Lites

HPLED DE WHITE

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
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 from the box. Ensure HPLED DE is received in all its parts.In the event the HPLED DE 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 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 must be used and housed only and exclusively for the 2000W Leonardo unit (code 320 – 321)

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

HPLED DE 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 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 in ventilated ambient which temperature must not exceed 35°C
HPLED DE is NOT for domestic use, HPLED DE can only be used for professional applications.
When HPLED DE unit is operated, some outer parts of the profile can reach temperatures of up to 60C°
HPLED DE 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 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 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
Do not and never handle HPLED DE with humid/wet hands or near to any water or any kind of moisture sources
Always connect HPLED DE to mains fitted with safety device switch that cuts power off in case of danger
The HPLED DE does NOT and CAN NOT be operated via Phase control dimmer nor connected/operated in NON-DiM mode
HPLED DE is rated Class I
Earth connection is mandatory!

CE Approvals

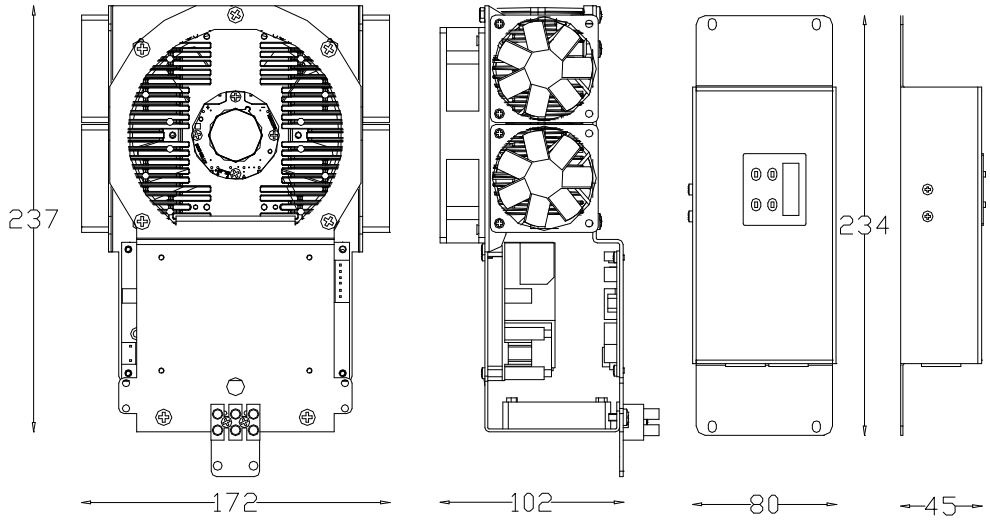
The HPLED DE products to which this manual refers to, complies with European directive pursuant to:
2014/35/EU safety of electrical equipment supplied at low voltage (LVD)
2014/30/EU Electromagnetic compatibility (EMC)
2011/65/EU Restriction of the use of certain hazardous substances (RoHS)

WARRANTY!

A 24-month warranty is granted on the HPLED DE from purchase's date. Warranty covers fabrication defects only. Warranty is immediately voided if the HPLED DE has been handled by unqualified personnel. Any improper and unauthorised use, such modification(s) or misapplication of the HPLED DE 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 230W
Stand-by power consumption 3W
Minimum ambient temperature -10°C
Maximum ambient temperature 35°C
LED Colour Temperature: 2700°k, 3000°K, 4000°K,5600°K (to specify when ordering)
Minimum *CRI* : 90 > and 97 > (depending on LED model)
LED Life (see Manufacturers ' specifications)
Weight: 2,7 Kg
IP rating: To be housed into original Profile Robert Jiuliat 600 SX series luminaire
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 module.

The HPLED DE 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 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 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 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

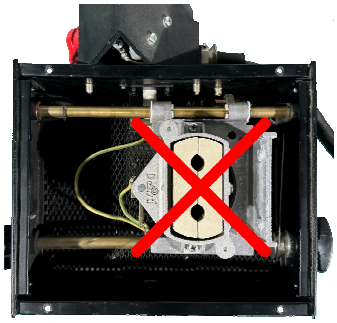


Fig.4

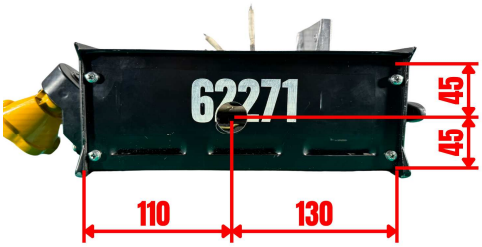


Fig.5

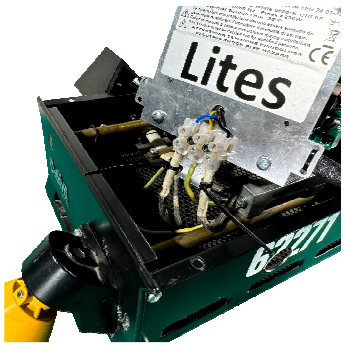


Fig.6

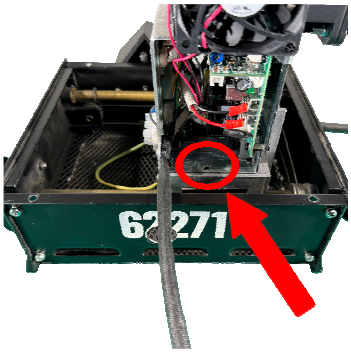


Fig.7

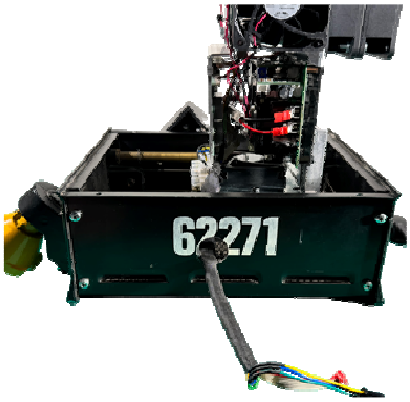


Fig.8

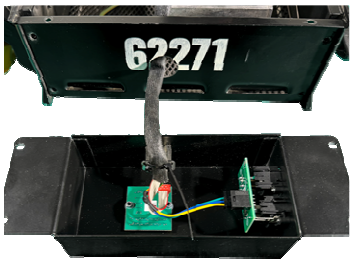


Fig.9

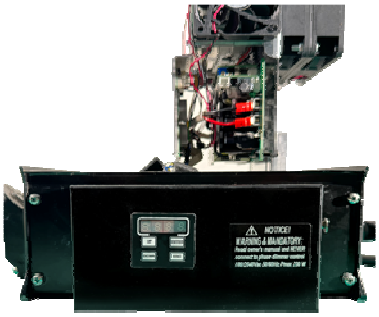


Fig.10

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 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 DE)
Software version information (HPLEDII –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	Function
Addr	001..510	Set Up DMX Address
Mode	1 ch 2 ch 3ch 4ch 5ch	DMX Operating mode (see next page)
Man	0..255	Manual light output adjustment (this is possible even if no DMX is present). Adjusted value will be stored on the internal permanent memory
drUt	..°C	Shows driver operating temperature
LEdt	..°C	Show led operating temperature
PUM	0..100%	Shows current led power (0-100%)
SMOO	SFSt 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	Aut MEDL LOW	3 fan operating modes i.e atuomatic, medium , slow speed. Fan speed adjujstments (fan-sound) reflect on self-correct output LED brightness and other factors as room-temperature
PoS	AA VV	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
SoFt		Shows Software version

DMX Operating Modes (Mode)

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

1ch mode

Channel	Function	DMX Values	
1	dimmer	0..255	Light output: 0=Off, 255=Maximum Power

2ch mode

Channel	Function	DMX Values	
1	shutter	0-9	off
		10..255	Strobe effect from slow to fast
2	dimmer	0..255	Light output: 0=Off, 255=Maximum Power

3ch mode

Channel	Function	DMX Values	
1	shutter	0-9	off
		10..255	Strobe effect from slow to fast speed
2	dimmer	0..255	Light output: 0=Off, 255=Maximum Power
3	Fan speed	0..24	Fan at slowest speed
		25..255	Fan speed from slow to fast

4ch mode

Channel	Function	DMX Values	
1	shutter	0..9	off
		10..255	Strobe effect from slow to fast speed
2	dimmer	0..255	Light output: 0=Off, 255=Maximum Power
3	Fan speed	0..24	Fan at slowest speed
		24..255	Fan speed from slow to fast
4	Frequency Modulation	0..24	PWM Frequency 1KHz
		25..49	PWM Frequency 2KHz
		50..74	PWM Frequency 3KHz
		75..99	PWM Frequency 4KHz
		100..124	PWM Frequency 5KHz
		125..149	PWM Frequency 6KHz
		150..174	PWM Frequency 7KHz
		175..199	PWM Frequency 8KHz
		200..224	PWM Frequency 9KHz
		225..255	PWM Frequency 10KHz

5ch mode

Channel	Function	DMX Values	
1	shutter	0..9	off
		10..255	Strobe effect from slow to fast speed
2	Dimmer Coarse	0..255	Light output: 0=Off, 255=Maximum Power – Coarse
3	Dimmer Fine	0..255	Light output: 0=Off, 255=Maximum Power - Fine
4	Fan speed	0..24	Fan at slowest speed
		24..255	Fan speed from slow to fast
5	Frequency Modulation	0..24	PWM Frequency 1KHz
		25..49	PWM Frequency 2KHz
		50..74	PWM Frequency 3KHz
		75..99	PWM Frequency 4KHz
		100..124	PWM Frequency 5KHz
		125..149	PWM Frequency 6KHz
		150..174	PWM Frequency 7KHz
		175..199	PWM Frequency 8KHz
		200..224	PWM Frequency 9KHz
		225..255	PWM Frequency 10KHz

Error messages

In case of malfunction, the following messages can be shown:
Led sensor error: the sensor on the led is faulty.
Overtemperature LED: the temperature on the LED exceeds the allowed limit, check if the fan is working.
Micro overtemperature: the temperature on the driver board exceeds the allowed limits, check if the fan is working.
Micro sensor error: the sensor on the driver board is faulty.
If these malfunctions occur, the LED turns off.
Avoid using the HPLED DE and promptly contact any authorized service centre.

Periodical maintenance

To ensure the correct HPLED DE operation, we suggest the following periodical maintenance operations:
Remove dust or any kind of other dirt from the fans and loop-holes, this operation ensures the correct air flow
Remove dust from lenses using a clean cloth. This will ensure the maximum light efficiency
Replace damaged protection screen and lenses when necessary.
Do not touch nor clean the LEDs nor the sourranded area with solvent

Device disposal information

At the end of its life, HPLED DE 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.

Note

Manufacture declines any sort of personal/corporate responsibility/liability for damages caused by people that are not scrupulously following indications given in this manual as for the inadequacy or for misuse of the product they do, as well as if the product has been handled by unqualified personnel. Not complying with security norms/periodical maintenance and all information contained and as expressed in the owner's/service manual will also totally free personal/corporate responsibility/liability.Text, wordings, drawings, specifications, modifications and other changes of this manual may apply anytime without notice. The specifications are not binding.