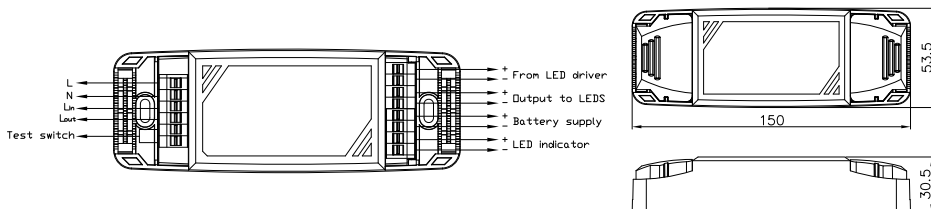


## INSTRUCTION MANUAL FOR EMERGENCY LED DRIVER MODEL NO. : HEM02



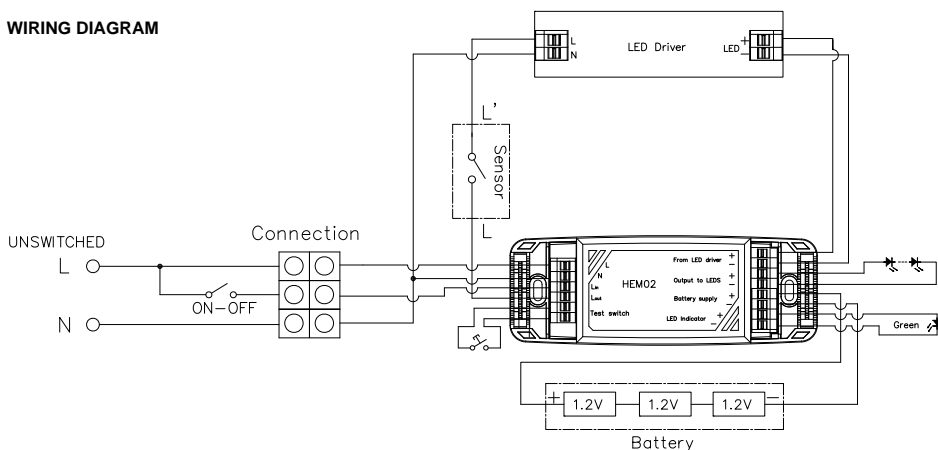
### DESCRIPTION

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 automatically adjust the output LED current to provide the best optimum match between the battery and the load, providing maximum illumination whilst ensuring full battery duration. The driver is compatible with a wide range of lighting LEDs.

### WIRING DIAGRAM



### BALLAST LUMEN FACTOR%

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%

### IMPORTANT

It is recommended that the module is installed by a competent person ensuring the installation complies with the necessary standards. Hytronik accept no responsibility for injury, damage or loss, which may arise as a result of incorrect installation, operation or maintenance.

The conversion requires an unswitched supply for charging the battery and a switched supply for a maintained conversion.

**ISOLATE BOTH MAINS SUPPLIES AND DISCONNECT THE BATTERY BEFORE INSTALLATION OR MAINTENANCE.**

**High voltage could be present at the output terminals if the battery is not isolated.**

**Warning**

**Avoid running the LED mains driver and Emergency pack without the load connected.**

**Failure to do so may result in damage to the LED array.**

**Do not short circuit or reverse connect the batteries.**

**CAUTIONS IN EMERGENCY BATTERY USAGE**

**STORAGE CONDITIONS**

1. Temperature range for storage (Humidity: Max. 85%)  
0 ~ +35 °C, one year storage  
(Storage time will be shortened if out of this temp. range)
2. Storage duration before use: Less than 6 months from batteries received to start with charging.

Note 1: For Ni-Cd battery, we recommend batteries are charged and discharged at least once every 6 months.

Note 2: For Ni-MH battery, we recommend batteries are charged and discharged at least once every 3 months.

Note 3: Never over discharge the battery.

**WARNING**

1. Avoid direct soldering onto cells.
2. Use only within the specified working temperature range.
3. Do not subject batteries to mechanical shock.

**DANGER!**

1. Avoid throwing cells into a fire or attempting to disassemble them. As the electrolyte inside is strong alkaline and can damage skin and clothes.
2. Avoid short circuiting. It may be leakage.

**SPECIFICATION**

Mains voltage	220-240V/AC 50/60Hz
Mains current	19mA-21mA
Mains power	4.5W
Output voltage (U-out max.)	68VDC
Power factor	0.85
Operation temperature	Ta: 0 ~ +50 °C
Battery charge voltage	3.0V ~ 4.5V
Battery charge current	Max.200mA
Battery pack	3 x 4.0 Ah C cell or 18670 type NiMH battery pack
Charge period	24 hours
Max. case temp.	+75 °C
Battery duration	Min. 3 hours
Mains Switch-over voltage range	120VAC - 180VAC
Output LED current	40mA (60VDC) - 320mA (8VDC)
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 → output: 3750V/AC
IP grade	IP20