INSTALLATION & MAINTENANCE MANUAL

BATMCW4 / BATMCW5 / BATMCW6
MODEMKIT / MODEMKIT2 / MODMWS

GENERAL INSTRUCTIONS

These instructions should be read carefully and retained after installation by the end user for future reference and maintenance.
These instructions should be used to aid installation of the following products:
BATMCW4 / BATMCW5 / BATMCW6 / MODEMKIT / MODEMKIT2 / MODMWS

SAFETY

- These products must be installed in accordance with the latest edition of the IEE Wiring Regulations (BS7671) and current Building Regulations. If in any doubt, consult a qualified electrician
- Please isolate mains prior to installation or maintenance
- Check the total load on the circuit (including when these luminaires/products are fitted) does not exceed the rating of the circuit cable, fuse or circuit breaker
- Please note the IP (Ingress Protection) rating of these products when deciding the location for installation
- Do not overload these accessories or subject it to conditions outside its rating
- These products are for indoor use only
- **BATMCWx** products are Class I and must be earthed
- **MODEMKIT / MODEMKIT2 / MODMWS** products are Class II double insulated
- These products are IP20 rated

INSTALLATION

Note – Microwave sensors may not be suitable for all installations, for example enclosed spaces, as they are able to detect movement through non-metallic surfaces like plasterboard and thin doors.

- Provide power to the required point of installation
- Squeeze the sides and hinge the diffuser away from the fitting (see Fig. 1)

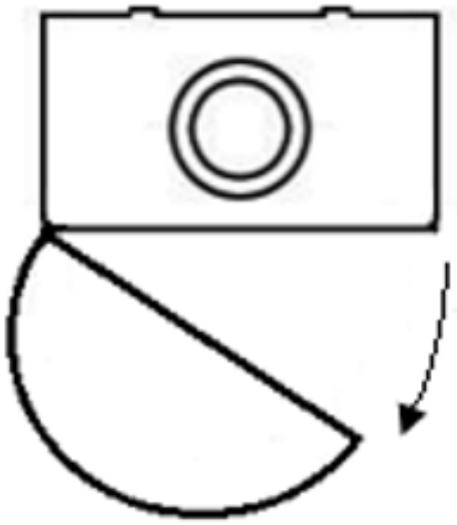


Fig. 1

- Mark the location of the fixing holes and drill the holes ensuring not to infringe with any gas/water pipes or electrical cables. The fitting can also be mounted over conduit boxes: for distance between fixing centres please see below:

PRODUCT CODE	DISTANCE (mm)
BATMCW4	600
BATMCW5	600
BATMCW6	600

- Fix the base to a suitable solid surface using the screws provided.
- Connect to the mains supply ensuring the correct polarity is observed: L – Live, L1 – Emergency Live (brown), E – Earth (green/yellow), N – Neutral (blue) (see Fig. 2). Two cables can be inserted into the push-fit terminal block in order to achieve loop-in/loop-out wiring

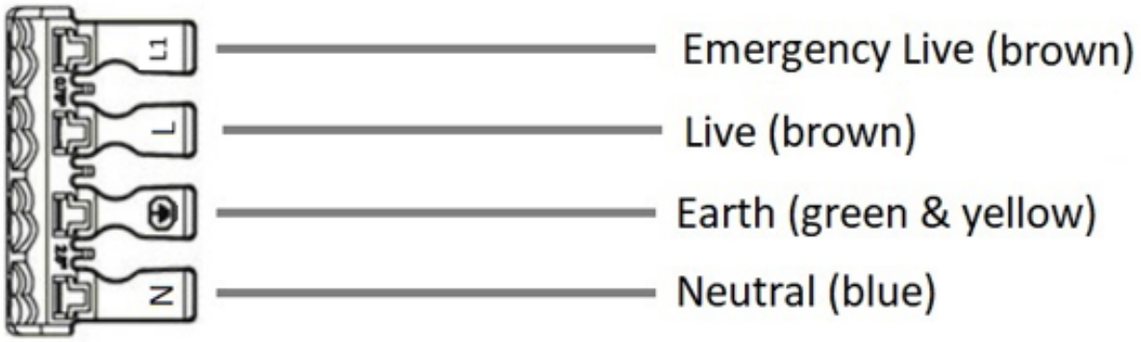


Fig. 2

MODEMKIT / MODEMKIT2

- Install by using the clips to secure them in place
- Luminaire with emergency mode and no sensor connected, connect the connectors labelled **A** from the terminal block to **A(EM)** from the emergency module, connector labelled **B** from the driver to **B(EM)** emergency module, connector labelled **C(LED)** from emergency module to **C** LEDs and connectors labelled **(DLED)** from emergency module to **D** LEDs
- Ensure that the battery is connected by opening the emergency module pack

and the battery connector on the PCB

- Ensure LED indicator is connected, mounted on holder located on end cap correctly and visible from outside
- See Fig. 3 for wiring diagram
- Refer to **MODEMKIT2** self-test function section

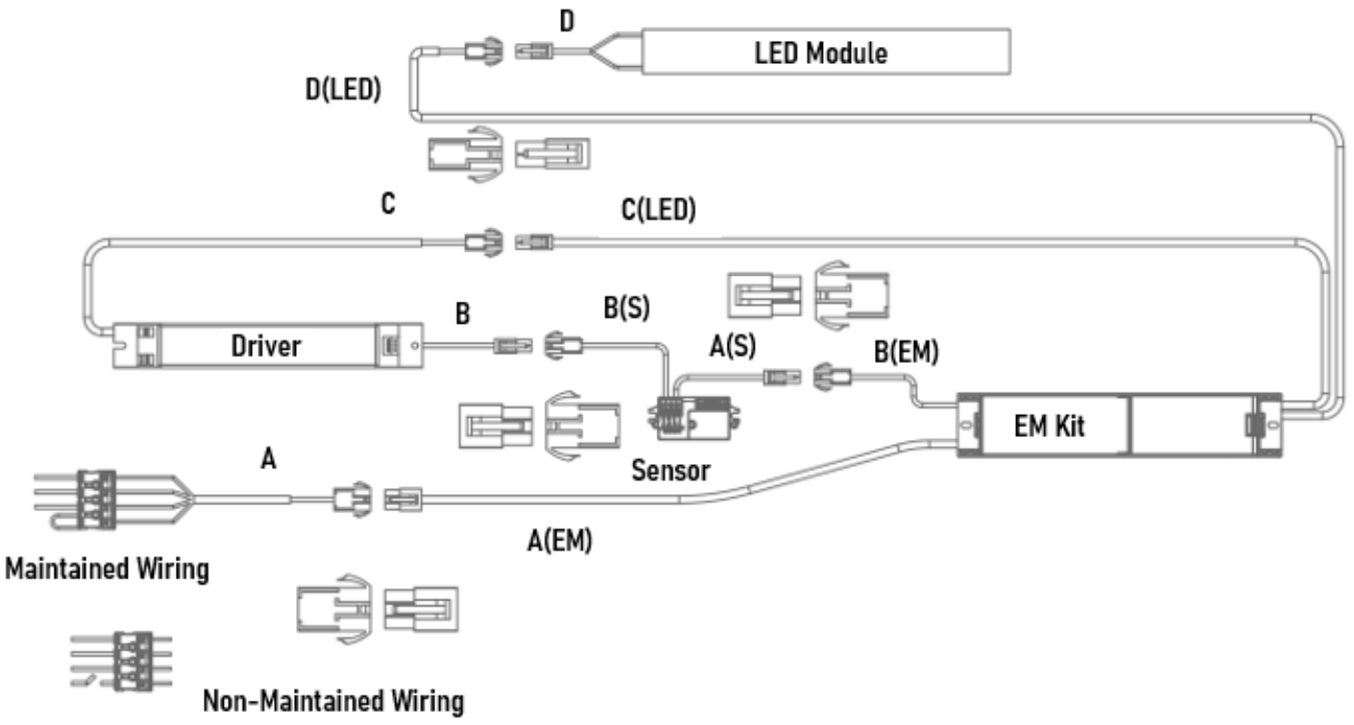


Fig. 3

MODMWS

- Install by using the clips to secure them in place
- Luminaire with no emergency mode and sensor connected, connect the connectors labelled **A** from the terminal block to **A(S)** from the sensor and connector labelled **B** from the driver to **B(S)** from sensor
- See Fig. 4 for wiring diagram

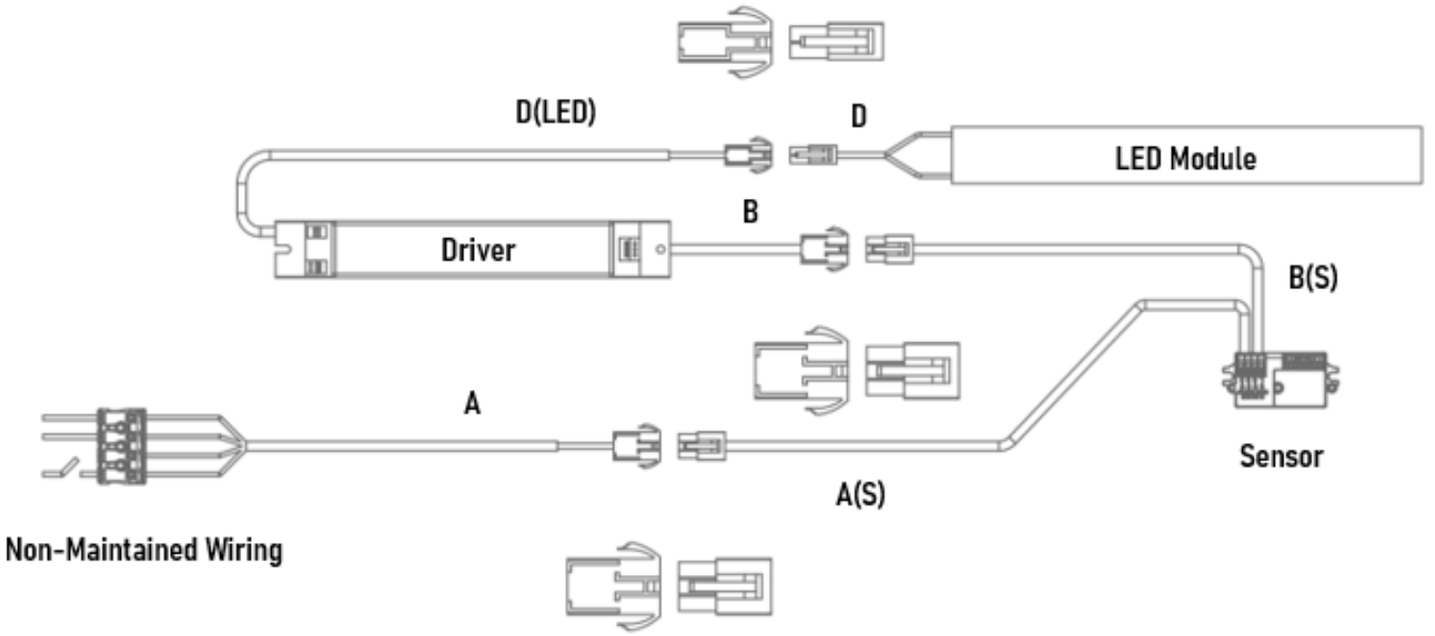
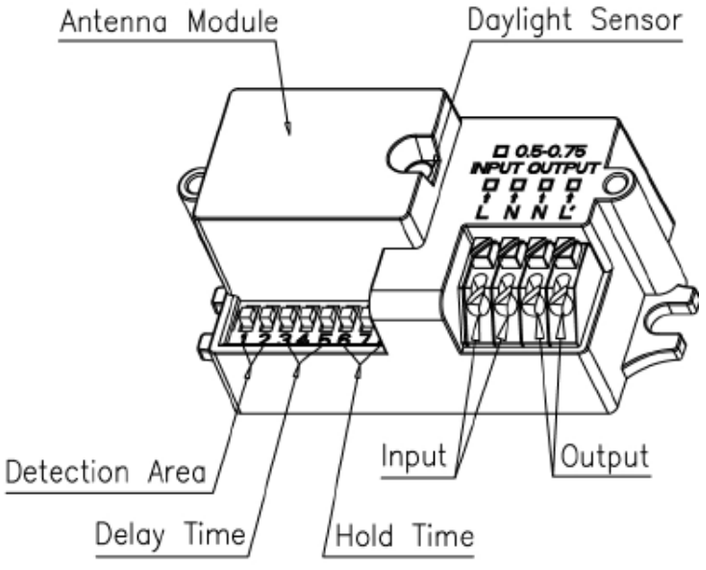


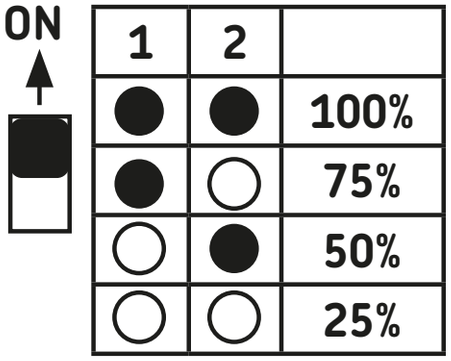
Fig. 4

Fig. 4

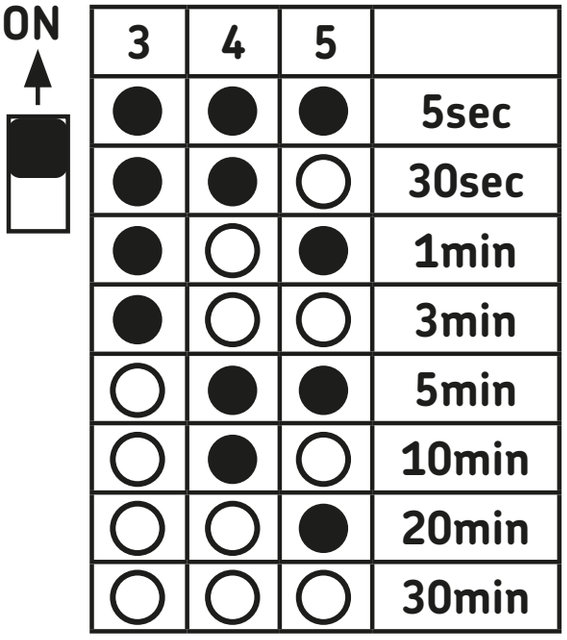
SENSOR LAYOUT



Detection Area

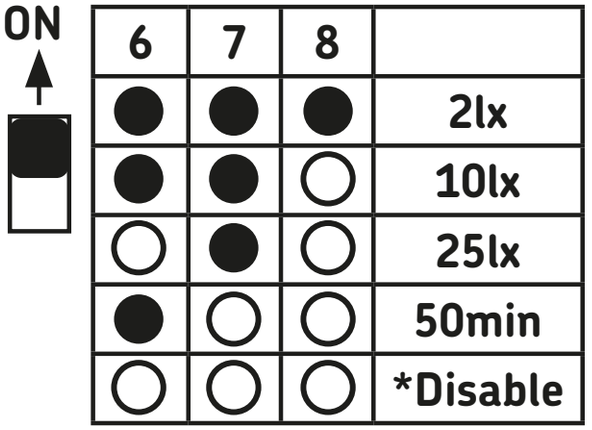


Hold Time



This is the time period the lamp remains at 100% after no motion is detected

Daylight Sensor



When set to disable, the daylight sensor will switch to lamp on when motion is detected regardless of the ambient light level

MODEKMIT / MODEMKIT2 and MODMWS

- Install the **MODEMKIT / MODEMKIT2** and **MODMWS** by using the clips to secure them in place
- Luminaire with emergency mode and sensor connected, connect the connectors labelled **A** from the terminal block to **A(EM)** from the emergency module, connector labelled **A(S)** from sensor to connector labelled **B(EM)** from emergency module, connector labelled **B** from the driver to **B(S)** from sensor, connector labelled **C(LED)** from emergency module to **C** LEDs and connectorslabelled **D(LED)** from emergency module to **D** LEDs
- Ensure that the battery is connected which is within the emergency module and the battery connector on the PCB
- Ensure LED indicator is connected, mounted on holder located on end cap correctly and visible from outside
- See Fig. 5 for wiring diagram

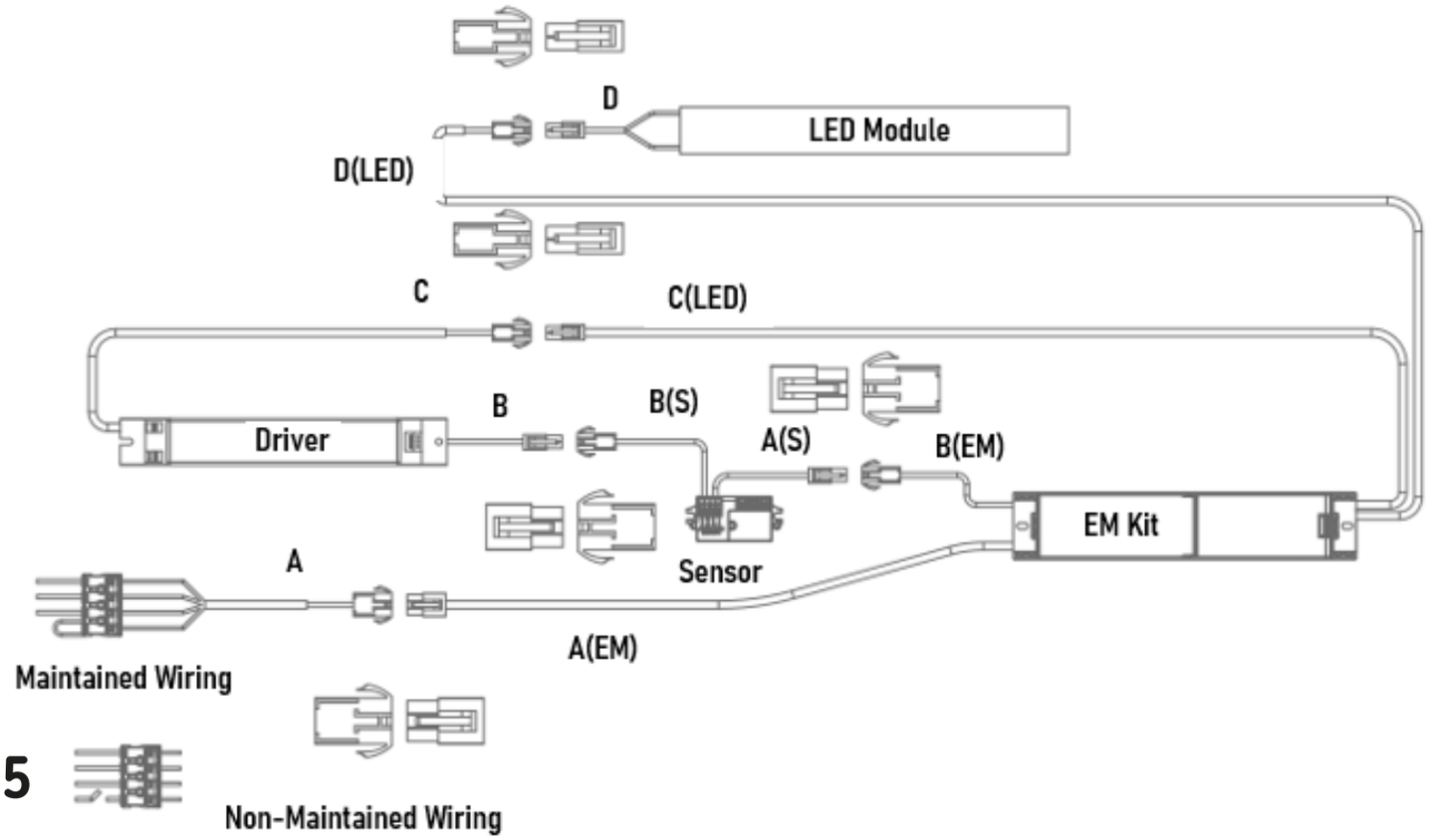


Fig. 5

NOTE: The **MODEMKIT / MODEMKIT2** and **MODMWS** are sold separately

- Select the required colour temperature via the three-position switch within the luminaire and required wattage via the DIP switch located on the driver (see Fig. 6)

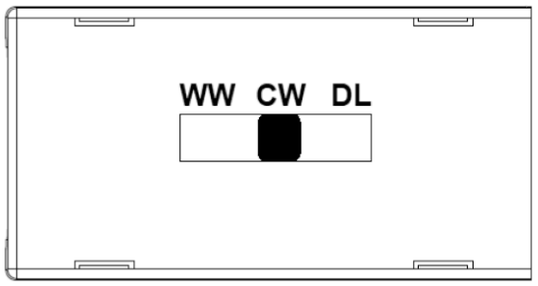
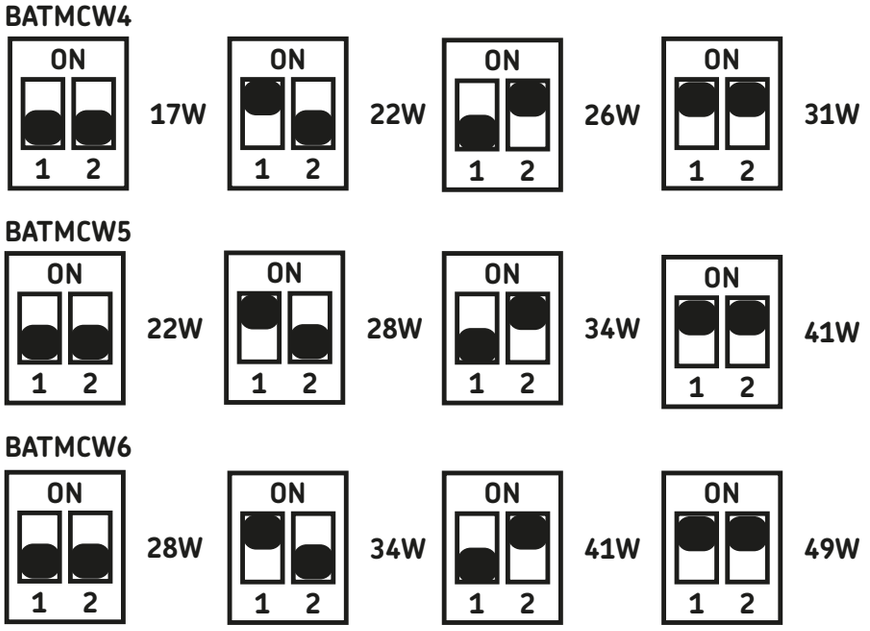


Fig. 6



- Refasten the cover
- Switch on and check for correct operation ensuring the green indicator LED is illuminated (for emergency lighting only)
- We recommend, on commissioning the installation, a minimum charge period of 24 hours before carrying out an emergency duration test
- The test button can be used to simulate a power failure to test the lamp and battery operation. This can be used to carry out monthly functional testing providing the battery holds at least a small charge

MODEMKIT2 – SELF-TEST FUNCTION

Commissioning

- Commissioning takes place by connecting the battery and then the un-switched supply. The battery must be connected first
- The green LED indictor will immediately flash 1 x second to indicate that there is a pending duration test
- A functional test will occur at 5 minutes after commissioning to allow 5 minutes for battery charging to ensure there is some charge
- A duration test will occur at between 24 - 48 hours after commissioning
- Any faults found in the functional and duration testing will be reported by the LED indicator as detailed below
- Disconnecting the un-switched supply and the battery resets the emergency module, clears all faults and a re-commission when the battery and then the un-switched supply are reconnected
- If the un-switched supply of an emergency lighting circuit is switched ON/OFF twice within 5 seconds, the schedule for all the emergency units in the circuit will reset to the current time

Duration Testing (3 hours)

- An automatic duration test will occur between 24–48 hours after commissioning to allow for battery charging
- An automatic duration test will occur semi-annually or annually at a random point in the 52nd week of each year
- A duration test will occur at a random point between 0–24 hours after pressing the manual button for 5-10 seconds. Time will be added to allow the battery to charge if the battery has been charging for less than 24 hours
- A duration test may be delayed by other events, such as a power cut that interrupts the test or a lack of charging time to the battery. If this occurs, the green LED indicator will flash 1 x second to indicate there is a pending duration test and the emergency module has been rescheduled
- Any faults found in the duration testing will be reported via the LED indicator, as detailed below
- A functional test will not override any faults reported by a duration test. A full duration test or re-commissioning is required to clear any faults

Functional Testing (<2 minutes)

- A short automatic functional test will occur every 7 days
- A manual functional test will start after pressing the manual test button to 1 – 2 seconds
- Any faults found in the functional testing will be reported by the LED indicator, as detailed below
- A functional test will not override any faults reported by a duration test. A full duration test or re-commissioning is required to clear any faults

Manual Testing

- For a manual functional test, press the test button for 1–2 seconds. A manual functional test will last <2 minutes will start
- For a manual duration test, press the test button for 5–10 seconds. A manual duration test will occur at a random point between 0-24 hours after pressing the test button for 5-10 seconds. Time will be added to allow the battery to charge if the battery has been charging for less than 24 hours

Pending Duration Testing

- A duration test maybe delayed by other events, such as power cut that interrupts the test or charging period. If this occurs, the green LED indicator will flash to indicate there is a pending duration test and the emergency module has been rescheduled until charging is complete

Lamp or Luminaire Fault

- Turn off the supply and replace or correct the fault with the lamp or luminaire, and then reconnect the supply
- Press the manual test button for 5–10 seconds. A manual duration test will occur at a random point between 24-48 hours later to allow the battery to charge fully
- If the battery and power have been disconnected, the EM kit will re-commission and automatically test the replacement
- A successful functional test will not override any faults reported by a duration test. A full duration test or re commissioning is required to clear any faults

Battery Fault

- Turn off the un-switched supply to the EM kit and replace the battery, then reconnect the supply
- If the fault was because the battery was not connected, the un-switched supply must be turned off when connecting the battery to clear the battery fault
- The EM kit will re-commission and automatically test the replacement between 24 – 48 hours after commissioning to allow for battery charging

LED Indicator

- System status is indicated by a bi-colour indicator LED as detailed below

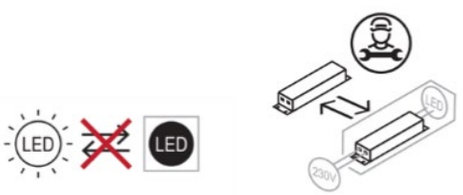
LED INDICATION	STATUS
Green permanently ON	System Healthy
Permanently OFF	Emergency mode: Mains failure or mains disconnected
Green Flash 1 x second	Duration Test Pending
Green Flash 2 x second	Duration Test Running
Green Fast Flash 4 x second	Functional Test Running
Red Permanently ON	Battery Charging Fault
Red Flash 2 x second	Battery Duration Fault
Red Flash 4 x second	Lamp or Luminaire Fault

WARNING

These products must be disconnected from the circuit if subjected to any high voltage or insulation resistance testing. Irreparable damage will occur if this instruction is not followed.

GENERAL

These products contain a light source of energy efficiency class C to Regulation (EU) No. 2019/2015 and (UK) 2021 No. 1095.
These products contain a non-replaceable LED light source and a control gear which can be replaced by a professional.



Clean with a soft dry cloth only, do not use aggressive cleaning products or solvents which may damage the product.
Installing in areas where the temperature consistently drops below 0°C may shorten the battery life.

The maximum constant ambient temperature at the point of installation should not exceed 50ºC.
These products are non-dimmable.
These products should be dismantled for disposal when it reaches the end of its life. Please see website for dismantling instructions.
These products should be recycled in the correct manner when it reaches the end of its life. Check local authorities for where facilities exist.
The batteries in the **MODEMKIT** and **MODEMKIT2** are Lithium Ion and must be disposed of correctly. Please contact the local authorities for the disposal of this toxic waste.

WARRANTY

The products listed below have the following warranty from date of purchase.

- **BATMCW4 / BATMCW5 / BATMCW6** – 7 years
- **MODEMKIT / MODEMKIT2** – 5 years (including battery)
- **MODMWS** – 5 years

Failure to install these products in accordance with the current edition of the IEE Wiring Regulations (BS7671), improper use, or removal of the batch code will invalidate the warranty. If these products should fail within its warranty period, it should be returned to the place of purchase for a free of charge replacement. ML Accessories does not accept responsibility for any installation costs associated with the replacement product. Your statutory rights are not affected. ML Accessories reserve the right to alter product specification without prior notice.

TESTING FOR EMERGENCY LUMINAIRES

MODEMKIT

Recommended routine test procedure in accordance with BS5266:

- Daily check – check LED charge indicator is illuminated
- Monthly functional test - simulate a mains supply failure for approx. 30 seconds by operation of key switch or switching off circuit breaker. Ensure normal supply is restored after test and ensure charge indicator is illuminated
- Annual 3-hour duration test - simulate a mains supply failure for 3-hour continuous test by operation of key switch or switching off circuit breaker. Ensure normal supply is restored after test and ensure charge indicator is illuminated
- If the luminaire fails any of the above tests, please contact a qualified electrician. See below for test record sheet

MODEMKIT2

Recommended routine test procedure in accordance with BS5266:

- Daily check – check status of bi-colour LED indicator
- Monthly functional test – the luminaire will perform this function without any action from the user. Alternatively, simulate a mains supply failure for approx. 30 seconds by operation of key switch, switching off circuit breaker or using test button. Ensure normal supply is restored after test and check status of bi-colour LED indicator
- Annual 3-hour duration test – the luminaire will perform this function without any action from the user. Alternatively, simulate a mains supply failure for 3-hour continuous test by operation of key switch, switching off circuit breaker or using test button. Ensure normal supply is restored after test and check status of bi-colour LED indicator
- If the luminaire fails any of the above tests, please contact a qualified electrician. Results should be recorded, even when obtained via the self-test function. See below for test record sheet

TEST RECORD SHEET

INITIAL COMMISSIONING 3 HOUR TEST	SIGNED	DATE

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	FUNCTIONAL										
7	FUNCTIONAL										
8	FUNCTIONAL										
9	FUNCTIONAL										
10	FUNCTIONAL										
11	FUNCTIONAL										
12	3 HOUR										

Installed by:

Installation date:

Contact number:

Knightsbridge

Manufacturers Declaration of Conformity
For ML Accessories (Knightsbridge)
Electrical products in accordance with UKCA marking

ML Accessories Ltd. declare that all products have been designed, manufactured, and tested in accordance with the requirements of the relevant legislation

UKCA marking legislation

UK SI 2016 No. 1091	Electro Magnetic Compatibility Regulations 2016
UK SI 2016 No. 1101	The Electrical Equipment (Safety) Regulations 2016
UK SI 2012 No. 3032	Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
UK SI 2017 No. 1206	Radio Equipment regulations 2017
UK SI 2021 No. 1095	The Ecodesign for Energy-Related Products and Energy Information (Lighting Products) Regulations 2021

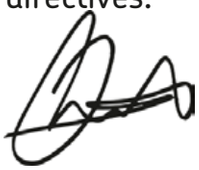
Included Legislation

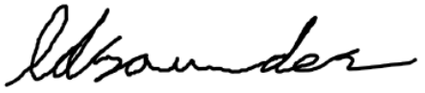
UK SI 2008 No. 2852	UK REACH
UK SI 2013 No. 3113	WEEE

Safety Standards

Full individual declarations and specific safety standards applicable to relevant product series can be found on our website **www.mlaccessories.co.uk**

We hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The products comply with all essential requirements of the directives.





Catherine Connolly
CEO

Lee Saunders
Technical Assessment & Compliance Manager

UKCA

ML Accessories Ltd. Unit E Chiltern Park, Boscombe Road, Dunstable. Bedfordshire, LU5 4LT

This declaration becomes invalid if technical or operational modifications are introduced without ML Accessories Ltd. written consent.

Knightsbridge

Manufacturers Declaration of Conformity
For ML Accessories (Knightsbridge)
Electrical products in accordance with CE marking

ML Accessories Ltd. Declare that all products have been designed, manufactured, and tested in accordance with the requirements of the relevant legislation

CE marking legislation

In Accordance with the following Directives:

2014/35/EU	Low Voltage Directive
2014/30/EU	EMC Directive
2014/53/EU	Radio Equipment Directive

Including Legislation

1907/2006	REACH
2015/863	RoHS
2021/341	ERP

Safety Standards
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We hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The product complies with all essential requirements of the directives.

Catherine Connolly
CEO

Lee Saunders
Technical Assessment & Compliance Manager

CE

ML Accessories Ltd. Unit E Chiltern Park, Boscombe Road, Dunstable. Bedfordshire, LU5 4LT

This declaration becomes invalid if technical or operational modifications are introduced without ML Accessories Ltd. written consent.

SUPPLIED BY:

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MADE IN CHINA

ML ACCESSORIES LTD

LIGHTING INDUSTRY ASSOCIATION

CE UKCA

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