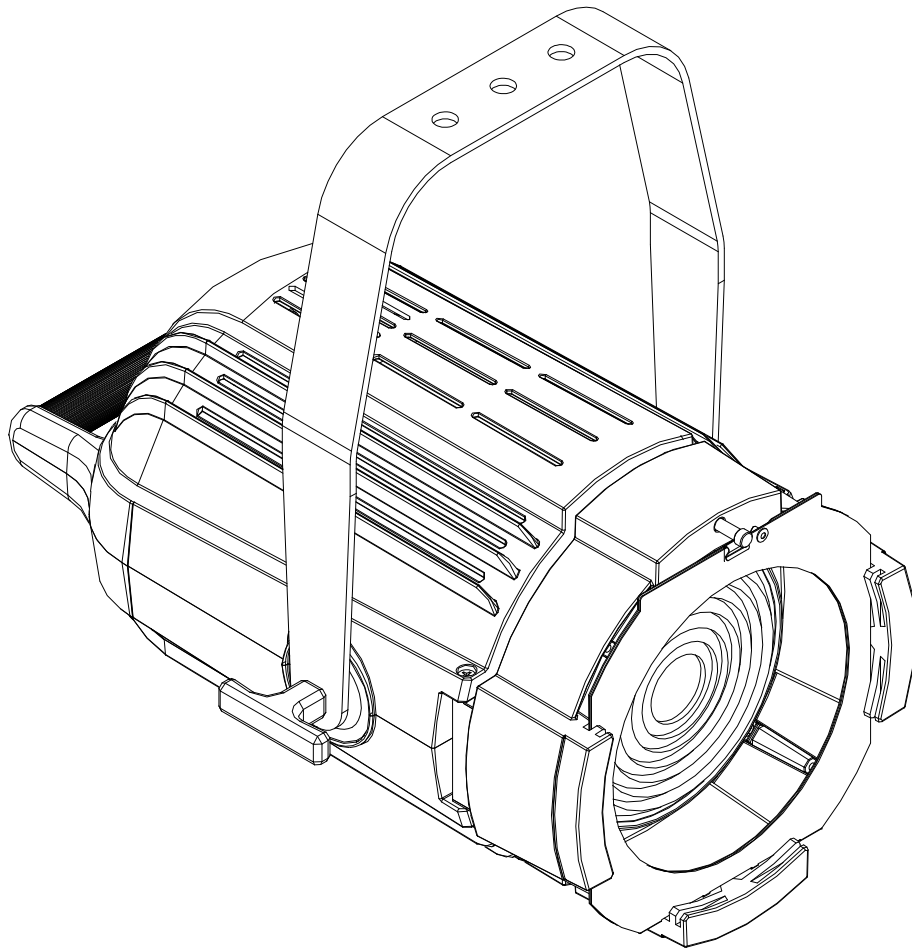


# Lites

## Lites F200 C6 (COLOUR RGBACL)

### Owners 's & 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 installation, service and full operation of the LitesF200 C6.**

**All operations must be accomplished, handled and carried out by qualified personnel only. Not complying with given notice will void warranty and will free manufacturer from any liability/responsability**

## Unpacking

Unpack the carton and gently remove Lites F200 from the box. Ensure Lites F200 received is integer from origin in all its components. In the event the Lites F200 shows any damage, do not use it and contact immediately your transporter as well as your seller.

Items in the carton consist of:

- Lites F200 C6 luminaire
- Colour frame
- Blue Neutrik PowerCon connector
- This owner's and service manual

## Safety information for the use of the Lites F200 as well as its periodical maintenance”

- Lites F200 is for professional use only and NEVER for domestic use therefore refrain from this latter utilisation.
- Users must scrupulously comply with information that follows, any other use in contrast will void warranty and will free the manufacturer of any sort of responsibility and liability.
- Never use Lites F200 on any flammable surfaces.
- Minimum distance from any flammable source is of 0.25m.
- Minimum throw distance from illuminated surface: 0.5m.
- Installation of the unit(s) must be secured with adequate clamps, safety cords, nuts and bolts to bear the weight of the whole unit(s)
- Always Power Lites F200 to safety circuit breakers. Lites F200 must NOT and CAN NOT be operated via Phase Control Dimmer.
- Install Lites F200 in ventilated ambient which temperature must not trespass 35°C
- Some outer parts of the LitesF200 can reach temperatures of up to 60C° when in operation.
- Lites F200 must be fitted with protection shields (Lenses)
- On no account, directly or indirectly, LED must be touched
- Always disconnet power, (always double check that power is off) before any Service/Operation of the unit.
- Lites F200 is rated Class I.
- Earth connection is MANDATORY!

An essential and periodically throughout cleaning of the Lites F200 is recommended. This practice avoids that layers of dust and other impurities 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 to keep the LitesF200 in its best performance conditions. Never touch the Yellow core of the LED both directly or indirectly nor use solvents that can damage the LED irremediably. Protection shields if battered, must be replaced with new ones (Lenses)

## CE APPROVALS

The Lites F200 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 LitesF200 from its purchase's date. Warranty covers fabrication defects only, unit will not be replaced but will be 100% fixed. Warranty is immediately voided if the Lites F200 has not been handled by qualified personnel. 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 impaired to render details illegible, will immediately void the warranty.

## Technical specifications

Power Supply: 100/240V~ 50/60Hz (autosetting)

Maximum power consumption 200W

Stand-by power consumption 4W

Cos Ø 0,98

Led 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 (30,000 manufacturer-specific hours)

Fresnel Lens: Ø 150mm

Colour frame dimensions: 195x185 mm (the use of standard 185x185mm colour frame is totally accettable)

Aluminium die-caste body to maximize heat dissipation

Operating temperature range:

-15°C + 35° C

Maximum temperature on the Lites F200

+60°C

Weight of the unit: Kg 6,9

Worm-gear beam adjustment on standard Lites200F

Rear handle for good grip of unit ; side-lock on mounting yoke to adjust and set unit to position.

Beam angle: 20°-60°

Working position: +90°/-90° on vertical axe

Protection rating: IP 20

DMX 512 , RDM, Protocols

Neutrik powercon IN & OUT connectors

Neutrik XRL5 IN & OUT signal connectors

4-digit display

Manual operation via 4-digit display

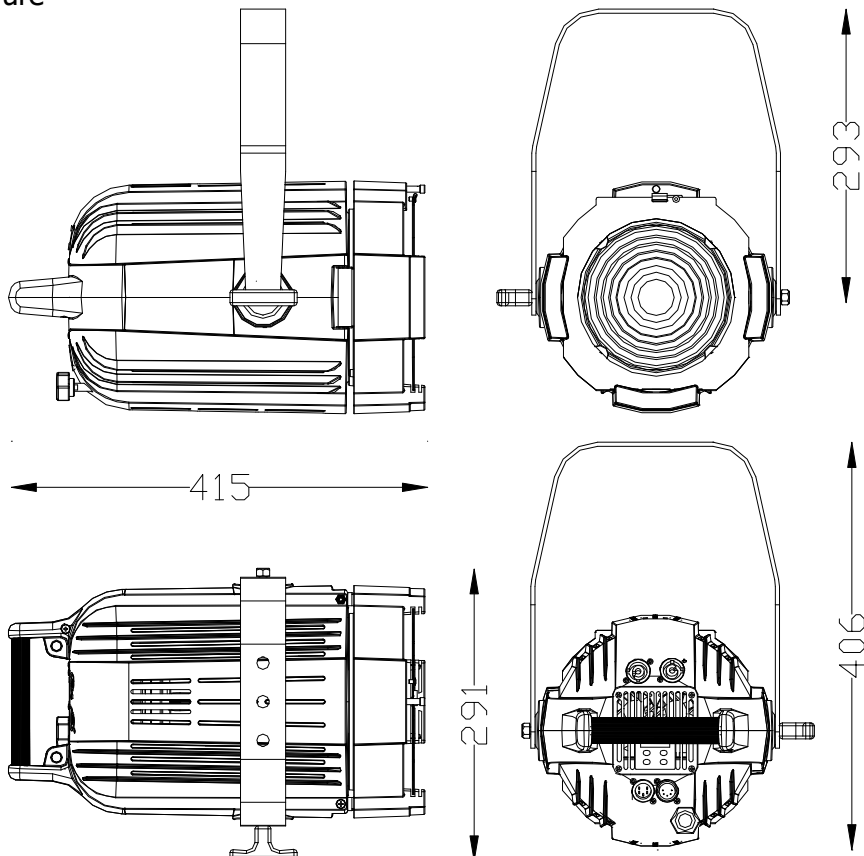
Idle fan mode for totally silent use of the unit.

Adjustable LED frequency

Selection of four LED dimming curves

Compliant : **CE**

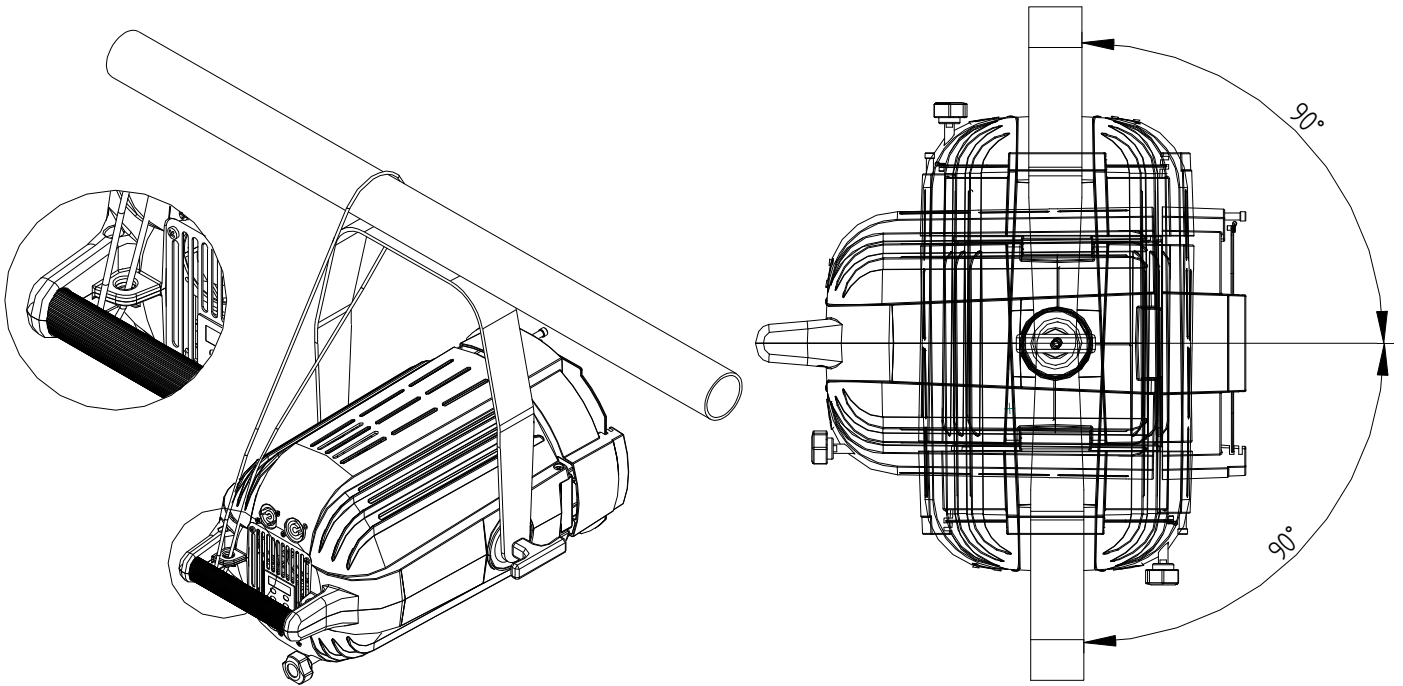
Dimensions: see figure



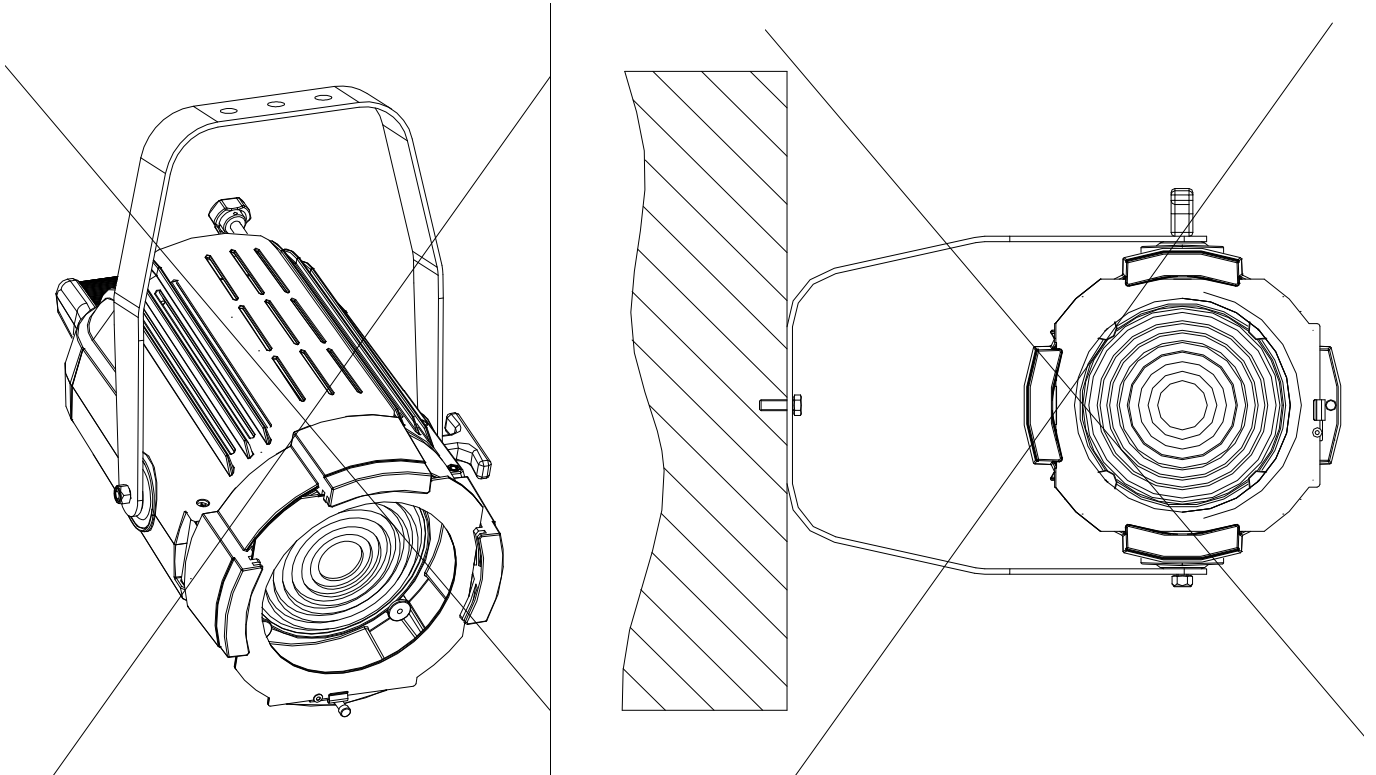
## Lites200F installation

Lites F200 is delivered with a robust yoke which hosts 3 x 12 mm mounting holes.

The use of an adequate G-clamp to sustain at least twice the weight of the Lites F200 (Lites200F weighs 6,9 kg) and/or M10 screw is mandatory. The use of safety chain(s) to sustain twice the weight of the Lites F200 is also mandatory, the safety chain adds more protections to users and third-parties. Eye-lid for the safety chain is provided on the Lites F200. (see Fig.). The Lites F200 yoke revolves on 360° on the projector's axis. Lites F200 can be installed  $\pm 90^\circ$  on the vertical axis. (see Fig.). Best Lites F200 's performances are achieved if unit is installed as shown in the illustrations that follows. (never install Lites F200 upsidedown, illustrations that follows show installation positions that must be avoided) . Incorrect installation(s) can, immediately or in short/long terms, jeopardise the correct operation of the Lites F200. Incorrect installations may void the warranty of the unit.

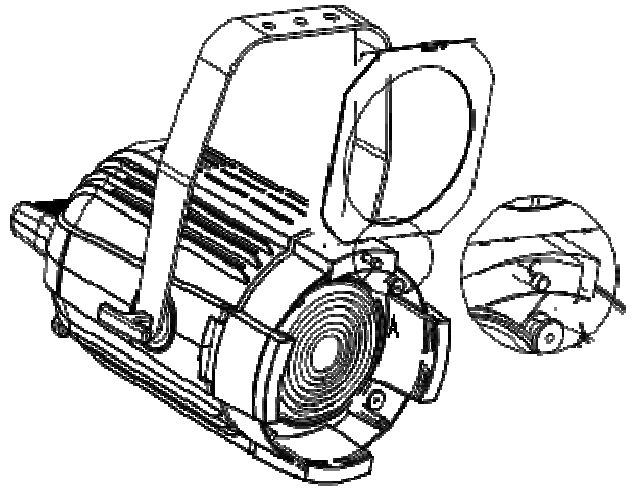


## AVOID INCORRECT INSTALLATIONS AS ILLUSTRATED



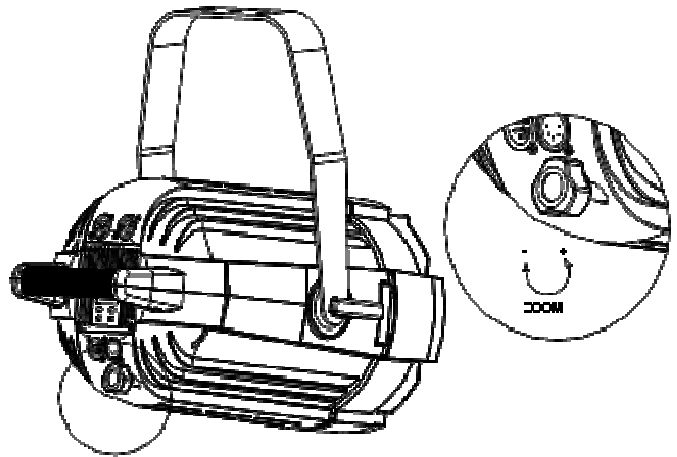
## Installations of the accessories

Lites F200 is delivered with a standard 195x185mm colour frame (standard colour frame 185x185 can also be used). The LED source used on LitesF200 allows the use of colour filters that cannot be used with high wattage tungstene lamps which would impair colour filters. Optional and standard 185x185 mm 4-leaf-barndoor can also be installed in the provided gates. Ensure that accessories when installed on the LitesF200 are securely fitted in the gates and that are triggered and secured by the spring-lock provided. (see figure)



## Beam adjustment

Lites F200 can revolve  $\pm 90^\circ$  upwards and  $\pm 90^\circ$  downwards on the axis of the luminaire. When correct position is set to position, secure it by tightening the provided side knob. Beam adjustment is achieved via rear Helicoidal screw. Turn clockwise to narrow beam, conversely beam widens.



## Connection to mains

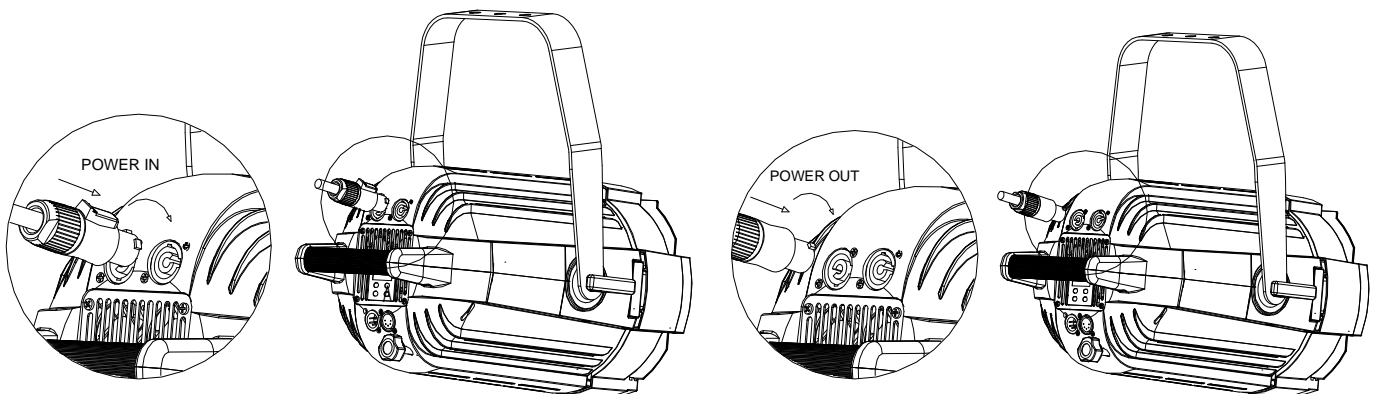
**WARNING ! Installation(s) must be accomplished, handled and carried out by qualified personnel only and must comply with all norms in force in the installation's country**

Lites F200 is supplied with a free Blue Neutrik PowerCon plug that must be wired using a  $3 \times 1.5 \text{mm}^2$  lead , additional specifications include:

- Operating Voltage: 300/500V
- Test Voltage: 2KV
- Operating Temperature:  $-10^\circ\text{C}$  /  $+100^\circ\text{C}$

Connect blue wire to N terminal, brown wire to L terminal and Yellow/Green wire to earth terminal. (see also illustration fig) Ensure connections to safety circuit breaker at all times. Daisy chain of up to maximum 8 units if connected to 230VAC. Daisy chain of up to maximum 4 units when connected to 110VAC. Maximum daisy chain length: 25m.

**WARNING: LitesF200 CANNOT be powered by using an angle phase dimmer pack**



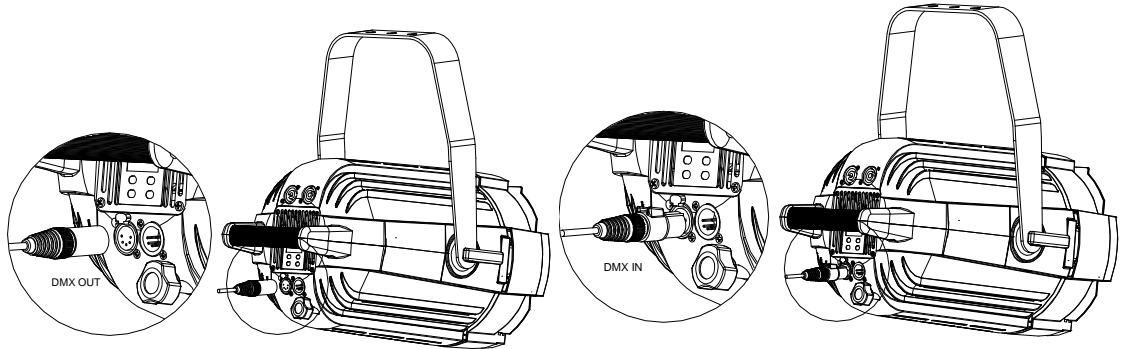
## Signal Control Connection

Lites F200 can be operated via either DMX512A and or RDM ready . For dasy chain connection use a -2 x 0,5 mm<sup>2</sup> size lead wire plus shield. Connect Pin 1 to ground, 2= data – while Pin 3 = data +. Pins 4 & 5 are not connected. Ensure that DMX wires and shield do not interfere,nor touch each other as well as they must not touch/interfere with the body of the unit . (DMX connectors are not provided)

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

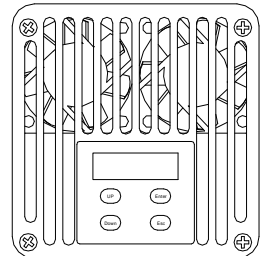
**WARNING ! Before powering Lites F200 ensure that all installation(s) procedure(s) have(s) been properly set and accomplished**

XLR5 connection	
leads	description
1	GND
2	DMX-
3	DMX+
4	NC
5	NC



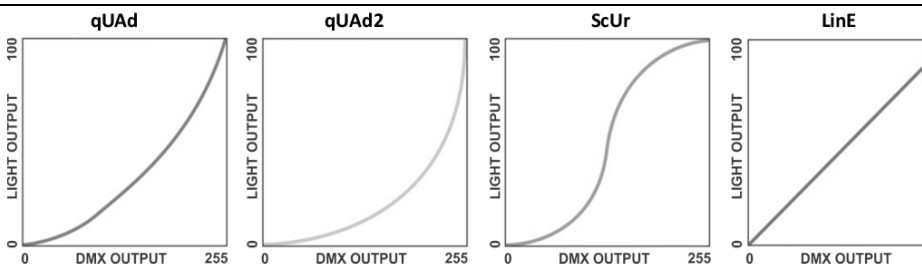
## Projector mode settings

When Lites F200 is powered, setup-display will show the software release version The UP, DOWN, ENTER and ESC buttons will allow the operations of the Lites F200 menu. UP and DOWN buttons allow to scan menu options, ENTER button allow to select. The ESC button is to return to the previous menu or to quit the previous setting.



## Menu items

Displayed Message	Allowed or displayed values	Function	
<b>Addr</b>	001..512	Set Up DMX Address	
<b>Auto</b> (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	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	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. 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. 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. Always confirm with Enter to save the settings.

	co25 co26 co27 co28 co29 co30 co31 co32 co33 co34 co35 co36 co37 co38 co39 co40	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	
	Pr01 Pr02 Pr03 Pr04	Program 1: auto Program 2: auto Program 3: auto Program 4: auto	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.
<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. The slave projectors must be set in 9ch mode.	
<b>ModE</b>	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	
<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>	qUAd SCUr qUAd2 LI nE	 <p>Dimming curves available</p>	

<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 : 90% 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>	SUrE	ON Will restore the default factory values
<b>SoFt</b>		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 Lites F200 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		



		<b>179...199</b>	<b>from 8000°k to 9000°k</b>
		<b>200...201</b>	<b>9000°k cri 93</b>
		<b>202...222</b>	<b>from 9000°k to 10000°k</b>
		<b>223...225</b>	<b>10000°k cri 95</b>
	<b>3200 ° k halogen lamp operation</b>	<b>226...255</b>	<b>halogen lamp dimming simulation</b>
<b>11</b>	<b>Color selection</b>	<b>0...15</b>	<b>No color</b>
		<b>16..23</b>	<b>red</b>
		<b>24...31</b>	<b>light red</b>
		<b>32...39</b>	<b>orange</b>
		<b>40...47</b>	<b>medium amber</b>
		<b>48...55</b>	<b>amber</b>
		<b>56...63</b>	<b>straw tint</b>
		<b>64...71</b>	<b>pale yellow</b>
		<b>72...79</b>	<b>spring yellow</b>
		<b>80...87</b>	<b>yellow</b>
		<b>88...95</b>	<b>lemon yellow</b>
		<b>96...103</b>	<b>lime</b>
		<b>104...111</b>	<b>lime green</b>
		<b>112...119</b>	<b>green</b>
		<b>120...127</b>	<b>moss green</b>
		<b>128...135</b>	<b>light cyan</b>
		<b>136...143</b>	<b>cyan</b>
		<b>144...152</b>	<b>peacock blue</b>
		<b>153...159</b>	<b>summer blue</b>
		<b>160...167</b>	<b>bright blue</b>
		<b>168...175</b>	<b>light steel blue</b>
		<b>176...183</b>	<b>light blue</b>
		<b>184...191</b>	<b>slate blue</b>
		<b>192...199</b>	<b>blue</b>
<b>200...207</b>	<b>deep lavender</b>		
<b>208...215</b>	<b>lavender</b>		
<b>216...223</b>	<b>magenta</b>		
<b>224...231</b>	<b>rose pink</b>		
<b>232...239</b>	<b>dark pink</b>		
<b>240...247</b>	<b>bright pink</b>		
<b>248...255</b>	<b>FULL RGBACL</b>		
<b>12</b>	<b>Fan speed</b>	<b>0..25</b>	<b>Auto speed or set from menu</b>
		<b>26..255</b>	<b>Fan speed from slow to fast</b>

**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 2 ch

<b>1</b>	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	
<b>2</b>	dimmer	0..255	From 0 to max 255

## 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

<b>1</b>	Red	0..255	From 0 to max 255
<b>2</b>	Green	0..255	From 0 to max 255
<b>3</b>	Blue	0..255	From 0 to max 255
<b>4</b>	Dimmer	0..255	From 0 to max 255
<b>5</b>	strobe	0...15	Strobe disengaged
		16...255	Strobo from slow (16) to fast (255)
<b>6</b>	Fan speed	0..24	Auto speed or set from menu
		25..255	Fan speed from slow to fast

## mode 6.HSI STUDIO 6 ch

<b>1</b>	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
<b>2</b>	Saturation	0..255	Color saturation with set color in the Hue channel
<b>3</b>	Dimmer	0..255	From 0 to max 255
<b>4</b>	strobe	0...15	Strobe disengaged
		16...255	Strobo from slow (16) to fast (255)
<b>5</b> (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		
<b>6</b>	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

## 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 Lites F 200 C6 and promptly contact any authorized service centre.

## Periodical maintenance

To ensure the correct Lites F 200 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 sourranded area with solvent**

## Device disposal information

At the end of its life, Lites F 200 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.