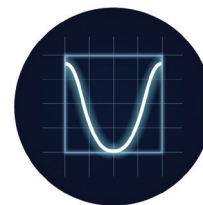


LED EMERGENCY GEAR:

THX LED UNIVERSE

SELF-TESTING EMERGENCY FOR LED PANELS/ STRIPS



COSINE DEVELOPMENTS
LEADERS IN EMERGENCY LIGHTING

DESCRIPTION

The THX LED Universe provides emergency operation for LED panels, strips, modules that uses an external LED driver with an output current of lower than 2Amps (2000mA). Any load with a forward voltage of 10 to 300Vdc may be driven on emergency mode.

The output power of ranges from 4 to 6 watts which provides a percentage light output on emergency mode. The percentage output on emergency mode will be determined by the wattage of the load connected. The unit provides 3-hour emergency operation.



TECHNICAL DATA

BATTERY TYPE	7.4V Li-ion
DIMENSIONS	140 x 30 x23mm
EMERGENCY LIGHTING DURATION	3 hour
LAMP TYPE	10 to 300Vdc LED modules
MAINS VOLTAGE	100 - 253Vac 50/60Hz
MAXIMUM AMBIENT TEMPERATURE	+45°C
OUTPUT VOLTAGE	10 - 300Vdc
BATTERY CHARGING TIME	3 - 6 hours

FEATURES

- > Auto. self-testing feature with visual status
- > Emergency lighting kit for 10-300Vdc LEDs
- > Maintained or non-maintained operation
- > Emergency lighting for 3 hours
- > Fast charging, 3-6 hours charge time

The THX LED Universe has a self-testing function that will cycle the battery every month and perform automatic tests. These tests will check the status of the battery and the load connected to the emergency control unit and signal any faults via the LED.

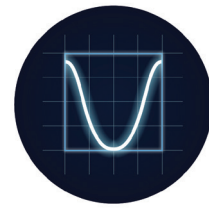
The monthly tests, of 18-minute durations, establish lamp condition whilst the yearly tests last 40 minutes to check battery capacity. System faults are reported via visual means. A safety start circuit is provided that prevents emergency operation until mains is connected. This enables installation without disconnecting or de-pleating the battery. A green pilot light indicates that the batteries are being charged. The unit is housed in a plastic case, which includes a wiring diagram.

The indicating lamp reports the status of the batteries and the lamp by flashing at different intervals. The built-in computer establishes whether the lamp is faulty, the battery voltage is low (shorted cell), the battery voltage is too high (old batteries) and if the batteries have lost capacity due to ageing. The user can now be aware on any problems with the emergency lighting system before power failures and not during them. The built-in computer prohibits deep discharging of the batteries.

LED EMERGENCY GEAR:

THX LED UNIVERSE

CONTINUED



COSINE DEVELOPMENTS
LEADERS IN EMERGENCY LIGHTING

Always fully functional. The inverter satisfies the requirements as defined in SABS 598-1 (Luminaires: General requirements and tests) and will satisfy SABS 1464 PART 22 (Safety of luminaires: Luminaires for emergency lighting).

TECHNICAL DATA

FAULT TYPE	INDICATOR CODE	
Mains is on and the system is OK	No flashing, indicator continuously burning	● ● ● ● ● ● ● ●
Battery fault	1 flash f ollowed by a pause	● ○ ● ○ ● ○ ● ○
Lamp fault	2 flashes f ollowed by a pause	● ● ○ ● ● ○ ● ●
No mains	Indicator Light off	○ ○ ○ ○ ○ ○ ○ ○

NOTES

Only connect the batteries after a permanent supply is established i.e., do not switch the unit on and off with the batteries connected during installation as this may cause damage and false error reporting.

Faults may be cleared by switching off the permanent mains supply and temporarily disconnecting the batteries. This action will reset the internal computer chip.

After corrective action i.e., replacing faulty lamp or batteries, faults should automatically clear after the next scheduled test. Never attempt to replace the lamp during a self-test or whilst the unit is in emergency mode. This action may cause damage and false error reporting.

