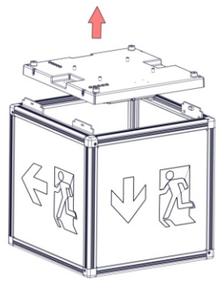
Module Connection & Dip Switch



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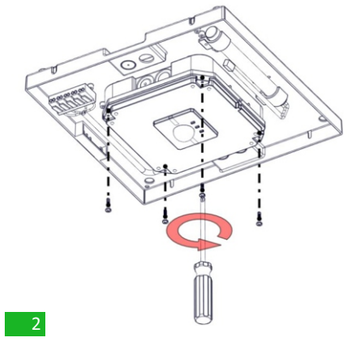

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Module connection

3

Dip Switch (DS1) Settings

4

Autonomy duration selection

The user can select one of the 3 available minimum autonomy durations: 1 hour, 3 hours and 8 hours. The selection must be done while the luminaire is disconnected from AC and battery supplies. The selection is achieved through Switches 2 & 3 of DS1. Switch 1 is not used.

Technical label installation

Two additional labels are included in the package, one for 3 hours duration (180) and one for 8 hour duration (480). Depending on the selected duration, the installer must cover the default 1 hour (60) printing with one that has the required duration. Please take notice of the orientation of the label.

Changing the operating mode

The control of maintained or non maintained operation of the luminary is achieved through Switch 4 of DS1. For maintained operation, switch number 4 must be in ON position. For non-maintained operation,switch number 4 must be in OFF position.

Battery Replacement

It can be done only by a competent person and after the mains interruption.

1. Remove the top cover (Step 1 of hanging or ceiling installation).
2. Unscrew the 2 screws that hold the battery to its base.
4. Remove the old battery and place a new one of the same type and characteristics.
3. Replace the removed parts.

NOTE: LED= Light Emitting Diode
LABELING EXPLANATION:
X: Self contained
1: Maintained operation **(*)**
A: Including test device
B: Including remote test mode
C: Including inhibiting mode
E: With non-replacable lamp(s) and/or battery
60: 1 hour duration
180: 3 hours duration
480: 8 hours duration

X	1	A E	6 0

(*) Maintained operation: The luminaire lights its illumination source, when it is powered by the mains power supply or not.
Non Maintained operation: The luminaire lights its illumination source, only in mains power supply's failure.

ATTENTION!!!

The light source of this luminaire is not replaceable when the light source reaches its end of life the whole luminaire shall be replaced.

Technical Characteristics

	Cube		
OPERATION VOLTAGE	220-240V AC / 50-60Hz		
MAXIMUM POWER CONSUMPTION	6.4W / 6.6VA		
MAXIMUM SUPPLY CURRENT	29.2 mA		
U-OUT	33V		
Prated	1h: 2.2W	3h: 1.5W	8h: 0.6W
Irated	1h: 200 mA	3h: 141mA	8h: 57mA
MAX OPEN CIRCUIT VOLTAGE	33V		
WIRE CROSS SECTION	$0.5mm^2$ - $2.5mm^2$		
MINIMUM POWER FACTOR	0.92		
BATTERY (Ni-MH)	4.8V/2Ah		
INSULATION BETWEEN SUPPLY & CONTROL TERMINALS	Basic insulation		
INSULATION BETWEEN SUPPLY & BATTERY CIRCUIT	Basic insulation		
BATTERY PROTECTION	Deep discharge and overcharge protection / the control gear will recharge the battery normally after the test of 22.3		
MINIMUM DURATION	1 hour	3 hours	8 hours
LIGHT SOURCE LUMINOUS FLUX (MAINS / EMERGENCY)	370/370lm	370/270lm	360/110lm
MIN MAX. DISCHARGE CURRENT	438-700mA	310-490mA	170-191mA
MIN MAX. DISCHARGE VOLTAGE	4-6V		
MIN MAX. CHARGE CURRENT	190-210mA		
TRICKLE CHARGE VOLTAGE/CURRENT	5.8V/70mA		
MAX CHARGE VOLTAGE	6V		
INDICATIONS/CONTROLS	LED Charge, Lamp Fault LED, Battery Fault LED/Test BUTTON		
CHARGE TIME	16h		
LIGHT SOURCE	16 power LEDs		
DEGREES OF COVER PROTECTION	IP40		
PRODUCED IN ACCORDANCE WITH	EN 60598-1, EN 60598-2-22, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3		
OPERATION TEMPERATURE RANGE	5 to 40 °C		
CONTROL GEAR MAX.TEMPERATURE: tc	53 °C at PSU1		
RELATIVE HUMIDITY	Up to 95%		
CONSTRUCTION MATERIAL	Aluminium, ABS/PC, PC, Acrylic Plate		
EXTERNAL DIMENSION (L x W x H)	310 x 310 x 330 mm		
WEIGHT	2326gr.		
GUARANTEE	4 years		
Controlgear classification in accordance with IEC 62034: with automatic test function.			

Honeywell Life Safety AS
Po. Box 3514, N-3007 Drammen, Norway
http://www.hls-nordic.com

Honeywell

Cube M ST LED

SELFTESTING MAINTAINED EMERGENCY LUMINAIRE

Package Contents

1	Luminaire
1	Mounting accessories
1	Indication sign
1	Manual

General

Cube is a self-contained luminary with selftest function.
It can be configured as maintained or non-maintained.

Selftest Functions
Every 15 days the luminaire will perform an emergency operation test. This will light the white LEDs for approximately 3 seconds. The red LED will flash during this test sequence. Every 6 months the luminaire will perform a battery condition test. The test will last for the stated duration. The white LEDs will be lit and the yellow LED will flash during this test sequence.
Note: When using DALI or Wireless communication, the frequencies and schedules for tests will instead be determined by the connected PC software.

Manual Test Functions

Emergency Operation Test
Press the TEST button less than 5 seconds. The white LEDs light for about 3 seconds and the red LED flashes.

Battery Condition Test
Press the TEST button for 5 to 10 seconds. This test will last for for the stated duration and can only be performed when the battery is fully charged (steady green LED). The white LEDs light and the yellow LED flashes.

Resetting Errors
Press the TEST button more than 10 seconds to delete all indicated errors. The luminaire enters regular operation mode.

In case that the luminaire no longer meets its rated duration of operation, the battery must be replaced.

Important notice when installing luminaires within the same area!!!
To avoid that luminaires perform their battery test at the same day, connect the battery packs with more than 1,5 minutes in between.

ATTENTION!!!
1. Operations for installation, maintainance or testing must be done by authorized personnel only. Always use in any case round mains cable, with a diameter of 5-10mm (H05RN-F type 2x1mm^2) or any other type, at least equal to it's mechanical and electrical properties).
2. The device must be connected to the mains power supply through a fuse that is dependent on the total line's power load.
3. In case of battery replacement, it must be replaced by the same type, by the manufacturer or a competent person.
4. In case of inactive use for a period greater than 2 months, disconnect the battery by pulling out the battery's connector.
5. The control gear within this luminaire is a built in control gear which relies on the luminaire for protection against electric shock.
6. The control gear is proof against supply voltage polarity reversal.
7. This control gear has mains connected primary windings.
8. **It is not allowed to discard batteries into common trash bins, they must be discarded only in battery recycling points. Do not incinerate.**

Connectors
CN1: Power connector
CN2: Communication Connector
CN5: Module connector
CN11: Non user connector
CN13: Non user connector
CN15: Indication LEDs connector

Indications LED Status

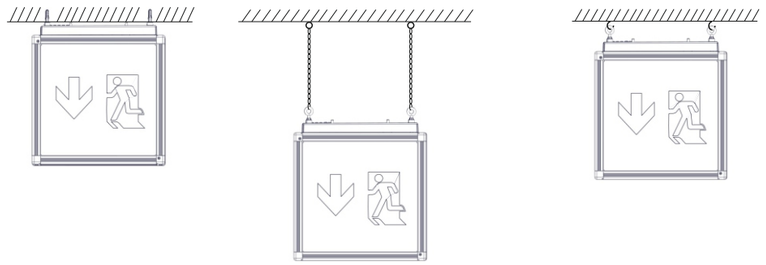
BATT. FAULT (yellow)	LAMP FAULT (red)	CHARGE (green)	Description
∅	∅	◉	Charging
∅	∅	●	Fully charged
∅	∅	○	Battery fault or emergency mode
∅	◉	∅	Operational test
∅	●	∅	Light source fault
◉	∅	∅	Autonomy test
●	∅	∅	Duration fault

Note:

●	Permanently ON
◉	Blink
○	Off
∅	Indifferent

Installation Methods

The luminaire can be installed in 3 different ways. It can be installed either at the ceiling, either hanging (hanging with chain and hanging with eye bolts. For ceiling installation special accessories are including. For hanging installation only eye bolts are including.



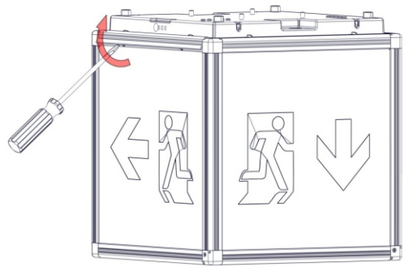
A Ceiling mounting

B Hanging installation with chain

C Hanging installation with hooks

Installation Instructions

Changing Pictogram



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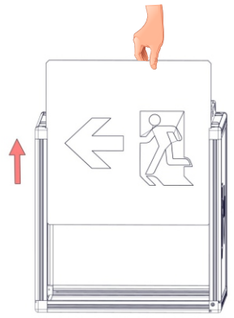

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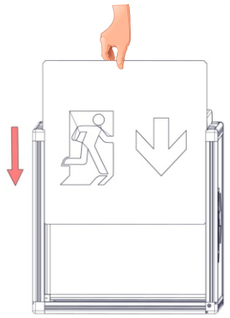

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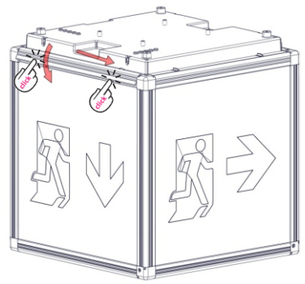

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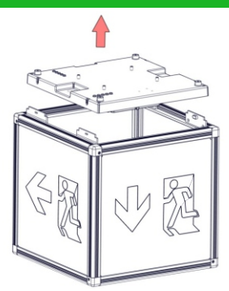
Follow the same steps for the remaining sides of the pictogram.

Ceiling Mounting



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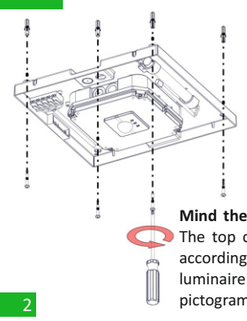
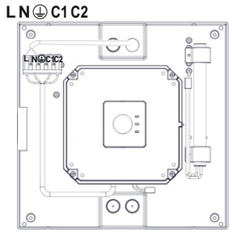


Mind the orientation of placement!!
The top cover placement is achieved according to the bottom part of the luminaire and the already installed pictograms.

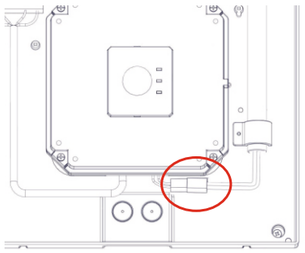
2



Make a hole in the center of the rubber gasket by using a small screwdriver. Pass the round cable through the rubber gasket and install the gasket in the appropriate hole.
Connect the mains cable to the respective terminal block: L for live wire, N for neutral and ⏚ for ground. Install the included tie (if needed) to fasten securely the power cables. Power supply cables cross section should be 0.8 – 3 mm^2. The C1 and C2 terminals are used for elBus communication (optional), DALI communication (optional) or voltage free contact (optional).

3

Battery Connection



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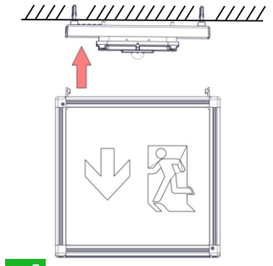

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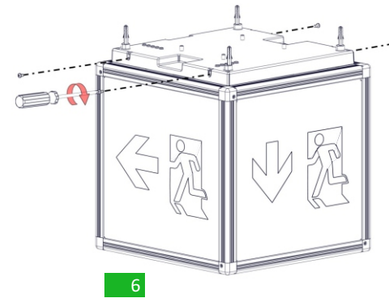

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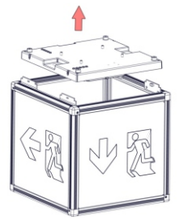
Hanging Installation



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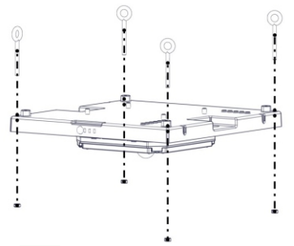

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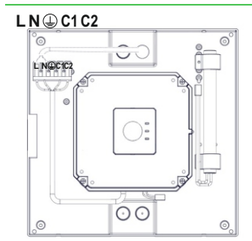

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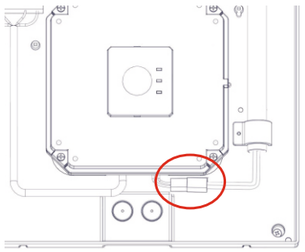
Connect the mains cable to the respective terminal block: L for live wire, N for neutral and ⏚ for ground. Install the included tie (if needed) to cables. Power supply cables cross section should be 0.8 – 3 mm^2. The C1 and C2 terminals are used for elBus communication (optional), DALI communication (optional) or voltage free contact (optional).

3

Battery Connection



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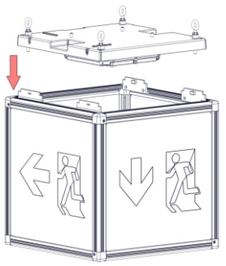

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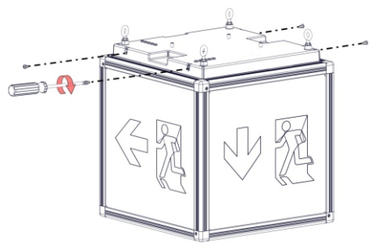

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