Lites

HPLED DE T

Tunable 3000°-5700°k

Retrofit for Fresnel
LEONARDO 2000 cod. 320-321 (De Sisti)

Owner's and service manual

Read this manual totally and carefully follow all the instructions contained. File this manual for future use. It is essential to read all the information contained to ensure correct installation, service and full operation of the HPLED DE T
All operations must be accomplished, handled and carried out by qualified personnel only.
NOT COMPLYNIG WITH GIVEN NOTICE IT WILL VOID WARRANTY AND WILL FREE THE MANUFACTURER OF ANY KIND OF RESPONSABILITY AND LIABILITY.

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Unpacking

Unpack the carton and gently remove HPLED DE T from the box. Ensure HPLED DE T is received in all its parts.In the event the HPLED DE T shows any damage, do not use it and contact immediately your transporter as well as your seller.
Items in the carton consist of:
- N. 1 HPLED DE T unit
- N. 2 Ø 4 mm washers
- N. 2 M4 screws

Installation, utilisation and service ownerr's manual.

General Information and recommendation to operate the unit in good and safe conditions.
Follow instructions with care and attention:
HPLED DE T must be used and housed only and exclusively for the 2000W Leonardo unit (code 320 – 321)

The HPLED DE T unit must NEVER be used unless it is housed in one of the models listed above. (Fresnel Leonardo cod. 320-321).

HPLED DE T fixture is only meant for professional use. NEVER use it for domestic or other improper use.
Minimum distance from any flammable source is of 0.25m.
Minimum throw distance from illuminated surface: 0.5m.
The installation of the unit(s) (prior to installation, the HPLED DE T unit must be housed in one of the De Sisti luminaires listed above), the housing of the external fixture body, must be secured with suitable clamps, safety cords and adequate protection.
Install HPLED DE T in ventilated ambient which temperature must not exceed 35°C
HPLED DE T is NOT for domestic use, HPLED DE T can only be used for professional applications.
When HPLED DE T unit is operated, some outer parts of the profile can reach temperatures of up to 60C°
HPLED DE T must be fitted with protection shields (Lenses)
On no account, directly or indirectly, LED must be touched as it may impair its use.
An Essential and Periodically throughout cleaning of the HPLED DE T is recommended. This practice avoids that layers of dust and other impurity jeopardise and reduce the correct operation of the unit. Lenses must be cleaned to remove layers of dust that may impede and or reduce the passage of the light through the lenses. The correct and periodically maintenance keeps also fans and vents clean thus keeping the HPLED DE T in its best performance conditions. Never touch, directly or indirectly, the Yellow core of the LED nor use solvents that can damage the LED irremediably. Protection shields if battered/worn, must be replaced with new ones (Lenses)

Warning from electric shocks

All operations must be accomplished, handled and carried out by qualified personnel only
Warning High voltage hazard, always disconnect Power before any handling and any servicing of HPLED DE T
Do not and never handle HPLED DE T with humid/wet hands or near to any water or any kind of moisture sources
Always connect HPLED DE T to mains fitted with safety device switch that cuts power off in case of danger
The HPLED DE T does NOT and CAN NOT be operated via Phase control dimmer nor connected/operated in NON-DiM mode
HPLED DE T is rated Class I
Earth connection is mandatory!

CE Approvals

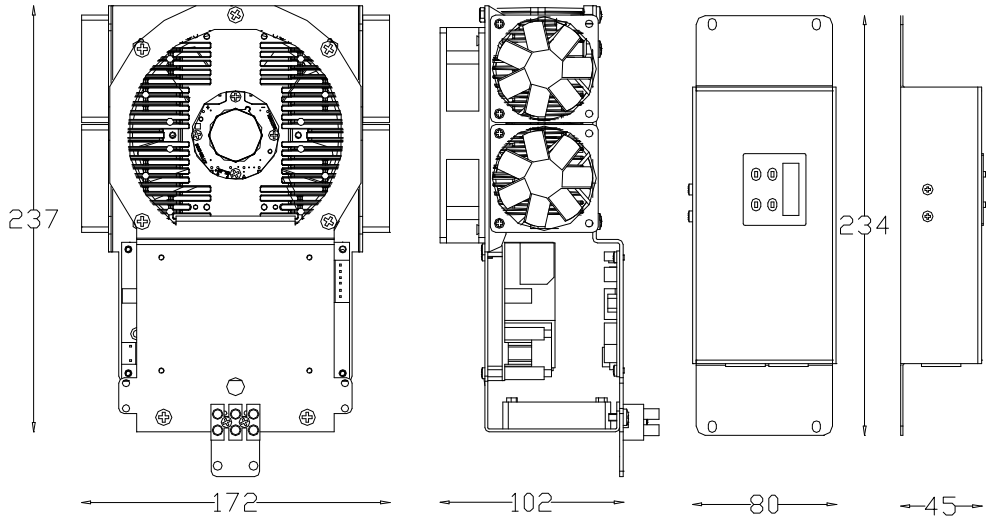
The HPLED DE T products to which this manual refers to, complies with European directive pursuant to:
2014/35/EU safety of electrical equipment supplied at low voltage (LVD)
2014/30/EU Electromagnetic compatibility (EMC)
2011/65/EU Restriction of the use of certain hazardous substances (RoHS)

WARRANTY!

A 24-month warranty is granted on the HPLED DE T from purchase's date. Warranty covers fabrication defects only. Warranty is immediately voided if the HPLED DE T has been handled by unqualified personnel. Any improper and unauthorised use, such modification(s) or misapplication of the HPLED DE T will also void the warranty of the product(s). Silver colour label showing technical data and serial number, if removed or if data are impaired to render details illegible, it will immediately void the warranty

Technical specifications

Power Supply 100-240 V~ 50/60Hz
Maximum power consumption 200W
Stand-by power consumption 3W
Minimum ambient temperature -10°C
Maximum ambient temperature 35°C
LED Colour Temperature: 3000°K - 5700°K
LED CRI 96 (3000°K) and 94 (5700°K)
LED Life (see Manufacturers ' specifications)
Weight: 2,7 Kg
IP rating 20: To be housed into original Fresnel De Sisti Leonardo cod.320-321
Working position: Any
Data connectors: IN & OUT XRL5
Data protocols: DMX 512; RDM ready
User interface: 4-digit display and 2 buttons
Manual operation: Users must operate via buttons provided on the display
Fan control: Fan speed adjustment
Control of LED frequency: Selection of LED frequency refresh
2 Dimming curves control: Selection of two dimming curves control
Compliant: CE
Dimensions (see picture):



⚠ It is mandatory to disconnect power from mains during the whole process installation of the HPLED DE T module.

The HPLED DE T module has been designed to replace the halogen lamps used in the 2000 W Fresnel De Sisti Leonardo model projectors (codes 320 and 321) with a fully LED gear. Place the projector on an even surface with the base of the projector facing up. (see fig. 1). Loosen the 4 M4 screws that secure the lamp-holder, slide the box and remove the slide-holder-box from the projector (see fig. 2). Remove the mirror holder and the G38 lamp-base. Loosen the 2 M4 screws that holds the mirror-holder in place (see fig. 3) and as well the 2 M4 screws that holds the lamp-holder to the slide (see fig. 4). Use the 4 mm Allen-key to loosen the screws that hold the power cables to the lamp-holder. Loosen the M4 screw that holds the yellow/green ground-cable to the lamp-holder. Cut the eyelet lug from the ground cable. Drill the slide box at the indicated heights with a drill using a 20/25 mm drill-bit (see fig. 5). Hold the HPLED DE T module and connect the power cables to the three-pole terminal, ensure connection to the ground-cable (central terminal) and the power cables to the side terminals. Secure the power cables with the supplied clamps (see fig.6). Secure the HPLED DE T module to the slide with the use of 2 M4 screws (see fig. 7). Lead the DMX cables and the display-strip through the hole previously drilled (see fig. 8). Connect the strip to the display and the DMX connector to the HPLED DE T display holder-box (see fig. 9). Secure the signal cables with the supplied cable-tie. Remove the 4 side screws from the sled holder-box and fix the display box to the projector sled holder (see fig.10). Insert the assembled slide box into the Fresnel projector (see fig.11). Close the slide box with the 4 M4 screws (see fig.12).

Fig.1

Fig.2

Fig.3

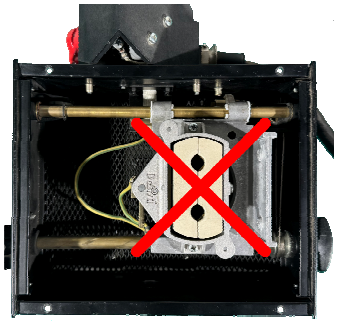


Fig.4

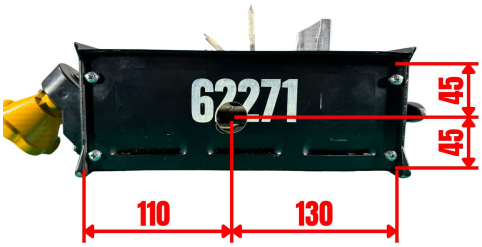


Fig.5

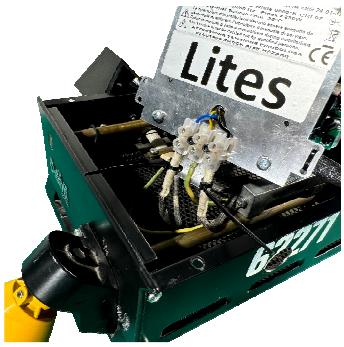


Fig.6

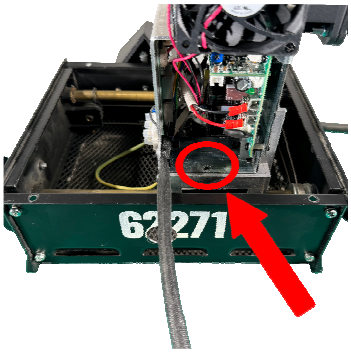


Fig.7

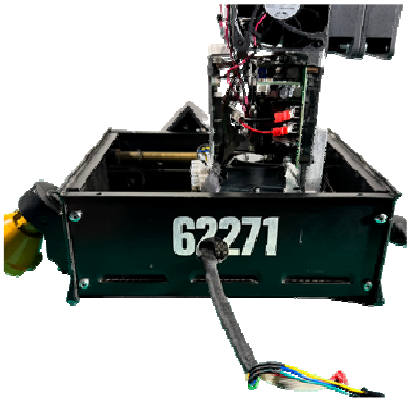


Fig.8

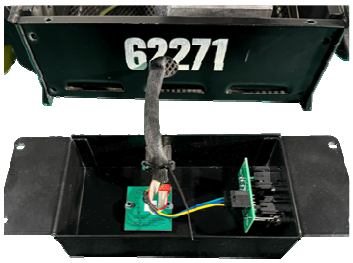


Fig.9

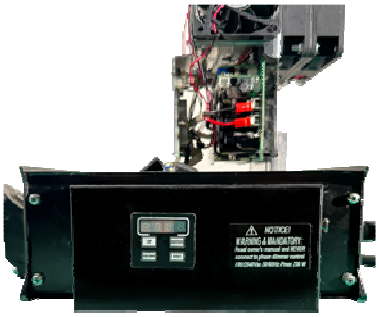


Fig.10

Fig.11

Fig.12

Connection to mains

WARNING ! Installation(s) must be accomplished, handled and carried out by qualified personnel only and must comply with all norms in force in the installation's country

Power up the projector using the supplied cable.

WARNING:NEVER CONNECT HPLED RJ ENGINE TO ANGLE PHASE DIMMER PACK NOR TO NON-DIM MODE

Signal control connection

HPLED DE T can be operated via either DMX512A and or RDM ready Protocols. For Daisy chain DMX line use a-2 lead wire plus shield.
Important note: when DMX is available a red dot will illuminate on the right hand of the display.When red dot is off no DMX signal is available.

Collegamento co connettore XLR5	
poli	**descrizione**
1	GND
2	DMX-
3	DMX+
4	NC
5	NC

RDM – Remote Device Management

RDM Controller allows for remote standard operations.
RDM default options include:
Discovery mode: RDM is engaged when controller incepts this mode, the device reports itself by giving a flash of light (Controller sets the device in a listing to read: settings, DMX address, personality settings, (Read all DMX mode including all DMX channels above)
ON/OFF "Identify": This mode is used to identify the manufacturer's device (Lites srl).
It gives a flash of light from the LED. Model information (HPLED II T)
Software version information (HPLED II –T v.x.xx)
Mode to reveal temperatures of the LED and of the driver
Mode to reveal hour-meters of the LED and of the device

Menu items

Displayed message	Allowed or displayed values	Mode	
Addr	001..510	DMX address : as of 1 to 511	
Auto (Automatic mode)	co01 co02 co03 co04 co05 co06 co07 co08 co09 co10 co11 co12	Preset 1 white 3000°k Preset 2 …….. Preset 3 …….. Preset 4 …….. Preset 5 …….. Preset 6 …….. Preset 7 …….. Preset 8 …….. Preset 9 …….. Preset 10 …….. Preset 11 …….. Preset 12 white 5700°k	Values between co001 through co12 allow for fixed white set-up without DMX 512 protocol signal. When fixture is turned, the last selected preset will be held
	Pr01 Pr02	Program 1: auto Program 2 : auto	Automatic mode without DMX 512 Protocol signal. Program selections run between Pr01 through Pr 02 Both programs can be modified. To change program select Enter then view (Scn0…Scn9; max scenes of each program). Clicking on enter once more it shows P.00.0 (time) followed by F.00.0 (speed) and ultimately the last view shows 1c.01… though c12 (colour to be assigned to each scene) The use of UP/Down keys allow for setting values. When selections are completed press enter to confirm
Mode	2 ch	3000°k- 5700 °K	Dmx mode (view next page)
	2 ch (D)	3000°k /5700°K –dimmer (default)	
	3 ch	3000/5700°k – dimmer - strobo	
	4 ch	3000/5700°k-dimmer 16 (bit) strobo	
drUt	..°C	Shows driver operating temperature	
LEdt	..°C	Show led operating temperature	
PUM	0..100%	Shows current led power (0-100%)	
SMOO	FAST MED SLOW	DMX data Speed adjustment	
GAMM	LInE qUAd	Dimmer profile selection: - LinE for linear dimming regulation - qUAd for tungsten lamp emulation)	
FREQ	1K 2K 3K 4K 5K 6K 7K 8K 9K 10K	LED operation frequence	
booS	Off on	Boost selection: off = maximum led power at 90% on = maximum led power at 100%	
FAn	FAST LOW	2 fan operating modes i.e fast, slow speed. Fan speed adjujstments (fan-sound) reflect on self-correct output LED brightness and other factors as room-temperature, number of engaged channels	
PoS	AA VV	I Display orientation selection: AA = normal VV = inverted	
StbY	Off on	Standby display activity: off = display always switched on on = display switched off after few seconds of buttons inactivity (only the right side dot will be lighted to indicate DMX availability)	

dEF	Off on	ON Will restore the default factory values
TiML	..h ..	Shows LED life
TiMU	..h ..	Shows HPLed life
SoFt		Shows Software version

DMX Operating Modes (Mode)

HPLED DE T provides with different DMX operating modes ensuring the ideal use of the DMX universe Shutter/strobo, 8/16 bit dimmer, fan speed and LED frequence are all adjustable

mode 2 ch white indipendenti

Ch	funzione	Livelli dmx	
1	3000°k White	0..255	From 0 to max 255
2	5600°k White	0..255	From 0 to max 255

mode 2 ch (default)

Ch	funzione	Livelli dmx	
1	3000°k-5600°k	0..255	When set to level 0 = 3000°k – When set to level 255 = to 5600°k
2	dimmer	0..255	From 0 to max 255

mode 3 ch dimmer

Ch	funzione	Livelli dmx	
1	3000°k-5600°k	0..255	When set to level 0 = 3000°k – When set to level 255 = to 5600°k
2	dimmer	0..255	From 0 to max 255
3	shutter	0-9	Strobe disengaged
		10..255	Strobe from slow (10) to fast (255)

mode 4 ch dimmer 16 bit

Ch	funzione	Livelli dmx	
1	3000°k-5700°k	0..255	When set to level 0 = 3000°k – When set to level 255 = to 5700°k
2	dimmer	0..255	From 0 to m6ax 255
3	Dimmer fine	0..255	From 0 to max 255
4	shutter	0-9	Strobe disengaged
		10..255	Strobe from slow (10) to fast (255)

Error messages

In case of malfunction, the following messages may be shown:

LED ERROR : sympthon of a possible short-circuit on LED driver.
TEMPERATURE ERRor: sympthon that sensors have measured temperature below -15°C or failure on NTC- in such event LED will switch to off mode. Should any of the above given messages occur, for precaution measures the LED will always switch to off mode. Halt the unit immediately and refrain from the use of it and promptly contact any authorized service centre.

Periodical maintenance

To ensure the correct HPLED DE T 's operations we suggest the following periodical maintenance operations:

Remove dust or any kind of other dirty from the fans and loop-holes to ensure the correct air flow
Remove dust from lenses using a clean cloth. This maintenace will ensure the maximum light efficiency
Replace damaged protection screens and lenses when necessary
Always handle HPLED DE T gently and with care, do not drop, do not shake do not cause shocks to the unit as it could damage it irremediably.

Do not touch nor clean the LED as well as the yellow area around it with solvents

Device disposal information

At the end of its life, HPLED DE T must be disposed to an appropriate electrical and electronic equipment waste collection centre. Eco-friendly disposal, helps to avoid possible negative impact on the environment and human health and promotes the reuse and/or recycling of the materials making up the product. Illegal disposal involves administrative sanctions provided by laws enacted.

Manufacture declines any sort of personal/corporate responsibility/liability for damages caused by the inadequate use of the product as well as if unqualified personnel have handled the product. Not complying with security norms/periodical maintenance as expressed in the owner's/service manual will also totally free personal/corporate responsibility/liability**.**

HPLED DE T 10/04/2024 rev.00