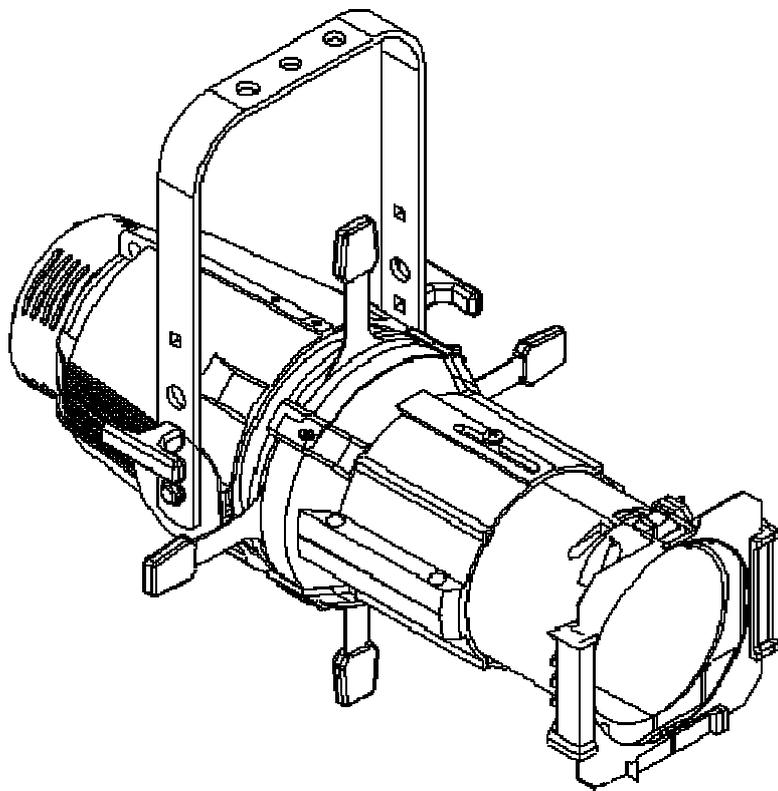


Lites

PROFILE LED T 3000°-5700°K

Owner's and service manual



Read this manual throughout and carefully follow all the instructions contained. File this manual for future perusals

It is essential to read and follow guidelines and other information contained in this manual to ensure correct installation, service and full operations of the Lites Profile T

All operations must be accomplished, handled and carried out by qualified personnel only

NOT COMPLYING WITH GIVEN NOTICE WILL VOID WARRANTY AND WILL TOTALLY DISCHARGE THE MANUFACTURER FROM ANY RESPONSABILITY

www.litesrli.com

Unpacking

Unpack the carton and gently remove Lites Profile T from the box. Ensure all parts and components of the Lites Profile T received are undamaged.

In the event the Lites Profile T shows any damage, do not use it and contact immediately your transporter as well as your seller.

Items in the carton consist of:

- Lites Profile T luminaire
- Colour frame
- Blue Neutrik PowerCon connector
- This owner's and service manual

Safety information for the use of the Lites Profile T and its periodical maintenance

- Lites Profile T is for professional use only and NEVER for domestic use.
- Users must scrupulously comply with manufacturer's guideline that follows; any other use in contrast with the provided information will void warranty and will discharge the manufacturer from any legal responsibility
- Never use Lites Profile T on any flammable surfaces.
- Minimum distance from any flammable source is of 0.25m.
- Minimum throw distance from illuminated surface: 1m.
- Installation of the unit(s) must be secured with adequate clamps, safety cords, nuts and bolts to bear twice the weight of the whole unit(s)
- Always power Lites Profile T to safety circuit breakers. Lites Profile T MUST NOT and CAN NOT be operated via Phase Control Dimmer.
- Install Lites Profile T in ventilated ambient which temperature must not exceed + 35°C (+ 95° F)
- Caution: when in operation some outer body-parts of the Lites Profile T can reach temperatures of up to + 60°C (+ 140° F)
- Lites Profile T must be fitted with protection shields (Lenses)
- Always disconnect power, (always check twice that power is off) before Servicing/Operating the unit.
- Lites Profile T is rated Class I
- Protection rating IP20
- Earth connection is MANDATORY!
- LED core must never be touched in any way as it may impair its use.
- An essential and periodically throughout cleaning of the Lites Profile T is recommended. This practice avoids that layers of dust and other impurity put at risk and reduce the correct operation of the unit. Lenses must be cleaned; 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, this practice ensures the best conditions and performance of the Lites Profile T. Never touch the yellow LED core in any way nor use solvents as this can irremediably damage the LED. Protection shields (lenses) if worn out, must be replaced with new ones

CE APPROVALS

The Lites Profile 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

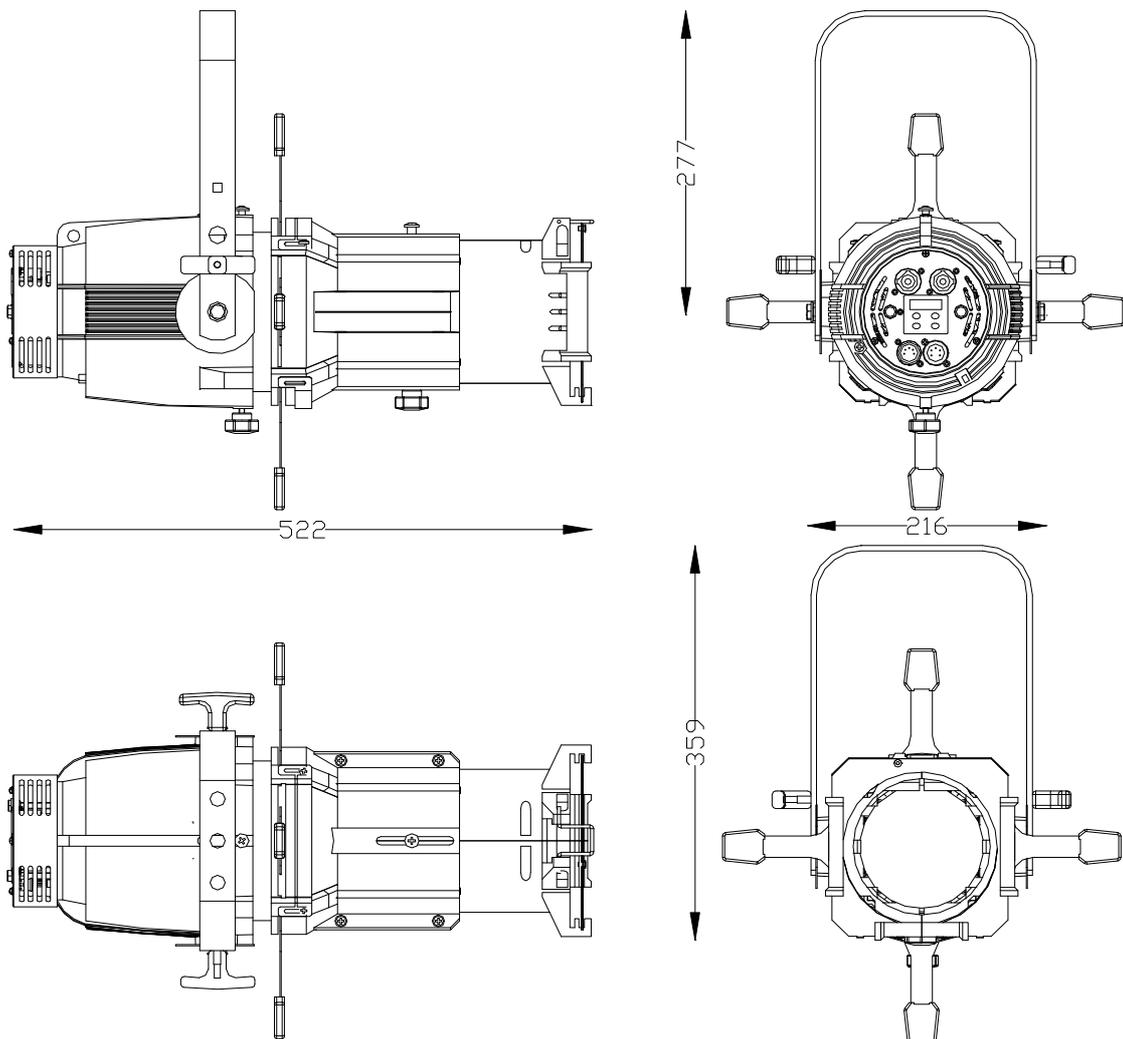
A 12-month warranty is granted on the Lites Profile T from its purchase's date. Warranty covers fabrication defects only, unit is not replaced but will be 100% fixed. Lites Profile T must be handled and used by qualified people, as if not, it will void the warranty. Warranty is also voided if qualified personnel and users do not and have not handled the Lites Profile T properly. Any improper and unauthorised use, such modification(s) or misapplication of the unit will also void the warranty of the product(s). Silver colour label showing technical data and serial number, if removed or if data are altered or tampered to change specs or render details illegible, will also immediately void the warranty.

Technical specifications

Power Supply	100-240	V~ 50/60Hz
Maximum power consumption	170W	
cos Ø	0,98	
Stand-by power consumption	5W	
Minimum ambient temperature	-10°C	
Maximum ambient temperature	35°C	
LED Colour Temperature:	3000°K-5700°K	
LED CRI	96 - 94	
Colour frame dimensions:	160x160 mm	
Aluminium die-caste body to maximize heat dissipation		
LED Life	(see Manufacturers ' specifications)	
Weight	7,5 Kg	
IP Rating	20	
Working position	Any	
Power connectors	IN & OUT Neutrik PowerCon	
Data connectors	IN & OUT XRL5	
Data protocols	DMX 512; RDM ready	
User interface	4-digit display and 4 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 four dimming curves control	
accessories:	Iris diaphragm; Gobo holder (size B Ø 86 mm, image Ø 66mm)	

CE Compliant

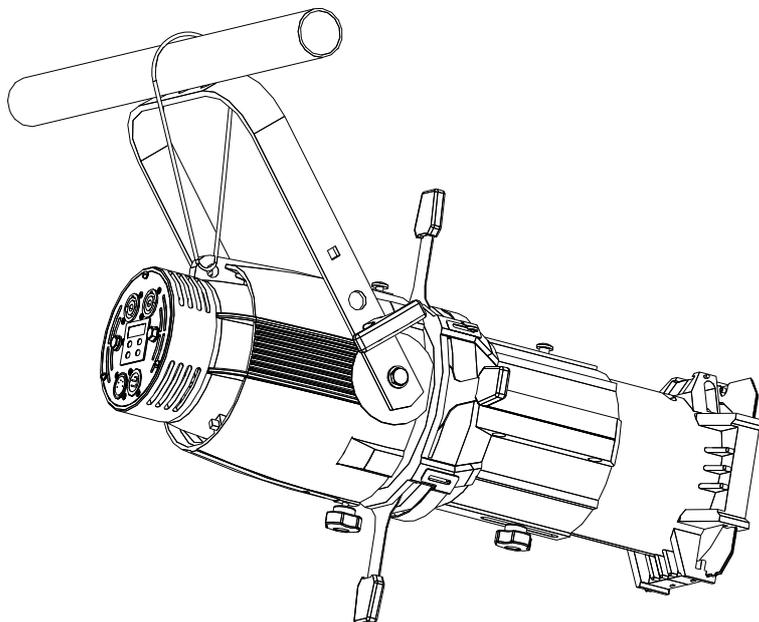
Dimensions (see) picture)



Lites Profile T installation

Lites Profile T is delivered with a robust yoke that hosts 3 x 12 mm mounting holes.

The use of an adequate G-clamp to sustain at least twice the weight of the Lites Profile T (Lites Profile T weighs 7,5 kg) and/or M10 screw is mandatory. The use of safety chain(s) to sustain twice the weight of the Lites Profile T is also mandatory; the safety chain adds more protections and safety to users and third parties. Eye-lid for the safety chain is provided on the Lites Profile T. The unit can be installed in any position (See Fig)



Connection to mains

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

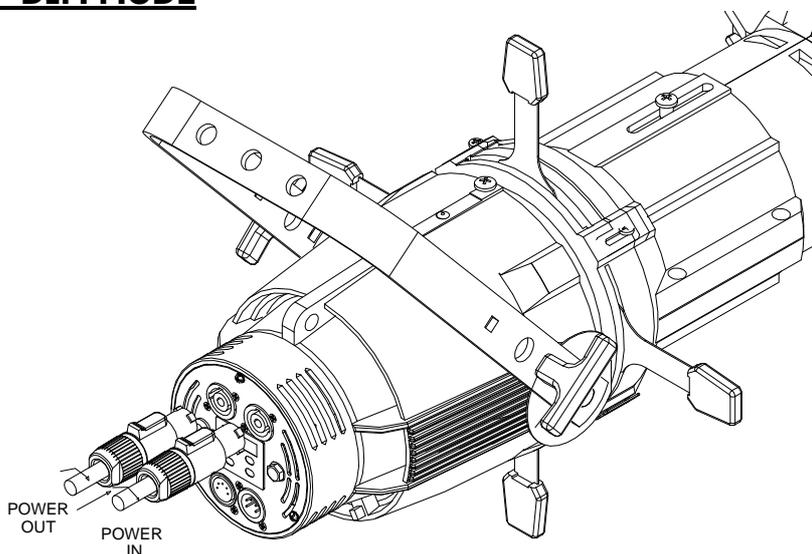
Lites Profile T is supplied with a free Blue Neutrik PowerCon plug that must be wired using a 3x1.5mm² lead

Additional specifications include:

- Operating Voltage: 300/500V
- Test Voltage: 2KV
- Operating Temperature: -10°C / +35°C (- 14° F / +90° F)

Connect blue wire to N terminal, brown wire to L terminal and Yellow/Green wire to earth terminal. Ensure to connect to safety circuit breakers at all times. When connected to 230VAC, daisy chain must not exceed the quantity of 10 units and 5 units when connected to 110VAC. Maximum daisy chain cable length: 20m.

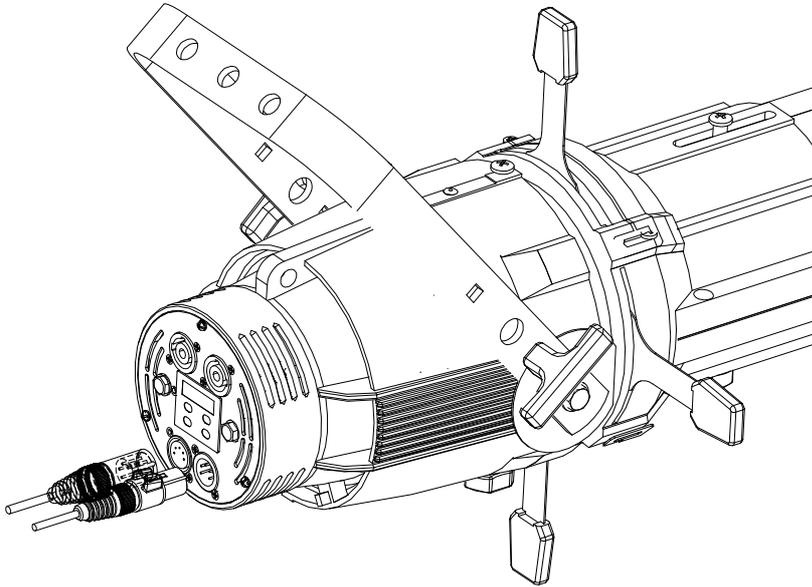
! WARNING: NEVER CONNECT LITES PROFILE T ENGINE TO ANGLE PHASE DIMMER PACK NOR TO NON- DIM MODE



Signal control connection

Lites Profile T can be operated via either DMX512A and or RDM ready Protocols. For Daisy chain DMX line use a-2 lead wire plus shield.

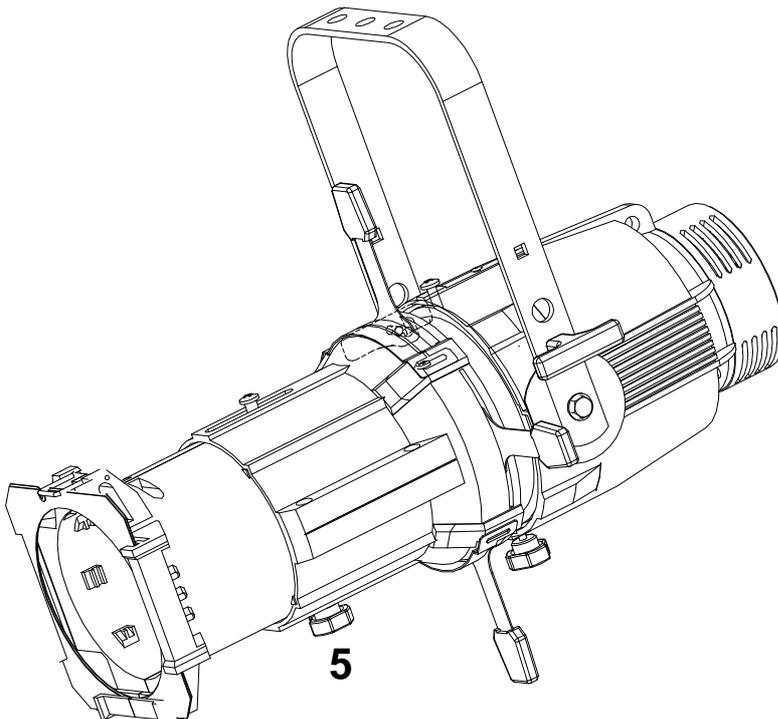
Important note: when DMX is available a red dot will illuminate on the right hand of the display. When red dot is off no DMX signal is available.



DMX XLR 5 Pin Assignment	
Pin	Description
1	GND
2	DMX-
3	DMX+
4	Not connected
5	Not connected

Focus

Loosen knob 5 than adjust optics to focus light projected



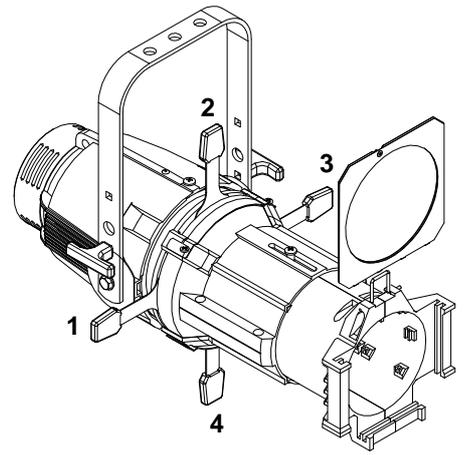
Shutter blades

There are 4 shutter blades, to shape patterns

Installations of the accessories

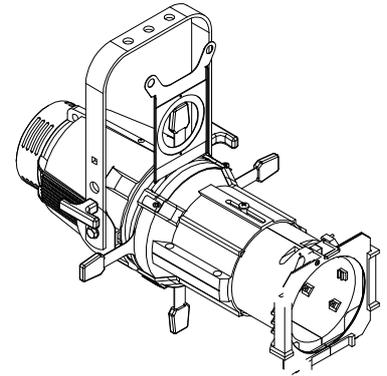
Gel frame

Lites Profile T is delivered with a standard 160x160mm colour frame. The LED source used on Lites Profile T allows the use of colour filters that cannot be used with high wattage tungsten lamps. Ensure that accessories when installed on the Lites Profile T are securely fitted in the gates and that are engaged and secured by the spring lock provided. (See figure)



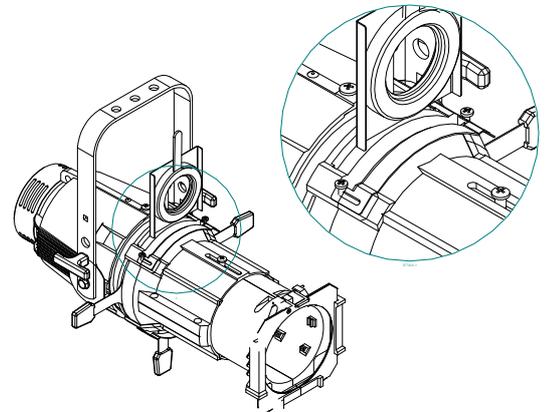
Gobo holder

Standard gobo holder (not included) can be used to house gobos 'size B' (\varnothing 86 mm, \varnothing 66 mm). Ensure gobo holder is securely engaged in its gate so to avoid injuries to third parties in case this accessory comes out of its place



Iris diaphragm

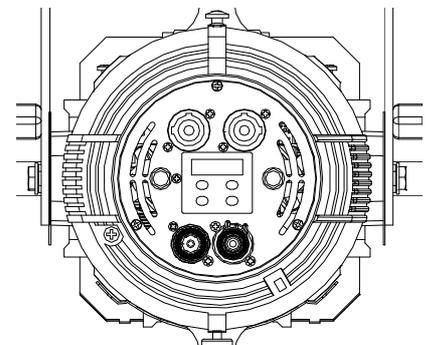
Diameter of the projected image maybe changed in sizes with the use of an iris diaphragm (not included). To set Iris into its housing loosen the two M4 screws and move the bulkhead (see fig.). Ensure that iris is secured into its gate to avoid injuries to third parties in the event it comes out of its place.



Power Lites Profile T ON

WARNING! Before powering Lites Profile T ensure that all installation(s) procedure(s) have(s) been properly set learnt and accomplished.

When Lites Profile T is powered the setup display will show the software release version. The UP, DOWN, ENTER and ESC buttons allow the operations of Lites Profile T menu. UP and DOWN buttons allow to browse through menu options, the ENTER button is to confirm selection. The ESC button is to return to the previous menu or to quit previous setting(s).



RDM – Remote Device Management

RDM Controller allows for remote standard operations

RDM default options include:

Discovery mode: RDM is active when controller detects this mode; the device reports the presence of the Lites Profile T by giving a flash of light (Controller sets the device to a listing to read: settings, DMX address, personality settings, i.e. DMX mode including all the above mentioned DMX values)

ON/OFF "Identify": This mode is to identify the manufacturer's device (Lites srl) -Flash of light is to confirm selection -

Model information (HPLED-BUCK)

Software version information (HPLED-BUCK 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

The device allows RDM protocol, ANSI E1.20–010 version

RDM Device Model ID			
5445:1214xxxx			

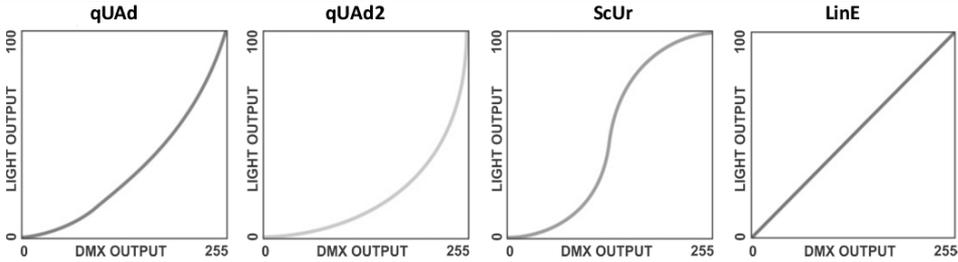
The following parameters are allowed:

<i>Denominazione Plasa/ESTA</i>	<i>RDM PID Value</i>	<i>Get</i>	<i>Set</i>	<i>Descrizione</i>
CATEGORY – NETWORK MANAGMENT				
DISC UNIQUE BRANCH	0x0001			Message related to Discovery RDM process
DISC MUTE	0x0002			Message related to Discovery RDM process
DISC UN MUTE	0x0003			Message related to Discovery RDM process
CATEGORY – RDM INFORMATION				
SUPPORTED PARAMETERS	0x0050	X		List of allowed parameters
PARAMETER DESCRIPTION	0x0051	X		Parameters description <i>Manufacturer specific</i>
CATEGORY – PRODUCT INFORMATION				
DEVICE INFO	0x0060	X		Reading of following parameters: - Protocol RDM version - Device Model ID - Product category - sw version ID - number of DMX channels - DMX mode index - DMX address - number of sensors
DEVICE MODEL DESCRIPTION	0x0080	X		Text description <i>device model</i> HPLED-II-DW
MANUFACTURER LABEL	0x0081	X		Text description <i>manufacturer</i> LITES
SOFTWARE VERSION LABEL	0x00C0	X		Text description <i>sw version</i> HPLED-II-DW v.1.xx
CATEGORY – DMX512 SETUP				
DMX PERSONALITY	0x00E0	X	X	DMX mode setting
DMX PERSONALITY DESCRIPTION	0x00E1	X		Text description DMX mode
DMX START ADDRESS	0x00F0	X	X	DMX address setting/reading
CATEGORY – SENSORS				
SENSOR DEFINITION	0x0200	X		Value related to the sensor
SENSOR VALUE	0x0201	X	X	Parameter for the visualisation of values read by [Board / Led Temperature °C]
CATEGORY – DIMMER SETTINGS (ADDITIONAL MESSAGES)				
CURVE	0x0343	X	X	Parameter for gamma correction (gamma) selection
CURVE DESCRIPTION	0x0344	X		Description of gamma correction parameter
OUTPUT RESPONSE TIME	0x0345	X	X	Parameter related to output smoothness (smooth)
OUTPUT RESPONSE TIME DESCRIPTION	0x0346	X		Output smoothness parameter description
MODULATION FREQUENCY	0x0347	X	X	Parameter related to the selection of pmw signal frequency
MODULATION FREQUENCY DESCRIPTION	0x0348	X		Description of parameter related to the selection of pmw signal frequency
CATEGORY – POWER/LAMP SETTINGS				
DEVICE HOURS	0x0400	X		Parameter related to the reading of device lifespan
LAMP HOURS	0x0401	X		Parameter related to the reading of maximum value hours of led ignition [max between LED1...LED6]
CATEGORY – CONTROL				
IDENTIFY DEVICE	0x1000	X		Flashing LEDs to allow visual identification of the device
CATEGORY – MANUFACTURER-SPECIFIC PIDS				
BOOST	0x9000	X	X	Read/Write BOOST value
FAN MODE	0x9001	X	X	Read/Write FAN MODE value

RDM Parameters – Values

<i>Name</i>	<i>Valid Values</i>	<i>Value Description</i>
ADDITIONAL MESSAGES		
CURVE	1 2 3 4	Read / Write GAMMA value 1 = LINEAR 2 = QUADRATIC [DEF] 3 = S-CURVE 4 = GAMMA 2.2
OUTPUT RESPONSE TIME	1 2 3 4	Read / Write SMOOTH value 1 = SMOOTH 0 → FAST [250 ms] 2 = SMOOTH 1 → MEDIUM [450ms] [DEF] 3 = SMOOTH 2 → SLOW [800 ms] 4 = SMOOTH 3 → SUPER FAST [15 ms]
MODULATION FREQUENCY	1 2 3 4 5 6 7 8 9 10	Read / Write PWM FREQUENCY value 1 = 1 kHz 2 = 2 kHz 3 = 3 kHz 4 = 4 kHz 5 = 5 Hz 6 = 6 kHz 7 = 7 kHz 8 = 8 kHz 9 = 9 kHz 10 = 10 kHz [DEF]
CATEGORY – MANUFACTURER-SPECIFIC PIDs		
BOOST	0 1	Read/Write BOOST value 0 = OFF [75%] [DEF] 1 = ON [90%]
FAN MODE	0 1 2 3	Read/Write FAN MODE value 0 = AUTO 1 = MEDIUM HIGH [DEF] 2 = MEDIUM LOW 3 = LOW

Menu items

Displayed Message	Allowed or displayed values	Function	
Addr	001..512	Set Up DMX Address	
Auto (Automatic mode)	3000 3100 3200 3400 3600 4000 4400 4900 5300 5500 5600 5700	Preset 1 White 3000°k Preset 2 White 3100°k Preset 3 White 3200°k Preset 4 White 3400°k Preset 5 White 3600°k Preset 6 White 4000°k Preset 7 White 4400°k Preset 8 White 4900°k Preset 9 White 5300°k Preset 10 White 5500°k Preset 11 White 5600°k Preset 12 White 5700°k	Values between 3000 through 5700 allow for fixed white set-up without DMX 512 protocol signal. When fixture is turned, the last selected preset will be held. By pressing the Enter button, "U" appears on the display and using the UP and Down buttons you can adjust the white tone. By pressing the ENTER key, the message D will appear and by using the UP and Down keys it will be possible to adjust the output brightness from 0 to 255. Once the preset has been modified, the dot at the bottom right of the display will flash.
	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
MaSL	Master Mode	The Master Mode uses the same settings as the Auto Menu. The only exception is that when all fixtures are connected to DMX 001 in daisy-chain, they perform the same presets and or the same presets selected on the Master fixture.(Slave devices must be set in Mode 2ch)	
Mode	2 ch	3000/5700 °K	Dmx mode (view next page)
	2 ch (D)	3000/5700°K -dimmer (default)	
	3 ch	3000/5700°k-dimmer- strobo	
	4 ch	3000/5700°k-dimmer16(bit) strobe	
	9 ch	3000/5700°k setting options	
drUt	..°C	Shows driver operating temperature	
LEdt	..°C	Shows leds operating temperature	
PUM	0..100%	Shows current led power (0-100%)	
SMOO	SFAST FAST MED SLOW	DMX data Speed adjustment	
GAMM	qUAd SCUr qUAd2 LIInE	 <p>Dimming curves available</p>	

FREQ	1K 2K 3K 4K 5K 6K 7K 8K 9K 10K	LED operation frequency
booS	Off on	When OFF, LED max flux : 90% When ON, LED max flux : 100%
FAn	Aut MEDH MEDL LOW	4 fan operating modes i.e automatic, medium fast, medium slow, slow speed. Fan speed adjustments (fan-sound) reflect on self-correct output LED brightness and other factors as room-temperature, number of engaged channels
PoS	AA VV	Display orientation selection: AA = normal VV = inverted
StbY	Off on	Standby display activity: off = display always switched 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)

Selecting 1 of the 5 available modes it enables the number of channels required, and its relevant modes, needed to operate Lites Profile T T

mode U2 ch white independenti

Ch	Function	dmx levels	
1	3000°k White	0..255	From 0 to max 255
2	5700°k White	0..255	From 0 to max 255

mode 2 ch (default)

Ch	Function	dmx levels	
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 max 255

mode 3 ch dimmer

Ch	Function	dmx levels	
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 max 255
3	shutter	0-15	Strobe disengaged
		16..255	Strobe from slow (16) to fast (255)

mode 4 ch dimmer 16 bit

Ch	Function	dmx levels	
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 max 255
3	Dimmer fine	0..255	From 0 to max 255
4	shutter	0-15	Strobe disengaged
		16..255	Strobe from slow (16) to fast (255)

mode 9 ch "w9ch" (setting options)

Ch	Function	dmx levels	
1	3000°k White	0..255	From 0 to max 255
2	5700°k White	0..255	From 0 to max 255
3	dimmer	0..255	From 0 to max 255
4	Dimmer fine	0..255	From 0 to max 255
5	shutter	0-15	Strobe disengaged
		16..255	Strobe from slow (16) to fast (255)
6	DMX data Speed adjustment	0..24	values selected from display
		25..74	SLOW
		75..124	MED
		125..174	FAST
		175..224	SFAST
		225..255	(reserved)
7	Dimming curves available	0..24	values selected from display
		25..74	qUAd
		75..124	SCUr
		125..174	qUAd2
		175..224	LInE
		225..255	(reserved)
8	Frequency Modulation (LED PWM Freq.)	0..39	values selected from display
		40..54	(reserved)
		55..69	PWM Frequency 1KHz
		70..84	PWM Frequency 2KHz
		85..99	PWM Frequency 3KHz
		100..114	PWM Frequency 4KHz
		115..129	PWM Frequency 5KHz
		130..144	PWM Frequency 6KHz
		145..159	PWM Frequency 7KHz
		160..174	PWM Frequency 8KHz
		175..189	PWM Frequency 9KHz
		190..204	PWM Frequency 10KHz
		205..219	(reserved)
		220..255	(reserved)
9	BOOST	0..24	values selected from display
		25..124	OFF
		125..224	ON
		225..255	(reserved)

Error messages

In case of any malfunction, the following messages maybe be shown:

HP Fan Error: means problems on fan

Temperature Error: LED sensor might be defective and or temperature has exceeded threshold limit

Should any of the above given messages occur, the LED will automatically switch off for protection. Refrain from and halt the use of the Lites Profile T and promptly contact any authorized service centre.

Periodical maintenance

To ensure the correct Lites Profile T operation, we suggest the following periodical maintenance operations:
Remove dust or any kind of other dirt from the fans and from loop-holes, this operation ensures the correct air flow though vents of the projectors.

Remove dust from lenses using a clean cloth. This operation ensures the maximum light efficiency of the light profile

Replace damaged protection screen and lenses when necessary

Do not touch nor clean the LED nor the yellow area around it with solvent

Device disposal information

At the end of its life, Lites Profile 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 re-use 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/misuse handling of the product as well as if the product has been handled by unqualified personnel. Not complying with security norms/periodical maintenance 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.