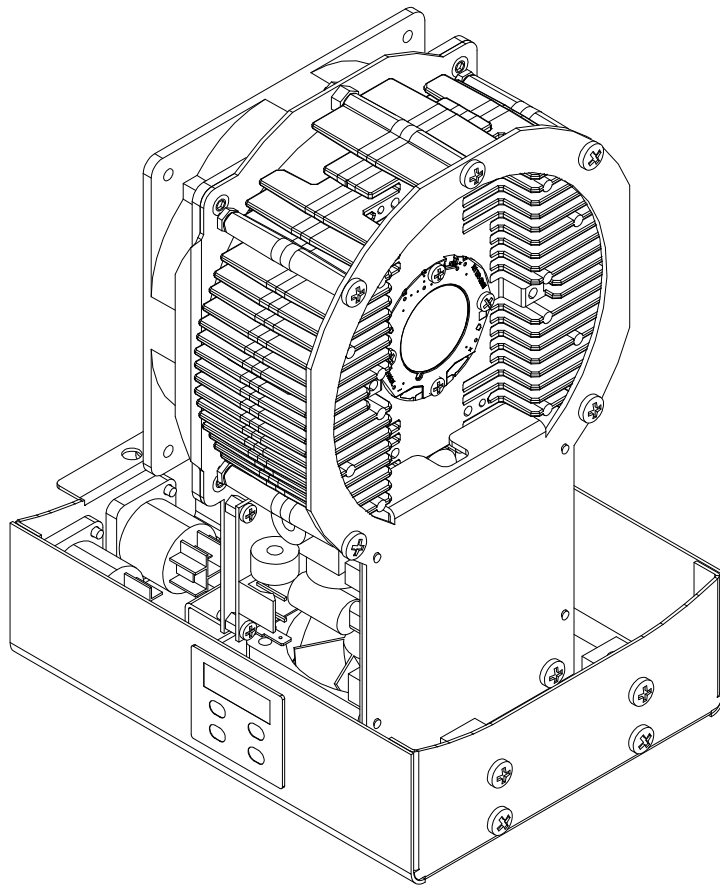


# Lites

## HPLED RJ C5

### Colour RGBWA

#### 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 C5**

**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 C5 from the box. Ensure HPLED RJ C5 is received in all its parts. In the event the HPLED RJ C5 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 C5 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 C5 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 C5 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 C5 unit must NEVER be used stand-alone; ; HPLED RJ C5 unit must be HOUSED and used only in one of the above listed Juliat models.**

HPLED RJ C5 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 C5 to safety circuit breakers.

Install HPLED RJ C5 in ventilated ambient which temperature must not exceed 35°C

HPLED RJ C5 is NOT for domestic use, HPLED RJ C5 can only be used for professional applications.

When HPLED RJ C5 unit is operated, some outer parts of the profile can reach temperatures of up to 60°C

HPLED RJ C5 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 C5 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 C5**

Do not and never handle HPLED RJ C5 with humid/wet hands or near to any water or any kind of moisture sources

Always connect HPLED RJ C5 to mains fitted with safety device switch that cuts power off in case of danger

**The HPLED RJ C5 does NOT and CAN NOT be operated via Phase control dimmer nor connected/operated in NON-DiM mode**

HPLED RJ C5 is rated Class I

**Earth connection is mandatory!**

## CE Approvals

The HPLED RJ C5 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)

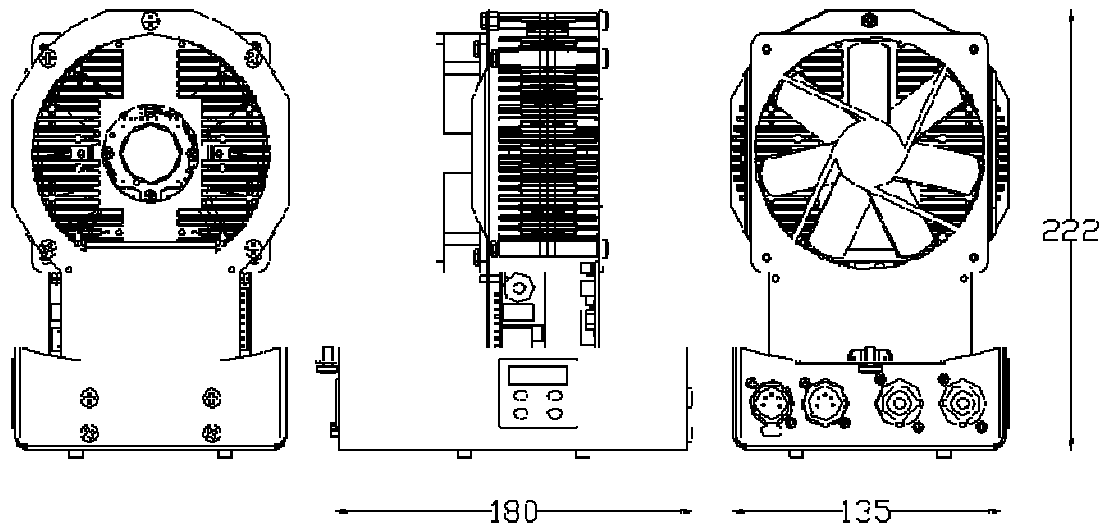
2011/65/EU Restriction of the use of certain hazardous substances (RoHS)

## WARRANTY!

A 24-month warranty is granted on the HPLED RJ C5 from purchase's date. Warranty covers fabrication defects only. Warranty is immediately voided if the HPLED RJ C5 has been handled by unqualified personnel. Any improper and unauthorised use, such modification(s) or misapplication of the HPLED RJ C5 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

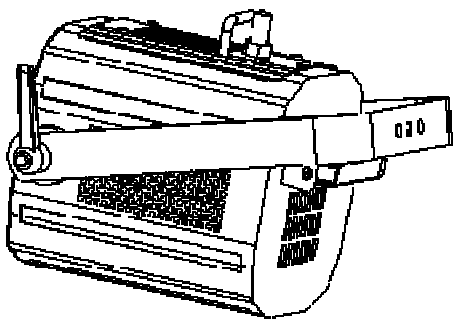
## Technical specifications

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 RGBWA:Red;green;blu;white 5000°K;amber;  
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):

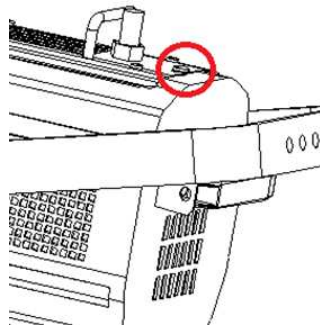


### **⚠ Ensure to totally disconnect HPLED RJ C5, housed in Robert Juliati fixture, from mains/electric source while installations and other services are being handled and/or carried out**

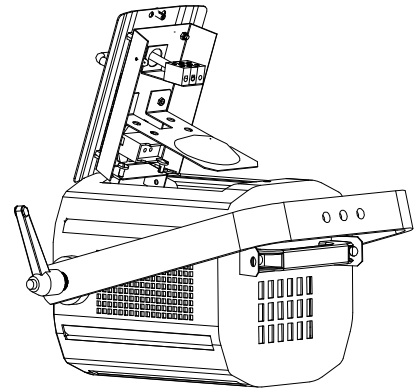
The HPLED RJ C5 fixture has been designed to replace incandescent and or discharge bulbs utilized in Robert Juliati items (please refer to the TABLE A located at pag.2 to view Juliati compatible fixture models)  
When orders are placed with Lites, it is essential that customer clearly states the Juliati model code and item name that needs to be used to house HPLED RJ C5 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 C5 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 C5 unit. Gently rotate the HPLED RJ C5 to ensure that both power-con connectors and DMX connectors are facing the rear of the projector (view fig.10). Place the HPLED RJ C5 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**

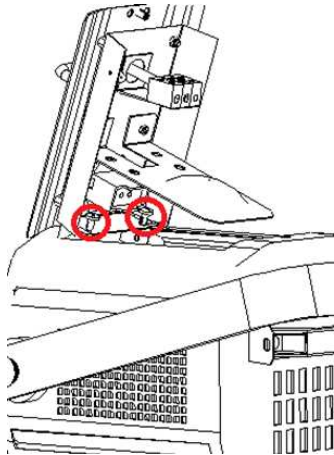


**Fig.2**

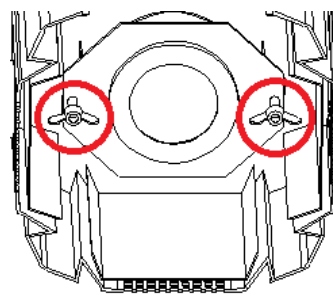


**Fig.3**

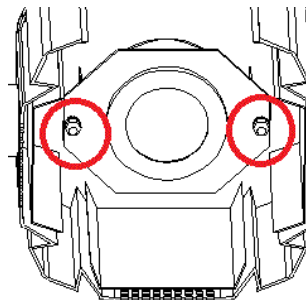
**Replace the 2 existing M6 wing nuts**



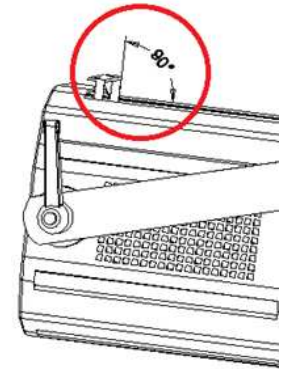
**Fig.4**



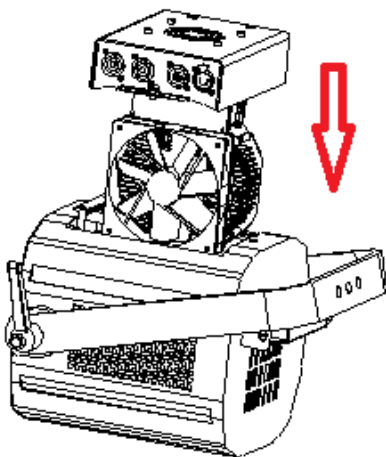
**Fig.5**



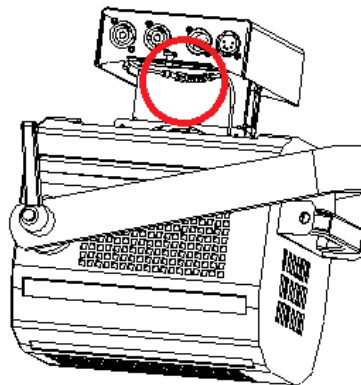
**Fig.6**



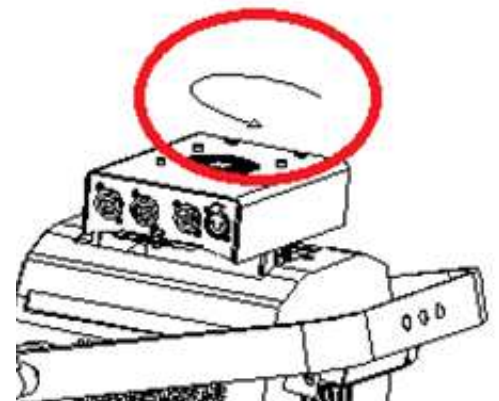
**Fig.7**



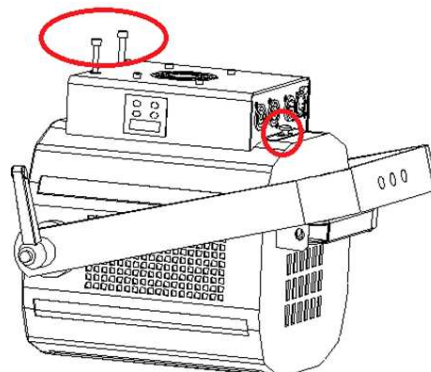
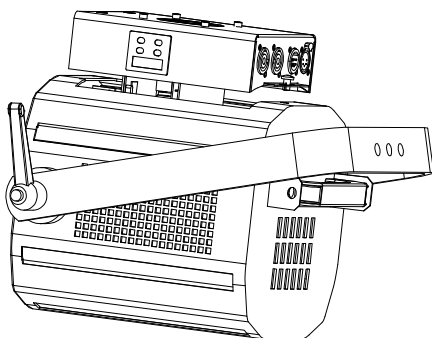
**Fig.11**



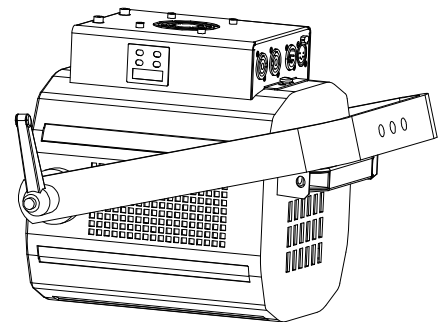
**Fig.9**



**Fig.10**



**Fig.12**

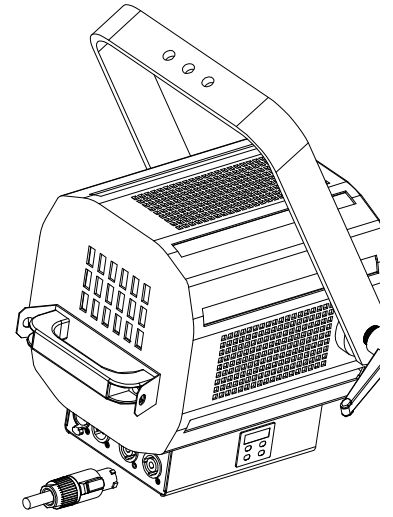


**Fig.13**

## 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**

HPLED RJ C5 is supplied with a free-Blue Neutrik PowerCon plug that must be wired using a 3x1.5mm<sup>2</sup> 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 C5 ENGINE TO ANGLE PHASE DIMMER PACK NOR TO NON-DIM MODE**

## Signal control connection

HPLED RJ C5 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 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 RJ-T)

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

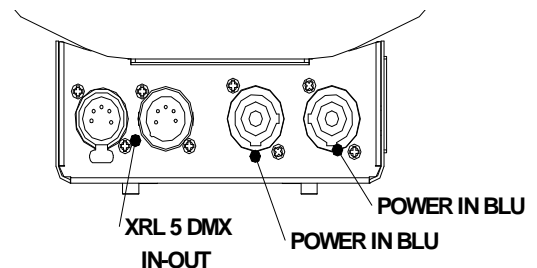
Mode to reveal temperatures of the LED and of the driver

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

## Power HPLED RJ C5 ON

**WARNING ! Before powering HPLED RJ C5 ensure that all installation(s) procedure(s) have(s) been properly set and accomplished.**

When HPLED RJ C5 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 C5 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	
<b>Addr</b>	001..508	Set Up DMX Address	
<b>Auto</b> (Automatic mode)	co01 co02 co03 co04 co05 co06 co07 co08 co09 co10 co11 co12 co13	Preset 1 red Preset 2 orange Preset 3 yellow Preset 4 c light green Preset 5 green Preset 6 cyan Preset 7 light blue Preset 8 blue Preset 9 dark blue Preset 10 fuchsia Preset 11 magenta Preset 12 white Preset 13 Amber	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 Pr03 Pr04 Pr05 Pr06 Pr07 Pr08	Program 1: auto Program 2 : auto Program 3: auto Program 4 : auto Program 5: auto Program 6 : auto Program 7: auto Program 8 : auto	Automatic mode without DMX 512 Protocol signal. Program selections run between Pr01 through Pr 08. 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
<b>MaSL</b>		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	
<b>Mode</b>	8 ch (D)	RGBAW 8 ch (default)	Dmx mode (view next page)
	2.ch	2 ch	
	14 ch	RGBAW 14 ch (16 bit)	
	5 ch	RGBAW 5 ch	
<b>drUt</b>	..°C	Shows driver operating temperature	
<b>LEdt</b>	..°C	Shows leds operating temperature	
<b>PUM</b>	0..100%	Shows current led power (0-100%)	
<b>SMOO</b>	FAST MED SLOW	DMX data Speed adjustment	
<b>GAMM</b>	LInE qUAd	Dimmer profile selection: - LinE for linear dimming regulation - qUAd for tungsten lamp emulation	
<b>FREQ</b>	1K 2K 3K 4K 5K 6K 7K 8K 9K 10K	LED operation frequency	
<b>booS</b>	Off on	When OFF, LED max flux : 80% When ON, LED max flux : 100%	
<b>FAn</b>	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	
<b>PoS</b>	AA VV	Display orientation selection: AA = normal VV = inverted	
<b>StbY</b>	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)	
<b>dEF</b>	Off on	ON Will restore the default factory values	
<b>SoFt</b>		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 C5

### mode 8 ch RGBWA i (default)

Ch	Function	dmx levels	
1	red	0..255	From 0 to max 255
2	green	0..255	From 0 to max 255
3	blue	0..255	From 0 to max 255
4	white	0..255	From 0 to max 255
5	amber	0..255	From 0 to max 255
6	strobe	0...15	Strobe disingaged
		16...255	Strobe from slow (16) to fast (255)
7	Rainbow	0..15	Rainbow disingaged
		16..255	Rainbow from slow (16) to fast (255)
8	dimmer	0..255	From 0 to max 255

### mode 2 ch

Ch	Function	dmx levels	
1	Rainbow	0...15	OFF position
		16...141	Set colours from red (16) to... Magenta (141)
		142...190	Colori fissi da white (142) a ambra (190)
		191...246	From slow Rainbow (192) to fast (247) Sequence rainbow R-G-B-R-W-A-W
		247...255	white
2	dimmer	0..255	From 0 to max 255

### mode 14 ch RGBWA 16 bit

Ch	Function	dmx levels	
1	red	0..255	From 0 to max 255
2	Red fine	0..255	Red fine tune adjustment
3	green	0..255	From 0 to max 255
4	Green fine	0..255	Green fine tune adjustment
5	blue	0..255	From 0 to max 255
6	Blue fine	0..255	Blue fine tune adjustment
7	white	0..255	From 0 to max 255
8	White fine	0..255	white fine tune adjustment
9	Amber	0..255	From 0 to max 255
10	Amber fine	0..255	Ambre fine tune adjustment
11	strobe	0...15	Strobe disingaged
		16...255	Strobe from slow (16) to fast (255)
12	Rainbow	0..15	Rainbow disingaged
		16..255	Rainbow from slow (16) to fast (255) rainbow R-G-B-R-W-A-W
13	dimmer	0..255	From 0 to max 255
14	Dimmer fine	0..255	Adjustment of global fine light intensity

### mode 5. ch RGBWA

Ch	Function	dmx levels	
1	red	0..255	From 0 to max 255
2	green	0..255	From 0 to max 255
3	blue	0..255	From 0 to max 255
4	white	0..255	From 0 to max 255
5	Amber	0..255	From 0 to max 255

## 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 C5 and promptly contact any authorized service centre.

## Periodical maintenance

To ensure the correct HPLED RJ C5 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 C5 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.