

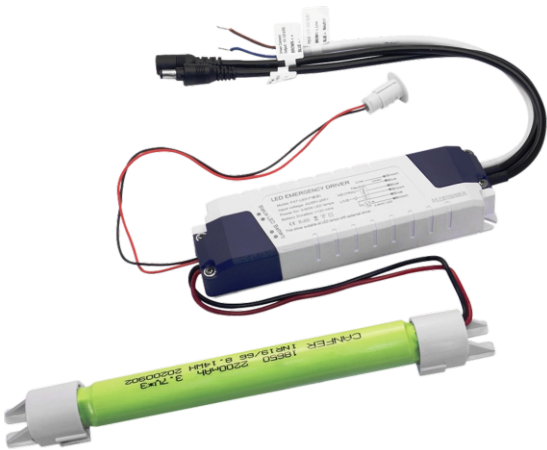
# UNIVERSAL PRO

SKU: K-12703

## 5-60W Emergency Lighting

The product package contains the following:

- Emergency Unit
- 2000mAh 11,1V Li-Ion battery
- Pre-wired output connection plugs
- Pre-wired Status LED/Self-test Buton
- Instruction Manual



Please read the Manual prior to the installation and commissioning of the K-12703.

The emergency pack is suitable for 5-60W LED lamps with external drivers.

The emergency pack includes housing, PCB, output connection plugs, battery and self-check test button with 3 colour LED indicator. The battery is a Li-ion battery with a long lifespan, the PCB uses IC control design in

short-circuit,, open circuit or input/output reverse connection.

**Operating principle:** The emency pack charges when AC power is present. When fully charged,the circuit will charging/discharging and power supply. The PCB circuit has built in protection for ovr-charging/discharging, output protect the battery from over-charging and the emergency pack will enter stand-by mode. As soon as the AC power fails the battery will supply power to the Led Lights

## Technical Specifications:

Working Voltage	AC176-265V	Battery Type	18650 Li-Ion 11.1V 2000mAh	Dimensions	L158*W42*H25mm
Emergency Output Voltage/Current	DC 10-120V 0.1A-1A	Battery Cycle Use Times	≥500 times	Battery Dimensions	L200*H20mm
Emergency Switching Time	≤5sec.	Emergency Time	≥180 minutes	Working Temperature	-5°C - +45°C
Suitable for Lamps Power (W)	5-60W, 80W max.	IP Rating	IP30	Storage Temperature	-5°C - +45°C
Lamp Type	LED Lamps	Emergency Power	10W	Warranty	3 years
Charging Time	24h	Weight	0.39kg	Body Material	Fire Resistant PC

### InstallationStandards:

- The installation of the K-12703 must be done by a certified electrical according to the En60598 part 1 and 2-22 as well as additional local standards (see basic wiring instructions on Page 2).
- The LTEMLED2 has no internal adjustments or serviceable parts and therefore the main cover should never be removed.
- For installation in combination with a LED Driver, the wiring instructions in this manual must be followed or the K-12703 may not funcon as expected.
- The Status LED/Test Buton should be positioned in such a way as to be easily visible under all circumstances to ensure quick and convenient functionality check.
- The LTEMLED2 should be installed indoors (stairs, corridor,ceiling,etc.) and it is not for outdoor use.

### Self-check function:

- Monthly inspection: The system simulates a power outage every 30 days for 35 seconds. It will quit and return to the mains power state automatically if there is no fault.
- Annual inspection: The system simulates a power outage every 365 days and for 3 hours or until the battery power is dissipated. It will quit and return to the mains power state automatically if there is nofault.

## Batery Maintenance:

- Initial batery charge must be for a minimum of 24 hours before testing.
- To achieve best performance the K-12703 must be properly maintained. The K-12703 should be tested fully by switching into emergency mode regularly in accordance with local testing regulations to check emergency operation time (according to batery capacity). Any warranty claim must be accompanied by documentation which records the dates of this maintenance procedure and signed by maintenance personnel.

## Dimensions:

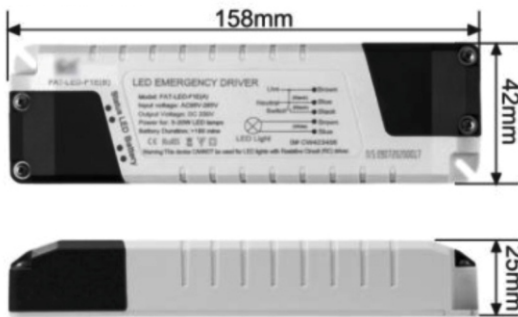


Fig. 1 Inverter Dimensions

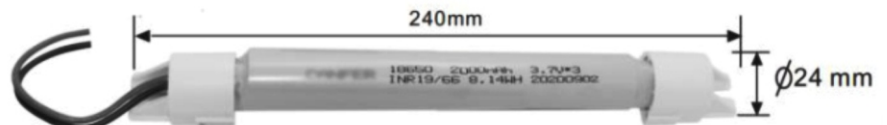


Fig. 2 Battery Dimensions

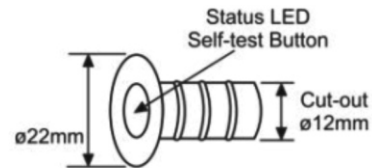
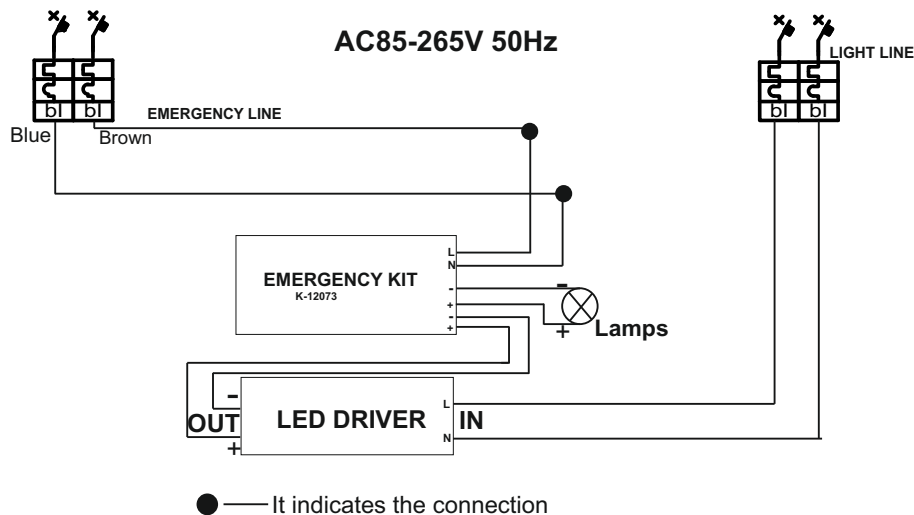


Fig. 3 Status LED/Self-test Button Dimensions

## Installation and Wiring Instructions:

1. The emergency pack can be mounted on surfaces using the two installation holes. First mark the hole positions and then use 4mm tapping screws to mount it on the surface. The product is safe to fit on materials combustible above 200°C.
2. Connect according to the wiring diagrams below observing the correct polarity where applicable.

### WIRING DIAGRAMS



3. When first connecting to AC power check if the LED lights work normally - the RED indicator light is ON until the batery is fully charged.
4. Once the batery is charged the Green indicator light will be ON.
5. Turn the switch to the LED lights ON and OFF to check the correct function of the lights (if a switch is present).
6. Test the emergency mode:
  - a. Press the test buton (status LED acts as the test buton also) for 1 second and the emergency pack will switch into power failure simulation mode (emergency mode). The indicator light for main power (Green) or for charging (Red) will be OFF. Once the buton is released it will return to normal AC power mode.
  - b. Cut off the emergency pack AC power - the LED lamp will be in emergency mode and the Green/Red indicator light will be OFF.

Afer testing all the above steps the installation is finished.

Keep a record of maintenance and maintain the emergency pack and LED lamp regularly. Check regularly to ensure its lifespan and usage.

## Indicator Light and Test Buton Functions:

<b>Indicator Light Function</b>	RED	When batery is charging: LED ON. Full charged or emergency status: LED OFF.
	GREEN	Main power: LED ON; emergency status: LED OFF. Monthly inspection status: slowly flashing. Annual inspection status: fast flashing.
	RED & GREEN	Batery fault: fast flashing. Light source fault: slowly flashing. Self-test status if batery not charged: long bright flashing.
<b>Test Buton Function</b>	Manual Test	Press the buton for 1 second and release. The buzzer will ring simulating emergency status.
	Manual Monthly Inspection	Long press the buton for 3-5 seconds. At the short buzzer ring release the buton to start monthly inspection; press once again to quit monthly inspection.
	Manual Annual Inspection	Long press the buton for 5-7 seconds. At the long buzzer ring release the buton to start annual inspection; press once again to quit annual inspection.
	Emergency Shutdown	In emergency state long press for more than 7 seconds or quickly press 2 times for emergency shutdown.
	Fault Removal	Afer a fault is removed press the buton once and the system enters normal state.
<b>Self-Test Function</b>	Monthly Inspection	Every 30 days afer installation the system will automati ally switch to the monthly inspection state. The duration is 35 seconds. If there is no fault it will automati ally exit and return to AC mains state.
	Annual Inspection	Every 365 days afer installation the system will automati ally switch to the annual inspection state. The duration is 3 hours . If there is no fault it will automati ally exit and return to AC mains state.
<b>Fault Detection</b>	Batery Disconnected	1. Batery open-circuit in Mains power status: Red and Green light fast flashing, buzzer does not report failure. Will be auto restored afer troubleshooting. 2. Batery open-circuit in Self-test status: Red and Green light fast flashing, buzzer reported fault. Press test buton to recover afer troubleshooting.
	Short-circuit of charging circuit	1. Short-circuit in Mains power status: Red and Green light fast flashing, buzzer does not report failure. Will be auto restored afer troubleshooting. 2. Short-circuit in Self-test status: Red and Green light fast flashing, buzzer reported fault. Press test buton to recover afer troubleshooting.
	Light Source Disconnected	1. Light source open-circuit in Mains power status: no failure reported. 2. Light source open-circuit in Self-test status: Red and Green light slowly flashing, buzzer reported fault. Press test buton to recover afer troubleshooting.
	Light Source Short-circuit	1. Light source short-circuit in Mains power status: no failure reported. 2. Light source short-circuit in Self-test status: Red and Green light slowly flashing, buzzer reported fault. Press test buton to recover afer troubleshooting.
	Insufficient Discharge Time	1. Monthly inspection status discharge time less than 35 seconds: Red and Green light long bright flashing, buzzer reported fault. 2. The discharge time is less than 3 hours in the annual inspection status: Red and Green light long bright flashing, buzzer reported fault.

If the indicator lights are not working as expected or if the LED light does not work afer turning the switch ON, the AC power should be cut off immediately and the emergency driver should be checked.

## Troubleshooting:

Most failures experienced are not due to the K-12703 itself and are caused by improper installation or connection of the unit. Please check that:

- Wires are properly clamped into terminals.
- Installation is done according to the wiring diagram.
- Proper polarities are observed.
- Proper LED load maximums are observed.

In case of electromagnetic interference:

- Do not cross-wire the power input line and the light connection output line.
- When parallel wiring, a distance between 5 and 10 cm should be observed.
- Shorten the distance between the power supply input line and the device.
- When running in parallel, the connection between the power input line and the lamp should be as short as possible.