

# 2-in-1 EXIT BOX

## Data Sheet

For Series: OT-ES9921



Scan for video instruction  
<https://youtu.be/cIHDPiHE5nU>



**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 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

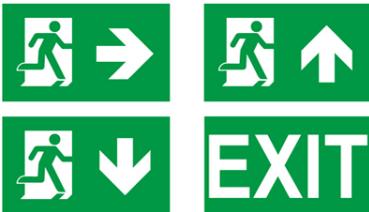
1 Security realated information .....	2
2 Packing list .....	2
3 Basic Parameters .....	3
4 General construction .....	4
5 Maintained & non-maintained changeover .....	5
6 Emergency function .....	6
7 Self & remote test system .....	7
8 Emergency controll logic .....	8
9 Installation guide .....	9
10 EM inspection record table .....	10
11 Video instruction link .....	11

## 1 Security related information

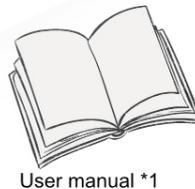
- Installation should be carried out in accordance with the latest edition of the I.E.E. Wiring regulations and taking into consideration the latest building regulations.
- Ensure that all electrical connections are tight with no loose strands, including factory made connections.
- Ensure there is adequate 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

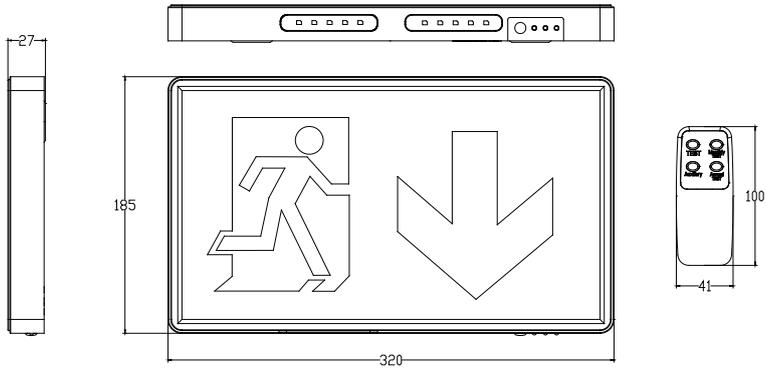


The pictogram ← → ↑ ↓ "EXIT"

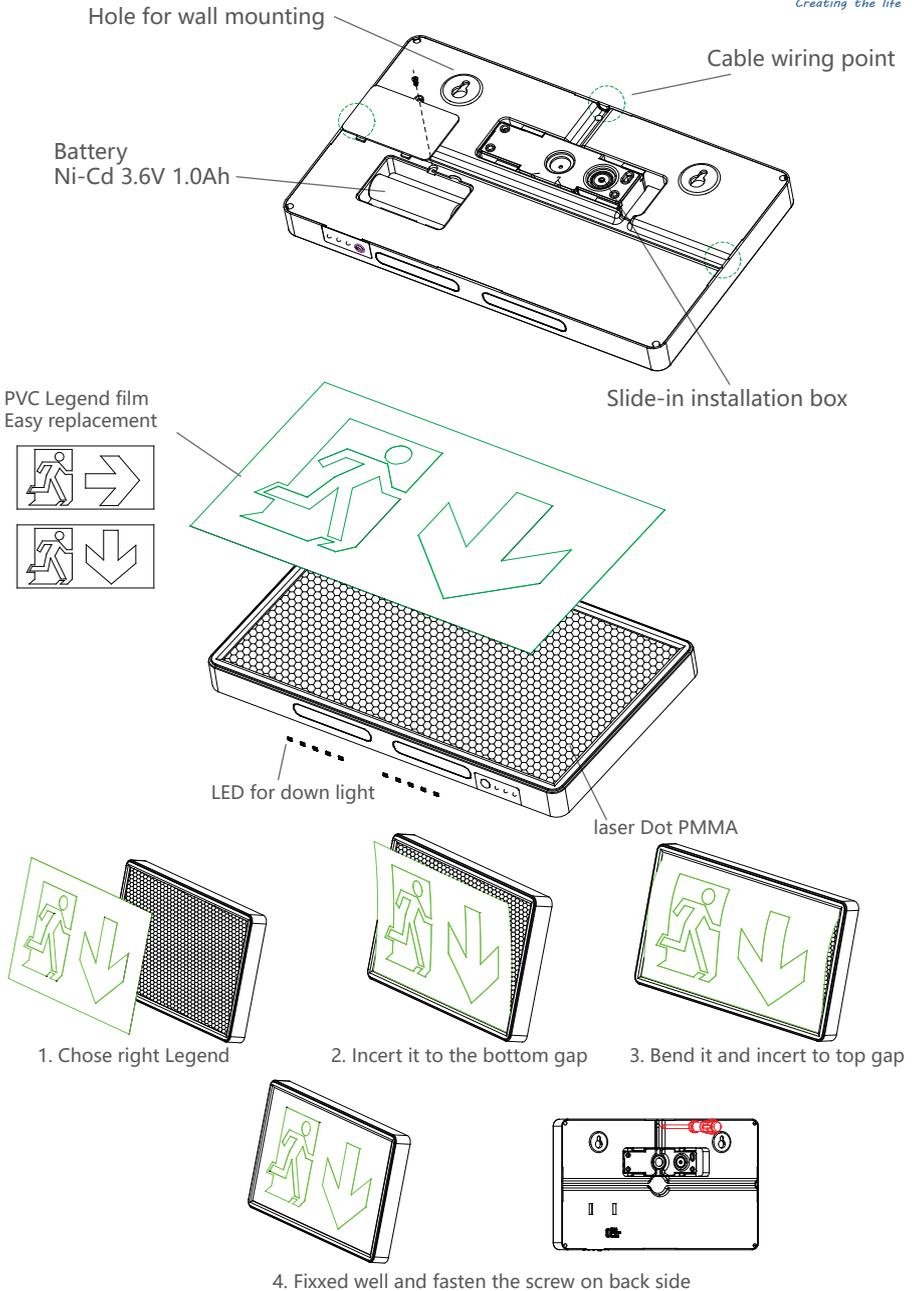


### 3 Basic Parameters

Model	Art Nr. OT- ES9921- **		
	SD	ST	RST
Material	Polycarbonate case		
Dimension	320*185*27mm		
LED Chips for exit legend	50 pcs SMD 3014 Chip		
LED Chips for Anti- Panic	10 pcs SMD 2835		
Color Rendering Index	>80		
Degree of protection	IP20		
Input Voltage	AC200- 240V 50/60HZ		
Input power	3.0W		
Down light beam angle	120°		
Power factor	>0.5		
LED lifespan	50,000 hrs		
↓ Next are Emergency parameters ↓			
EM mode	Non- maintained & maintained		
Standard	60598 - 2- 22:2014		
Luminous Flux ( The Safety Sign)	70LM/ Green		
Luminous Flux (The Anti- panic light)	40LM/ White		
Emergency Pack	3.6V 1.0Ah 3* AA Ni- Cd pack		
Emergency time	3 Hours		
Emergency change over	<0.5S		
Test	Manual	Manual + Self test	Manual + Self + Remote test
Charging indicator	NO	Green	Green
Faulty indicator	NO	RED	RED



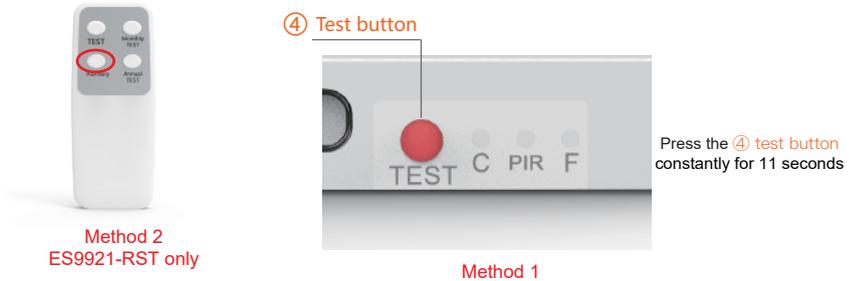
## 4 General construction



## 5 Maintained & non-maintained changeover

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

a) The OT-ES9921ST/RST was preset Maintained mode.



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 (ES9921-RST only).

The OT-ES9921 will change the Emergency work mode.

6 Self / remote test system(\*\*ST &\*\*RST only)

6.1 Testing (If no failure)

6.1.1. Manual function test.

ES9921ST: Active the ④ test button.  
ES9921RST: Press “TEST” switch on controller.

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

6.1.2 Monthly test.

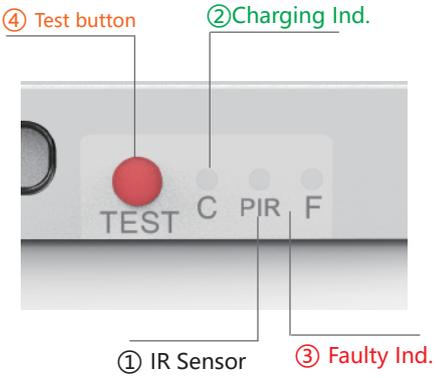
ES9921ST: Active the ④ test button for 5 second;  
ES9921RST: Press the “Monthly TEST” switch on controller;  
or the lamp installed every 30 days.

- 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.

6.1.3 Annual test.

ES9921ST: Active the ④ test button for 7 second;  
ES9921RST: 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-ES8821RST only

## 6.2 Testing (If any failure)

- 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

## 7 Emergency control logic

### The emergency function control logic

Operation	Charging indicator (Green)		Faulty Indicator (RED)		Emergency LED In Maintained mode		Emergency LED Non-Maintained mode	
	1 Second	1 Second	1 Second	1 Second	1 Second	1 Second	1 Second	1 Second
Normal charging	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					OFF		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**

## 8 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 User manual. Failure to maintain or change the battery may result in reduced duration in emergency mode.

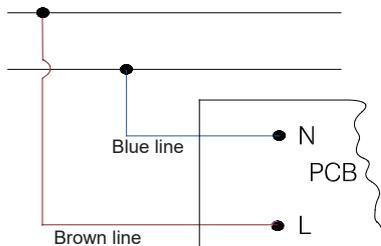
## Emergency function test before installation

### 8.1.1. Wiring & Connect the AC cable according to the Dia 1.

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

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

### 8.1.3. Cut off the AC power supply, The mains indicator & Charging indicator off and emergency function on.



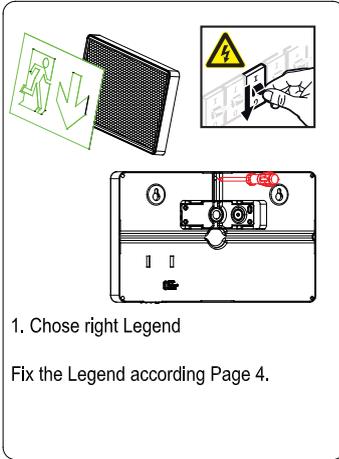
Dia 1

## 9 Installation guide



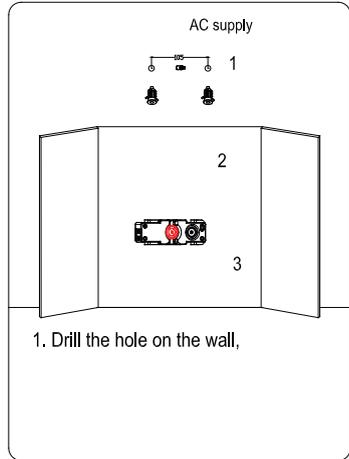
**Caution**

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.



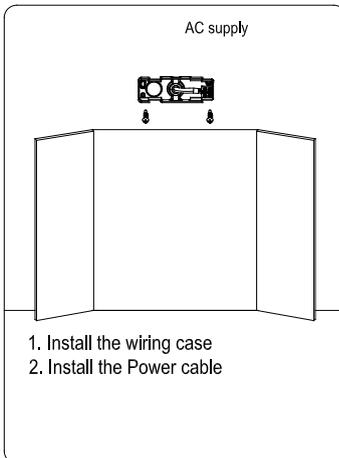
1. Chose right Legend
- Fix the Legend according Page 4.

### STEP 1



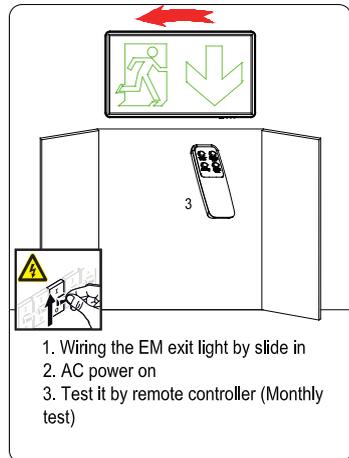
1. Drill the hole on the wall,

### STEP 2



1. Install the wiring case
2. Install the Power cable

### STEP 3



1. Wiring the EM exit light by slide in
2. AC power on
3. Test it by remote controller (Monthly test)

### STEP 4

10 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: ..... Luminaire NO.: .....  
 ..... Installed Date: .....  
 Luminaire Locaton: ..... Contact details: .....  
 .....  
 .....

11 Video introduction



Scan for video instruction  
<https://youtu.be/cIHDPfHE5nU>



Designed by OTC Project team  
Made in China