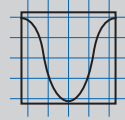


# THX LED UNIVERSE

## SELF-TESTING EMERGENCY FOR LED PANELS/STRIPS



**COSINE DEVELOPMENTS**  
LEADERS IN LIGHTING TECHNOLOGY



### OVERVIEW:

- > Maintained or non-maintained operation
- > Auto. self-testing feature with audible and visual tactics
- > Emergency lighting kit for 10 to 300Vdc LEDs
- > Emergency lighting for 1 - 3 hours
- > 5 year warranty

### PRODUCT DESCRIPTION:

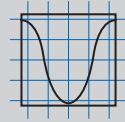
The THX LED Universe provides emergency operation for LED panels, strips, modules that uses an external LED driver with an output current of lower than 2Amps (2000mA). Any load with a forward voltage of 10 to 300Vdc may be driven on emergency mode. The output power of the THX LED Universe ranges from 6 to 8 watts. The THX LED Universe 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 THX LED Universe provides a minimum of 1-hour emergency operation.

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 and the buzzer. The monthly tests, of two-minute durations, establish lamp condition whilst the 6th month tests last 40 minutes to check battery capacity. System faults are reported via both audible and visual means. A safety start circuit is provided that prevents emergency operation until mains is connected. This enables installation without disconnecting or depleting the battery. A red pilot light indicates that the batteries are being charged. The unit is housed in a plastic case, which includes a wiring diagram.

SPECIFICATIONS	
<b>Battery Type</b>	7.4V Li-ion
<b>Dimensions</b> (L x W x H)	250 x 45 x 35mm
<b>Emergency Lighting Duration</b>	Minimum 1 hour
<b>Lamp Type</b>	10 to 300Vdc LED modules
<b>Mains Voltage</b>	100 - 253Vac 50/60 Hz
<b>Maximum Ambient Temperature</b>	+45°C
<b>Output Voltage</b>	10 - 300Vdc

## THX LED UNIVERSE (CONTINUED)

## SELF-TESTING EMERGENCY FOR LED PANELS/STRIPS


**COSINE DEVELOPMENTS**  
 LEADERS IN LIGHTING TECHNOLOGY
**OVERVIEW:**

- > Maintained or non-maintained operation
- > Auto. self-testing feature with audible and visual tactics
- > Emergency lighting kit for 10 to 300Vdc LEDs
- > Emergency lighting for 1 - 3 hours
- > 5 year warranty

**PRODUCT DESCRIPTION:**

The indicating lamp reports the status of the batteries and the lamp by flashing at different intervals. An audible alarm emits a beep every hour of a five seconds duration if a system fault is detected. The built-in computer establishes whether the lamp is faulty, the if 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.

This type of inverter is now becoming mandatory in Europe because users need to guarantee that the emergency lighting is 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).

FAULT TYPE	LED CODE		BUZZER
Mains is on and the system is OK	No flashing, LED continuously burning	●●●●●●●●	Off
Battery voltage low	Continuous flashing	●○●○●○●○	Beep every hour
Low capacity battery	Two flashes followed by a pause	●○●○●○●○	Beep every hour
Lamp fault	One flash followed by a pause	●○●○●○●○	Beep every hour
No mains	LED off	○●○●○●○●	Off

**NOTES:**

The unit may be installed without the buzzer connected if necessary.

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.