


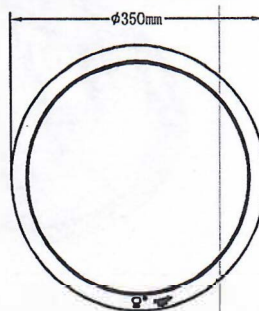


# INSTALLATION AND OPERATING INSTRUCTIONS FOR LED EMERGENCY ROUND BULKHEAD

CE IP44   

## RELEVANT STANDARDS

EN60598-2-22	EN55015
EN60598-1	EN61547
EN60598-2-1	EN61000-3-2
EN62493	EN61000-3-3



## CAUTIONS

This product should be installed by a registered electrician in accordance with local standards and electrical regulations. Take care to ensure the mains supply is isolated before installation. Check the unit label for correct supply voltage and frequency.

Replace the battery when the battery no longer meets its rated duration of operation .

Proof against supply voltage polarity reversal .

The insulation used between the supply and the battery circuit meet reinforced insulation .

## TECHNICAL DATA

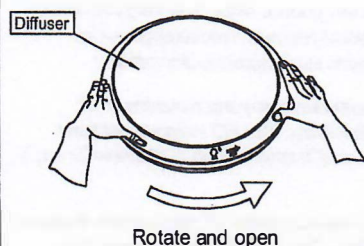
Input voltage:	220-240V, 50Hz	Lumen output:	Ref below chart
Charge time:	Ref below chart	Battery:	NI-MH Battery
Emergency Duration:	1 / 2 / 3 / Hours option	Mounting:	Ceiling mount
Power consumption:	Ref below chart	IP rating:	IP44
Function:	AUTO test	Material:	RoHS
Source:	SMD 2835 LED,	Sensor detection angle :	360°
Color temperature:	5000K /4000K /3000K	Integrated sensor :	5.8 GHz Microwave motion detector (<10mW)
Operation:	ACEM, Maintained & Non-maintained operation		

## SPECIFICATION

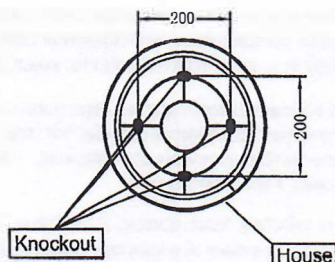
Model Number	Input Voltage	Charge Duration	Discharge Duration	Operation	Battery	Sensor	Power	lumen output	Emergency lumen output
RB-350(C/N/W)-ACEM-MS-3H -AT-MH	220-240V~50Hz	24h	3 h	ACEM	NI-MH,9.6V 3.0Ah	Yes	31W	2150lm	650lm
RB-350(C/N/W)-ACEM-MS-2H -AT-MH	220-240V~50Hz	16h	2 h	ACEM	NI-MH,9.6V 3.0Ah	Yes	31W	2150lm	650lm
RB-350(C/N/W)-ACEM-MS-1H -AT-MH	220-240V~50Hz	24h	1 h	ACEM	NI-MH,9.6V 1.8Ah	Yes	30W	2150lm	650lm
RB-350(C/N/W)-ACEM-3H -AT-MH	220-240V~50Hz	24h	3 h	ACEM	NI-MH,9.6V 3.0Ah	No	28W	2150lm	650lm
RB-350(C/N/W)-ACEM-2H -AT-MH	220-240V~50Hz	16h	2 h	ACEM	NI-MH,9.6V 3.0Ah	No	28W	2150lm	650lm
RB-350(C/N/W)-ACEM-1H -AT-MH	220-240V~50Hz	24h	1 h	ACEM	NI-MH,9.6V 1.8Ah	No	27W	2150lm	650lm
RB-350(C/N/W)-EM-3H -AT-MH	220-240V~50Hz	24h	3 h	Non-Maintained	NI-MH,9.6V 3.0Ah	No	5W	—	650lm
RB-350(C/N/W)-EM-2H -AT-MH	220-240V~50Hz	16h	2 h	Non-Maintained	NI-MH,9.6V 3.0Ah	No	5W	—	650lm
RB-350(C/N/W)-EM-1H -AT-MH	220-240V~50Hz	24h	1 h	Non-Maintained	NI-MH,9.6V 1.8Ah	No	4W	—	650lm

## INSTALLATION

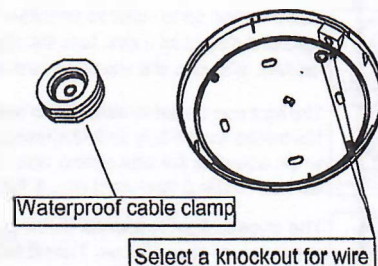
① Open the luminaire, rotate the diffuser as graph show



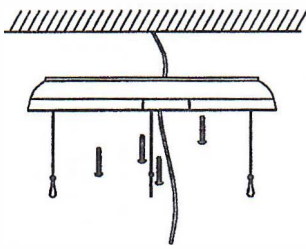
② Knockout hole for mounting.



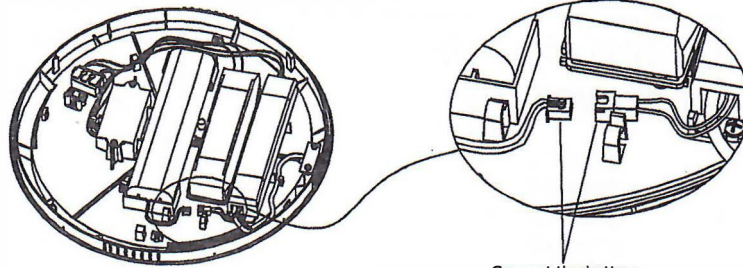
③ Select appropriate knockout hole for wiring. Snap waterproof cable clamp into wiring hole, put the wire through the house.



④ Fix house on the ceiling by screws.

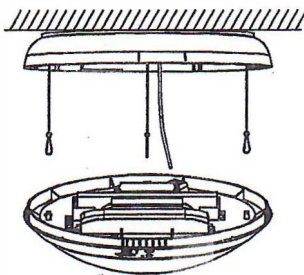


⑤ Connect the battery connector before next step.

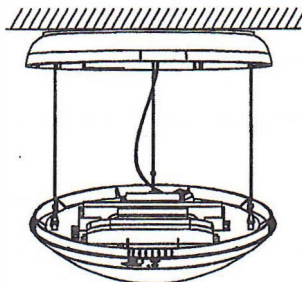


Connect the battery.

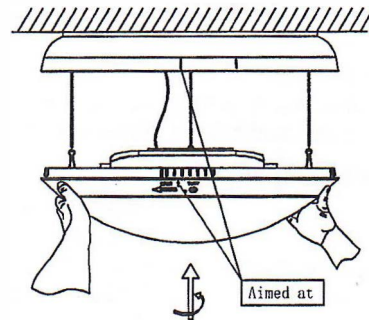
⑥ Hanging the diffuser with module on the house by using steel hook provided.



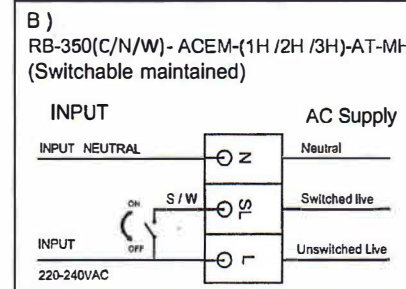
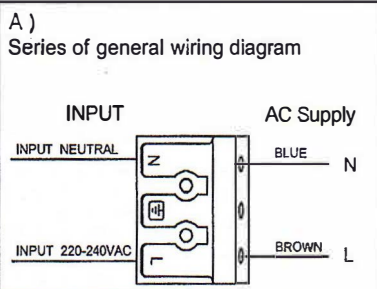
⑦ Connect the wiring cable on terminal block (As shown in Fig 1)



⑧ Assemble the diffuser with module onto the house.



Electrical Connection Fig1



## SERVICE & MAINTENANCE

**Normal Operation:** The LED indicator will go out if the mains supply fails, internal charger malfunctions, or unit is in test mode. The fixture must be charged 24 hours after installation.

**Battery:** Sealed Nickel-Cadmium rechargeable battery pack. Batteries of a different type can not be used. Batteries should be replaced by authorised service personnel only. If the unit no longer maintains its rated battery backup time. Should only be replaced by competent service personnel with same battery pack. Used battery should be recycled.

**Test Switch:** If pressed the test switch, LED indicator will go out and the fixture will be operate by battery.

**Microwave sensor:** The sensor is an active motion detector, it emits high-frequency electro-magnetic wave (5.8GHz) and receives their echo. The sensor detects the change in echo from even the slightest movement in its detection zone. A microprocessor then triggers the "switch light ON" command. Detection is possible through doors, panes of glass or thin walls.

**Note:** the high-frequency output of this sensor is <10Mw- that is just one 100th of the transmission power of a mobile phone or the output of a microwave oven.



Reach is the term used to describe the radius of the circular detection zone produced on the ground. After mounting the sensor light at a height of 2.5m, turn the reach control completely in anti-clockwise direction to select minimum reach (approx. 1 m radius), and turn the reach control completely in a clockwise direction to select the maximum reach (approx. 8m radius).



The light can be set to stay ON for any period of time between approx. 8sec (dial turned fully anti-clockwise) and a maximum of 12min (dial turned fully clockwise). Any movement detected during the "on" time will reset the timer. The LED indicator will flash when adjusting the time setting dial. The number of flashes means the following: 1 flash = 10sec, 2 flashes = 1 min, 3 flashes = 2 min, 4 flashes = 5 min, 5 flashes = 8 min, 6 flashes = 10 min, 7 flashes = 12 min.



The chosen light response threshold can be infinitely from approx. 2-2000lux. Turn it fully anti-clockwise to select dusk-to-dawn operation at about 2 Lux. Turn it fully clockwise to select daylight operation at about 2000lux. The knob must be turned fully clockwise when adjusting the detection zone and performing the walk test in daylight.

## INSTRUCTIONS FOR AUTOMATIC TEST OPTION

(EXIT LIGHT SELF DIAGNOSTICS/SELF TEST FUNCTION)

1. Install LED exit sign according to installation instruction sheet
2. Once the unit is powered up it will automatically initiate a self test and diagnostics as follows:

- Every 4 seconds : Checks for battery disconnection, charger board fault, lamp failure and transformer failure
- Every month : Performs a 3 minute duration test
- Every year : Performs a 1 Hour or 3 Hour duration test

All test functions are factory preset and do not need field adjustment

### 3. Dual Colour Indicator LED Status Meanings

- Green      Solid On      Ready / Normal Operation  
                  Flashing      Testing
- Red            Requires Service

•	One flash, 4 second pause	Battery not connected
••	Two flashes, 4 second pause	Battery short or low battery voltage
•••	Three flashes, 4 second pause	Charger board fault
••••	Four flashes, 4 second pause	Transformer fault
•••••	Five flashes, 4 second pause	LED lamp fault

#### NOTE

After repairing a service fault, press and hold the test button for 2 seconds to reset the flashing indicator light to green

### 4. Manual Testing

Press test button once	30 second duration test
Press test button twice within 2 seconds	3 minute duration test
Press test button 3 times within 2 seconds	30 minutes duration test
Press test button 4 times within 2 seconds	1 or 3 hours duration test