5-in-1 Evacuation sign

Data Sheet

For Series: OT-ES809 ST/RST

OTC

OTC IND CO., LTD

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CE

RoHS

Dear partners,
* Thanks for Choosing OTC LED energency 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 3 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.
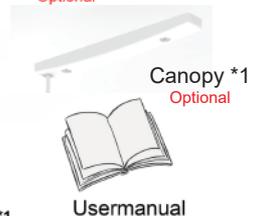
Contents

INNOVATING YOUR PROJECTS

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 seperate enclosure may be required if this unit is to be used in dusty and wet environments.
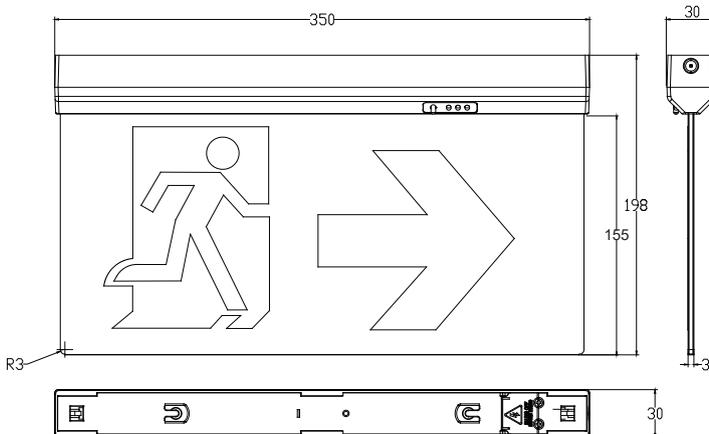
Q.C. date label, installation in an improper working environment or installation not according to the current edition of the I.E.E. Wiring Regulations . The guarantee is also invalidated if the luminaire has been I.R. tested. Should this product fail during the guarantee period it will be replaced free 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

1m hunging pack
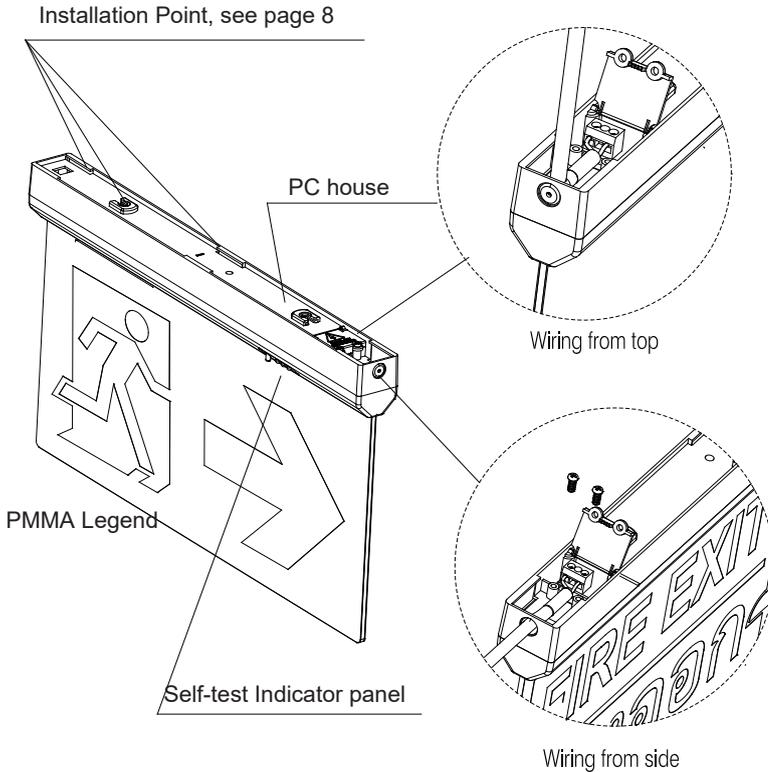
The Sign

4 pieces pictogram
Left /Right /Up /Down

Recess accessory *1
Optional

Canopy *1
Optional

Installation pack

Remote controller *1
Optional

TEST | Stand-by TEST
Auxiliary | Abroad TEST

Usermanual

Model	Art Nr. OT- ES809	
	ES809ST	ES809RST
Material	Polycarbonate + PMMA	
LED Chips	20pcs SMD 4014	
Degree of protection	IP20	
Input Voltage	AC200-240V 50/60HZ	
Input power	2.5W	
Power factor	>0.5	
Emergency changeover	<0.5S	
Emergency mode	Maintained & non- mainained (Page 7)	
LED lifespan	50,000 hrs	
Guarantee	5 years (Battery 4 years)	
Emergency Standard	60598 - 2- 22:2021	
Legend stanrdard	ISO7010:2019	
The Photonetic	ISO 3864 - 4:2011 / EN 1838 - 2013	
Emergency Pack	3.6V 0.6Ah	
Emergency time	3 Hours	
Test	Manual test + self- test	Manual + self + remote test
Mains indicator (M)	Green	
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)	50LM	
Luminous Flux(EM)	50LM	

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Installation Point, see page 8

PC house

Wiring from top

PMMA Legend

Self-test Indicator panel

Wiring from side

INNOVATING YOUR PROJECTS

4# . Rest mode & storage

4#.1 This luminaire conbined 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.

5.1 Testing (If no failure)

5.1.1. Manual function test.
ES809–ST/ES809–RST: Active the ④ test button.
ES809RST: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.
ES809–ST/ES809–RST: Active the ④ test button for 5 second;
ES809RST: 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.
ES809–ST/ES809–RST: Active the ④ test button for 7 second;
ES809RST: 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.

④ Test button   ②Charging Ind.

① Mains Ind.   ③ Faulty Ind.
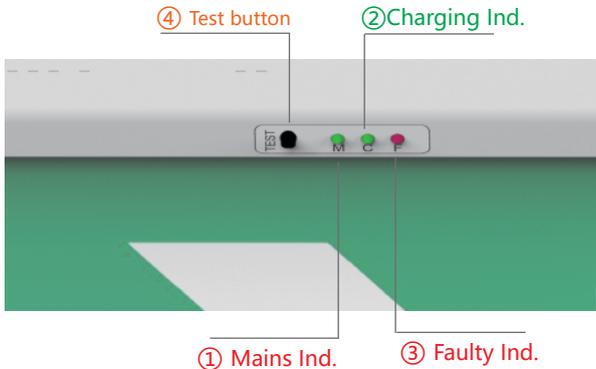
Remote test controller
OT-ES809RST only

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5.2 Testing (If any failure, Only ES809-ST/RST)

5.2.1 Battery failure:
Monitored constantly. The ③ faulty indicator will falsh 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 falsh 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	Mains indicator (Green)		Charging indicator (Green)		Faulty Indicator (RED)		Emergency LED Maintained mode	
Time line	1 Second	1 Second	1 Second	1 Second	1 Second	1 Second	1 Second	1 Second
Normal charging	Constantly on		Constantly on		OFF		Constantly on	
Normal AC Failure	OFF		OFF		OFF		Constantly on	
Manual test	OFF		OFF		OFF		Constantly on	
Monthly self-test	OFF		●	●	OFF		Constantly on	
Annual self-test	OFF		●	● ● ●	OFF		Constantly on	
Battery circuit failure	Constantly on		OFF		●	●	Constantly on	
Light source failure	Constantly on		Constantly on		● ●	● ●	OFF	
Duration test failure	Constantly on		Constantly on		Constantly on		Constantly on	

Before   **After**

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

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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 operatedand & 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 Mains indicator on,
-- The charging indicator on,
-- The Faulty indicator off,

Blue Line
Brong Line
Wiring

N
PCB
L

Dia 1
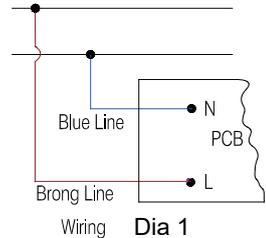
7.1.2. Press the test button, The charging indicator off, and emergency function actived.

7.1.3. Cut off the AC power supply, The mains indictor & Charging indicator off and emergency functon on.

7.2 Maintained & non-maintained mode changeover (ST & RST only)

a) The OT-ES809ST/RST was preset Maintained mode.

④ Test button

TEST

Press the ④ test button constantly for 11 seconds

Method 2
ES809-RST only

Method 1
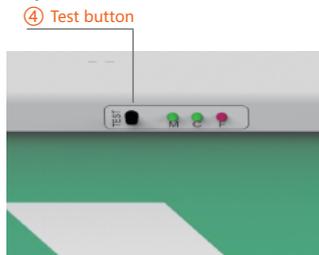
b) AC power on

Method 1: Press the ④ test button   constantly for 11 seconds
Method 2: Press the "Auxiliary" switch on remote test controller for 6 seconds (ES809-RST only).

The OT-ES809 will change the Emergency work mode.
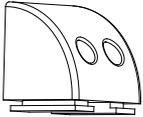
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Original technology
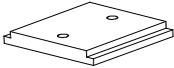Creating the life

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.
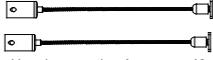3. Keep the product far from heat sources and in a well ventilated area.

INNOVATING YOUR PROJECTS

Installation pack

Ceiling mouting Accessory

Alligator Anchor*2
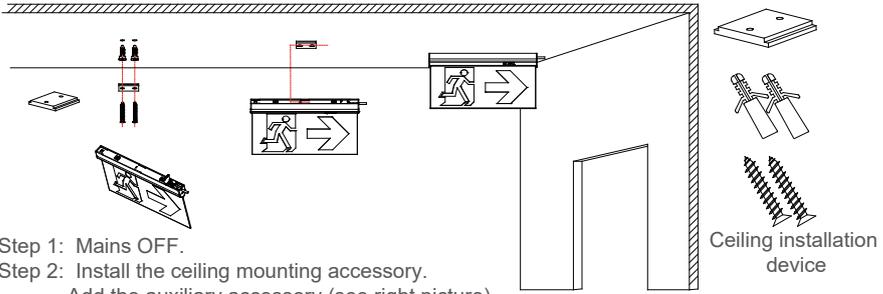
4*30 Screws * 2

The Wall mouting Accessory

Hunging mouting Accessory *2

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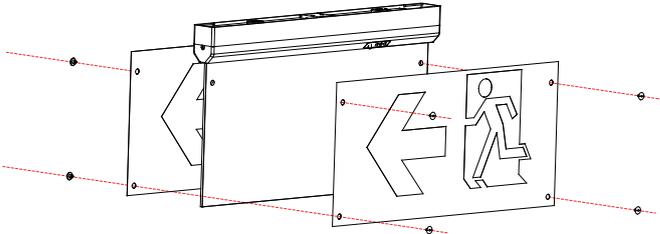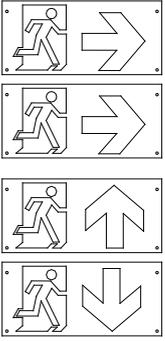
1) Chose the right PVC legend.
2) Install the legend by clips.

Installation 1: Ceiling mounting
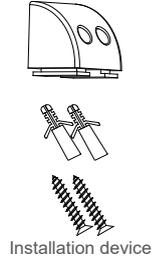
Ceiling installation
device

Step 1: Mains OFF.
Step 2: Install the ceiling mounting accessory.
         Add the auxiliary accessory (see right picture)
          If the ceiling is not flat.
Step 3: Wiring The cable from side hole recommend
          and testing accoring Page 7
Step 4: Fix the sign on the ceiling
Step 5: Mains ON
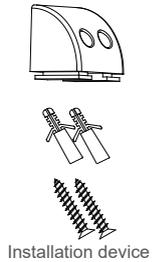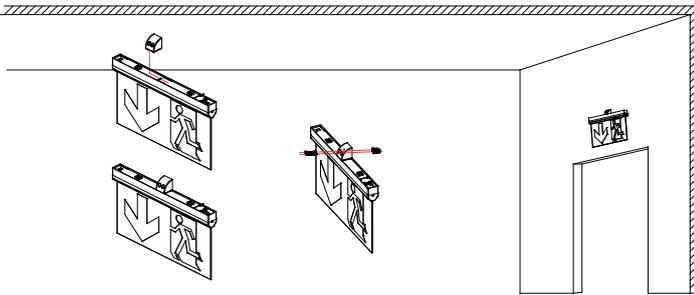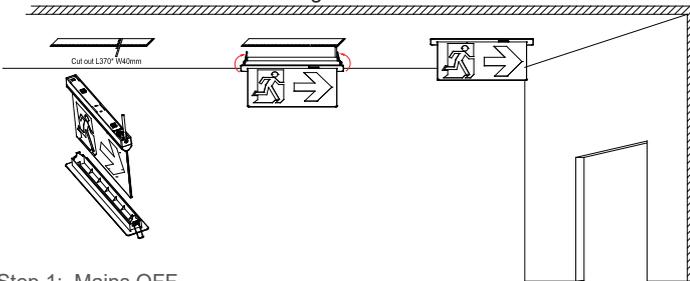
Installation 2: Side wall mounting
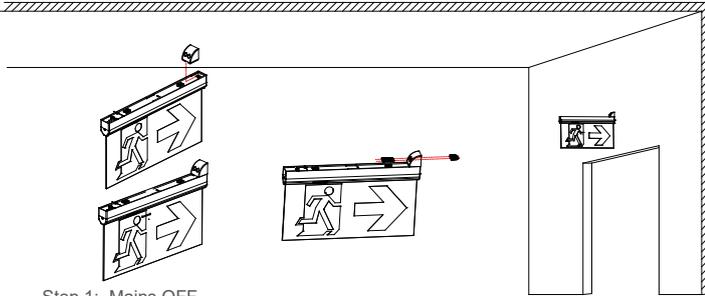
Step 1: Mains OFF.
Step 2: Install the wall mounting accessory
Step 3: Fix the sign on the wall
Step 4: Wiring and testing accoring Page 7
Step 5: Mains ON

Installation device

Installation 3: Wall mounting
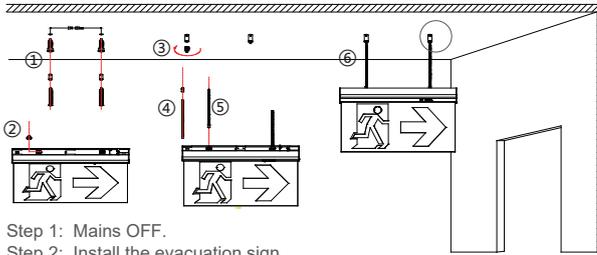

Installation device

Installation 4: Recessed mounting

Cut out L370* W40mm

Step 1: Mains OFF.
Step 2: Cut the square hole on Ceiling.
Step 3: Fix the Exit light into the Ceiling accessory
Step 4: Install the Exit light.
Step 5: Mains ON

Recessed installation device
(Not included)

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Installation 5: Hanging

a)

b)

c)   Stopper side

d)

e)

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 Incert the c) string into d) from no stopper side.
　⑤ Install c)+d) on to e) according the drawing by screwing.
　⑥ Incert the string into b) set the length accroding Pic8.1.

Step 3: Wiring and testing accoring Page 7
Step 4: Mains ON

Hanging installation device

Pic8.1
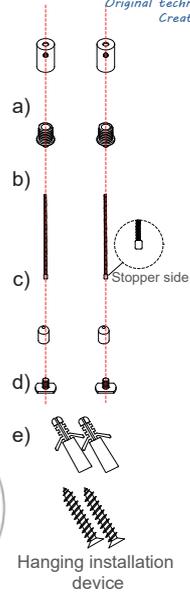
Installation 5: Hanging with canopy

a)

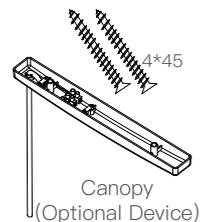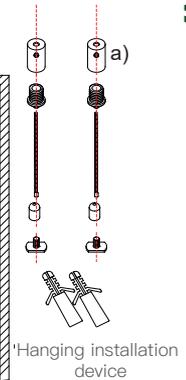Hanging installation device
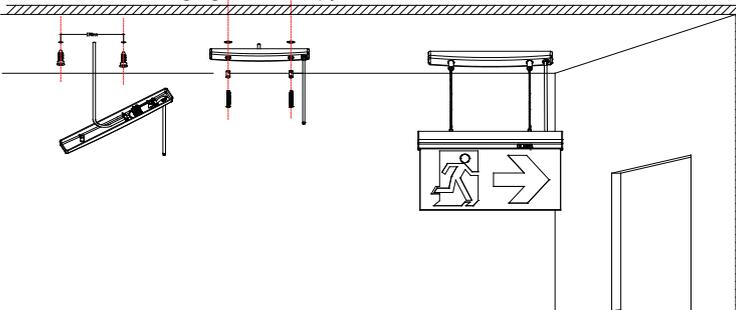
Step 1: Mains OFF.
Step 2: Connect the power cable to canopy.
Step 3: Fix the canopy toghether with a) of hanging accessory
　　　　 to the ceiling by 4*45mm screws
Step 4: Install the ES809 same as ↑Installation 5↑.
Step 5: Wiring and test accoring page 7
Step 6: Mains ON

4*45

Canopy
(Optional Device)

Luminaire emergency inspection record

month	Test	First Year Signed	Date	Second Year Signed	Date	Third Year Signed	Date	Fourth Year Signed	Date	Fifth Year 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:

....

Luminaire Locaton:

....

Installed Date:

....

Contact details:

....

Luminaire NO.:

....

INNOVATING YOUR PROJECTS

10 Cheap solutions DIY

⚠ WARNING

1. All OTC emergency lights are designed according to 60598-1 and 60598-2-22:2014 strictly. There is no trouble if you chose OTC products to bid projects, including project acceptance, monthly, annual inspections.

2. If you just need sell them online or install in your home & there is no professional project acceptance inspection, you can chose some cheaper solutions.

NO.	DIY Items	OTC default Solutions	Cheaper solutions	Dis-advantages
1	MOQ	No MOQ, 1pcs available	1000Pcs	
2	Material of house	PC Plastic	ABS	Not fire resist
3	Battery pack	3.6V 0.6Ah Ni-Cd	3.7V Li-ion	1 years guarantee for Li-ion
4	EM driver	Isolated	CBB solution	Can not IEC61347-2-7 compliant
5	Lumen output	Constant brightness	Bright at beginning Waker by the end	Can not IEC60598-2-22:2014, 22.17.1 compliant
6	Duration time	180mins	90mins or others	According local fire department requests
7	Installation pack	Installation pack in Page2	Only required installation facilities	Not recommend if sell online.

OTC only guarantee the EM function of luminaire if DIY !

Please check the requests/standards with local fire department before making decision.