



INSTALLATION & MAINTENANCE MANUAL

**BTxxACTEMS**

## 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:  
BT9ACTEMS / BT14ACTEMS / BT20ACTEMS**

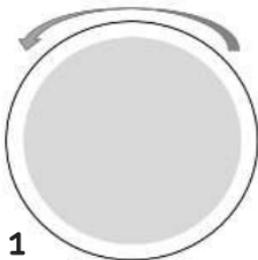
## SAFETY

- This product 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 this luminaire is fitted) does not exceed the rating of the circuit cable, fuse or circuit breaker
- Please note the IP (Ingress Protection) rating of this luminaire when deciding the location for installation
- This product is Class II double insulated
- This product is IP65 rated

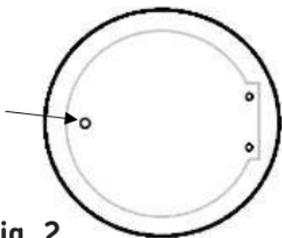
## INSTALLATION

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. Suitable IP rated junction boxes should be used where required
- Remove the diffuser by rotating bezel anti-clockwise (see Fig. 1)

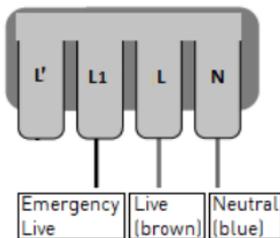


**Fig. 1**



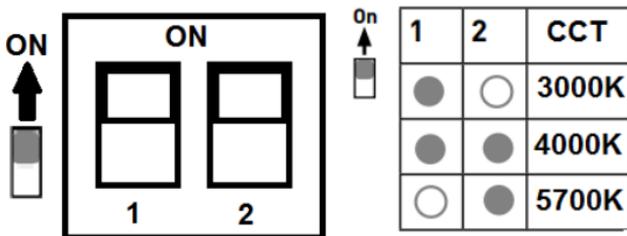
**Fig. 2**

- Remove the fastening screw securing the LED plate and open the LED plate (see Fig. 2)
- Mark the location of the fixing holes, and drill the holes ensuring not to infringe with any gas/water pipes or electrical cables
- Feed the cable via the rubber grommet to retain IP rating, and secure the baseplate to the surface
- Connect the Live (brown), Emergency Live (L1) and Neutral (blue) to the terminals on the terminal block (see Fig. 3)



**Fig. 3**

- The additional terminal called Slave Live (L) is available to enable the sensor to power on additional luminaires. A max. LED load of 400W can be controlled by the sensor
- Please see DIP Switch Layout to set up sensor
- Connect the battery to the inverter
- Refasten the LED plate screw
- Choose the required colour temperature by means of the DIP switch (see Fig. 4)

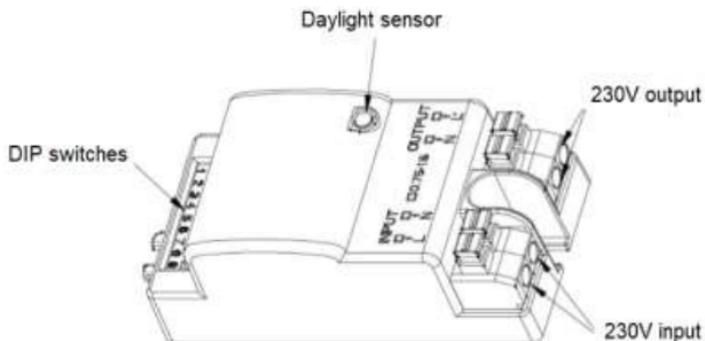


**Fig. 4**

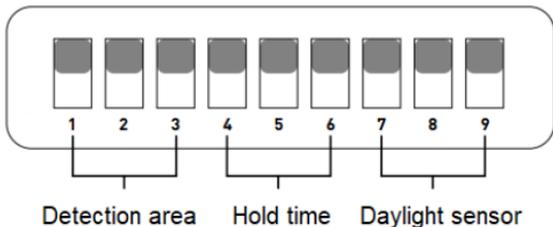
- Reattach the diffuser by rotating clockwise
- Switch on and check for correct operation, ensuring the green indicator LED is illuminated
- We recommend, on commissioning the installation, a minimum charge period of 24 hours before carrying out an emergency duration test

Note: this fitting shuts off power to the Lithium Ion battery periodically to prevent overcharging. Therefore, the green LED indicator has been set up to indicate that the emergency inverter is in good condition, not to indicate that the battery is charging. The installer must ensure that the battery is connected.

## SENSOR LAYOUT



## DIP SWITCH LAYOUT



### DIP SWITCH SETTINGS

#### Detection area

On ↑	1	2	3	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	75%
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	50%
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	25%
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10%

#### Hold time \*

On ↑	4	5	6	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5sec
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30sec
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	90sec
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3min
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20min
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30min

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

#### Daylight sensor

<b>On</b> ↑ 	<b>7</b>	<b>8</b>	<b>9</b>	
	●	●	●	2lx
	●	●	○	10lx
	○	●	○	25lx
	●	○	○	50lx
○	○	○	Disable	

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

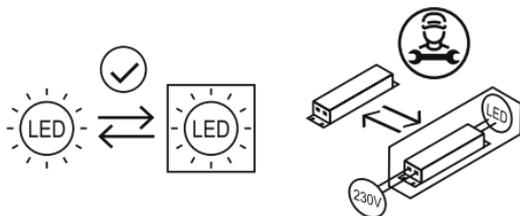
## WARNING

This product 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

This product contains a light source of energy efficiency class D (BT9ACTEMS) / E (BT14ACTEMS, BT20ACTEMS) to Regulation (EU) No. 2019/2015.

This product contains an LED light source which can be replaced by the end user 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.

Do not use any source of high-pressure washers to maintain or clean this luminaire.

This product is non-dimmable.

This product should be dismantled for disposal when it reaches the end of its life. Please see website for dismantling instructions.

This product 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 this luminaire are Lithium Ion and must be disposed of correctly. Please contact the local authorities for the disposal of this toxic waste.

## WARRANTY

This product has a warranty of 5 years (excluding battery) from date of purchase. Failure to install this product in accordance with the current edition of the IEE Wiring Regulations, improper use, or removal of the batch codes will invalidate the warranty. If this product 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

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 a 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

230V  
50Hz



IP65

52

**ML**  
ACCESSORIES LTD



**UK  
CA** **CE**



**INTERNATIONAL  
CONTACT DETAILS**



**ML Accessories Limited LU5 4LT**  
**[www.mlaccessories.co.uk](http://www.mlaccessories.co.uk)**

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## TEST RECORD SHEET

INITIAL COMMISSIONING 3 HOUR TEST		SIGNED				DATE					
		FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR		FIFTH YEAR	
MONTH	TEST	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: