

Automatic Self-Test Non-Maintained LED Emergency Downlight (ATS Type S)

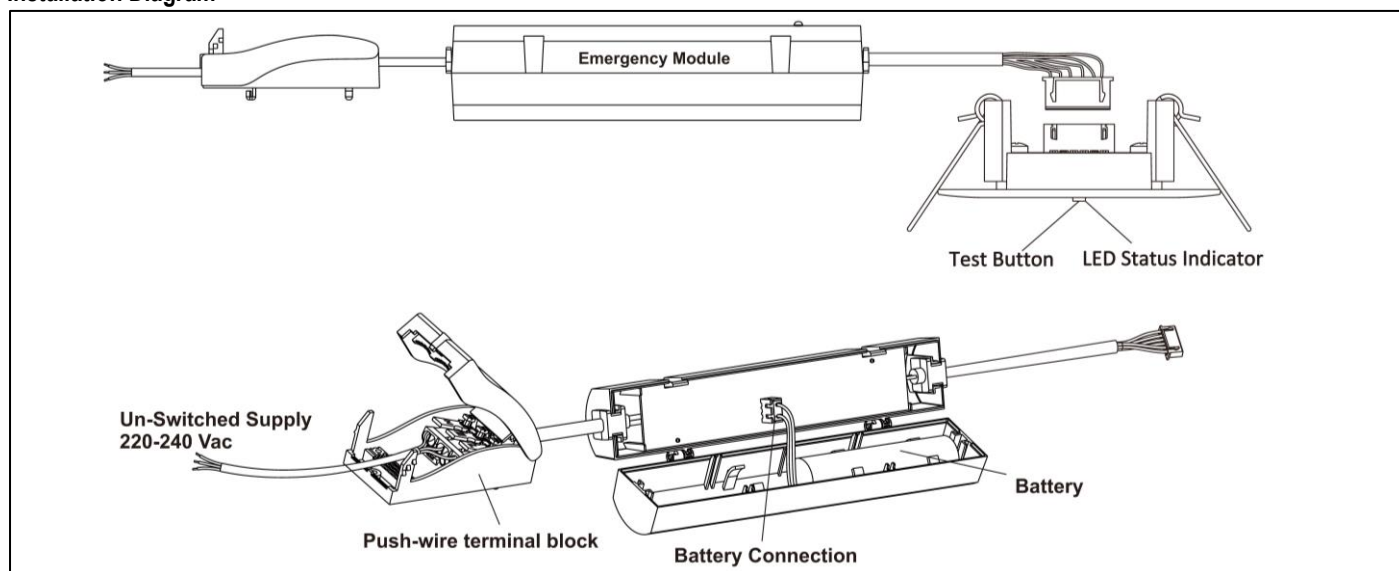
Please read these instructions thoroughly before use and retain for future reference.

- This luminaire is a recessed non-maintained emergency luminaire that will only operate in the event of a cut in the supply power.
- This emergency luminaire is classified as **ATS type S**. This is a stand-alone, self-contained emergency luminaire with localised automatic testing and reporting facilities requiring manual inspection to record the results.
- The emergency luminaire will perform an automatic weekly functional test and an annual full duration test at a random time during a 24-hour period, reporting any faults found with the battery or load.

Safety Information

- Installation must be carried out in accordance with national building and wiring regulations.
- If you are in any doubt about installing this product, please consult a qualified electrician.
- This product is suitable for connection to a 220-240Vac 50/60Hz supply.
- This is a **class II IP20** rated product for indoor use and does not require an Earth though a terminal marked **E** is provided for Earth continuity.
- Do not use the emergency downlight if the cable is damaged.
- The emergency downlight is not suitable for use on a battery supply with a trickle or intermittent re-charging circuit.
- The emergency downlight is not protected against supply voltage polarity reversal.
- Insulation between the emergency module supply and battery circuit is double insulation.
- The recharging device will recharge the battery normally after removal of a battery short-circuit
- When cutting holes, drilling or screwing take care not to damage existing wiring or pipework.

Installation Diagram



Installation Information

- The emergency downlight provides power in the event of a cut in the supply and must be wired to the un-switched supply.
- Before commencing installation, turn off and isolate the circuit to be worked on by removing the fuse or switching the circuit breaker off at the distribution board.
- A 58mm cut-out hole is recommended for fitting the downlight.
- Remove the terminal cover and connect the supply wires to the terminals as follows:
L – Un-switched Live, N – Neutral, E – Optional Earth Continuity
- Connect the emergency module outputs to the downlight as shown in the diagram.
- **The battery is supplied disconnected.** To connect or replace the battery, disconnect the emergency module from the supply, open the cover on the emergency module and connect the battery to the circuit board connector.
- Write the commissioning date on the battery label.
- Ensure that all electrical connections are tight with no loose strands.
- Place the emergency module in the ceiling void.
- Pull the downlight springs back to fit through the hole in the ceiling and clip into place.
- Reconnect the power and check that the green LED indicator illuminates on the downlight face to show the battery is charging.
- The battery leaves the factory in a charged state but may take up to 24 hours to fully charge for a 3-hour test. Charge for 5 minutes before performing a functional test to ensure there is some charge in the battery.
- Manual testing can be initiated using the test button on the face of the downlight, see the following user guide for more information.
- A full unscheduled manual emergency test will require the un-switched supply to be turned off.
- Replace the battery when the luminaire fails to meet the 3-hour duration requirement in testing.



The Waste Electrical & Electronic Equipment Regulations (WEEE) requires that products bearing this symbol must not be disposed of with household waste as they may contain substances harmful to the environment. The Local Authority can provide advice on recycling.

Automatic Self-Test Emergency Luminaire User Guide








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Commissioning

- Commissioning takes place by connecting the battery and then the un-switched supply. The battery must be connected first.
- The green LED will immediately flash 1 x second to indicate that there is a pending duration test.
- A duration test will occur at a random point between 24 hours and 48 hours after commissioning to allow 24 hours for battery charging.
- Any faults found in the duration testing will be reported via the LED indicator, as detailed below.
- Disconnecting the un-switched supply and then the battery resets the emergency module, clears all fault reports and forces a re-commission when the battery and then power supply are reconnected. Press the manual test button for 5-10 seconds to re-commission the emergency module.

LED Indicator

	Green	= System Healthy		Red	= Battery Charging Fault
	Green Flash 1 x Second	= Duration Test Pending		Red Flash 2 x Second	= Battery Duration Fault
	Green Flash 2 x Second	= Duration Test Running		Red Flash 4 x Second	= Lamp or Luminaire Fault
	Green Flash 4 x Second	= Functional Test Running			

Duration Testing (3 hours)

- An automatic duration test will occur at a random point between 24 hours and 48 hours after commissioning to allow for battery charging.
- An automatic duration test will occur annually at a random point in the 52nd week of each year.
- A duration test will occur at a random point between 0 and 24 hours after pressing the manual test button for 5-10 seconds. Time will be added to allow the battery to charge if the battery has been charging 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, in which case the green LED will flash 1 x second to indicate there is a pending duration test that the emergency module has rescheduled.
- Any faults found in the duration testing will be reported via the LED indicator, as detailed above.
- 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 immediately after pressing the manual test button on the cover for 1-2 seconds.
- Any faults found in the functional testing will be reported via the LED indicator, as detailed above.
- 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

- Manual functional test: Press the test button on the cover for 1-2 seconds. A manual functional test lasting <2 minutes will start immediately.
- Manual duration test: Press the test button on the cover for 5-10 seconds. A manual duration test will occur at a random point between 0 and 24 hours after pressing the manual test button for 5-10 seconds. Time will be added to allow the battery to charge if the battery has been charging less than 24 hours.

Pending Duration Tests

- A duration test may be delayed by other events, such as a power cut that interrupts the test or charging period, in which case the green LED will flash to indicate there is a pending duration test that the emergency module has rescheduled until charging is complete.

Lamp Fault

- Turn off the supply and replace or correct the fault within the luminaire if possible, 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 and 48 hours later to allow the battery to charge fully.
- If the battery and power have been disconnected the module 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 fault reports.

Battery Fault

- Turn off the un-switched supply and replace the battery, and then reconnect the supply.
- If the fault was because the battery was not connected, the un-switched supply must still be turned off when connecting the battery to clear the battery fault and force a re-commission.
- An automatic duration test will occur at a random point between 24 and 48 hours after commissioning to allow for battery charging.