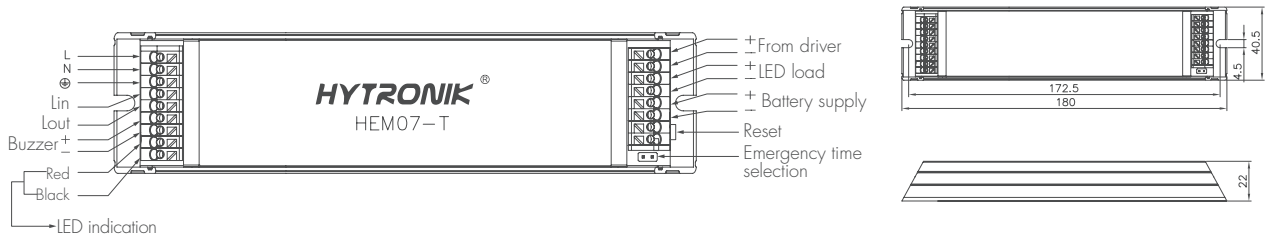


# Emergency LED Driver Self-testing Version

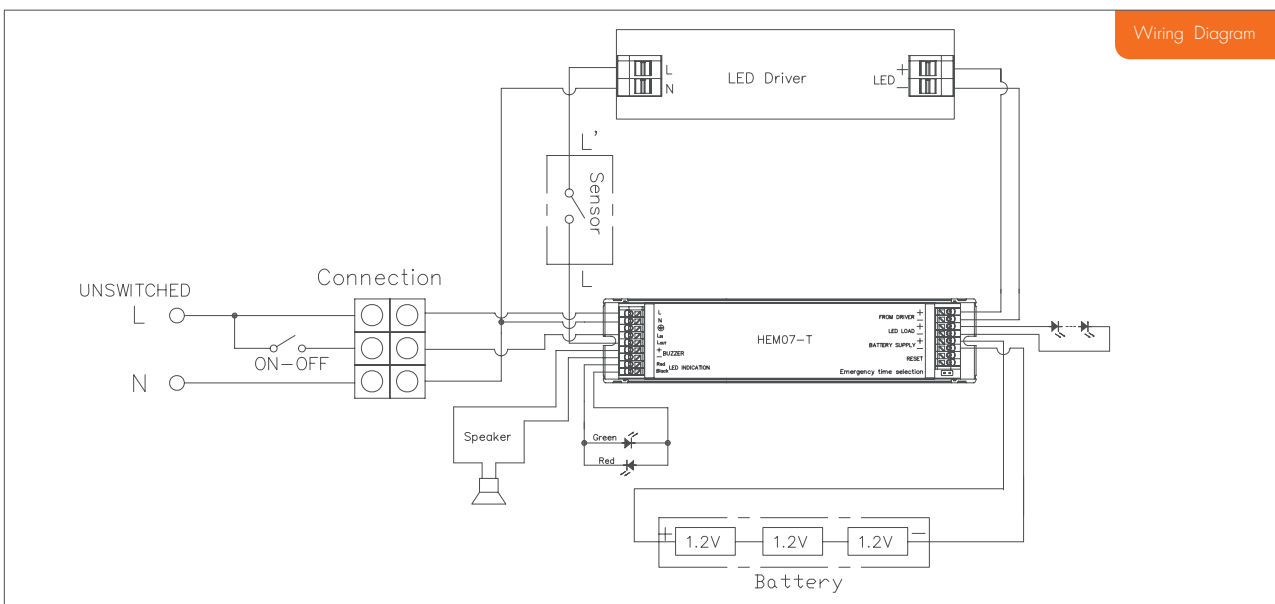
Model: HEM07-T



This emergency lighting module is designed to convert a wide range of LED types, and is an ideal choice for converting most standard LED luminaires and arrays containing from 3 to 20 (60V) LEDs in series.

This unit is designed to utilize the existing LED driver and panel layout (no need to break into the LED circuit) to be dimmed to 3W in case of emergency.

The driver can automatically adjust the output LED current to provide the optimum match between the battery and the load, which enables maximum illumination whilst ensuring full battery duration. The driver is compatible with a wide range of LEDs such as Philips Fortimo DIM, SIM and LLM ranges, Bridgelux LS/ES/RS ranges, Citizen 4-41W ranges, GE Infusion, Xicato and many others.



## Highlights

- Dual wattage and duration selection: 3W @ 3 hrs
- Built-in MCU programmed self-testing, maintenance free
- Automatic output current adjustment
- Wide range of LEDs in series (8~60V)
- With both LED indication and Buzzer warning
- Good compatibility with various brands of LED in the market
- Deep discharge protection
- Constant current charger
- High temperature NiMH/Nicd cells
- 5-Year product warranty

## Ballast Lumen Factor % :

@3W	Luminaire Power	5W	7W	10W	12W	15W	20W	25W	30W	35W	40W	45W	50W
		60%	43%	30%	25%	20%	15%	12%	10%	9%	8%	7%	6%

The driver is supplied as standard in conversion kit form, with the following parts:

- 500mm Green & Red charge healthy LED indicator and mounting collar.
- AMP Irreversible battery connector.
- External 5V Buzzer indicator for failure report.

## Self-testing Feature

Carrying out routine test on emergency lighting and holding records of the test result is required by the law. (IEC62034, BS5266, EN50172). Hytronik advanced LED emergency control model HEM07-T has a internal clock, programmed to interrupt the permanent mains supply at pre-determined intervals to perform the requested routine testing: 3min. functional test every month, and 1h (3W) function test every 6 months, and 3h (3W) function test every 12 months.

- Self-test starts after the luminaire are connected to mains for continued 48 hours.
- Auto-commissioning, save manpower and maintenance.
- Permanently monitors battery and charge condition
- Dual failure indication: failures are clearly identified on the luminaire by red LED and buzzer.
- MCU programmed test schedule:  
Emergency time 3h: 3min @ every month; 1h (3W) @ 6 months; 3h (3W) @ 12months. (ex-work default value)  
Emergency time 1h: 3min @ every month; 20min (3W) @ 6 months; 1h (3W) @ 12months.
- Automatic delayed test in case of power failure at programed testing period.






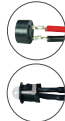


Status	Buzzer beep & LED flash mode	Bisual indication	Buzzer
Battery failure	Red LED slowly flashes once in 3 seconds; buzzer beeps 10 seconds every hour.		
LED lamp failure	Red LED rapidly flashes twice in 3 seconds buzzer beeps 10 seconds every hour.		
Emergency LED driver failure	Red LED rapidly flashes 3 times in 3 seconds buzzer beeps 10 seconds every hour.		
Healthy condition	Green LED is constantly on		
Battery charge	Green LED slowly flashes once every second		
Battery discharge	/	/	
Monthly test	Green LED slowly flashes once in 3 seconds		
6 month test	Green LED flashes twice in 3 seconds		
12 month test	Green LED quickly flashes 3 times in 3 seconds		

## Reset Function

There is a RESET button on HEM06-T which are designed to randomly initiate the self-testing program after commissioning. It can also remove "failure indication" after replacing the failed component. Three ways to achieve:

- \* Short push (<2s): goes to monthly test mode and can clear all failure indications, except the one caused by low battery.
- \* Long push (<5s): buzzer beeps twice and battery start charging for 24h, then goes to 12-month test mode. All indications are cleared after test.
- \* Long push (>10s): buzzer beeps three times, then goes to 12-month test mode. All indications are cleared after test.

## Battery options

Package code	Picture	Spec.	Size(mm)	Duration	Accessories
BPC10		 3 cells, D type, D4000, high temperature Nicd battery, 3.6V, 4.0AH	215x37x37.5	3hrs@3W	battery bracket, LED indicator, Buzzer
BPC11		 3 cells, D type, D4000, high temperature Nicd battery, 3.6V, 4.0AH	100x65x36	3hrs@3W	battery bracket, LED indicator, Buzzer
BPC15		 3 cells, 18720 type, 18720-4000, high temperature NiMH battery, 3.6V, 4.0AH	240x23x22.5	3hrs@3W	battery bracket, LED indicator, Buzzer
BPC16		 3 cells, 18720 type, 18720-4000, high temperature NiMH battery, 3.6V, 4.0AH	58x74x21	3hrs@3W	battery bracket, LED indicator, Buzzer

Note: \* Do not short circuit or reverse connect the batteries.  
\* Charge new battery 24h before use.

\* high temp. battery pack. 75 degree for Nicd, and 55 degree for NiMH.  
\* In compliance with IEC61951-1 (Nicd type), IEC61951-2 (NiMH type).

Specification	
Mains voltage	220~240VAC 50/60Hz
Mains current	19mA - 23mA
Mains power	5W
Output voltage(U-out max.)	70VDC
Power factor	0.9
Operation temperature	Ta: 0~+50°C
Battery charge voltage	2.7V~4.5V
Battery charge current	200mA (Max.)
Battery pack	BPC10, BPC11, BPC15, BPC16
Charge period	24 hours
Max. case temp.	75°C
Battery duration	3 hours @3W
Mains Switch-over voltage range	120VAC~180VAC
Output LED current	3W- 320mA~40mA (8~60VDC)
Over-heat protection	Over-heat protection with auto-reset.
EMC standard	EN55015, EN61547
Safety standard	EN50172, EN61347-2-7, EN61347-2-13, IEC62034, BS5266
Certification	Semko, CE, EMC
Dielectric strength	Input→ground: 1750VAC
IP grade	IP20