

The logo for BARDIC emergency lighting. It features the word "BARDIC" in a large, bold, green, sans-serif font. Below it, the words "emergency lighting" are written in a smaller, green, sans-serif font. The entire logo is framed by a dark red border consisting of two horizontal bars at the top and bottom, and two vertical bars on the left and right sides.

BARDIC
emergency lighting

**SENTINEL AUTOMATIC
SELF TESTING SYSTEM**

MODEL S 4

**OPERATION
INSTALLATION
COMMISSIONING**

SENTINEL AUTOMATIC SELF TESTING SYSTEM

Version S 4

OPERATION

The Bardic SENTINEL Automatic Self-Testing System enables each emergency and evacuation light to perform an automatic self test between 91-93 days. It indicates the result of the test to ensure compliance with Australian Standards AS/NZ 2293. The SENTINEL unit can only be fitted to Bardic emergency and evacuation lighting units.

Every 91 days the SENTINEL unit will switch the mains off and operate on battery power to automatically tests each emergency/evacuation light. To comply with the Australian and New Zealand Standard, the emergency/evacuation light must remain illuminated for 90 minutes. The SENTINEL test program can also be manually initiated by pressing the test push button on the unit twice within a 3-second period.

The result of the test is indicated by a Green L.E.D. located on the unit as follows: -

- | | |
|--|--|
| L.E.D on and steady
●●●●●●●●●●●●●●●● | : Normal mode; battery on charge and passed last test. |
| L.E.D. off
○○○○○○○○○○○○○○○○○○ | : EMERGENCY/EVACUATION LIGHT. unit undergoing SENTINEL test, AC supply off or charging circuit failure. |
| L.E.D. flashing slowly
●●●●○●●●●○●●●●○ | : EMERGENCY/EVACUATION LIGHT. passed SENTINEL test during previous five (5) days. |
| L.E.D. flashing continuously
●○●○●○●○●○●○●○●○ | : EMERGENCY/EVACUATION LIGHT failed SENTINEL test. (This condition is retained until the fault is rectified or the EMERGENCY/EVACUATION LIGHT. is automatically or manually retested). |
| L.E.D. flashing for a 5 second period
●○●○●○●○●○●○●○●○ | : Manual test command accepted, but test delayed to enable the battery to recharge following a recent power failure. (This also occurs when commissioning and re-commissioning following a battery replacement). |

The Red L.E.D. when illuminated indicates that the battery is charging.

The Green L.E.D. indicates that SENTINEL is fitted and it is normally illuminated except during periods of test and mains failure.

INSTALLATION

Perform the following installation instructions in the order listed below: -

1. If the emergency/evacuation light. is already in service and SENTINEL is to be added, disconnect the AC supply and the battery.
2. Remove the shorting link fitted to pins 4 & 5 of the 8-pin plug. Use the spare SENTINEL logo label to stick the removed shorting link inside the fitting to enable the emergency/evacuation light. to operate normally again if the SENTINEL is removed.
3. Carefully plug the SENTINEL onto the 8-pin plug. The SENTINEL and the PCB are polarised to prevent incorrect assembly.
4. Push out the perforated red dot on the product label under the word “SENTINEL” and mount the Green L.E.D. securely into the hole provided, by pushing the collar onto the mounting ring. Connect the red and black leads of the L.E.D. to the two pins on the main PCB marked “GREEN/YELLOW”, ensuring that the polarity of the leads are correct.

5. FITTING THE LIGHT SENSOR (FLUORESCENT MODELS ONLY)

A. 10w Models:

Push the light sensor into the hole in the body moulding under the tube, or under the EMERGENCY tube in twin-tube sustained models. Plug the 2-pin socket into the 2-pin polarised plug on the PCB.

B. 10w W/P Models & All 20w and 40w Batten Models:

Fit the rubber grommet onto the light sensor and slide the grommet into the slot provided under the tube, or the EMERGENCY tube in twin-tube sustained models. Plug the 2-pin socket into the 2-pin polarised plug on the PCB.

C. 10w & 40w W/P Models:

Fit the rubber grommet into the hole provided under the tube, or the EMERGENCY tube in sustained models. Push the light sensor into the grommet from the equipment side so that the back of the light sensor is level with the back of the grommet. Plug the 2-pin socket into the 2-pin polarised plug on the PCB.

6. To cater for different requirements, the SENTINEL offers a random test option. If it is desired that the automatic test period should vary between emergency/evacuation light's, remove the shorting link on the SENTINEL unit. This will allow each emergency/evacuation light. to fully test at random intervals between 91 and 93 days. If the random shorting link is left in place, then all

emergency/evacuation light's will test at the 91 days interval, providing the emergency/evacuation light's were manually tested as one circuit at commissioning.

7. Connect the battery by using the in-line plug, or by connecting the lead(s) directly to the battery or PCB, as appropriate.

STEP 8 IS VERY IMPORTANT

8. Press the reset button on the back of the SENTINEL unit. Connect the AC supply and leave for 24 hours to enable the battery to fully charge.
9. Fit the SENTINEL label to the body adjacent to the product label, to indicate that the emergency/evacuation light. is fitted with SENTINEL, or in a position that can easily be seen from the ground.

COMMISSIONING

To initiate a manual test (90 minute test), push the TEST button twice within 3 seconds. Provided there has been no recent power failure, the Green L.E.D. will extinguish and the test will commence after a short delay (20 seconds). If there has been a recent power failure, the SENTINEL will acknowledge the command causing the Green L.E.D. to flash rapidly for 5 seconds and then illuminate. This acknowledgement will delay the test until the battery has had time to fully recharge.

The test period will last for a minimum of 90 minutes after which time the test will be terminated and the Green L.E.D. will commence to flash at the rate of 4 seconds "on" and 1 second "off" for a period of 5 days, indicating a "Pass" result. During the 5-day period, the manual test cannot be re-initiated as the battery will need this time to recover.

If the unit fails the 90minute test, the Green L.E.D. will flash continuously and will continue to do so until repaired or retested.