

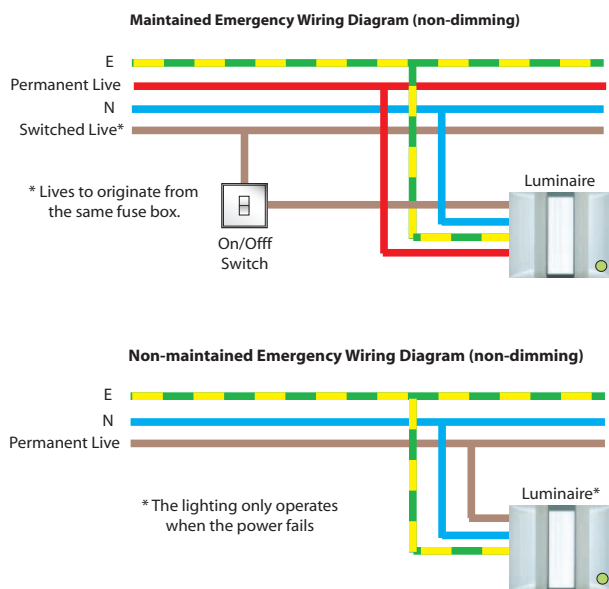
Emergency Luminaires

The majority of Clearvision products are available with a 3hr emergency lighting facility which, dependant on the luminaires design can be either an integral (-EMI) or external (-EMR) pack. Where space and thermal conditions prohibit installation of emergency gear within the luminaire housing, the components will be supplied in a remote gearbox, connected via a 0.5m umbilical harness.

In addition to conventional emergency packs Clearvision are able to provide compact self-test (see bottom of page)LED based systems. LED emergency units utilise smaller battery packs and draw much less power during their charging cycles. See page 242.

Wiring

In addition to switched live, neutral and protective earth, a further unswitched live connection should be provided to each maintained emergency luminaire via a 4-core cable (6-core for dimmable fittings). This allows the luminaire to be switched on/off as normal, whilst still permitting battery charging and ensuring correct operation in the event of a power failure. non-maintained fittings require only 3-core cabling.



Testing of Emergency Installations

BS 5266 : part 1 requires regular testing of emergency lighting installations on a monthly (5 minute function), six-monthly (1 hour duration) and annual (3 hour duration) basis to ensure correct operation and maintenance of batteries, lamps and inverter units.

However, this can be time consuming and costly in man hours as often the testing has to be done during out-of-office hours.

Self-test Emergency Facility

The solution to this is the specification and implementation of self-testing emergency luminaires. Clearvision can offer a self-test facility with most of our emergency luminaires on request. No programming is required and connection to an external control monitoring device is unnecessary.

Units carry out routine automatic testing in accordance with BS EN 62034 : 2006, reporting their status via a green/red colour change LED (see example below). Testing is usually carried out once normal lighting has been switched off, unless the lighting is permanently on, in which case the tests are delayed for a minimum of 24 hours.

MODE	L.E.D. INDICATOR	BUZZER	
Mains ON No Faults	GREEN (Permanently ON)	OFF	●
Mains ON Battery Fault	RED (Flash once every 3 secs)	Beep every Hr.	🔊 ● ○ ○
Mains ON Lamp Fault	RED (Flash twice every 3 secs)	Beep every Hr.	🔊 ● ● ○
Mains ON Battery + Lamp Faults	RED (Flash 3 times every 3 secs)	Beep every Hr.	🔊 ● ● ●
Self Test Mode	GREEN (Flash every 10 secs)	OFF	● ● ●
Mains Failure Battery OK*	OFF	OFF	

Example of self-test behaviour

DALI

Clearvision is also able to offer DALI compatible emergency luminaires enabling faults to be reported and logged to a central point such as a lighting control system (see pages 246-247) or BMS.