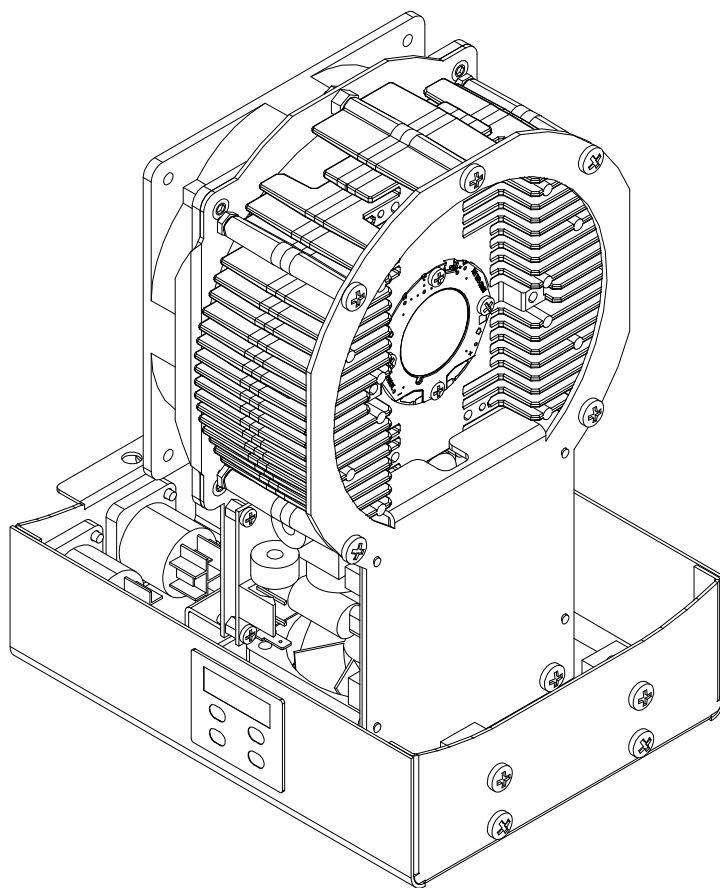


Lites

HPLED RJ T

Tunable 3000°-5700°

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 RJ T

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

NOT COMPLYING WITH GIVEN NOTICE IT WILL VOID WARRANTY AND WILL FREE THE MANUFACTURER OF ANY KIND OF RESPONSIBILITY AND LIABILITY.

Unpacking

Unpack the carton and gently remove HPLED RJ T from the box. Ensure HPLED RJ T is received in all its parts. In the event the HPLED RJ 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 RJ T unit
- N. 1 Free neutrik power-con connector (blue)
- N. 2 M5x45 screws
- N. 2 Ø 5 mm washers
- N. 2 M6 nuts

Installation, utilisation and service owner's manual.

 **General Information and recommendation to operate the unit in good and safe conditions.**

Follow instructions with care and attention:

HPLED RJ T must be used and housed exclusively and solely for the Robert Juliat unit as listed in the A table shown below.

When ordering HPLED RJ T please always specify the equipment code n that needs the upgrading.

Model	Lamp	Juliat Profile model		
600SX	HAL 1000/1200W	611SX	613SX	614SX
Figaro	CDM-T 150W	441SX	443SX	444SX
Figaro	CDM-T 250W	451SX	453SX	454SX
Quincy	HID 575W	421SX	423SX	424SX
Pierrot	HID 700W	411SX	413SX	414SX
Model	Lamp	Juliat Profile model		
600S	HAL 1000/1200W	611S	613S	614S

Model	Lamp	Juliat Followspot code
Cricket	HAL 1000/1200W	1116
Buxie	HID 575W	1124
Foxie	HID 700W	1114

HPLED RJ T unit must NEVER be used stand-alone; ; HPLED RJ C6 unit must be HOUSED and used only in one of the above listed Juliat models.

HPLED RJ 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.

Installation of the unit(s), (prior to installation, HPLEDRJ T unit must be housed in one of Juliat fixture as listed in the above table) including external profile body, must be secured with adequate clamps, safety cords, nuts and bolts to bear at least 4 times the weight of the whole unit(s).

Always Power HPLED RJ T to safety circuit breakers.

Install HPLED RJ T in ventilated ambient which temperature must not exceed 35°C

HPLED RJ T is NOT for domestic use, HPLED RJ T can only be used for professional applications.

When HPLED RJ C6 unit is operated, some outer parts of the profile can reach temperatures of up to 60°C

HPLED RJ 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 RJ 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 RJ 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 RJ T

Do not and never handle HPLED RJ T with humid/wet hands or near to any water or any kind of moisture sources

Always connect HPLED RJ T to mains fitted with safety device switch that cuts power off in case of danger

The HPLED RJ T does NOT and CAN NOT be operated via Phase control dimmer nor connected/operated in NON-DiM mode

HPLED RJ T is rated Class I

Earth connection is mandatory!

CE Approvals

The HPLED RJ 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)

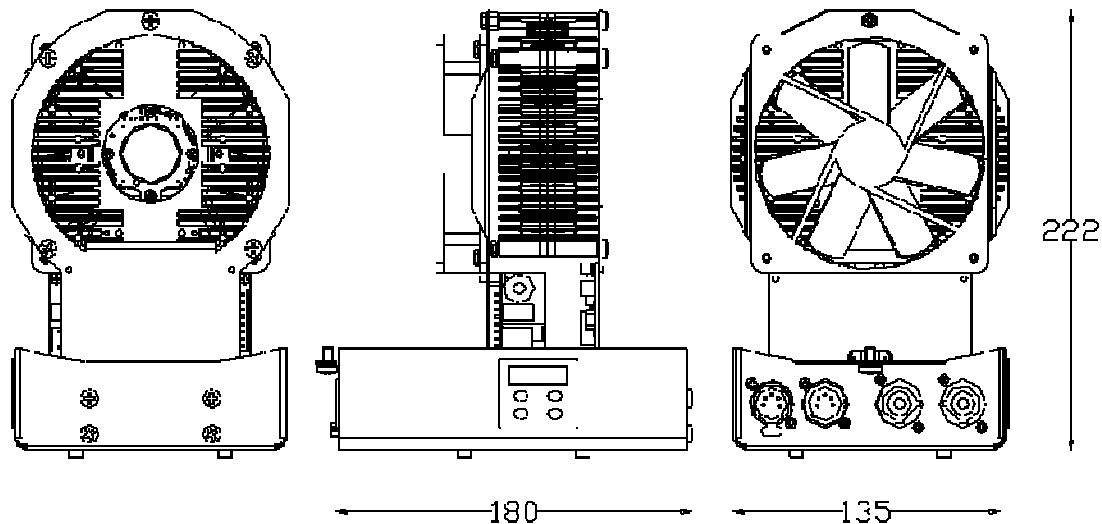
2011/65/EU Restriction of the use of certain hazardous substances (RoHS)

WARRANTY!

A 24-month warranty is granted on the HPLED RJ T from purchase's date. Warranty covers fabrication defects only. Warranty is immediately voided if the HPLED RJ T has been handled by unqualified personnel. Any improper and unauthorised use, such modification(s) or misapplication of the HPLED RJ 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 170W
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: 2,4 Kg
IP rating: To be housed into original Profile Robert Juliati 600 SX series luminaire
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 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 four dimming curves control
Compliant: **CE**
Dimensions (see picture):



⚠ Ensure to totally disconnect HPLED RJ T, housed in Robert Juliati fixture, from mains/electric source while installations and other services are being handled and/or carried out

The HPLED RJ T fixture has been designed to replace incandescent and or discharge bulbs utilized in Robert Juliati items (please refer to the TABLE A located at pag.2 to view Juliati compatible fixture models)
When orders are placed with Lites, it is essential that customer clearly states the Juliati model code and item name that needs to be used to house HPLED RJ T unit in. Place the Juliati fixture on a robust and firm flat even base and ensure that lamp-access door is facing up (view fig.1). Open lamp-access door by turning a quarter-turn screw based at the rear section, carry out this task with the use of a screwdriver (view fig.2). Disconnect ground-wire from lamp access-door. With the use of a screwdriver, loosen the 2 M5 screws used to join lamp access-door to the U latch of the projector (see fig.4). Remove lamp-access door and replace the 2 existing wing-nut with 2 M6 nut including the 6mm star-washer (view fig. 5-6). Place the latch perpendicular to the body of the projector (view fig.7). House the HPLED RJ unit into the rear section of the projector. **There is only one method to house HPLED RJ T unit into the projector as shown in the illustration (see fig.8).** Connect the ground-wire of the projector to the ground-wire "faston terminal" of the HPLED RJ T unit. Gently rotate the HPLED RJ T to ensure that both power-con connectors and DMX connectors are facing the rear of the projector (view fig.10). Place the HPLED RJ T unit and ensure that the 2 mounting holes are matching the U-shape latch, ensure also that the quarter-turn screw is also matching the hole of the projector. Use the 4 mm Allen-key to tighten the 2 M5x45 mm screws and its 5 mm star-washer to the Ushape latch. Tighten now the quarter-turn screw as shown in the sketch (see fig.12-13).

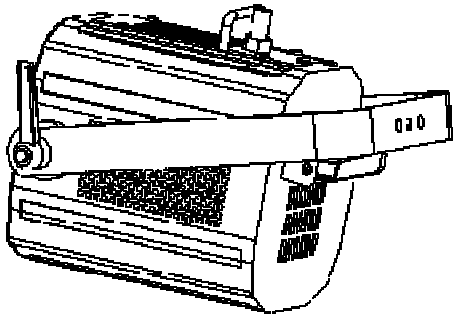


Fig.1

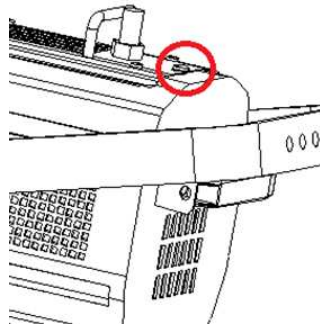


Fig.2

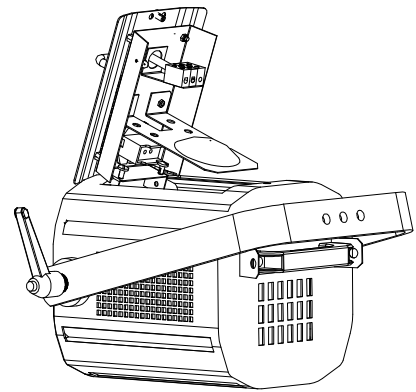


Fig.3

Replace the 2 existing M6 wing nuts

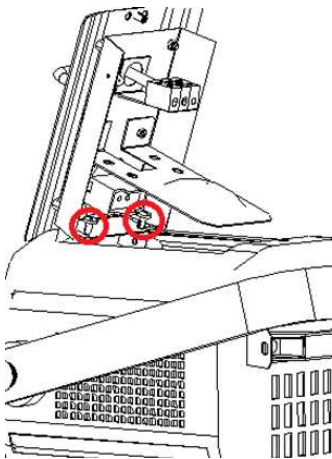


Fig.4

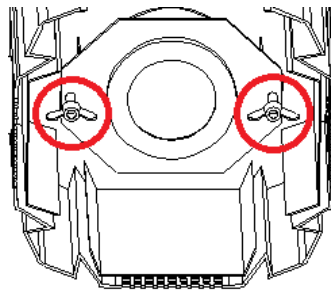


Fig.5

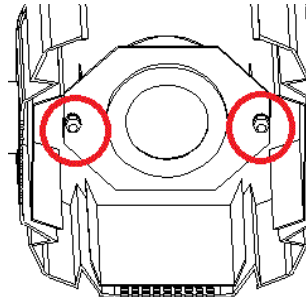


Fig.6

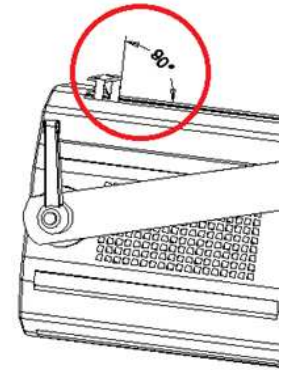


Fig.7

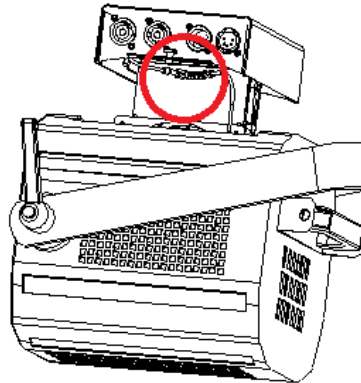
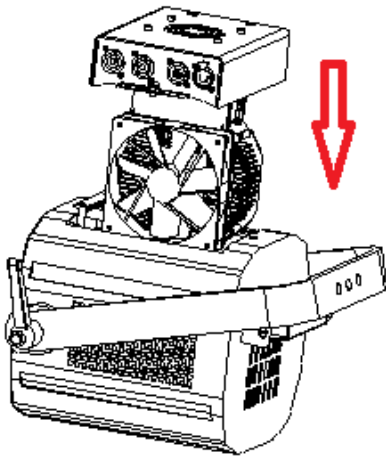


Fig.9

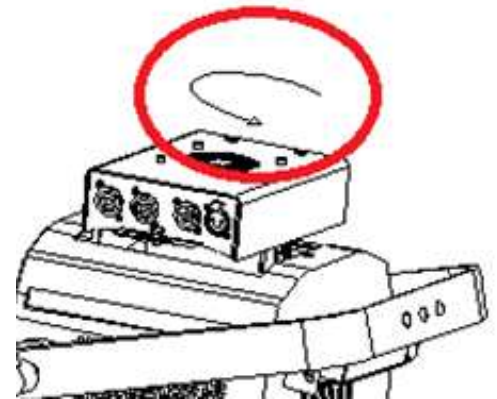


Fig.10

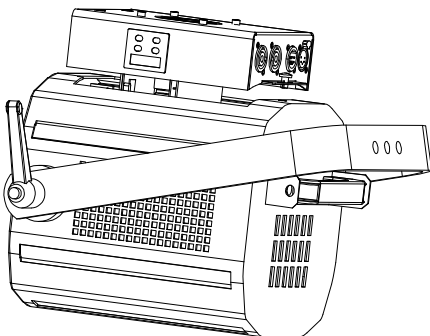


Fig.11

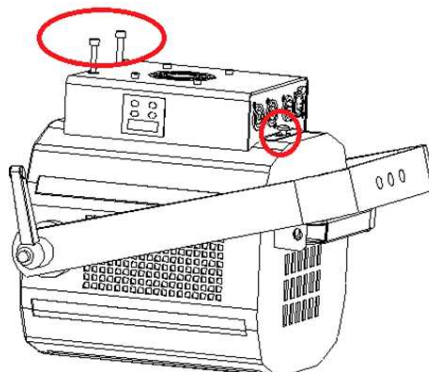


Fig.12

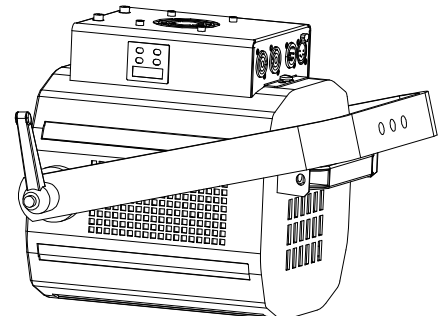


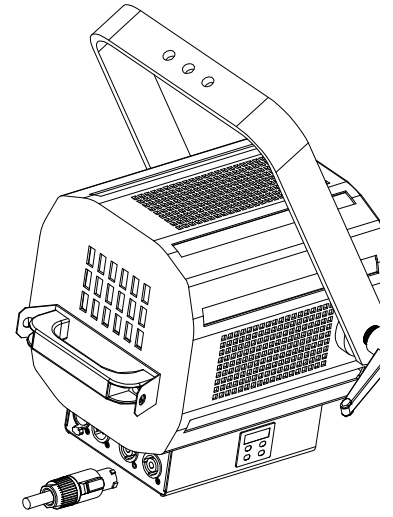
Fig.13

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

HPLD RJ T is supplied with a free-Blue Neutrik PowerCon plug that must be wired using a 3x1.5mm² lead which additional specifications include: Operating Voltage: 300/500V, Test Voltage: 2KV, Operating Temperature: -10°C / +35°C. Connect blue wire to N terminal, brown wire to L terminal and Yellow/Green wire to earth terminal. Ensure the use of safety circuit breaker at all times. Daisy chain of up to 10 units is permitted when connected to 230VAC. Daisy chain of up to 5 units is permitted when connected to 110VAC. Maximum daisy chain length: 20m.

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



Signal control connection

HPLED RJ 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.

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 RJ-T)

Software version information (HPLEDII -T v.x.xx)

Mode to reveal temperatures of the LED and of the driver

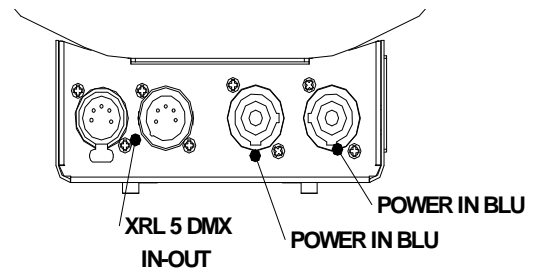
Mode to reveal hour-meters of the LED and of the device

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

Power HPLED RJ T ON

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

When HPLED RJ T is powered the setup display will show the software release version. The UP, DOWN, ENTER and ESC buttons will allow for the operations of HPLED RJ 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).



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	
drUt	..°C	Shows driver operating temperature	
LEdt	..°C	Shows leds 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 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 ttons 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 4 available modes it enables the number of channels required, and its relevant modes, needed to operate HPLED RJ T.

mode U2 ch white

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

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 RJ T and promptly contact any authorized service centre.

Periodical maintenance

To ensure the correct HPLED RJ T 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 surrounded area with solvent

Device disposal information

At the end of its life, HPLED RJ 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.



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.