
Manuellandandan	OA-607 T : Door mount
Mounting location	OC-907C T : Inside transom
Supply voltage	12 to 30 VDC
	OA-607 T : 1.0 W or less
Power consumption	OC-907C T : 3.0 W or less
	OC-907C T × 1 + OA-607 T × 4 : 5.5 W or less
Detection method	Active infrared reflection (presence detection type)
Detection area	Threshold area (1st row): 8 lines × 1
	Swing area (2nd, 3rd row): 8 lines × 2
Detection angle adjustments	Threshold area (1st row) : -5 to +5° (inside and outside)
0 ,	Swing area (2nd, 3rd row): -5 to +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), polarity free
	Motor/BG input : Optocoupler voltage 5 to 160VDC, 5 to 120 VAC, 60Hz (polarity free)  Knowing act input : Dry contact input
	Close switch input: Dry contact input
	Activation output: Form A relay 50 V, 0.3 A (resistance load)
Output specifications	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-907C T : 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.
- -Increase the separation between the equipment and receiver.
- -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.

#### Distribution of source code for open source software

This product includes open source software.

We can copy and distribute the source code of the software according to the license requirements if the open source software includes

LGPL (GNU LESSERGENERAL PUBLIC LICENSE) or other licenses under the conditions of disclosure.

Regarding the open source code of this product, we will distribute the source code corresponding to the open source software at the actual cost for at least 3 years after purchasing it to the individual/group who made the inquiry.

Contact: OPTEX OSS information desk E-mail: oss-distribute@optex.co.jp

This product contains various open source software to which the following license information applies.

#### arduino-esp32

GNU Lesser General Public License v2.1

#### **AsyncElegantOTA**

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#### AsyncTCP

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