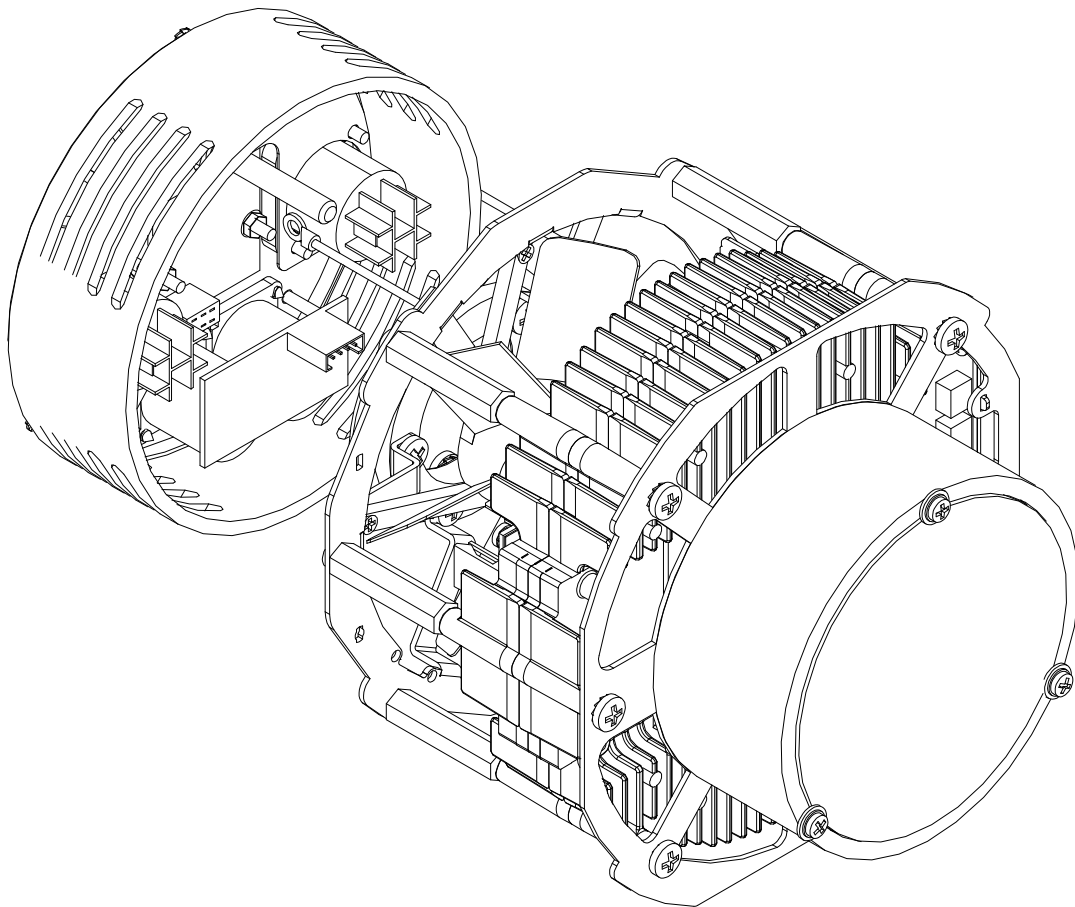


Lites

HPLED II C6 colour RGBACL

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

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.

www.litesrl.com

Unpacking

Unpack the carton and gently remove HPLED II C6 from the box. Ensure HPLED II C6 is received in all its parts. In the event the HPLED II C6 shows any damage, do not use it and contact immediately your transporter as well as your seller

Items in the carton consist of:

HPLED II C6 Module

Rear metal cover with input connections

Blue Neutrik PowerCon connector

This owner's manual

Safety information for the use of the HPLED and periodical maintenance of unit.

Users must scrupulously comply with information/indications that follows

HPLED II C6 must be installed on original " **ETC source 4**" fixture only. Any other use will void warranty and will free the manufacturer of any sort of responsibility and liability.

Never utilise HPLED II C6 assembly alone as it must always be housed in original ETC Source 4 barrel.

Minimum distance from any flammable source is of 0.25m.

Minimum throw distance from illuminated surface: 0.5m.

Installation of the unit(s), including external source4 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 II C6 to safety circuit breakers

Install HPLED II C6 in ventilated ambient which temperature must not exceed 35°C

HPLED II C6 is NOT for domestic use. HPLED II C6 can only be used for professional applications

Some outer parts of the ETC Source4 can reach temperatures of up to 60C° when HPLED is operated

HPLED II C6 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 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 II C6 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 II C6

Do not and never handle HPLED II C6 with humid/wet hands or near to any water or any kind of moisture sources

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

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

HPLED II C6 is rated Class I

Earth connection is mandatory!

CE Approvals

The HPLED II C6 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 II C6 from purchase's date. Warranty covers fabrication defects only. Warranty is immediately voided if the HPLED II C6 has been handled by unqualified personnel. Any improper and unauthorised use, such modification(s) or misapplication of the HPLED II C6 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 175W

Stand-by power consumption 3W

Minimum ambient temperature -10°C

Maximum ambient temperature 35°C

LED Colour RGBACL: Red; green; blue; amber; cyan; lime

30 colored presets

10 Preset bianchi da 2.300°K a 10.000°k

LED CRI: *Minimum CRI*: 93> and 98>(depending on the selected white)

10 white presets from 2,300 ° K to 10,000 ° k

LED Life (see Manufacturers ' specifications)

Weight: 2,49 Kg

IP Rating: To be housed into original ETC Source four fixture only

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

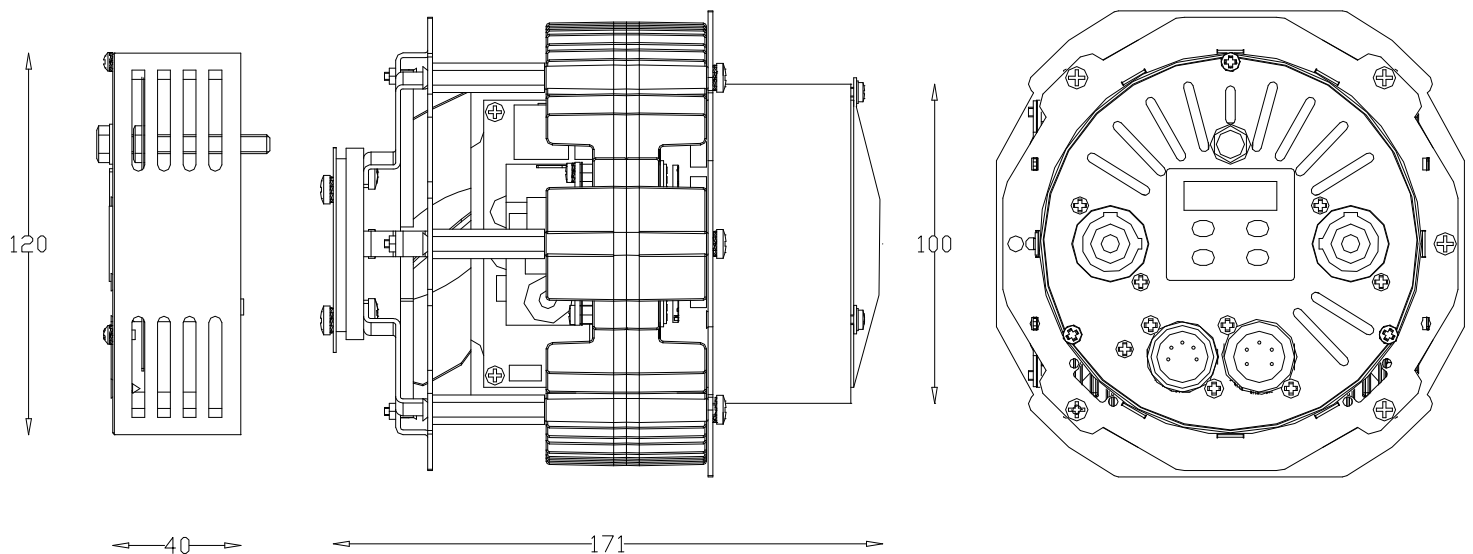
Fan control: Fan speed adjustment

Control of LED frequency: Selection of LED frequency refresh

4 Dimming curves control: Selection of four dimming curves control

Compliant: **CE**

Dimensions (see picture):



HPLED C 5 installation

HPLED II C6 has been designed to be installed in any original "ETC source 4" fixtures. Some parts of the existing "ETC Source 4" fixture must be removed to lodge the module in

Course of actions:

1. **Disconnect any kind of power/source from any item being handled, that could cause electric shock**
2. Loosen knobs that hold front lens assembly, remove it and place it aside in a safe place
3. Locate rear section of the Source 4 fixture, then start loosening knob that holds the round plate in place until it is totally separated from the main body. You may either store or scrap this part. **HOWEVER LOCK-WASHER AND THE M4 SCREW USED TO HOLD THE GROUND CORD ON THE ETC SOURCE4 BODY MUST BE SECURED ASIDE AS THEY WILL BE USED FOR THE NEW GROUND CORD PROVIDED WITH THE HPLED II C6 FIXTURE.**
4. **As of now onwards for your own safety we recommend you to wear protection gloves and safety transparent eye protection goggles. We advise you to watch the video at this link <https://www.youtube.com/watch?v=x489dXR8bu0&t=31s> (in the YOUTUBE search box, type: "Ellisoidal glass reflector removal from Source"). This will help you to disassemble the glass reflector.**
5. Place HPLED II C6 on working bench and start loosening the 3 M4 screws that hold the metal ring (marked by red arrow in figure 2).
6. Accommodate the HPLED II C6 in the Source4 body. Ensure the correct inward direction is followed as remarked by the 2-red-round ring references. Make also sure to follow the red arrow direction as shown in figure 3. During such operation make sure that the 3 connecting cables (i.e. power cable, DMX cable and display cable) are not squeezed, while being lead through loop-holes during reassembling of the unit.
7. Remount the metal ring to its former position; tighten now the 3 provided M4x6 screws to their full extent. Do not exceed nor force tightening.
8. Connect the 3 lead-cables to the rear metal cover provided, ensure that connectors are inserted in the correct side. Special attention must be paid to the **flat cable** as it must be handled with extreme care while connecting its ends. (if flat cable is squeezed or impaired it can cause malfunctionings to the product)
9. Ensure that all cable connections are neatly and clearly set to their positions avoiding any contact, interference, interconnections, interpositions with fans and other interfering components that might collide, squeeze hamper the correct operations and eventually damage the product.
10. Remount the rear metal cover to the Source 4 body using any 11mm spanner; tighten the screw to its full extent. Do not exceed nor force tightening.
11. The lock washer and the M4 screw used for holding the eyelet-cord to ground the fixture as expressed in point 3, must be now used to secure the new provided eyelet-cord to ground/earth the fixture as shown in fig.6

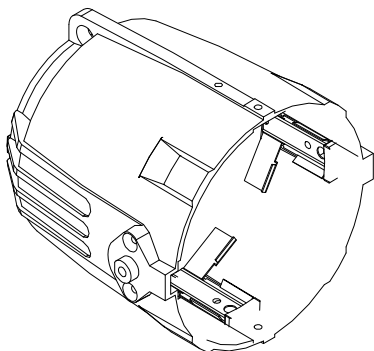


Fig.1

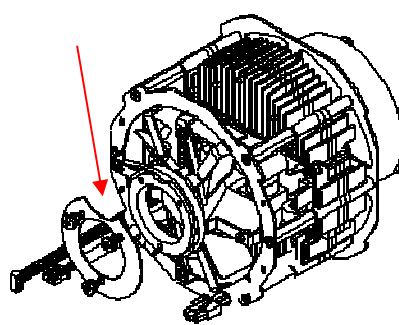


Fig.2

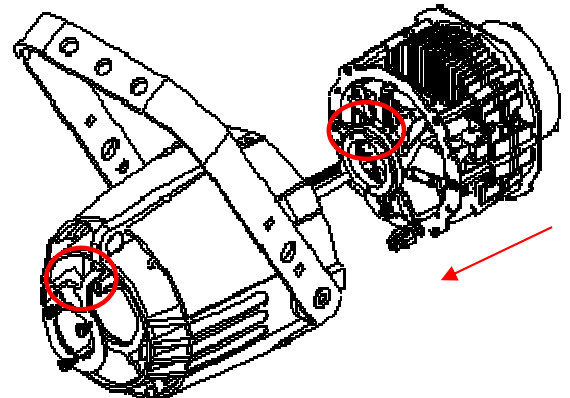


Fig.3

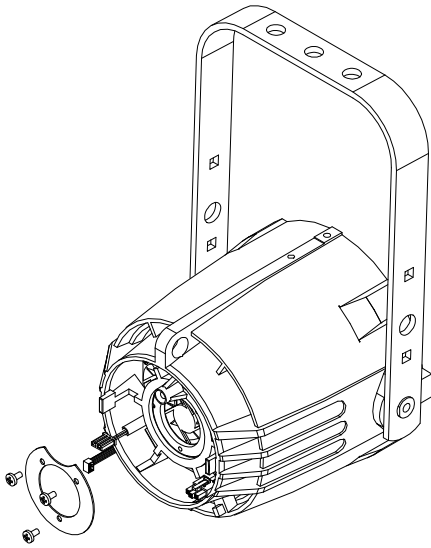


Fig.4

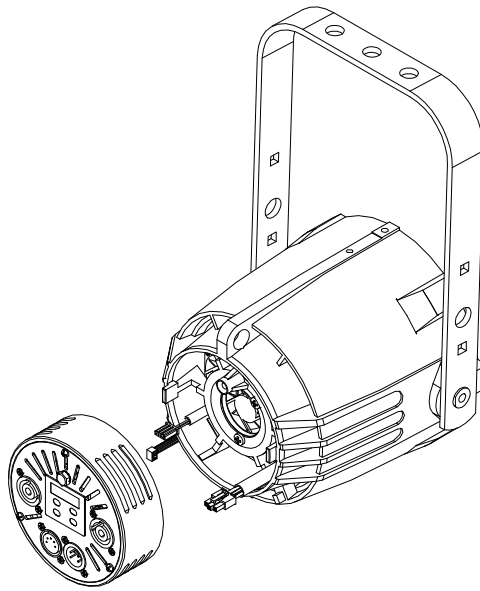


Fig.5

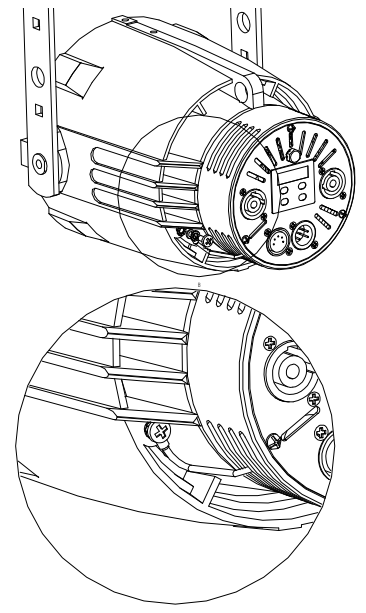


Fig.6

⚠ 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

HP LED II C6 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 HP LED II C6 ENGINE TO ANGLE PHASE DIMMER PACK NOR TO NON-DIM MODE

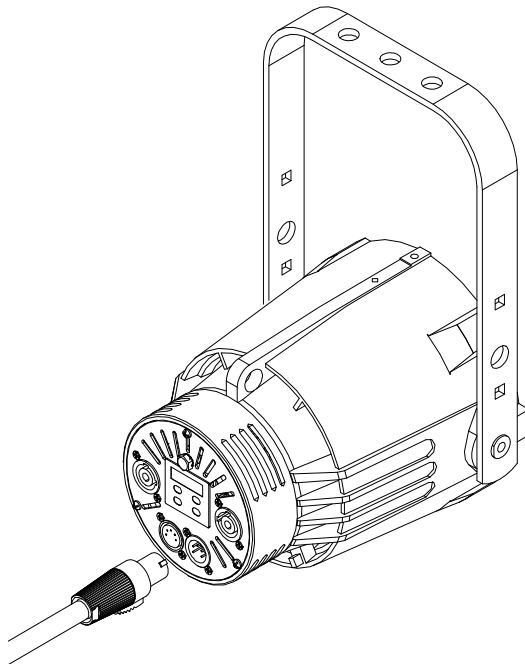


Fig.7

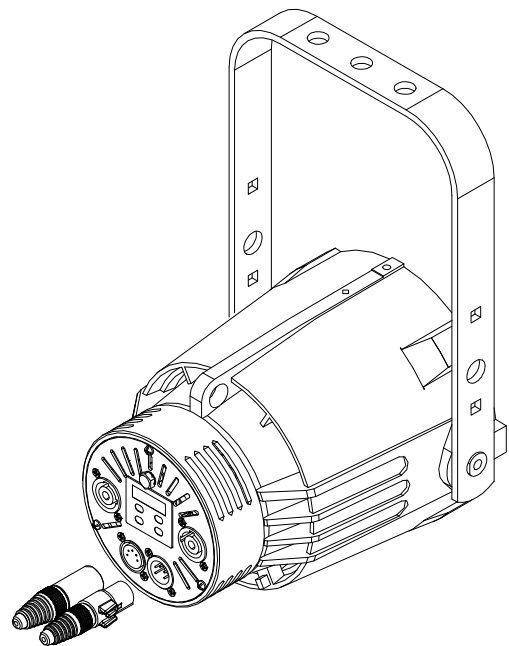


Fig.8

Signal control connection

HPLED II C6 can be operated via either DMX512A and or RDM ready Protocols. For Daisy chain DMX line use a-2 lead wire plus shield.

Red led blinks when DMX Input is available. DMX off line when led is off

DMX XLR 5 Pin As signment	
pin	Description
1	GND
2	DMX-
3	DMX+
4	Not connected
5	Not connected

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-C6)

Software version information (HPLEDII –C6 v.x.xx)

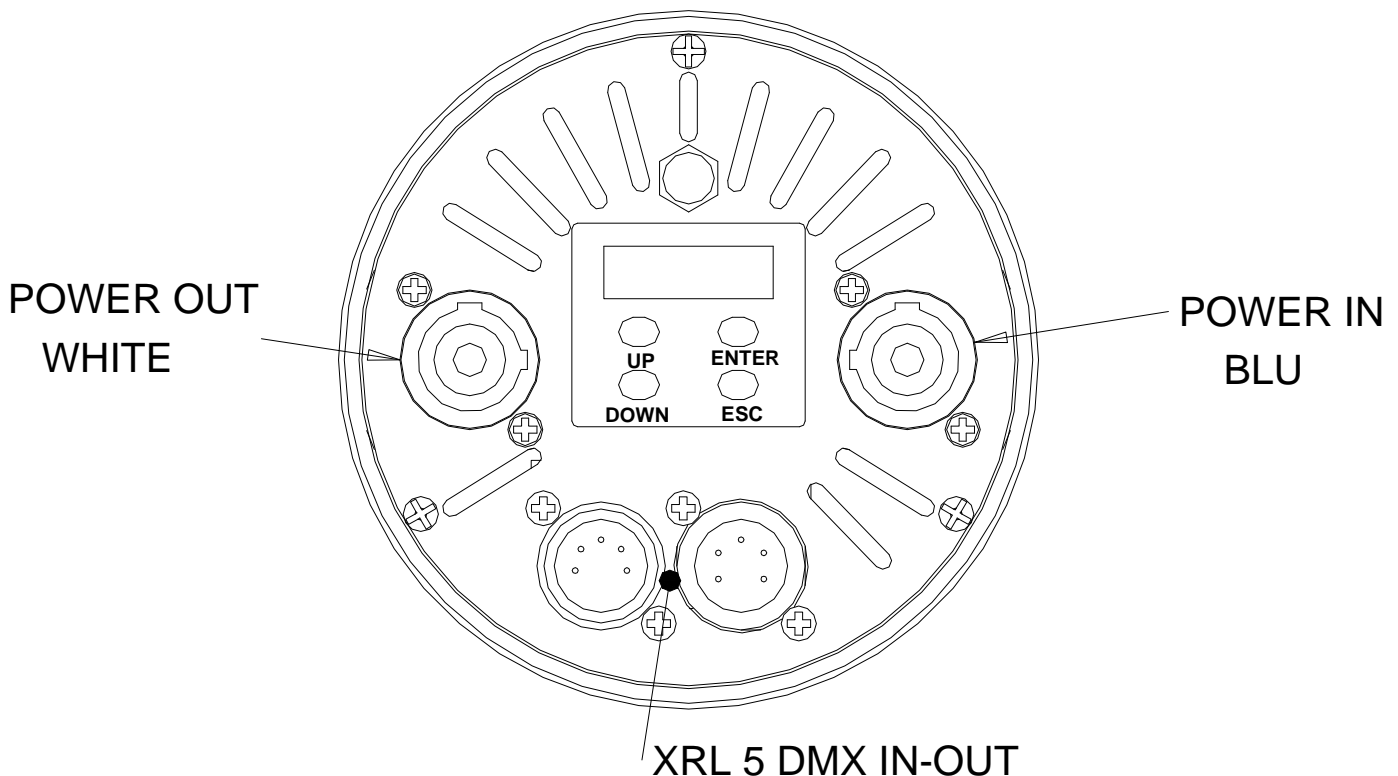
Mode to reveal temperatures of the LED and of the driver

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

Power HPLED II C6 ON

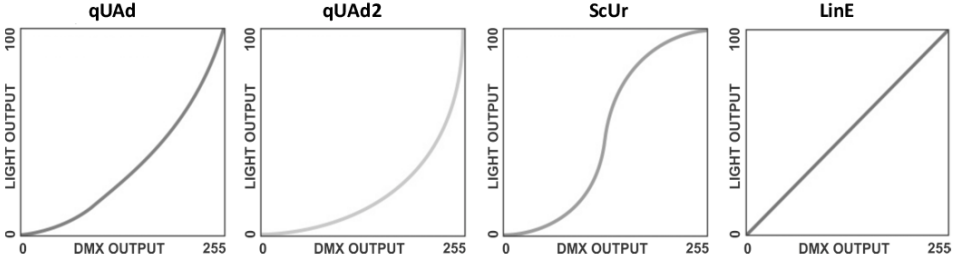
WARNING ! Before powering HPLED II C6 ensure that all installation(s) procedure(s) have(s) been properly set and accomplished.

When HPLED II C6 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 II C6 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)	co01 co02 co03 co04 co05 co06 co07 co08 co09 co10 co11 co12 co13 co14 co15 co16 co17 co18 co19 co20 co21 co22 co23 co24 co25 co26 co27 co28 co29 co30 co31 co32 co33 co34 co35 co36 co37 co38 co39 co40	Preset 1 red Preset 2 light red Preset 3 orange Preset 4 medium amber Preset 5 amber Preset 6 straw tint Preset 7 pale yellow Preset 8 spring yellow Preset 9 yellow Preset 10 lemon yellow Preset 11 lime Preset 12 lime green Preset 13 green Preset 14 moss green Preset 15 light cyan Preset 16 cyan Preset 17 peacock blue Preset 18 summer blue Preset 19 bright blue Preset 20 light steel blue Preset 21 light blue Preset 22 slate blue Preset 23 blue Preset 24 deep lavender Preset 25 lavender Preset 26 magenta Preset 27 rose pink Preset 28 dark pink Preset 29 bright pink Preset 30 Rainbow Preset 31 white 2300°k Preset 32 white 2700°k Preset 33 white 3200°k Preset 34 white 4000°k Preset 35 white 5600°k Preset 36 white 6500°k Preset 37 white 7000°k Preset 38 white 8000°k Preset 39 white 9000°k Preset 40 white 10000°k		<p>It's possible to select 30 colored presets and 10 fixed white presets, without the aid of the DMX 512 signal. By selecting the value indicated from co01 to co40 you choose the combined color. When you turn off the projector the selected preset will be saved. In each preset you can change the output color level.</p> <p>Select the preset that needs to be to be changed. If you press once the Enter button, the display will show r (red) with the set value, then if you keep pressing Enter, G (green), b (blue), A (amber), c (cyan), L (lime), S (strobe), n (Rainbow), d (dimmer) will be displayed one by one.</p> <p>Use the Up and Down button to adjust the level of the 6 colors + the 3 functions n (rainbow), S (strobe), d (dimmer), pressing them one by one from 0 to 255, to determine the output color.</p> <p>Always confirm with Enter to save the settings.</p>
	Pr01 Pr02 Pr03 Pr04	Program 1: auto Program 2: auto Program 3: auto Program 4: auto		<p>Automatic mode without DMX 512 Protocol signal. Program selections run between Pr01 through Pr 04. Both programs can be modified. To change program select Enter then view (Scn0...Scn6; 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 c40 (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.</p>

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. The slave projectors must be set in 9ch mode.			
ModE	12 ch (D)	RGBACL 12 ch (default)		Dmx mode (view next page)	
	2 ch	2 ch			
	16 ch	RGBACL 16 ch (16 bit)			
	6 ch	RGBACL 6 ch			
	RGB	RGB 6 ch			
	HSI	Stubio HSI 6 ch			
	9ch	9 ch			
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	qUAd SCUr qUAd2 LInE				
		Dimming curves available			
FrEq	1K 2K 3K 4K 5K 6K 7K 8K 9K 10K	LED operation frequence			
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 atuomatic, medium fast, medium slow, 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	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	SUR	ON Will restore the default factory values			
SoFt		Shows Software version			

DMX Operating Modes (Mode)

Selecting 1 of the 7 available modes it enables the number of channels required, and its relevant modes, needed to operate HPLED II C6

mode 12 ch RGBACL (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	amber	0..255	From 0 to max 255
5	cyan	0..255	From 0 to max 255
6	lime	0..255	From 0 to max 255
7	strobe	0...15	Strobo disengaged
		16...255	Strobo from slow (16) to fast (255)
8	Rainbow	0..15	Rainbow disengaged
		16..255	Rainbow from slow (16) to fast (255)
9	dimmer	0..255	From 0 to max 255
10 (priority on channel 11)	White selection	0...15	Deserted whites
		16...17	2300°k cri 93
		18...38	from 2300°k to 2700°k
		39...40	2700°k cri 97
		41...61	from 2700°k to 3200°k
		62...63	3200°k cri 98
		64...84	from 3200°k to 4000°k
		85...86	4000°k cri 95
		87...107	from 4000°k to 5600°k
		108...109	5600°k cri 98
		110...130	from 5600°k to 6500°k
		131...132	6500°k cri 95
		133...153	from 6500°k to 7000°k
		154...155	7000°k cri 93
		156...176	from 7000°k to 8000°k
		177...178	8000°k cri 96
		179...199	from 8000°k to 9000°k
		200...201	9000°k cri 93
		202...222	from 9000°k to 10000°k
223...225	10000°k cri 95		
	3200 ° k halogen lamp operation	226...255	halogen lamp dimming simulation
11	Color selection	0...15	No color
		16..23	red
		24...31	light red
		32...39	orange
		40...47	medium amber
		48...55	amber
		56...63	straw tint
		64...71	pale yellow
		72...79	spring yellow
		80...87	yellow
		88...95	lemon yellow
		96...103	lime
		104...111	lime green
		112...119	green
		120...127	moss green
		128...135	light cyan
		136...143	cyan
		144...152	peacock blue
		153...159	summer blue
		160...167	bright blue
		168...175	light steel blue
		176...183	light blue
		184...191	slate blue
		192...199	blue
		200...207	deep lavender
		208...215	lavender
		216...223	magenta
		224...231	rose pink
		232...239	dark pink
		240...247	bright pink
248...255	FULL RGBACL		
12	Fan speed	0..25	Auto speed or set from menu
		26..255	Fan speed from slow to fast

mode 2 ch

1	Color selection	0...15	No color
		16...20	red
		21...25	light red
		26...30	orange
		31...35	medium amber
		36...40	amber
		41...45	straw tint
		46...50	pale yellow
		51...55	spring yellow
		56...60	yellow
		61...65	lemon yellow
		66...70	lime
		71...75	lime green
		76...80	green
		81...85	moss green
		86...90	light cyan
		91...95	cyan
		96...100	peacock blue
		101...105	summer blue
		106...110	bright blue
		111...115	light steel blue
		116...120	light blue
		121...125	slate blue
		126...130	blue
		131...135	deep lavender
		136...140	lavender
		141...145	magenta
		146...150	rose pink
		151...155	dark pink
		156...160	bright pink
	161...165	Full RGBACL	
	White selection	166...170	white 2300°k
		171...175	white 2700°k
176...180		white 3200°k	
181...185		white 4000°k	
186...190		white 5600°k	
191...195		white 6500°k	
196...200		white 7000°k	
201...205		white 8000°k	
206...210		white 9000°k	
211...215	white 10000°k		
Rainbow	216...225	Rainbow from slow (191) to fast(229) Sequence rainbow R-G-B-A-C-L	
3200 ° k halogen lamp operation	226...255	halogen lamp dimming simulation	
2	dimmer	0..255	From 0 to max 255

mode 16 ch RGBACL 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	amber	0..255	From 0 to max 255
8	amber fine	0..255	amber fine tune adjustment
9	cyan	0..255	From 0 to max 255
10	cyan fine	0..255	cyan fine tune adjustment
11	lime	0..255	From 0 to max 255
12	lime fine	0..255	lime fine tune adjustment
13	strobe	0..15	Strobe disingaged
		16..255	Strobo from slow (16) to fast (255)
14	dimmer	0..255	From 0 to max 255
15	Dimmer fine	0..255	Adjustment of global fine light intensity
16	Fan speed	0..25	Auto speed or set from menu
		26..255	Fan speed from slow to fast

mode 6. ch RGBACL

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	amber	0..255	From 0 to max 255
5	cyan	0..255	From 0 to max 255
6	lime	0..255	From 0 to max 255

mode 6.RGB 6 ch

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	Dimmer	0..255	From 0 to max 255
5	strobe	0..15	Strobe disingaged
		16..255	Strobo from slow (16) to fast (255)
6	Fan speed	0..24	Auto speed or set from menu
		25..255	Fan speed from slow to fast

mode 9 ch

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	amber	0...255	From 0 to max 255
5	cyan	0...255	From 0 to max 255
6	lime	0...255	From 0 to max 255
7	strobe	0...15	Strobo disingaged
		16...255	Strobo from slow (16) to fast (255)
8	Rainbow	0...15	Rainbow disingaged
		16...255	Rainbow from slow (16) to fast (255)
9	dimmer	0...255	From 0 to max 255

mode 6.HSI STUDIO 6 ch

1	Hue	0..255	Hue selection, following levels R, R+L, R+G+L, G+L,G, G+C,G+B+C, B+C, B B+A, R+B+A, R+A, R
2	Saturation	0..255	Color saturation with set color in the Hue channel
3	Dimmer	0..255	From 0 to max 255
4	strobo	0...15	Strobe disingaged
		16...255	Strobo from slow (16) to fast (255)
5 (priority on channel 1)	Selection whites	0...15	Whites off
		16...18	2300°k cri 93
		19...41	from 2300°k to 2700°k
		42...44	2700°k cri 97
		45...67	from 2700°k to 3200°k
		68...70	3200°k cri 98
		71...93	from 3200°k to 4000°k
		94...96	4000°k cri 95
		97...119	from 4000°k to 5600°k
		120...122	5600°k cri 98
		123...145	from 5600°k to 6500°k
		146...148	6500°k cri 95
		149...171	from 6500°k to 7000°k
		172...174	7000°k cri 93
		175...197	from 7000°k to 8000°k
		198...200	8000°k cri 96
201...223	from 8000°k to 9000°k		
224...226	9000°k cri 93		
227...249	from 9000°k to 10000°k		
250...255	10000°k cri 95		
6	Fan speed	0..24	Auto speed or set from menu
		25..255	Fan speed from slow to fast

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 II C6 and promptly contact any authorized service centre.

Periodical maintenance

To ensure the correct HPLED II C6 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 II C6 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.