

Location		Type	Mode	Lamp Size
Year	1	Date	Initials	4
		Date	Initials	
Fault/Fix	2	Date	Initials	3
		Date	Initials	
	3	Date	Initials	2
		Date	Initials	
	4	Date	Initials	1
		Date	Initials	

INSTALLATION AND WIRING INSTRUCTIONS, OPERATION & MAINTENANCE PROCEDURES

FOR: AUTO TEST CONVERSION KITS SUITABLE FOR SELF CONTAINED LUMINAIRES.

1. INSTALLATION

Important Notes:

- a) Check product labels for correct input voltage and timing duration (1or 3 hour) before installation.
 - b) If separate switched and unswitched supplies are to be connected to this luminaire they must originate from the same phase.
 - c) If testing distribution wiring by meggering, luminaires must be disconnected or damage may occur.
 - d) Please read instructions carefully before commencing.
 - e) All installation work should be carried out to current IEE regulations.
1. Check the Module Label to ensure you are using the correct module for your application.
 2. Fit the Auto Test Module in an accessible position within the luminaire in accordance with the attached drawing. Ensure it is as far away as possible from heat generating components i.e. choke, transformer etc. (Max. Auto Test case temp is 70°C.)
 3. Ensure you do not obstruct the cable entry points, louvre or earthing points.
 4. If relocating existing components ensure they are correctly fitted and take note of points mentioned in 3. Use high temperature PVC cable (105°) equal to or larger than the cable used in the fitting.
 5. Use heat sleeving if required and route the cable in a neat fashion (avoid sharp or serrated edges).
 6. Route the Tri-colour LED, push switch and LDR wires at least 5cm (2") from the lamp wires to avoid EMC coupling.
 7. Route the Tri-colour LED, push switch and LDR wires at least 5cm (2") from AC mains cables where possible to avoid EMC coupling. Where this is not possible, the maximum distance should be maintained between these wires and the AC mains wiring.
 8. Ensure the Tri-colour LED, push switch and LDR wires do not exceed a length of 1 meter.
 9. The LDR sensor has a maximum operating temperature of 80°C and as such should not be fitted to any lamp if the wall surface of the lamp at the point of mounting exceeds this temperature. Please note, if using the LDR with a T5 lamp higher than an 8 watt or any compact fluorescent lamp, do not use the LDR mounting clip to mount the LDR directly onto the lamp body as these lamps generally exceed a wall temperature of 80°C. In this situation mount the LDR 10mm from the lamp surface either on the fitting gear tray or internal housing close to the lamp but not touching the lamp – this will prevent the LDR from being heat damaged by the lamp.
 10. If using either the LDR clip or mounting the LDR in the geartray ensure that it is securely positioned at least 30 mm from the lamp cathodes this is to prevent incorrect readings as the lamp blackens and also to prevent heat damage to the LDR.
 11. If this product is to be used in a multi-lamp fitting, the switched supply to all lamps should be removed during the Auto Test emergency test to avoid incorrect light readings.
 12. Position the push switch and the Tricolor LED so that it is unobstructed by louvres and clearly visible to the user.
 13. Position the auto test diagnostic indicator membrane beside the Tri-colour LED so that it is easily visible to the user and unobstructed by louvers.
 14. On completion check all connections for continuity. Also check for earth continuity and flash test (maximum voltage permitted 1.5kV). **Do Not Megger Test.**
 15. Connect the mains supply and check the charge LED illuminates and the lamp operates on Switched Mains. The tri-colour LED should flash Red/Green for 6 seconds and then extinguish. The charge LED should illuminate and remain lit. This indicates a successful power up.
 16. After 10 minutes, remove the emergency lamp and depress the self-test button. This will initiate self-test cycle during which the Amber LED should turn on for 5 seconds and then flash every second indicating lamp failure.
 17. Replace the emergency lamp and depress the self-test button. This will initiate self-test cycle during which the Amber LED should turn on for 18 seconds and then extinguish. Any failure will be indicated by the Autotest tri-colour LED (see section 3). If the status indicator registers a fail, allow the product to charge for 24 hours and carry a further self test sequence by depressing the self-test button. If the luminaire continues to fail then contact the company for advice.
- In addition, fittings may need to be tested to Local, National or ICEL 1001 Standards, please refer to these where applicable.

Note:

Any modifications to a Certified (BSI Kitemarked) product invalidates the Certificate and all marking relating to this must be removed.

2. OPERATION AND MAINTENANCE

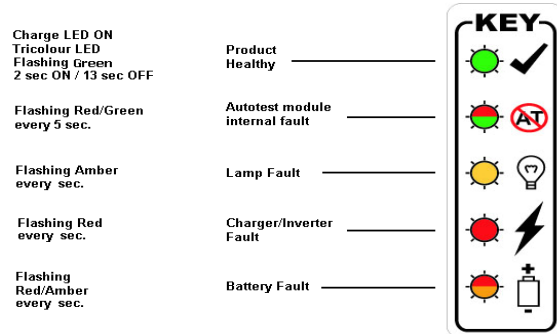
- 2.1 On completion of the installation a copy of these instructions together with the test record card(s) should be handed over to the authority responsible for maintenance and testing.
- 2.2 **Isolate supply to luminaire before attempting any form of servicing.** Be aware that the emergency lighting inverter circuit will continue to function after isolation of the mains supply and there is an **Electric Shock Risk** from fluorescent lamp tube pins etc.

2.3 It is recommended that sealed rechargeable batteries are replaced after each 4 years of operation in accordance with their design life. Batteries should be replaced when the luminaire no longer meets its' declared duration performance. Consult the company for details of correct replacement battery packs.

3. SPECIFICATION.

Input Voltage – 230Vac +/-10% at 50Hz
Current Consumption – 3mA @ 230Vac.

Status Indicator – Tricolour, High Intensity Light Emitting Diode (LED) indicating health status of the luminaire as per the legend below:-



4. TESTING RECOMMENDATIONS

For self contained luminaires the following test schedule is adopted and any failures indicated via the Status Led indicator (see above)

- Daily:** The unit is checked for mains present and correct battery charge operation.
- Monthly:** The daily test is carried out. The Autotest module interrupts the mains supply to the luminaire and the luminaire switches into emergency operation. The unit is allowed to operate for 60 seconds during which time correct functional operation is checked.
- Six monthly:** The daily test is carried out. The Autotest module interrupts the mains supply to the luminaire and the luminaire switches into emergency operation. The unit is allowed to operate for 1 hour in emergency (20 minutes for a one hour system) during which time correct functional operation is checked.
- Annually:** The daily test is carried out. The Autotest module interrupts the mains supply to the luminaire and the luminaire switches into emergency operation. The unit is allowed to operate for a full rated duration in emergency during which time correct functional operation is checked.
- Manual** Any time the push button is depressed, the Autotest module indicates how many **monthly tests** have been carried out in an annual schedule. Buzzer (if fitted) is turned on/off and Tricolour LED flashes Amber every second indicating the number of tests passed, then it goes into self-test sequence where the module will check the correct functioning of the product.

For Emergency Luminaires, test results together with details of corrective actions should be recorded on the test record card provided.

Cleaning and relamping of emergency lighting luminaires should be regularly carried out in accordance with the guidelines set out in the national standards to ensure optimum photometric performance. Failure to maintain the product may affect product performance, and invalidate warranty.

