

# 4-in-1 Evacuation sign

## Data Sheet

For Series: OT-ES9119\_Li ST/RST



OTC IND CO., LTD

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Dear partners,

\* Thanks for Choosing OTC LED emergency products for your projects.

OTC always pursue high quality, steady quality products, competitive price and one-stop customer service, and offer enjoyable installation experience.

\* All the OTC emergency lamp with 5 years quality guarantee (Battery 2 years) . If any doubts/ questions, please contact OTC project support team directly by email support@otcind.net . You will get solutions in 7~24 hours rapidly.

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**1 Security related information**

- Installation should be carried out in accordance with the latest edition of the I.E.E. Wiring regulations and taking into consideration the latest building regulations.
- Ensure that all electrical connections are tight with no loose strands, including factory made connections.
- Ensure there is adequate free air circulation of at least 100mm around the luminaire. It is the installer's responsibility to consider fire risk and take appropriate precautions.
- A separate enclosure may be required if this unit is to be used in dusty and wet environments.

Q.C. date label, installation in an improper working environment or installation not according to the current edition of the I.E.E. Wiring Regulations . The guarantee is also invalidated if the luminaire has been I.R. tested. Should this product fail during the guarantee period it will be replaced free of charge, subject to correct installation and return of the faulty unit. We do not accept responsibility for any installation costs associated with the replacement of this product. Your statutory rights are not affected. We reserve the right to alter specifications without prior notice.

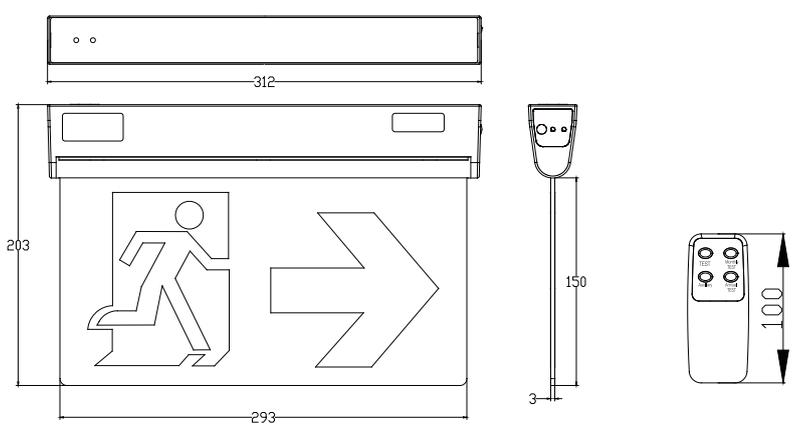
**2 Packing list**



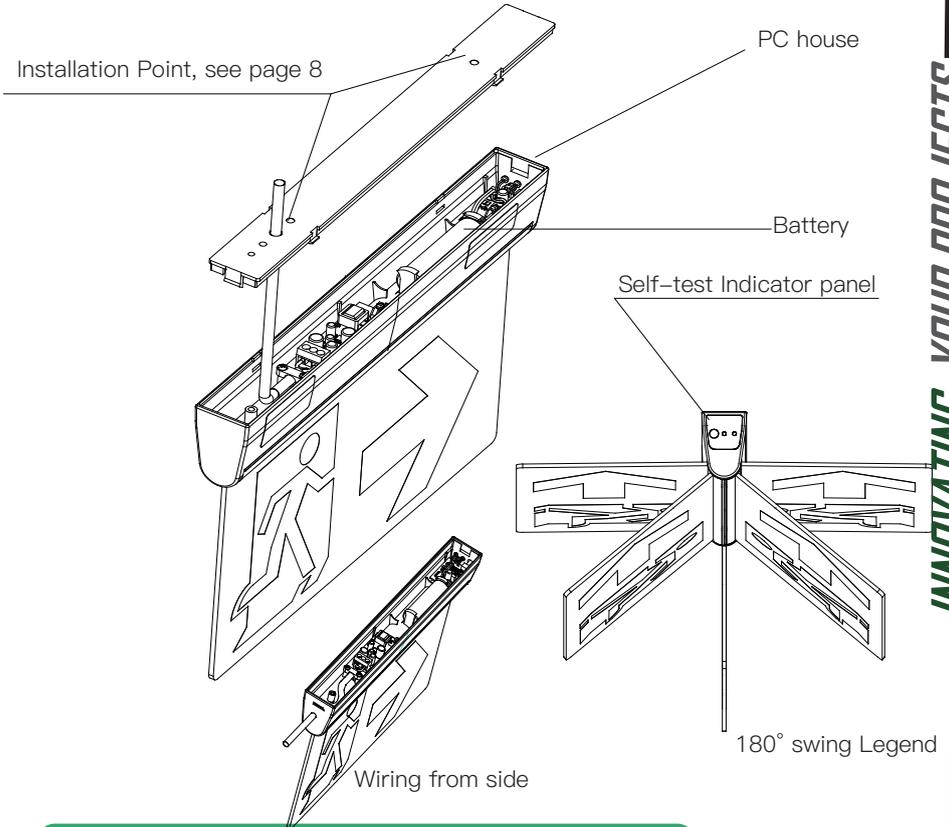
**Installation accessories**

**3 Basic Parameters**

Model	Art Nr. OT-ES9119 Li	
	ES9119-ST	ES9119-RST
Material	Polycarbonate + PMMA	
LED Chips	22pcs SMD 4014	
Color Rendering Index	>80	
Degree of protection	IP42	
Input Voltage	AC200-240V 50/60HZ	
Input power	2.5 W if maintained / 1.0 W if non-maintained	
Power factor	>0.5	
Emergency changeover	<0.5S	
Emergency mode	Maintained & non-maintained	
LED lifespan	50,000 hrs	
Guarantee	5 years(Battery 2 years)	
Emergency Standard	60598-2-22:2021	
Legend standard	ISO7010:2019	
The Photonic	ISO 3864-4:2011 / EN 1838-2013	
Emergency Pack	LiFePO <sub>4</sub> 3.2V 1.6Ah Or Li(NiCoMn)O <sub>2</sub> 3.2V 2.0Ah	
Emergency time	3 Hours	
Test	Manual + self test	Manual + self + remote test
Charging indicator (C)	Green	
Faulty indicator (F)	Red	
Charging details	100mA, Full charged in 12 hours	
Disharging details	250mA, 3 hours emergency time	
Luminous Flux(Mains)	100LM	
Luminous Flux(EM)	100LM	



## 4 General construction



### 4# . Rest mode & storage

#### 4#.1 This luminaire combined rest mode.

When the AC supply failure / cut down. The EM LED on.

- If the battery over discharged, The luminaire will changeover rest mode automatically.
- You can click the ④ test button. and the luminaire also can changeove rest mode.

#### 4#.2 Storage & transportation

- Make sure the luminaire in rest mode
- Keep the storage temperature 0~30°C
- Keep away from inflammables; keep dry & ventilation.

**5 Self / remote test system(ES809ST &ES809RST only)**

5.1 Testing (If no failure)

5.1.1. Manual function test.

ES9119–ST/ES9119–RST: Active the ④ test button.

ES9119RST:Press “TEST” switch on controller.

- a) The ② Charging indicator OFF.
- b) The Emergency function ON.
- c) The test will cut off the mains

5.1.2 Monthly test.

ES9119–ST/ES9119–RST: Active the ④test button for 5 second;

ES89119–RST: Press the “Monthly TEST” switch on controller;  
or the lamp installed every 30 days.

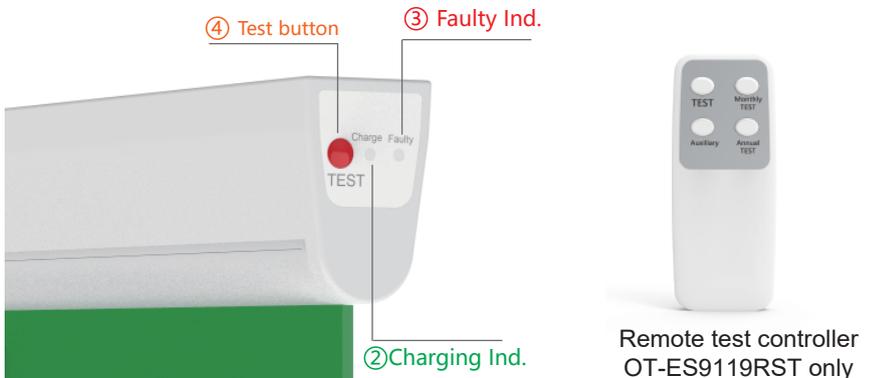
- a) The ② Charging indicator will flash in 1Hz for 128s;
- b) The Emergency function ON;
- c) The test finished and back to standby mode.

5.1.3 Annual test.

ES9119–ST/ES9119–RST: Active the ④test button for 7 second;

ES9119RST: Press the “Annual TEST switch on controller;  
or the lamp installed every 180 days.

- a) The ② Charging indicator will flash in 2Hz for 3hours;
- b) The charging will be cut off & emergency function ON 3hours;
- c) The lamp back to standby mode after test.



Remote test controller  
OT-ES9119RST only

## 5.2 Testing (If any failure, Only ES9119–ST/RST)

5.2.1 Battery failure: ● ● ● ● ●  
Monitored constantly. The ③ faulty indicator will flash in 1 Hz if the battery failure any time.

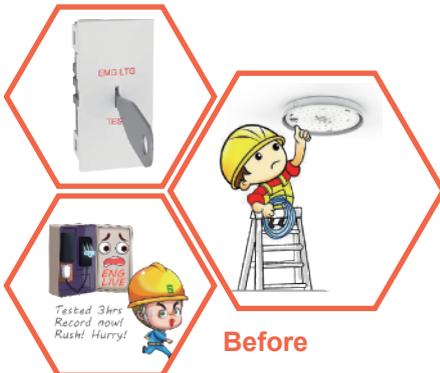
5.2.2 LED load failure: ● ● ● ● ● ● ● ● ● ●  
If press test button, or the luminary self-monthly test. The ③ faulty indicator will flash in 2 Hz if LED load failure.

5.2.3 Duration failure:   
Only in Annual self-test. The ③ faulty indicator will turn on constantly if the Battery can not last 3 hours

## 6 Emergency control logic

### The emergency function control logic

Operation	Charging indicator		Faulty Indicator (RED)		Emergency LED		Emergency LED	
	1 S	1 S	1 S	1 S	1 S	1 S	1 S	1 S
Time line (Second)								
Normal charging	●		OFF		Constantly on		OFF	
Normal full charged	Constantly on		OFF		Constantly on		OFF	
Normal AC Failure	OFF		OFF		Constantly on		Constantly on	
Manual test	OFF		OFF		Constantly on		Constantly on	
Monthly self-test	●	●	OFF		Constantly on		Constantly on	
Annual self-test	●	●	●	●	Constantly on		Constantly on	
Battery circuit failure	OFF		●	●	Constantly on		OFF	
Light source failure	Constantly on		●	●	OFF		OFF	
Duration test failure	Constantly on		Constantly on		Constantly on		OFF	



Before



After

No Key switch, No Harry, No ladders  
Safe / Easy / Convenient

## 7 Emergency function & Wiring

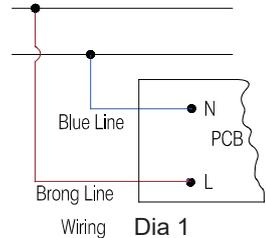
### ADDITIONAL INFORMATION - COMPONENT REPLACEMENT

- The luminaire contains no user replaceable components other than the battery pack contained in emergency versions.
- The battery has a 4 year service life provided it is operated and maintained by regular testing, as detailed in this Usermanual. Failure to maintain or change the battery may result in reduced duration in emergency mode.

#### 7.1 Emergency function test before installation

7.1.1. Chose the cable wiring way according page 4.  
Connect the AC cable according to the Dia 1.

- The charging indicator on,
- The Faulty indicator off,



7.1.2. Press the test button, The charging indicator off, and emergency function activated.

7.1.3. Cut off the AC power supply, The Charging indicator off and emergency function on.

#### 7.2 Maintained & non-maintained mode changeover

a) The OT-ES9119-ST/RST was preset Maintained mode.



Method 2  
ES9119-RST only



Method 1

Press the ④ test button constantly for 11 seconds

b) AC power on

Method 1: Press the ④ test button constantly for 11 seconds

Method 2: Press the “Auxiliary” switch on remote test controller for 6 seconds (ES9119-RST only).

The OT-ES9119 will change the Emergency work mode.

## 8 Installation guide



**Caution**

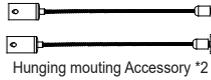
1. All OTC emergency lights are designed for projects. Only qualified electrician can install or maintain it.
2. The mains have to be off during the installation or maintenance.
3. Keep the product far from heat sources and in a well ventilated area.



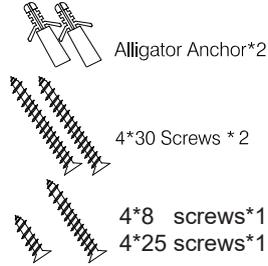
### Installation pack



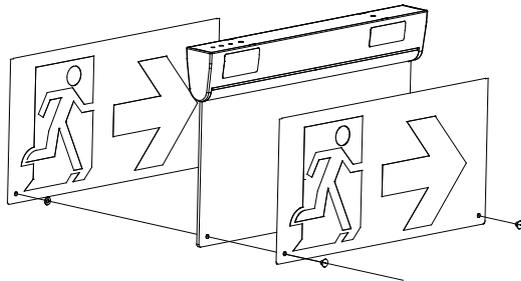
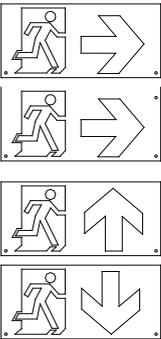
The Side-Wall-mounting Accessory



Hanging mounting Accessory \*2

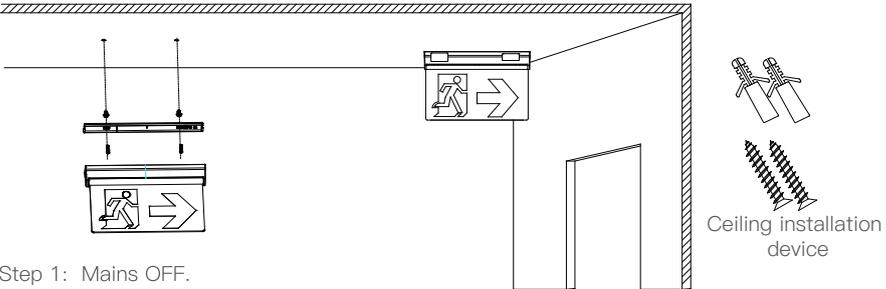


### Install the PVC Legend



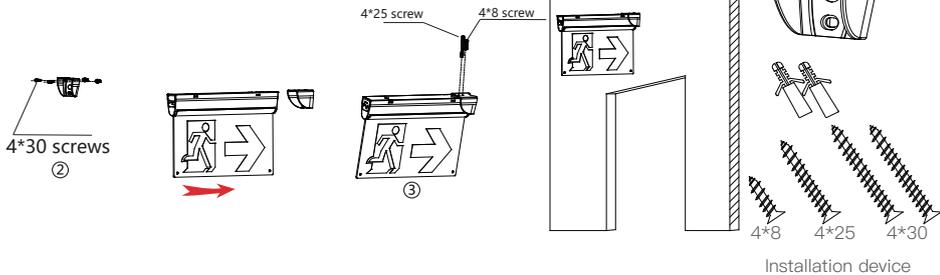
- 1) Chose the right PVC legend.
- 2) Install the legend by clips.

### Installation 1: Ceiling mounting



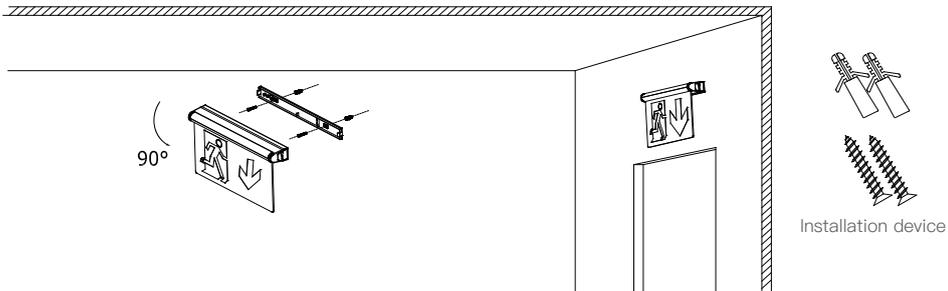
- Step 1: Mains OFF.
- Step 2: Install the base on to the ceiling by 2 pieces 4\*30 screws
- Step 3: Wiring The cable and testing accoring Page 7
- Step 4: Fix the sign on the ceiling
- Step 5: Mains ON

Installation 2: Side wall mounting



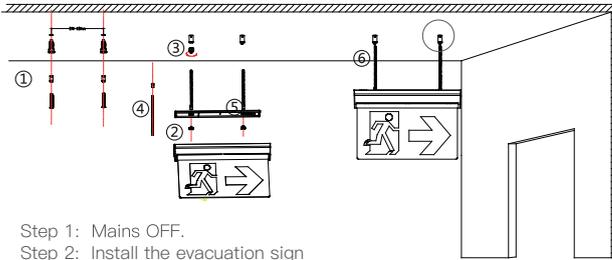
- Step 1: Mains OFF.
- Step 2: Install the wall mounting accessory on to wall by 2 pieces 4\*30 screws
- Step 3: Install the luminaire by 4\*30 screw \*1 + 4\*15 screw\*1.
- Step 4: Wiring and testing accoring Page 7 (From side recommend)
- Step 5: Mains ON

Installation 3: Wall mounting



- Step 1: Mains OFF.
- Step 2: Install the base on to the wall by 2 pcs 4\*30 screws
- Step 3: Fix the lamp on to the wall.
- Step 4: Wiring and testing accoring Page 7 (From side recommend)
- Step 5: Mains ON

### Installation 4: Hanging



Step 1: Mains OFF.

Step 2: Install the evacuation sign

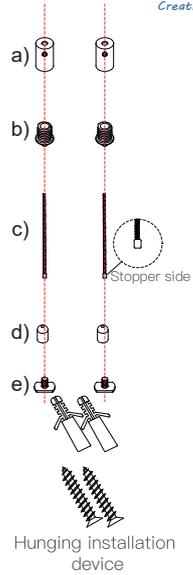
- ① Install the a) by screws, distance 180–200mm recommend.
- ② Install e) into the base of sign.
- ③ Install b) into a) by screwing.
- ④ Insert the c) string into d) from no stopper side.
- ⑤ Install c)+d) on to e) according the drawing by screwing.
- ⑥ Insert the string into b) set the length accroding Pic8.1.

Step 3: Wiring and testing accoring Page 7

Step 4: Mains ON

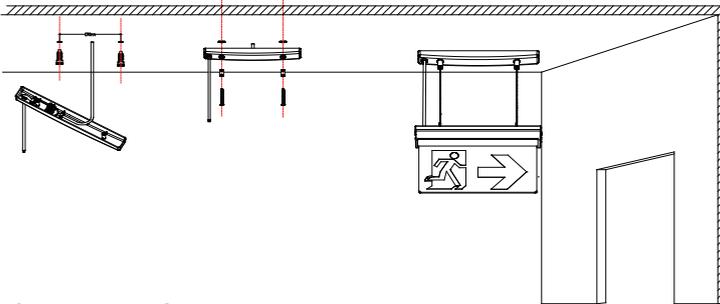


Pic8.1



Hanging installation device

### Installation 5: Hanging with canopy



Step 1: Mains OFF.

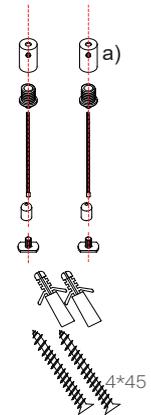
Step 2: Connect the power cable to canopy.

Step 3: Fix the canopy together with a) of haning accessory to the ceiling by 4\*45mm screws

Step 4: Install the ES9119 same as ↑ Installation 4 ↑.

Step 5: Wiring and test accoring page 7

Step 6: Mains ON



Hanging installation device



Canopy  
(Optional Device)

9 EM inspection record table

Luminaire emergency inspection record

month	Test	First Year		Second Year		Third Year		Fourth Year		Fifth Year	
		Signed	Date	Signed	Date	Signed	Date	Signed	Date	Signed	Date
1	Functional										
2	Functional										
3	Functional										
4	Functional										
5	Functional										
6	1 hour										
7	Functional										
8	Functional										
9	Functional										
10	Functional										
11	Functional										
12	3 hours										

Installed By: ..... Installed Date: ..... Luminaire NO.: .....

Luminaire Location: ..... Contact details: .....



**INNOVATING YOUR PROJECTS**