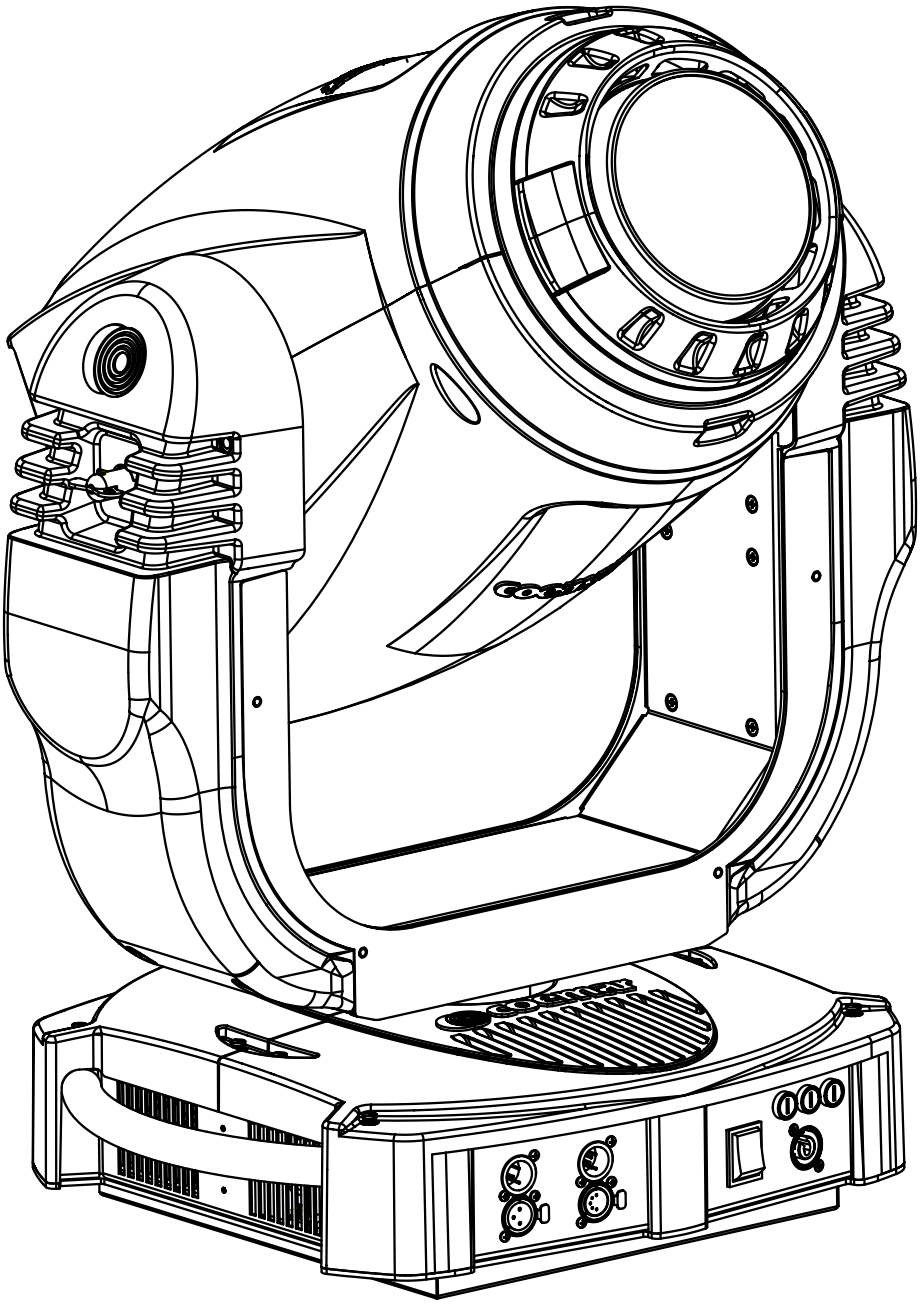
Infinity Spot L



Instruction manual

coemar
Light Emotion

Version 1.0

∞Infinity Spot L

Serial number

Date of purchase

Retailer

Address

Suburb

State

Tel. / Fax

Please note in the space provided above the relative service information of the model and the retailer from whom you purchased your **Infinity Spot L**: this information will assist us in providing spare parts, repairs or in answering any technical enquiries with the utmost speed and accuracy.

WARNING: the security of the fixture is granted only if these instructions are strictly followed; therefore it is absolutely necessary to keep this manual.

User Manual Version 1.0
Edition June 2015

INDEX

English

Congratulations on having purchased a **Coemar** product. You have assured yourself of a fixture of the highest quality, both in the componentry and in the technology used. We renew our invitation to you to complete the service information form on the previous page. This will assist in providing prompt and accurate advice from your **Coemar** service centre, which you can trust and to which you can submit any requests for service or information. Following the instructions and procedures outlined in this manual will ensure the maximum efficiency of this product for years to come.

1.Packaging and transportation

1.1 Packaging

Open the packaging and make sure that no part of the equipment has suffered any damage during the transportation. In case of damage to the fixture, contact your currier and your supplier immediately by telephone, fax or email, and inform them you will formally notify them in writing through registered letter.

Packing List

Make sure the packaging contains:

1. the **Infinity Spot L** projector.
2. the instruction manual.
3. the Cam-Lock support brackets.
4. power supply cable with PowerCon connector.

1.2 Trasportation

Infinity Spot L must be transported exclusively in its original packaging or in an appropriate flight case.

2. General information

2.1 Important safety information.

Fire prevention:

1. Infinity Spot L utilizes a Osram Lock-IT® HTI® 1000W/PS lamp, the use of any alternative lamp might be risky and will make the warranty of the fixture null and void.
2. Never locate the fixture on any flammable surface.
3. Minimum distance from flammable materials: 0.5m.
4. Minimum distance from the closest illuminable surface: 0.5m.
5. Replace any blown or damaged fuses only with identical ones, both in size and value. Refer to the connection diagram if there is any doubt.
6. Connect the projector to mains power protected by a thermal magnetic circuit breaker.

Preventing electric shock:

1. Presence of high voltage inside of the fixture. Insulate the projector from mains supply before opening or performing any function which involves touching the inside of the fixture, including lamp replacement.
2. For the connection to the mains, adhere strictly to the guidelines outlined in this manual.
3. The level of technology of **Infinity Spot L** requires the use of specialised personnel for all service applications; refer all work to your authorised **Coemar** service centre.
4. A good earth connection is essential for the proper functioning of the projector. Never connect the fixture if there is no earth connection.
5. Mains cables must not come into contact with other cables.
6. Do not operate the projector with wet hands or in an area where water is present.
7. The fixture must never be located in an exposed position, or in areas of extreme humidity.

Protection against ultraviolet radiation(UV):

1. Never turn on the lamp if any of the lenses, filters, or the plastic housing are damaged; their shielding functions will only operate efficiently if they are in perfect working order.
2. Never look directly in the direction of the lamp when it is operating.

Safety:

1. The projector must always be installed with bolts, clamps, or other fixing devices which are suitably rated to support the weight of the projector.
2. Always use a secondary safety fixing device with chain or steel wire of a suitable rating to sustain the weight of the unit in case of failure of the principal fixing point.
3. The external surfaces of the unit, at various points, may reach 150°C. Never handle the unit until at least 10 minutes have elapsed since the lamp was turned off.
4. Always replace the lamp if any physical damage is evident.
5. Never install the fixture in an enclosed area lacking sufficient air flow; the room temperature must not exceed 35°C.
6. Wait at least 10 minutes after the unit has been turned off before attempting to replace or remove the lamp. Always use protection gloves while replacing the lamp.
7. The projector contains electronic and electrical components which must under no circumstances be in contact with water, oil or any other liquid. Failure to do so will compromise the proper functioning of the projector.

Projector movement.

The projector has a pan range of 540° in its base and a tilt range 284° in its yoke; do not obstruct the projector whilst it is moving.

Forced ventilation

On the body of the projector you will note several air vents housing several cooling fans, both in the basis and in the body. To avoid any problems associated with overheating, never obstruct any of these vents, as this would seriously compromise the proper operation of the unit.

Protection rating against penetration by external agents:
The fixture is classified as an ordinary apparatus ; its protection grade against penetration by external agents, solid or liquid, is IP20.

2.2 Warranty conditions

1. The fixture is guaranteed for a period of 12 months from the date of purchase against manufacturing or materials defects.
2. The warranty does not extend to damage caused by inappropriate usage, use by inexperienced operators or inadequate maintenance.
3. The warranty is immediately void if the projector has been tampered or opened by unauthorised personnel.
4. The warranty does not extend to fixture replacement.
5. Both the serial number and the model of the projector are required for any advice or service from your authorised service centre.

2.3 EC Norms

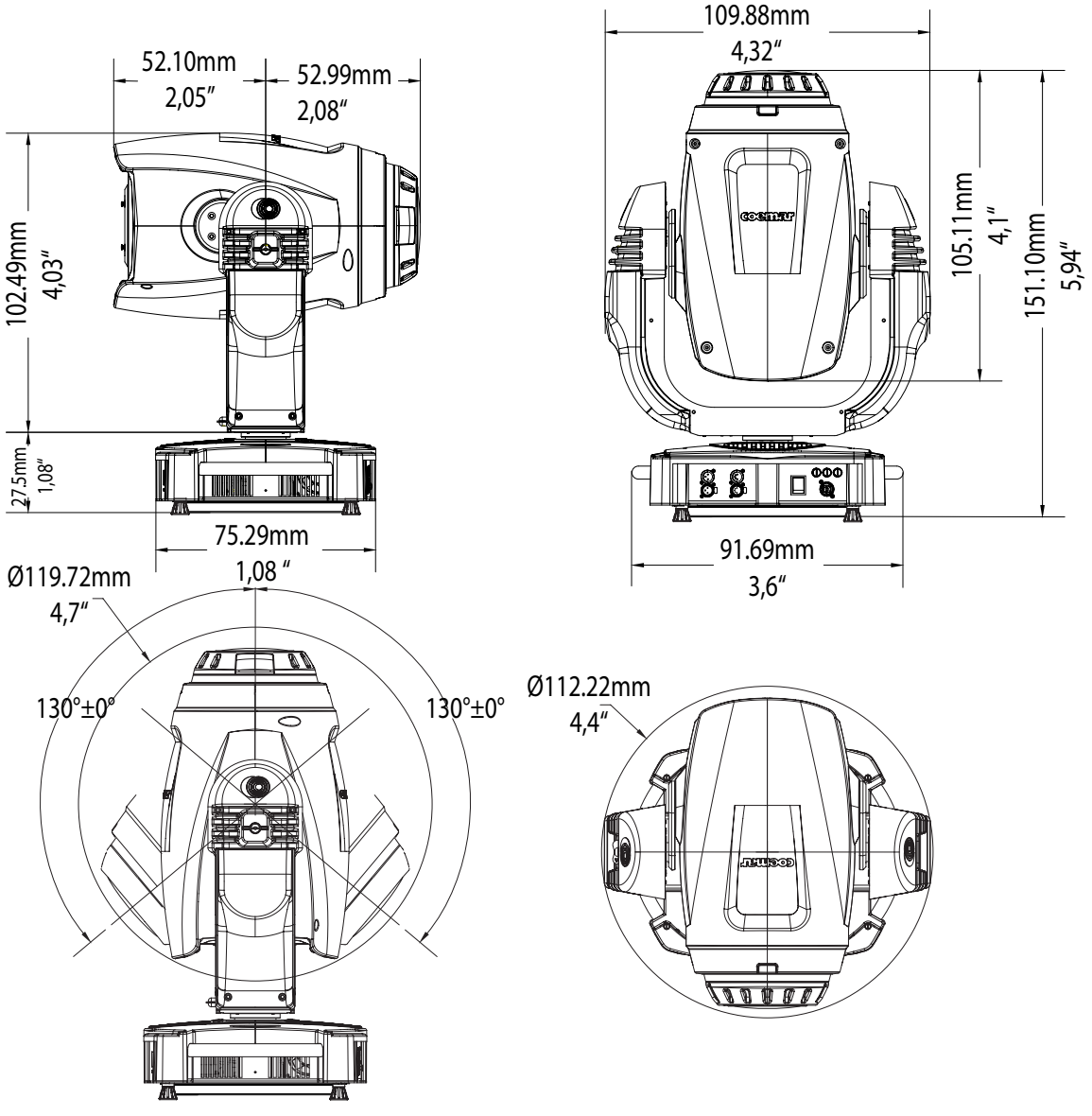
The projector meets all fundamental applicable EC requirements.

3. Product specifications

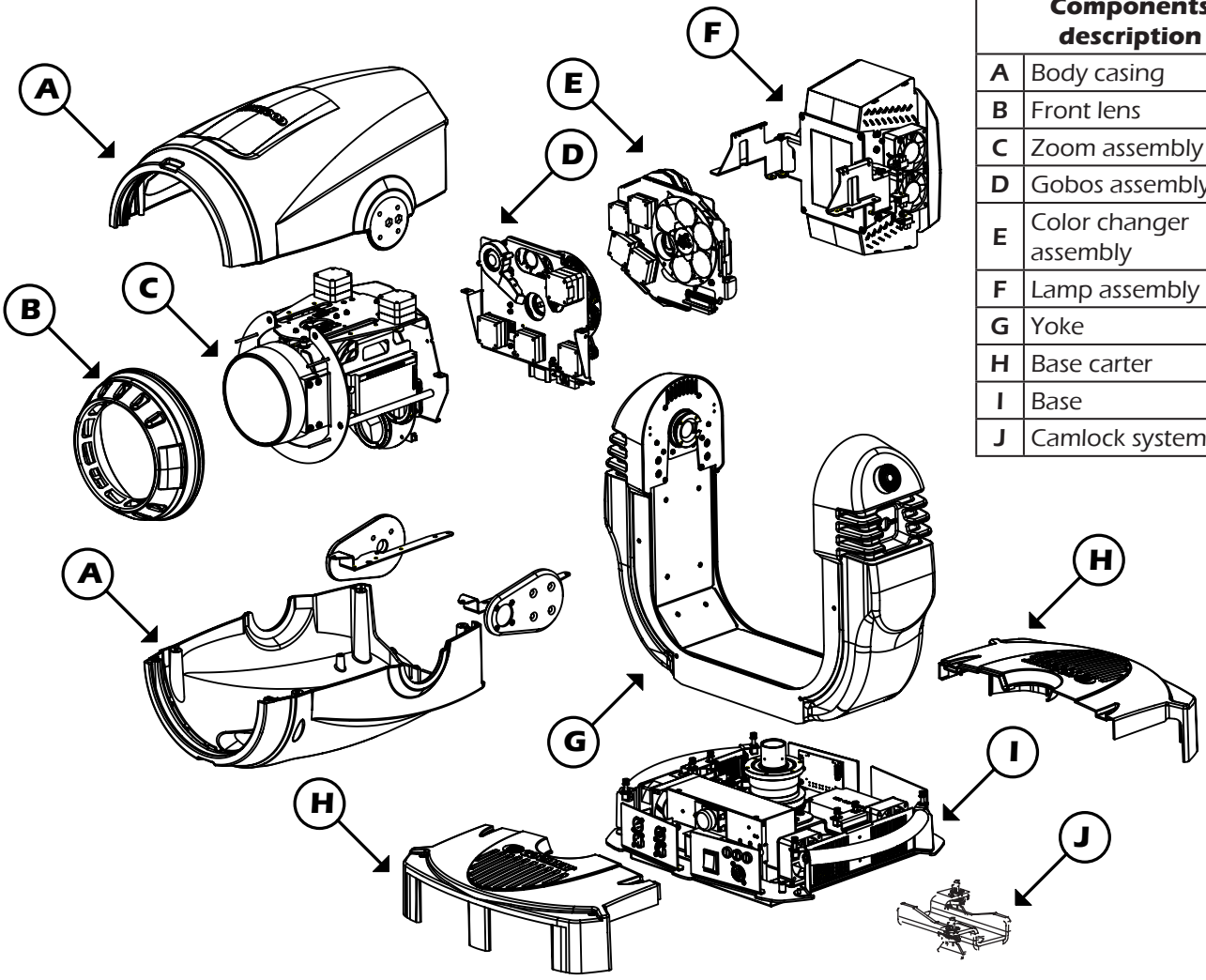
3.1 Technical characteristics

Power supply	90-250 Vac 50/60Hz A
Maximum current flow	5,8A at 230V, 11,5A at 115V
Power factor correction	Cos ϕ = 0,9
Lamp power	1000W
Minimum ambient temperature	35°C / 95°F
Weight	35kg / 77,16lbs
Protection rating	IP20

3.2 Dimensions



3.3 Project Components

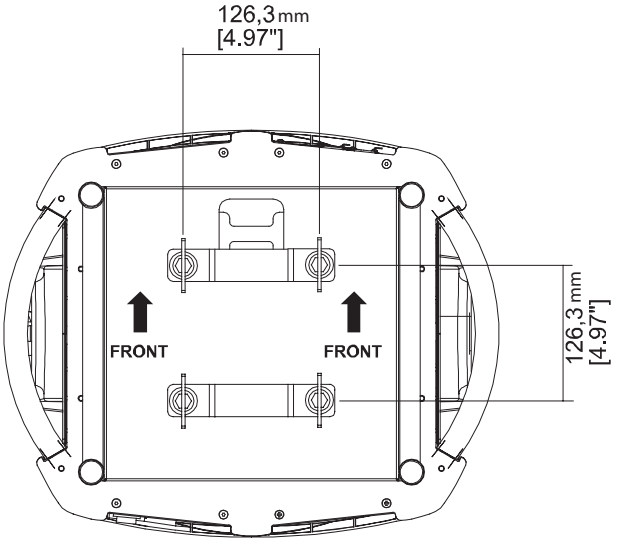


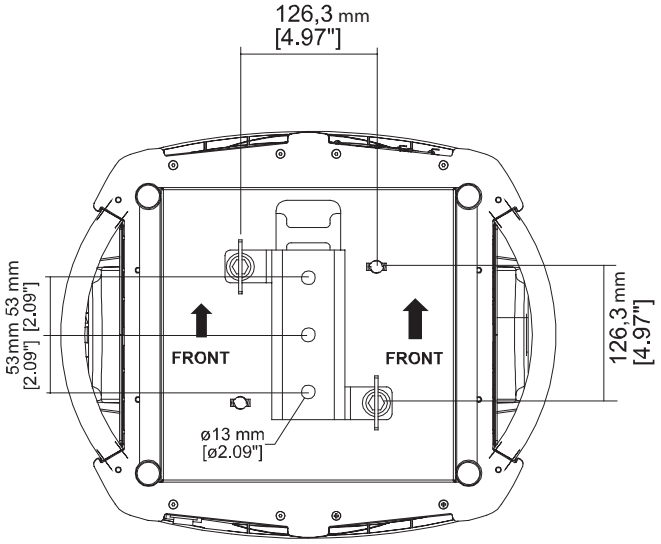
Components description	
A	Body casing
B	Front lens
C	Zoom assembly
D	Gobos assembly
E	Color changer assembly
F	Lamp assembly
G	Yoke
H	Base carter
I	Base
J	Camlock system

4. Installation

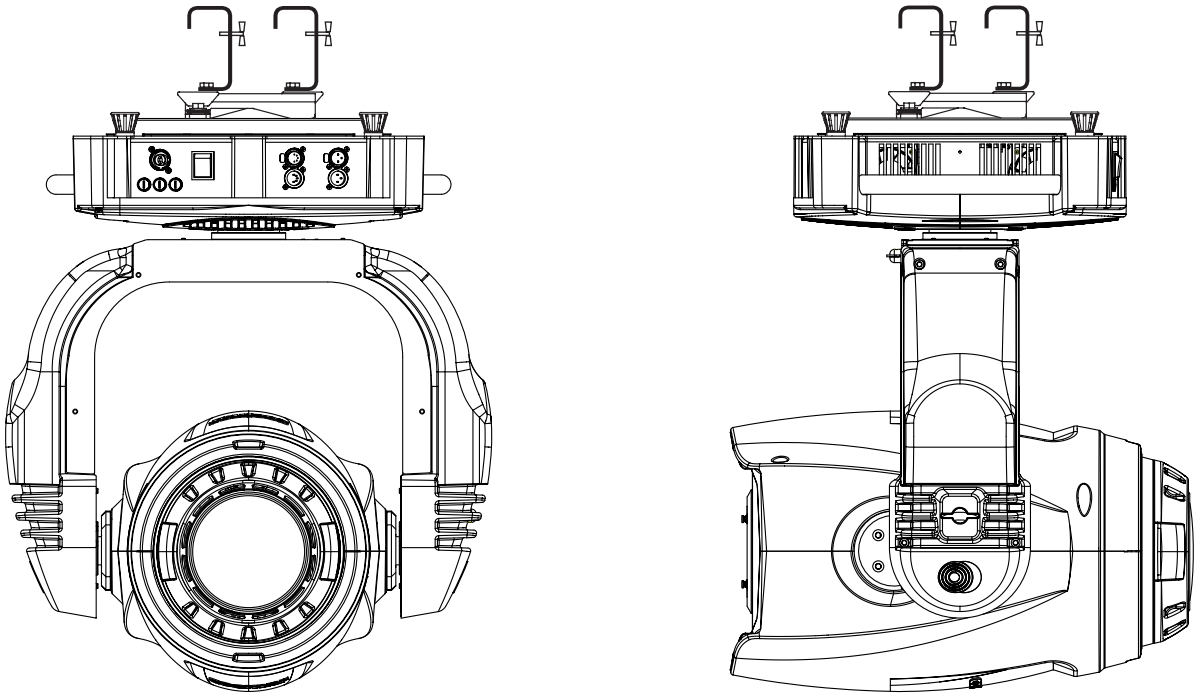
4.1 Mechanical installation

Infinity Spot L may be either floor or ceiling mounted. It may also be installed on a structure. The unit is provided with four rubber feet mounted on its base, allowing it to be placed on a flat surface. For installations on a reticular structure, **Coemar** provides a set of Cam-lock support brackets,
which are included in the packaging. The Cam-lock bracket is one-fourth-turn supports. Before using it for supporting the projector, make sure that it is correctly seated and firmly tightened into position).





For installations on a reticular structure, we recommend using specific "C" hooks, suitable for supporting the weight. Normally, the "C" hooks are tightened in the central hole of the cam-lock brackets, as shown in the picture below.

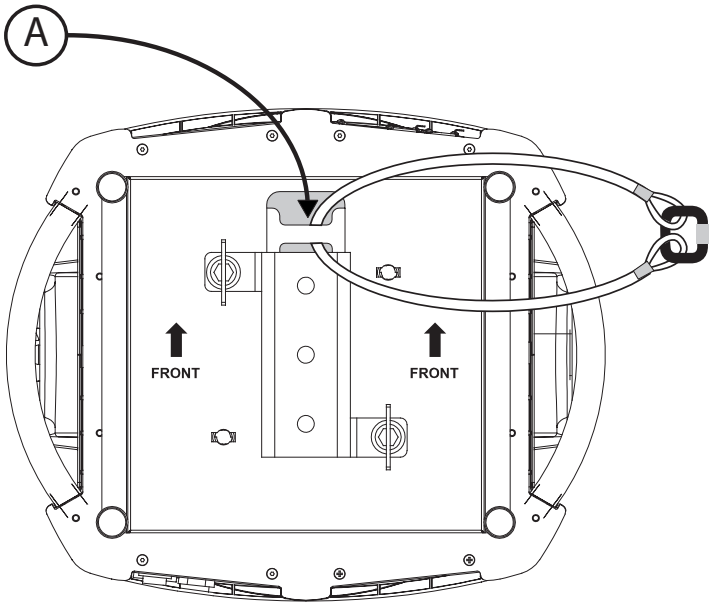


WARNING !
Always make sure that both the structure and the fixing devices (screws, clamps etc.) are suitable for holding the weight of the unit.

The structure must also be sufficiently rigid so as not to move or shake whilst the **Infinity Spot L** projector moves during its operation. Make sure that the supporting structure is not subject to torsion.
Do not install the projector in locations readily accessible by unauthorised or untrained personnel who is not aware of these safety instructions.

4.2 Safety connection

If the Infinity Spot L is fixed to a structure, the use of a safety chain is recommended in order to meet the current relevant safety standards. The safety chain must pass through the holes "A" and then fixed to the structure itself.
If using steel wires or chains which have not been manufactured by Coemar, make sure that they are suitable for holding the weight of the unit.



5. Powering Up

5.1 Connecting to mains power

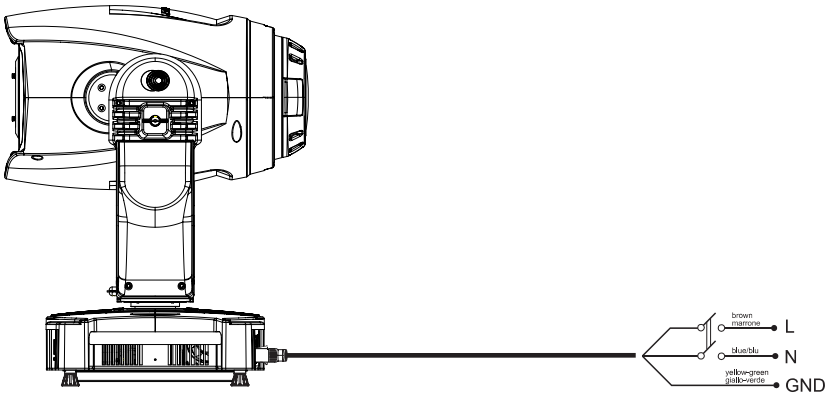
For connection to mains, use a connector of a suitable rating to sustain the maximum current: 200/208/230/240 Vac 8 amps constant current in normal operation.

Identify the mains cable which exits the base of the unit and connect as shown below:

Mains cable characteristics

The mains cable provided is thermally resistant, complying to the most recent international standards.

Note: in case of cable replacement, similar cable with comparable thermal resistant qualities must be used exclusively (cable 3X1.5 ø external 10mm, rated 300/500V, tested to 2 KV, operating temperature -40°C + 180°C, **Coemar** code CV5311/SP/2,5).



WARNING !

• The use of a thermal magnetic circuit breaker is recommended for each projector. Strictly adhere to all regulatory norms.

• Infinity Spot L cannot be powered through Dimmer power units.

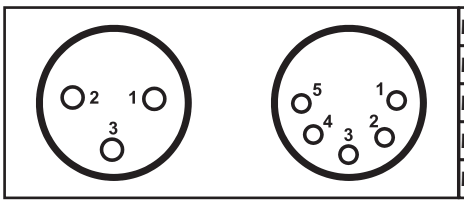
• A good earth connection is necessary for the correct operation of the Infinity Spot L. Never connect the projector to main power if the green/yellow earth cable provided is not correctly connected.

• All cable and plug connections must be carried out by qualified personnel only.

6. Control signal connections

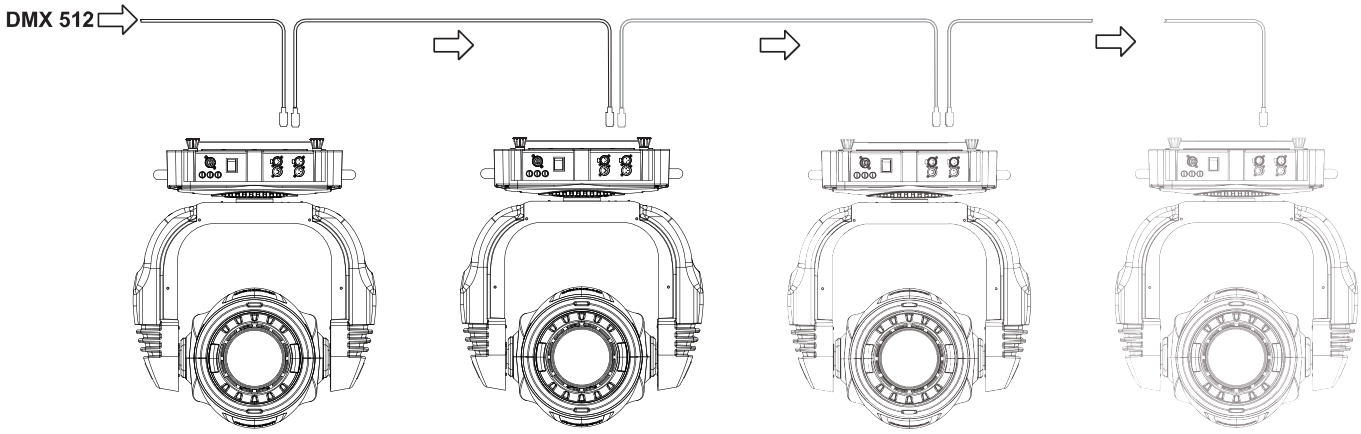
The digital control signal is transmitted to the projector via a two pole cable screened as per international standards for the transmission of DMX512 data. The connection must be serial, utilising connectors XLR3 and XLR5, male and female, located on the base of Infinity Spot L labelled DMX 512 IN and OUT (see diagram)

Control signal connection by XLR3 e XLR5 plugs



Pin 1 = Ground (GND)
Pin 2 = Data -
Pin 3 = Data +
Pin 4 = Unconnected
Pin 5 = Unconnected

When signal arrives from a DMX 512 console with canon XLR5 (5 poles) pins 4 and 5 must not be connected.

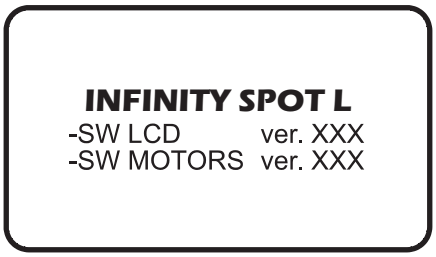


WARNING !

Make sure that screening and conductors are not in contact one another or with the metal housing of the connector. Pin n# 1 and housing must never be connected to the unit power supply.

7. Turning on the projector

After having followed the preceding steps, proceed with the power supply and turn on the projector via the main power switch. The display will show a short welcome message and the software version installed on the internal microprocessors:



The projector will perform the reset function on all motors. This operation will last a few seconds, thus allowing the digital control motors to correctly position themselves. Then the display will turn on in a fixed mode, indicating the correct DMX 512 signal reception.

During th reset the display will blink for a few secods..

.. then the DMX address screen will appear

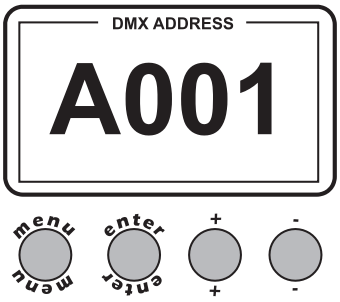
If the address continues to blink and the "NO DMX SIGNAL" message appears, it means that the DMX signal has not been received. Check the connection cable and the mixer functioning.

7.1 DMX address of the projector

NB: The following section is valid only in the case where Infinity Spot L is controlled by the signal DMX 512.
Each projector uses 28 address channels for its complete operation and is controlled by a DMX 512 signal (for further information, see section 7.2, DMX functions).
When powered up initially, each projector will show A001, which indicates DMX address 001; a projector thus addressed will respond to commands of channel 1 to 28 from your DMX 512 controller. A second unit must be addressed as A029, a third as A057 and so on. The operation must be carried out every Infinity Spot L which has an address different from A001.

Altering DMX address

1. Press the + or – button until the display shows the required DMX address. The digits on the display will blink to indicate that the variation has not been registered.
2. Press the enter key to confirm your selection. The digits on the display panel will cease to blink and the projector will now respond to the new address.



NB: by holding the + or – button down the scrolling will be faster; thus allowing a faster selection

WARNING!
If you alter the DMX address with no DMX signal connected, the digits on the display panel will continue to flash even after you have pressed ENTER button to confirm the address.

8. DMX functions

channel	function	type of control	effect	decimale	percentage
1	**x axis, base movement (pan coarse)**	proportional	proportional coarse control of the base motor movement	0 - 255	0% - 100%
2	**x axis, base movement (pan fine)**	proportional	proportional fine control of the base motor movement	0 - 255	0% - 100%
3	**x axis, yoke movement (pan coarse)**	proportional	proportional coarse control of the yoke motor movement	0 - 255	0% - 100%
4	**x axis, yoke movement (pan coarse)**	proportional	proportional fine control of the yoke motor movement	0 - 255	0% - 100%
5	**movement speed**	step	standard (fast)	0 - 10	0% - 4%
			ultra fast movement (best for programming positions)	11 - 25	4% - 10%
		proportional	vector mode (from fast to slow)	26 - 127	10% - 50%
			tracking mode (from fast to slow)	128 - 247	50% - 97%
		step	smooth mode	248 - 255	97% - 100%
6	**dimmer**	step	black-out	0 - 7	0% - 3%
		proportional	gradual adjustment of luminous intensity from 0 to 100%	8 - 255	3% - 100%
7	**strobe and shutter**	step	black-out	0 - 19	0% - 7%
			shutter open	20 - 39	8% - 15%
			black-out	40 - 59	16% - 23%
		proportional	strobe effect with random pulse frequency	60 - 79	24% - 31%
			strobe frequency 1 (1.0 flash/sec)	80 - 84	31% - 33%
			strobe frequency 2 (1.5 flash/sec)	85 - 89	33% - 35%
			strobe frequency 3 (2.0 flash/sec)	90 - 94	35% - 37%
			strobe frequency 4 (2.5 flash/sec)	95 - 99	37% - 39%
			strobe frequency 5 (3.0 flash/sec)	100 - 104	39% - 41%
			strobe frequency 6 (4.0 flash/sec)	105 - 109	41% - 43%
			strobe frequency 7 (5.0 flash/sec)	110 - 114	43% - 45%
			strobe frequency 8 (6.0 flash/sec)	115 - 119	45% - 47%
			strobe frequency 9 (7.0 flash/sec)	120 - 124	47% - 49%
			strobe frequency 10 (8.0 flash/sec)	125 - 129	49% - 51%
			strobe frequency 11 (9.0 flash/sec)	130 - 134	51% - 53%
		step	strobe frequency 12 (10.0 flash/sec)	135 - 139	53% - 55%
			sequenced pulse effect, slow closing, fast opening at speed 1	140 - 149	55% - 58%
			sequenced pulse effect, slow closing, fast opening at speed 2	150 - 159	59% - 62%
			sequenced pulse effect, slow closing, fast opening at speed 3	160 - 169	63% - 66%
			sequenced pulse effect, slow closing, fast opening at speed 4	170 - 179	67% - 70%
			sequenced pulse effect, fast closing, slow opening at seed 1	180 - 189	71% - 74%
			sequenced pulse effect, fast closing, slow opening at seed 2	190 - 199	75% - 78%
			sequenced pulse effect, fast closing, slow opening at seed 3	200 - 209	78% - 82%
			sequenced pulse effect, fast closing, slow opening at seed 4	210 - 219	82% - 86%
			momentary blacout during gobo and color changes	220 - 227	86% - 89%
			momentary blacout during pan and tilt movements	228 - 233	89% - 91%
			shutter open	234 - 255	92% - 100%
8	**color - full color (CH 9: 0 - 63)**	step	color 1	0 - 42	0% - 16%
			color 2	43 - 85	17% - 33%
			color 3	86 - 128	34% - 50%
			color 4	129 - 171	51% - 67%
			color 5	172 - 214	67% - 84%
			color 6	215 - 255	84% - 100%
	color - half color (CH 9: 64 -127)	step	color 1	0 - 36	0% - 14%
			color 1 - 2	37 - 73	15% - 29%
			color 2 - 3	74 - 110	29% - 43%
			color 3 - 4	111 - 147	44% - 58%
			color 4 - 5	148 - 184	58% - 72%
			color 5 - 6	185 - 221	73% - 87%
			color 6 - 1	222 - 255	87% - 100%
	color - proportional color (CH 9: 128 - 191)	step	no color	0 - 10	0% - 4%
		proportional	proportional color	11 - 255	4% - 100%
	color - rainbow (CH 9: 192 - 255)	step	no color	0 - 9	0% - 4%
		proportional	left rotation from fast to slow	10 - 127	4% - 50%
		step	stop	128 - 137	50% - 54%
		proportional	left rotation from slow to fast	138 - 255	54% - 100%

9	**color mode**	step	full color	0 - 63	0% - 25%
			half color	64 - 127	25% - 50%
		proportional	proportional color	128 - 191	50% - 75%
		step	rainbow	192 - 255	75% - 100%
10	**cyan**	proportional	proportional control of the percentage of cyan color in the light beam from 0 to 100%	0 - 255	0% - 100%
11	**magenta**	proportional	proportional control of the percentage of magenta color in the light beam from 0 to 100%	0 - 255	0% - 100%
12	**yellow**	proportional	proportional control of the percentage of yellow color in the light beam from 0 to 100%	0 - 255	0% - 100%
13	**speed CMY**	step	no effect	0 - 7	0% - 3%
		proportional	varable speed from fast to slow	8 - 255	3% - 100%
14	**macro CMY**	step	no effect	0 - 9	0% - 4%
			macro 1	10 - 14	4% - 5%
			macro 2	15 - 19	6% - 7%
			macro 3	20 - 24	8% - 9%
			macro 4	25 - 29	10% - 11%
			macro 5	30 - 34	12% - 13%
			macro 6	35 - 39	14% - 15%
			macro 7	40 - 44	16% - 17%
			macro 8	45 - 49	18% - 19%
			macro 9	50 - 54	20% - 21%
			macro 10	55 - 59	22% - 23%
			macro 11	60 - 64	24% - 25%
			macro 12	65 - 69	25% - 27%
			macro 13	70 - 74	27% - 29%
			macro 14	75 - 79	29% - 31%
			macro 15	80 - 84	31% - 33%
			macro 16	85 - 89	33% - 35%
			macro 17	90 - 94	35% - 37%
			macro 18	95 - 99	37% - 39%
			macro 19	100 - 104	39% - 41%
			macro 20	105 - 109	41% - 43%
			macro 21	110 - 114	43% - 45%
			macro raimbow wait - 1	115 - 121	45% - 47%
			macro raimbow wait - 2	122 - 128	48% - 50%
			macro raimbow wait - 3	129 - 135	51% - 53%
			macro raimbow wait - 4	136 - 142	53% - 56%
			macro raimbow wait - 5	143 - 149	56% - 58%
			macro raimbow wait - 6	150 - 156	59% - 61%
			macro raimbow wait - 7	157 - 163	62% - 64%
			macro raimbow wait - 8	164 - 170	64% - 67%
			macro raimbow wait - 9	171 - 177	67% - 69%
			macro raimbow wait - 10	178 - 185	70% - 73%
			full colors raimbow wait - 1	186 - 192	73% - 75%
			full colors raimbow wait - 2	193 - 199	76% - 78%
			full colors raimbow wait - 3	200 - 206	78% - 81%
			full colors raimbow wait - 4	207 - 213	81% - 84%
			full colors raimbow wait - 5	214 - 220	84% - 86%
			full colors raimbow wait - 6	221 - 227	87% - 89%
			full colors raimbow wait - 7	228 - 234	89% - 92%
			full colors raimbow wait - 8	235 - 241	92% - 95%
			full colors raimbow wait - 9	242 - 248	95% - 97%
			full colors raimbow wait - 10	249 - 255	98% - 100%

15	rotating gobos	step	open	0 - 25	0% - 10%
			gobo 1	26 - 51	10% - 20%
			gobo 2	52 - 77	20% - 30%
			gobo 3	78 - 103	31% - 40%
			gobo 4	104 - 129	41% - 51%
			gobo 5	130 - 155	51% - 61%
			gobo 6	156 - 181	61% - 71%
			gobo 7	182 - 207	71% - 81%
			wheel rotation speed 1 (slow)	208 - 213	82% - 84%
			wheel rotation speed 2	214 - 219	84% - 86%
			wheel rotation speed 3	220 - 225	86% - 88%
			wheel rotation speed 4	226 - 231	89% - 91%
			rwheel rotation speed 5	232 - 237	91% - 93%
			wheel rotation speed 6	238 - 243	93% - 95%
			wheel rotation speed 7	244 - 249	96% - 98%
			wheel rotation speed 8 (fast)	250 - 255	98% - 100%
16	gobo mode	step	gobo rotation mode	0 - 127	0% - 50%
			gobo index mode	128 - 255	50% - 100%
17	gobo mode rotation	step	stop	0 - 9	0% - 4%
		proportional	left rotation (from fast to slow)	10 - 127	4% - 50%
		step	stop	128 - 137	50% - 54%
		proportional	right (from slow to fast)	138 - 255	54% - 100%
17	gobo mode index	proportional	gobo index coarse	0 - 255	0% - 100%
18	gobo index fine	proportional	gobo index fine	0 - 255	0% - 100%
19	gobo shake effect	step	stop	0 - 9	0% - 4%
			gobo shake R-L speed 1 (slow)	10 - 22	4% - 9%
			gobo shake R-L speed 2	23 - 35	9% - 14%
			gobo shake R-L speed 3	36 - 48	14% - 19%
			gobo shake R-L speed 4	49 - 61	19% - 24%
			gobo shake R-L speed 5	62 - 74	24% - 29%
			gobo shake R-L speed 6	75 - 87	29% - 34%
			gobo shake R-L speed 7	88 - 100	35% - 39%
			gobo shake R-L speed 8	101 - 113	40% - 44%
			gobo shake R-L speed 9 (fast)	114 - 126	45% - 49%
			stop	127 - 138	50% - 54%
			gobo shake L-R speed 1 (slow)	139 - 151	55% - 59%
			gobo shake L-R speed 2	152 - 164	60% - 64%
			gobo shake L-R speed 3	165 - 177	65% - 69%
			gobo shake L-R speed 4	178 - 190	70% - 75%
			gobo shake L-R speed 5	191 - 203	75% - 80%
			gobo shake L-R speed 6	204 - 216	80% - 85%
			gobo shake L-R speed 7	217 - 229	85% - 90%
			gobo shake L-R speed 8	230 - 242	90% - 95%
			gobo shake L-R speed 9 (fast)	243 - 255	95% - 100%
20	fixed gobos	step	open	0 - 25	0% - 10%
			gobo 1	26 - 51	10% - 20%
			gobo 2	52 - 77	20% - 30%
			gobo 3	78 - 103	31% - 40%
			gobo 4	104 - 129	41% - 51%
			gobo 5	130 - 155	51% - 61%
			gobo 6	156 - 181	61% - 71%
			gobo 7	182 - 207	71% - 81%
			wheel rotation speed 1 (slow)	208 - 213	82% - 84%
			wheel rotation speed 2	214 - 219	84% - 86%
			wheel rotation speed 3	220 - 225	86% - 88%
			wheel rotation speed 4	226 - 231	89% - 91%
			wheel rotation speed 5	232 - 237	91% - 93%
			wheel rotation speed 6	238 - 243	93% - 95%
			wheel rotation speed 7 (fast)	244 - 255	96% - 100%

21	**fixed gobo shake effect**	step	stop	0 - 9	0% - 4%
			gobo shake R-L speed 1 (slow)	10 - 22	4% - 9%
			gobo shake R-L speed 2	23 - 35	9% - 14%
			gobo shake R-L speed 3	36 - 48	14% - 19%
			gobo shake R-L speed 4	49 - 61	19% - 24%
			gobo shake R-L speed 5	62 - 74	24% - 29%
			gobo shake R-L speed 6	75 - 87	29% - 34%
			gobo shake R-L speed 7	88 - 100	35% - 39%
			gobo shake R-L speed 8	101 - 113	40% - 44%
			gobo shake R-L speed 9 (fast)	114 - 126	45% - 49%
			stop	127 - 138	50% - 54%
			gobo shake L-R speed 1 (slow)	139 - 151	55% - 59%
			gobo shake L-R speed 2	152 - 164	60% - 64%
			gobo shake L-R speed 3	165 - 177	65% - 69%
			gobo shake L-R speed 4	178 - 190	70% - 75%
			gobo shake L-R speed 5	191 - 203	75% - 80%
			gobo shake L-R speed 6	204 - 216	80% - 85%
			gobo shake L-R speed 7	217 - 229	85% - 90%
			gobo shake L-R speed 8	230 - 242	90% - 95%
			gobo shake L-R speed 9 (fast)	243 - 255	95% - 100%
22	**iris**	step	open	0 - 9	0% - 4%
		proportional	linear opening from max to min	10 - 246	4% - 96%
		step	closed	247 - 255	97% 100%
23	**macro iris**	step	no effect	0 - 9	0% - 4%
		proportional	iris pulsed effect at different speed from min to max	10 - 63	4% - 25%
			iris pulse with flash closing from min to max	64 - 117	25% - 46%
			iris pulse with flash closing from max to min	118 - 171	46% - 67%
		step	spare	172 - 255	67% - 100%
24	**effects**	step	no effect	0 - 9	0% - 4%
		proportional	linear frost	10 - 127	4% - 50%
		step	prism 1	128 - 191	50% - 75%
			prism 2	192 - 255	75% - 100%
25	**effects rotation**	step	stop	0 - 9	0% - 4%
		proportional	clockwise rotation from fast to slow speed	10 - 127	4% - 50%
		step	stop	128 - 137	50% - 54%
		proportional	counterclockwise rotation from slow to fast speed	138 - 255	54% - 100%
26	**focus**	proportional	linear control of the image focus	0 - 255	0% - 100%
27	**zoom**	proportional	linear control of the beam zoom from large to narrow	0 - 255	0% - 100%
28	**lamp ON/OFF and motor reset**	step	no effect	0 - 9	0% - 4%
			lamp OFF (3 seconds)	10 - 60	4% - 24%
			no effect	61 - 129	24% - 51%
			lamp ON (3 seconds)	130 - 179	51% - 70%
			no effect	180 - 200	71% - 78%
			internal motor reset	201 - 239	79% - 94%
			total reset	240 - 255	94% - 100%

NOTE: Perform a motor reset after the lamp ignition to obtain the best motor alignment

Projector: Infinity Spot L **Chart name: DMX 512 functions**

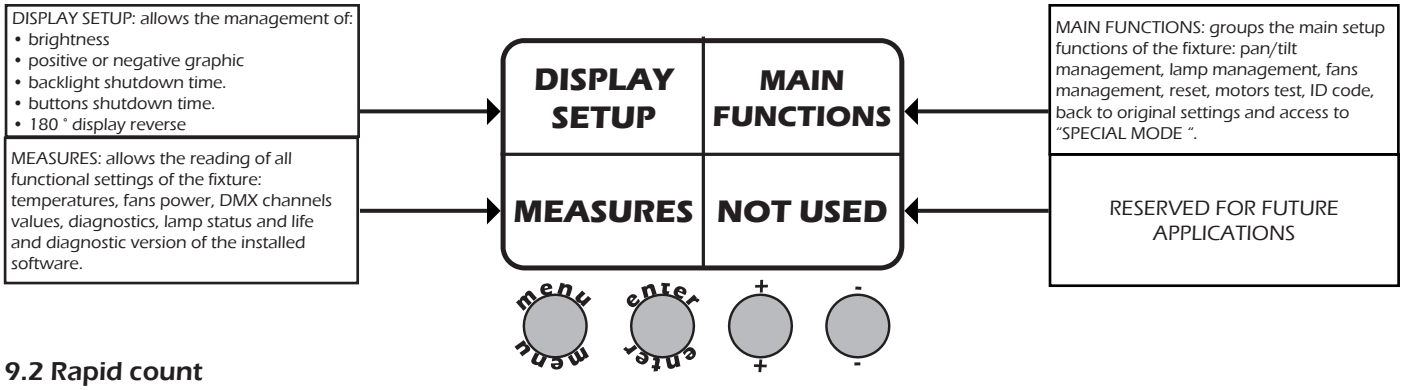
Table number: 341 **Edition: 0** **Data: 10/07/2015**

9. Display panel functions

By suitably using all the functions of **Infinity Spot L**, which can be activated through its display panel, it is possible to change some of the parameters and to add some functions.
Changing the preset settings made by **Coemar** can vary the functions of the projector so that it will respond differently to the controller; therefore carefully read about the functions described hereunder before carrying out any possible selection.

9.1 Quick guide to menù

In order to access the functions, just press the menu button: the screen you see hereunder, divided into four sections, will appear; the sections will be shown cyclically, one by one, every time the + or – button is pressed.
To select the desired function, press enter.

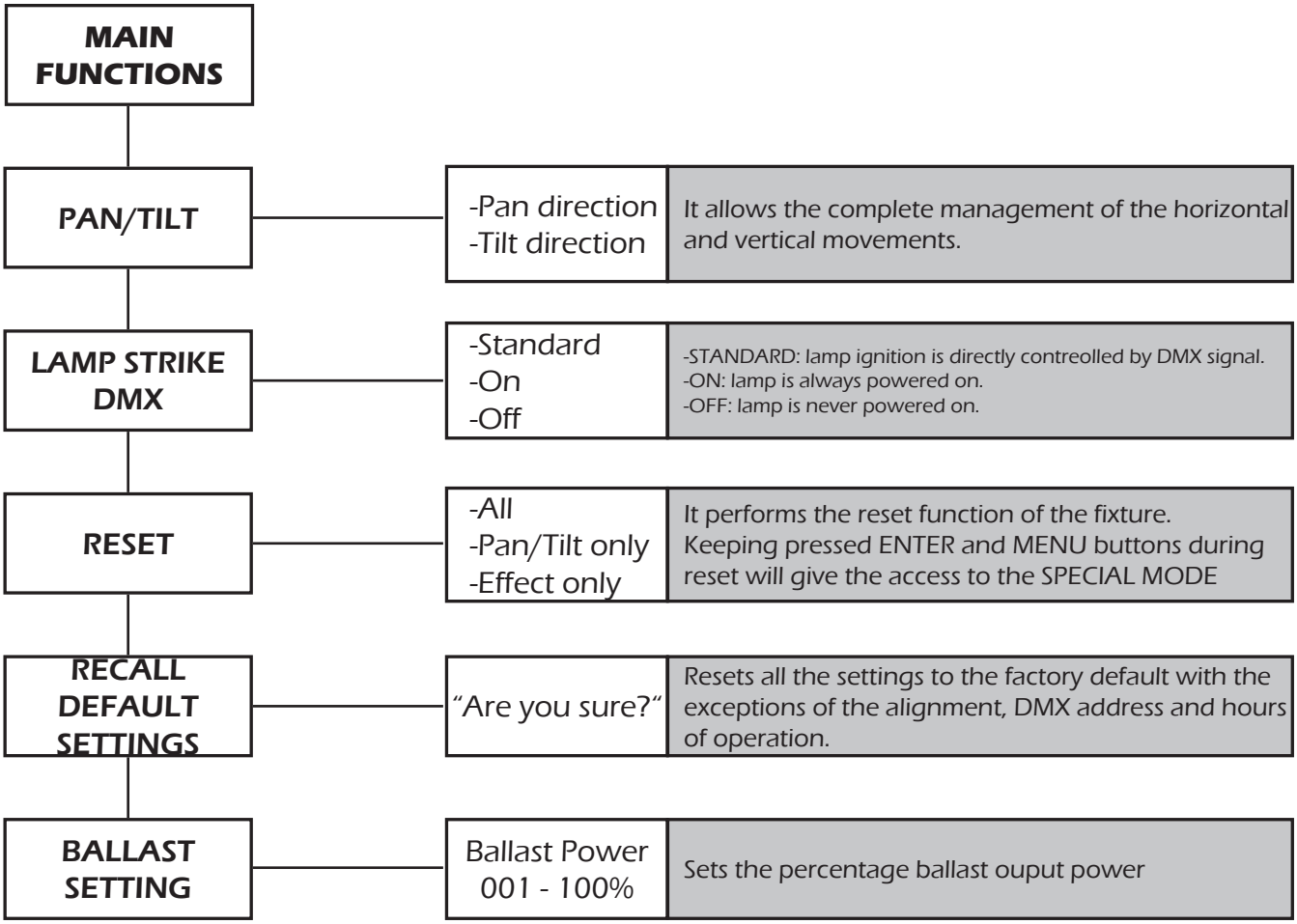


9.2 Rapid count

By the display panel of Infinity Spot L It is possible to rapidly change the various numbers displayed for the different functions in the following 3 manners:
1. Pressing the + or – buttons will cause the count to be quicker.
2. Pressing first + and then – and then holding them down simultaneously will cause the numbers to jump to the highest value.
3. Pressing first – and then + and then holding them down simultaneously will cause the numbers to jump to the lowest value.

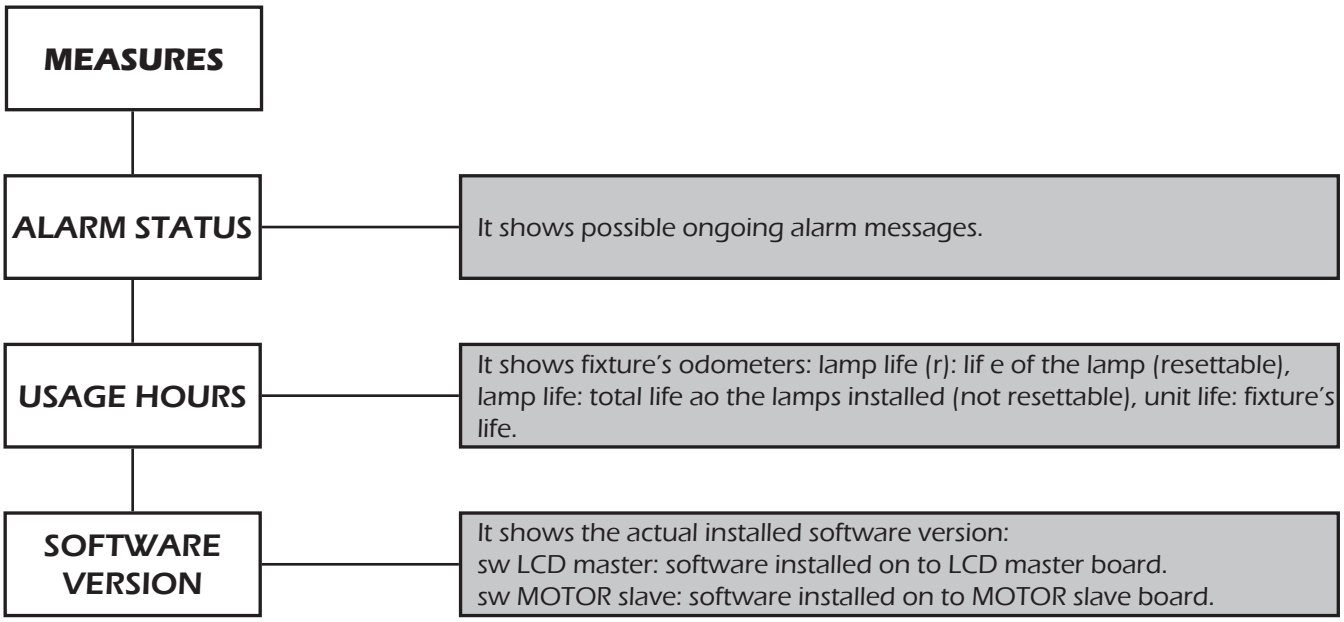
9.3 Main functions

The projector gives the opportunity to change and customize some functional settings.



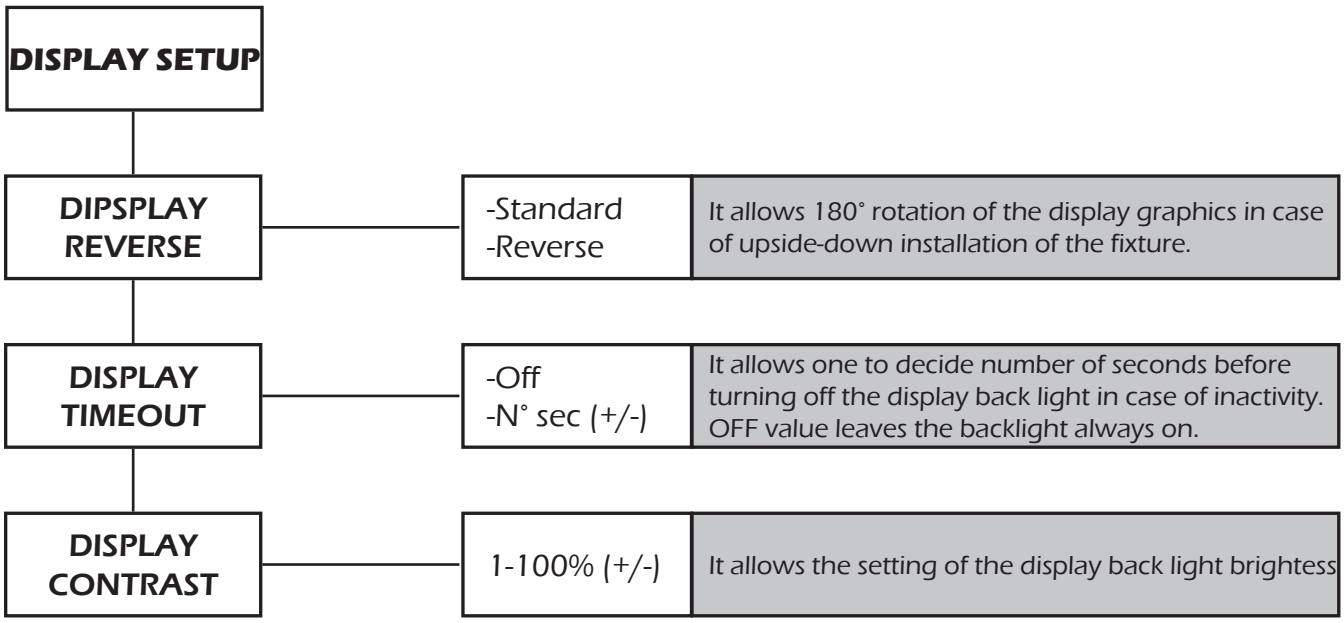
9.4 Measures

The electronics of **Infinity Spot L** allows to make autodiagnostic measurements.



9.5 Display setup

The display setup allows tot une the **Infinity Spot L** functions according to your needs. The following diagram shows the section features.



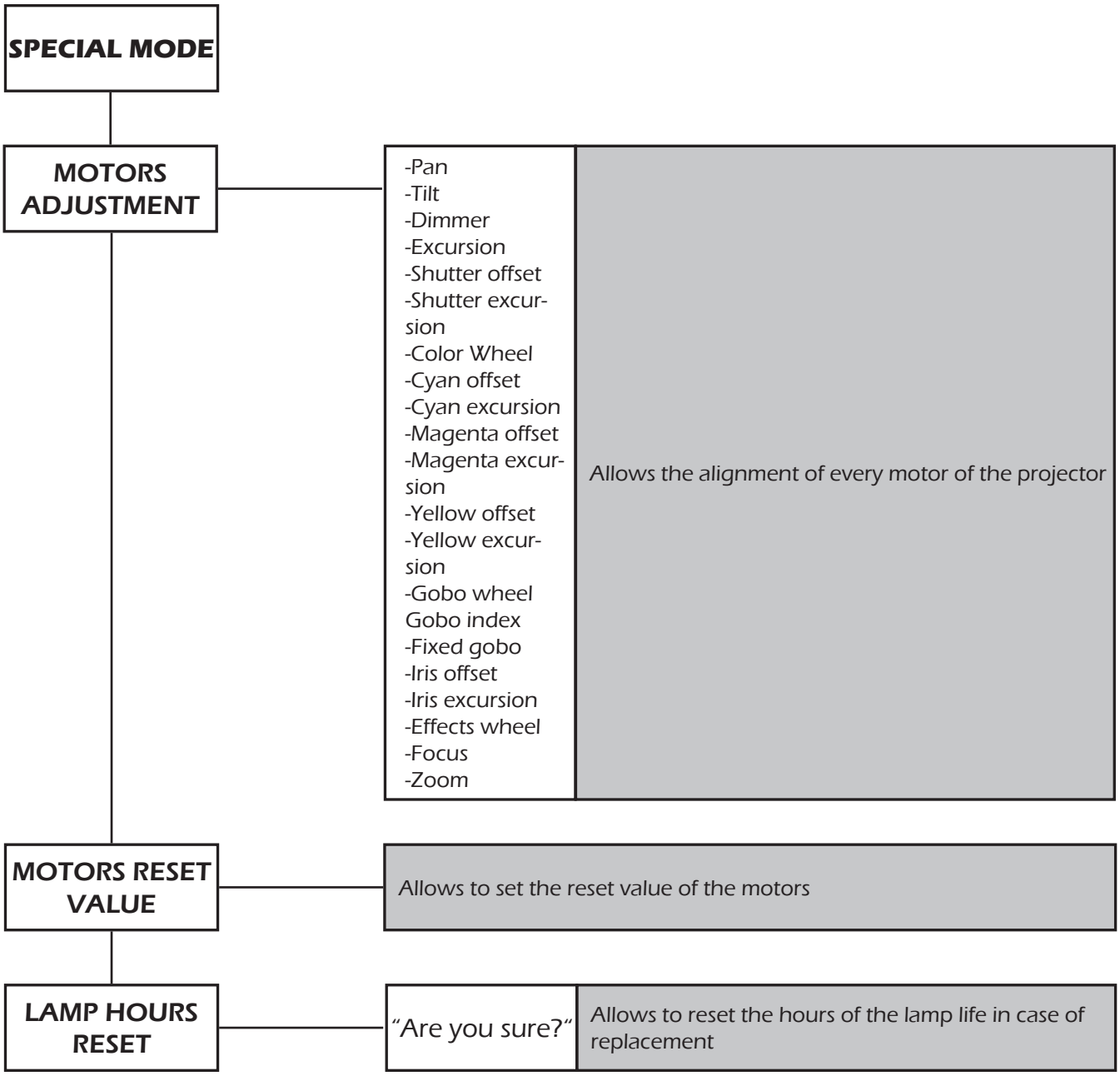
9.6 Special mode and electronic motor alignment

WARNING!
This section is for the exclusive use of qualified and experienced personnel.

SPECIAL MODE menu allows access to the electronic motor alignment section and to special functions, like lamp odometer reset, software upload and download. To enter SPECIAL MODE reach the reset page in the MAIN FUNCTIONS menu, start reset choosing ALL and press simultaneously enter and menu buttons for about 10 seconds.

WARNING!
The electronic alignment is only possible with DMX512 signal active.

The display panel of **Infinity Spot L** allows the electronic motor alignment of the projector motors in the optical system; this procedure is performed by **Coemar** at the factory during the testing: in order to obtain particular effects or in the case of internal components being replaced (motors, electronic boards, sensors, etc.) it may be necessary to change this setting. Altering the default settings performed by **Coemar** may radically alter the functioning of the projector. Carefully read all of the following functions before trying to perform any operations.



10. Lamp installation and alignment

Infinity Spot L comes with one Osram Lock-IT® HTI® 1000W/PS with a PGJX28 base working at maximum power of 1000W. It is possible to install also alternative lamps listed in the table below.These lamps are available as a spare part at your **Coemar**'s distributor or service centre.

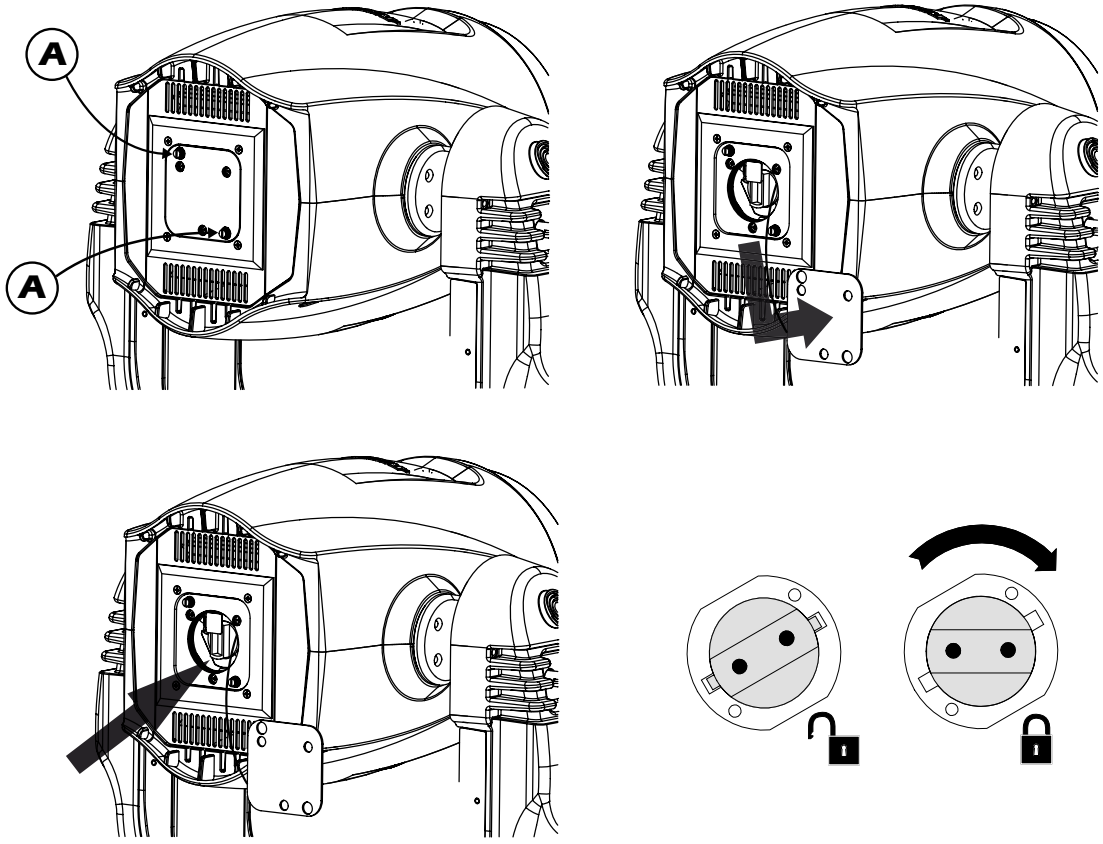
WARNING !
Ballast settings and lamp replacement must be done by qualified personnel.
Disconnect the unit from main power prior to attempting lamp's installation or replacement.

The fixture internal temperature can reach 250° C after 5 minutes, and reach a peak of 350 °C; make sure that the lamp is cold before trying to remove it. In any case the fixture can be opened only 10 minutes after turning off the lamp. The lamp is of the mercury vapour type with discharge ignition. This type of lamp operates at high internal pressure, and a slight risk of explosion exists if the lamp is operated beyond its recommended life. Therefore, we recommend to replace the lamp within the specified lamp life. Always handle the lamp with care avoiding to touch it with bare hands.

10.1 Lamp installation

1. Use a suitable tool to loosen the 2 "A" fixing screws of the lamp holder cover at the rear of the projector body.
2. Remove the lamp holder cover.
3. Insert the lamp into the holder and gently rotate it clockwise until it blocks.
4. The lamp used is made of quartz glass and must be handled with care; always adhere to the instructions provided in the lamp packaging. Never touch the glass directly, use the polythene wrapping provided in the lamp packaging. DO NOT USE UNDUE FORCE ON THE GLASS.
5. Insert the lamp holder cover in its original position and screw the 2 "A" screws back in.

WARNING !
- Never use undue force if the procedure becomes difficult.
- Never put pressure on the glass of the lamp.
Never touch the glass of the lamp with bare hands.



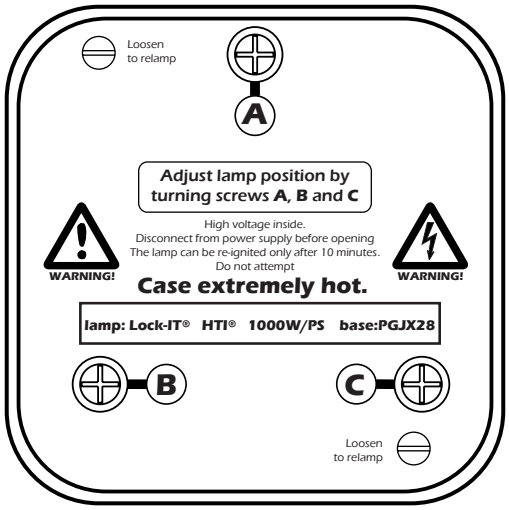
WARNING !
Each time you replace the lamp, we recommend the following operations.
• realign the lamp in the optical system in order to avoid dichroic filters overheating and consequent effects.
• reset the lamp odometer to obtain reliable information about the residual life of the lamp.

10.2 Aligning the lamp in the optical path

Aligning the lamp in the optical system is achieved via the 3 adjusters at the rear of the projector. This procedure should be undertaken to maximize output, to avoid the possible overheating of the internal components due to the incorrect focusing of the beam onto components not predisposed to high temperature. It is extremely important to obtain a uniform distribution of light on all beams.

Alignment procedure

Alignment is carried out by using the 3 screws A, B and C showed in the picture below. The lamp should be on, black-out and dimmer fully open, and no colours selected. If the lamp is not correctly aligned, a hot-spot to the most central part of the beam possible and then flatten the beam to maximum uniformity. The combined regulation of the three adjusters allows horizontal, vertical and axial regulation of the lamp.



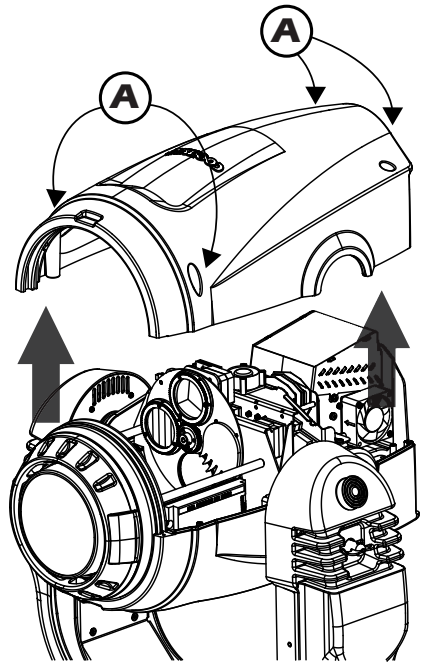
11. Operating on internal groups

The fixture allows the extraction of both gobos and colour changer assemblies in order to facilitate inspection, gobos replacing and clearing of colour filters and lenses.

WARNING!
The following procedures should be undertaken by qualified and experienced technical personnel.
Handle with extreme care!
Always disconnect al cables before proceeding and ensure that the unit is sufficiently cool.

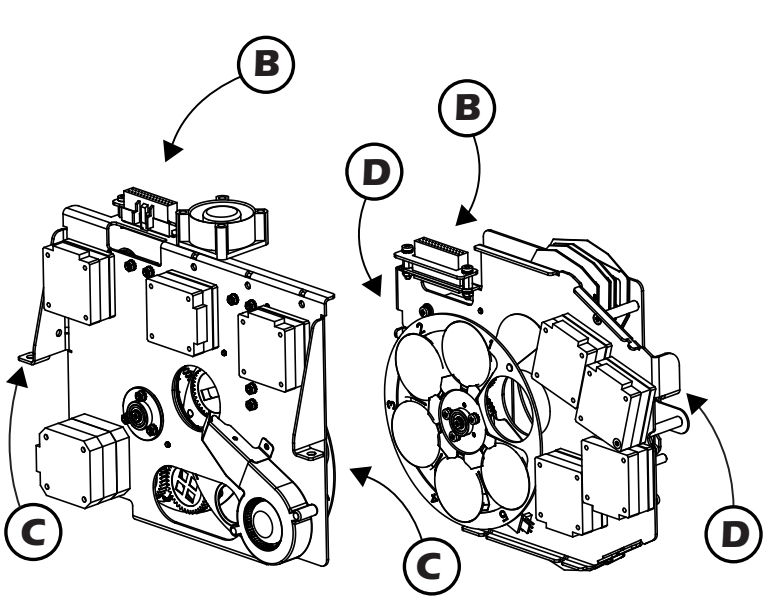
11.1 How to open the projector

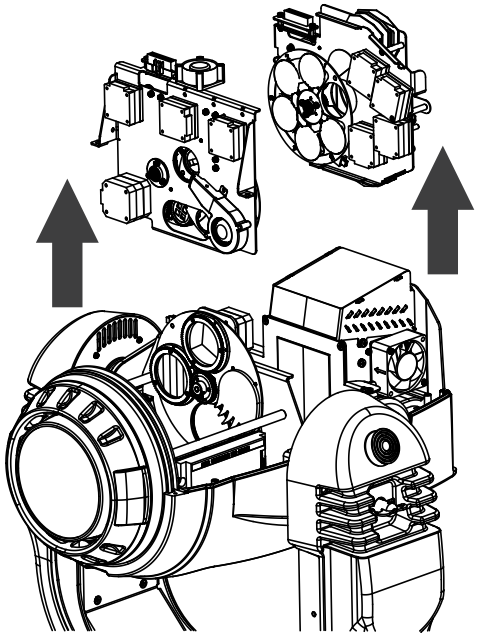
Using an appropriate screwdriver, remove screws "A" from the upper housing and remove this. In order to identify the upper housing to be removed, position the unit so that the printing on the lamp holder group can be read (the printing must not upside down). Once this operation has been carried out, block the movement of the body through the specific device and proceed with the removal of the upper housing.



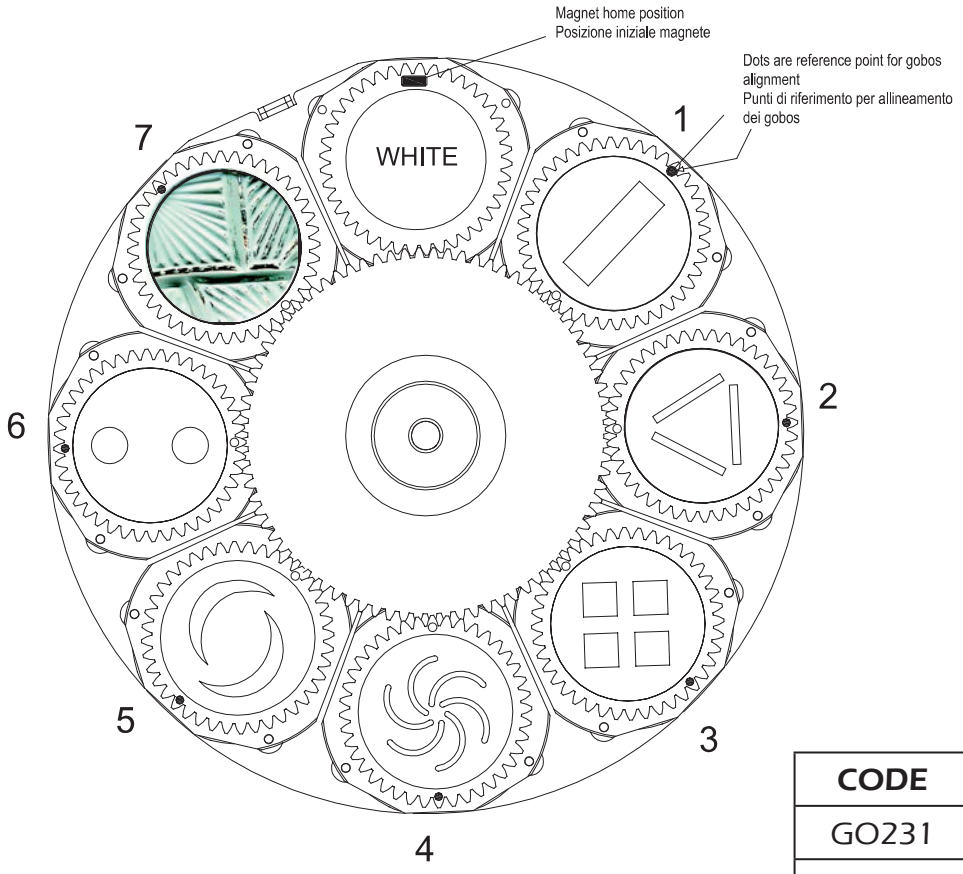
11.2 How to extract the gobos and colour changer assembly.

1. Remove "B" screws of the connectors labeled "gobos" and "color changer" and gently remove the connector.
2. Remove "C" and "D" screws of the two assembly, note that the "D" screws are placed in the inside.
4. Now, gently extract the gobos assembly.
5. Finally extract the color changer assembly.





11.3 Rotating gobo wheel configuration (gobos wheel 1)



CODE	POS	DESCRIPTION	N°
GO231	1	Bold Line	1
GO232	2	Triangle	1
GO233	3	Window	1
GO227	4	Whirl	1
GO234	5	Half Moon	1
GO85	6	Two Dots	1
VT295	7	Cristal	1

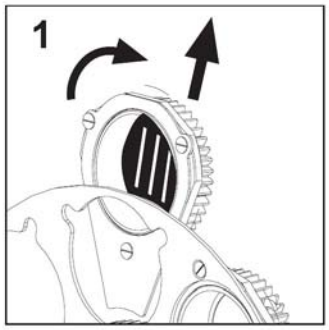
Alternative gobos specifications

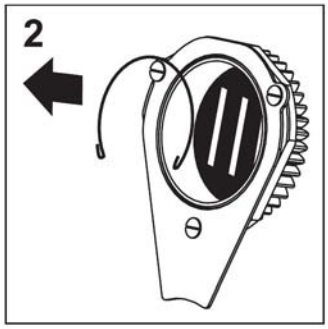
Type of gobo	Working area [mm]	Thickness [mm]	Overall diameter [mm]
Metal gobos	Up to 21	0,5	Up to 21
Glass gobos undefined	Up to 27	from 1 to 4	Up to 26,8
Glass gobos defined	Up to 21	Up to 6,8	Up to 26,8

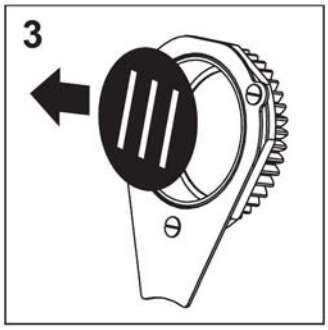
In case of replacing of metal gobos, we strongly recommend to use special gobos provided by Coemar.
In any case gobo's thickness must never be below 0.5 mm.

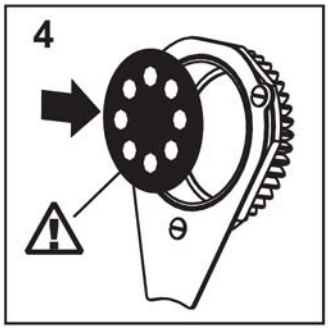
11.4 How to replace gobos

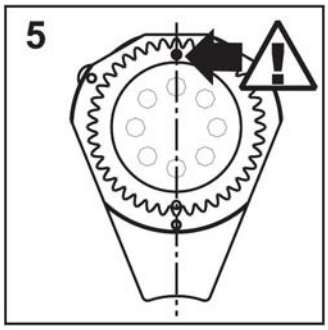
1. Lift and gently extract from the gobo wheel the support which contains the gobo you are going to replace.
2. Remove the spring that fixes the gobo to the support.
3. Remove the old gobo.
4. Insert the new gobo respecting the black side. Avoid to touch the uncoated side.
5. On the gear there is an etched reference point: use it to orient the gobo and fix on to the projector.
6. Mount the spring ensuring it keeps the gobo firm.
7. Check the gobo freely rotate and mount the gobos assembly in the fixture following backwards the procedure explained in the previous section.

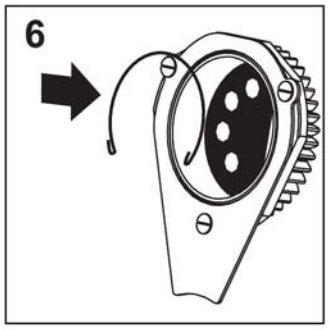


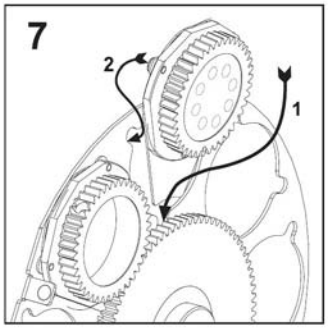






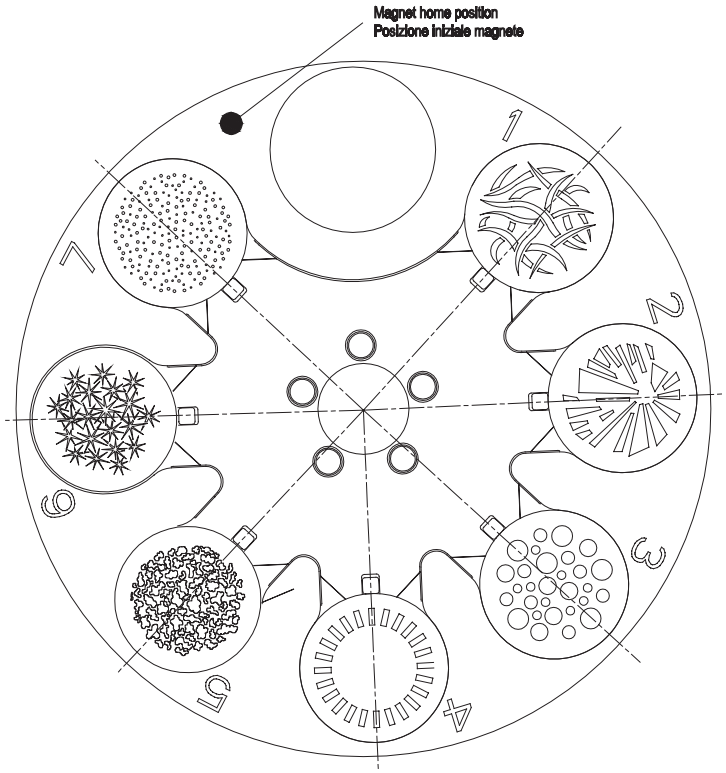






11.5 Standard fixed gobos wheel configuration (gobos wheel 2)

Note: this gobos wheel only accepts gobos made of metal, in case of replacing we strongly recommend to use special gobos supplied by Coemar. In any case, thickness of the gobos never must be under 0,5 mm.

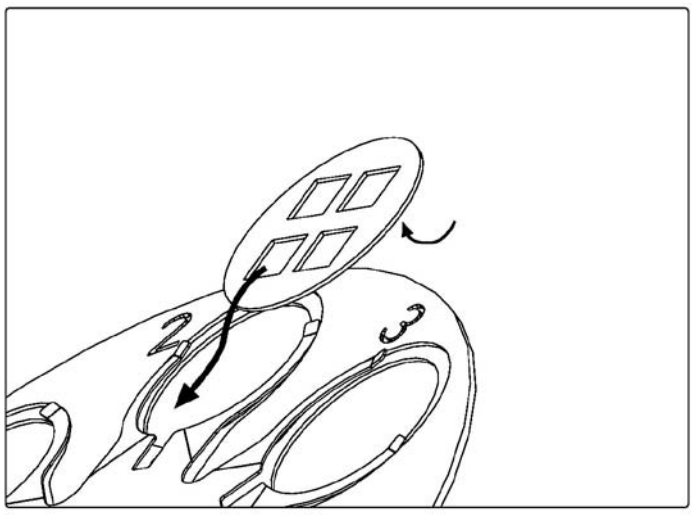


CODE	POS	DESCRIPTION	N°
GO223	1	Snakes	1
GO221	2	Crash	1
GO224	3	Bubbles	1
GO225	4	Breakup dashes	1
GO230	5	Blobs	1
GO222	6	Sparkles	1
GO226	7	Universe	1

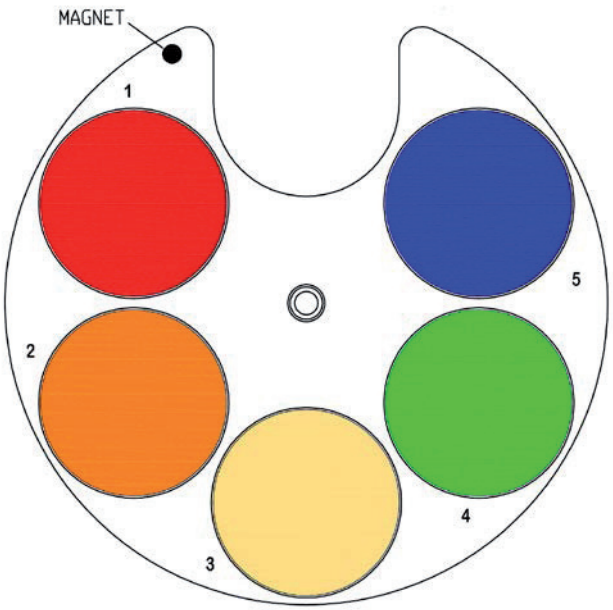
11.6 How to replace gobos on gobos 2 wheel

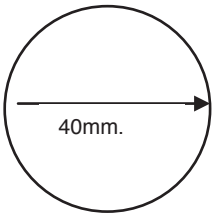
1. Facing the front side of the wheel, gently hold the gobo you want to replace with thumb and finger, then lift it up pushing it with your finger, then remove it.

2. Insert the new gobo making it slip under the spring until it locks; refer to the nick in the spring to keep a useful point of reference to orient the gobos.



11.7 Standard color whel configuration

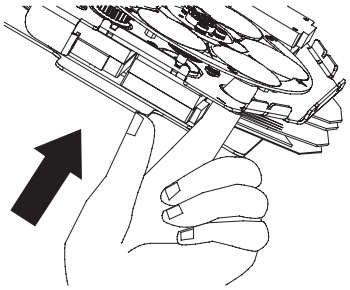


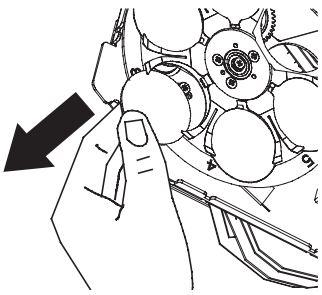


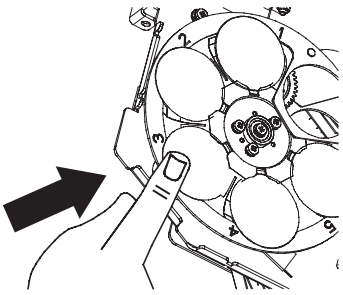
CODE	POS	ROSCO STANDARD	N°
VT357	1	021 Bright Red	1
VT351	2	022 Dark Amber	1
FC050	3	411 Full CT straw	1
VT355	4	089 Moss Green	1
VT353	5	079 Just Blue	1

11.8 How to replace filters

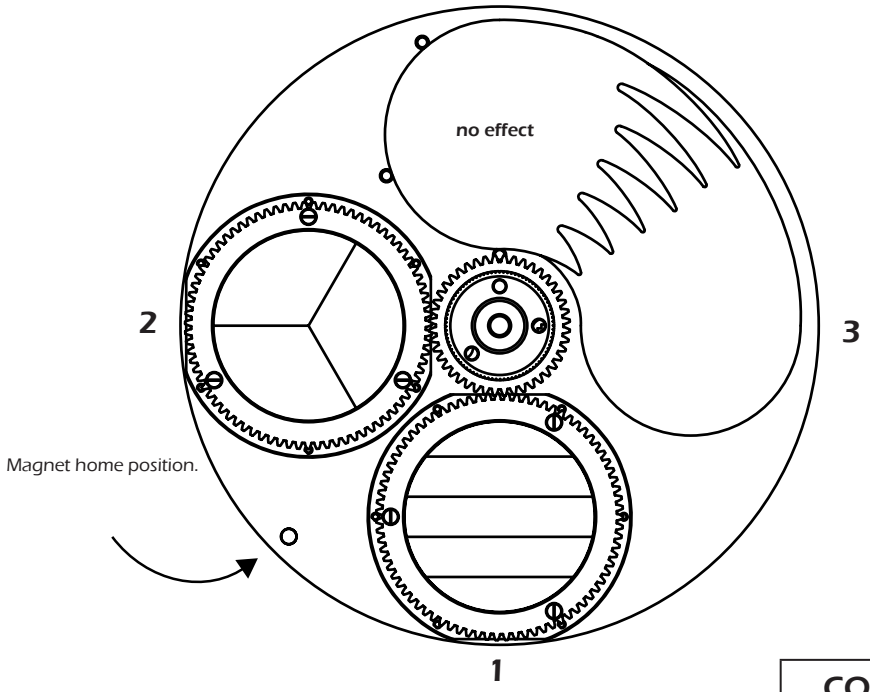
1. Facing the front side of the wheel, push up the filter to replace inserting your finger through the plate hole, then remove the filter.
2. Insert the new filter (facing the coated side downwards) making it slip under the spring until it locks; respect the coated side of the filter (bottom side).
NB: The wheel only accepts glass filters or gobos with a maximum diameter of 40 mm and no more thick than 1 mm.







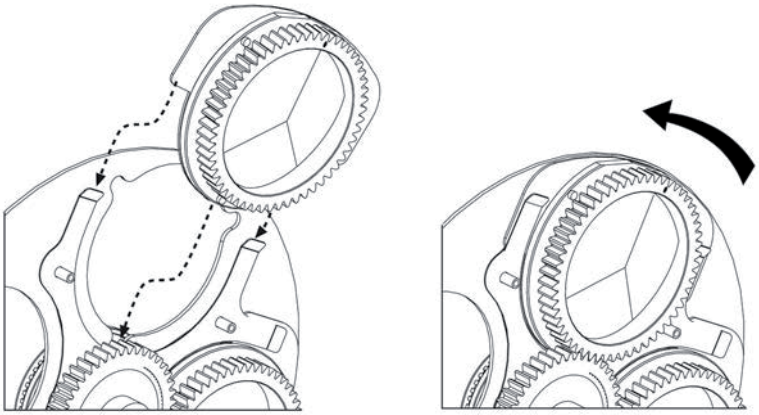
11.9 Standard effect wheel configuration



CODE	POS	DESCRIPTION	N°
COPR03	1	4 Facet Prism	1
COPR01	2	3D Effect	1
VT333	3	Progressive Frost	1

11.10 How to replace effects

1. Lift and gently extract from the wheel the support which contains the effect you are going to replace.
2. Slide the new support under the spring, making sure that it enters in place through the two pins on the back of the support.



11.11 Reassembly the groups on the projector

In order to reassembly the two groups in place, just follow backwards the procedure explained at the beginning of this chapter: half insert the gobo assembly and incline it toward the front of the fixture, Insert the colour changer and then full insert the gobo assembly. Fix the two groups by their screws, connect the cables and fix them again. Verify that the internal of the body is free from loose pieces (washers, screws, etc..) then fix the body cover.

12. Maintenance

12.1 Periodic cleaning

Lenses and filters

Even a fine layer of dust can reduce the luminous output and alter the compactness of the beam. Regularly clean all filters and lenses using a soft cotton cloth, dampened with a specialist lens cleaning solution.

Fans and air passages

The fans and air passages must be cleaned approximately every 8 weeks; the length of the period between each cleaning will depend, of course, upon the conditions in which the projector is operating. Suitable instruments for performing this type of maintenance are a brush and a common vacuum cleaner or an air compressor.
If necessary, do not hesitate to carry this out even after a shorter period of time.

12.2 Periodic maintenance

Lamp

Check the lamp and replace it if there is any observable damage or deformation or if or if the time limit is close (check the resettable counter).

Mechanical parts

Periodically check the movement of all mechanical devices, and check driving belts, gears and lens guides. Replace them if necessary. Make surethe projector is not mechanically damaged. If necessary, replace the worn parts. Check the tension of the belts and adjust them if necessary.

Electrical components

Check all electrical connections, in particular for correct earthing and correct attachment of all extractable connectors. Press the connectors if necessary and reposition as before.

13. Spare parts

All the components of Infinity Spot L are available as replacement spares from your authorized Coemar service centre. Accurate description of the fixture, model number and type will assist us in providing for your requirements in an efficient and effective manner.

14. Error Messages

If you have to check a malfunction, **Infinity Spot L** has an auto diagnostic system that visualizes in the lower part of the display one or more intermittent messages, preceded by "ERR".
The following table will help you to understand these messages correctly. If the problem persists despite carrying out the suggested procedure, contact your **Coemar Customer Service Centre**.

Error Messages	Description and suggested solution
ERR: Memory FAILURE	Internal memory writing error. Contact your authorized Coemar Service center
ERR: CFG data FAILURE	Configuration data error. The initial parameter setting has failed, the projector has loaded its factory default setting. Turn the projector off and on again. Should the error reoccur, refer to your authorised Coemar service centre
ERR: DMX address	DMX addressing error. The projector is not receiving all DMX channels needed to operate correctly. Check the DMX address indicated on the display and the number of channels being output from the controller (some controllers do not exceed 12 channels)
ERR: DMX frame	DMX frame error. DMX signal present but frame too short; the controller has not enough channels to control the projector
ERR: No Slave LINK	Communication error. The LCD board is not communicating properly with the main board. Check the cabling connecting the boards or refer to your authorised Coemar service centre.
ERR: No Ballast LINK	Communication error. The LCD board is not communicating properly with the ballast. Check the cabling connecting the boards or refer to your authorised Coemar service centre.
ERR: Ballast Temp. #1	Primary ballast temperature too high. Check that the ambient temperature does not exceed 40°C check also the proper functioning of the fans.
ERR: Ballast Temp.#2	Secondary ballast temperature too high. Check that the ambient temperature does not exceed 40°C check also the proper functioning of the fans.
ERR: Vin line low	Too low main power input. Main power voltage is too low, it must be at least 90 Vac.
ERR: Vout lamp high	Too high lamp voltage. Lamp can be exhausted and so consume more power than normal. Replace the lamp and if needed, refer to your authorised Coemar service centre.
ERR: Encoder PAN	PAN encoder not found. Check the sensor on the encoder wheel placed at the base to detect the position of the PAN movement motor; check the motor and the relevant cabling
ERR: Encoder TILT	TILT encoder not found. Check the sensor of the encoder wheel placed on the fixture's yoke to detect the position of the TILT movement motor; check the motor and the relevant cabling
ERR: Sensors Line #2	The sensor does not detect the magnet. Check sensor and motor cabling of the Gobos assembly.
ERR: Sensors Line #3	Sensor line 3 error. Control circuit error relating to position sensors for the motors. (EFFECTS, ZOOM, FOCUS) posta nella forcella: il sensore non rileva il magnete. The sensor does not detect the magnet. Check sensor and motor cabling of the Zoom, Focus and effect wheel.
ERR: Sensors Line #5	Sensor line 5 error. Control circuit error relating to position sensors for the motors of the colour changer assembly. The sensor does not detect the magnet. Check sensor and motor cabling of the colour changer assembly.
ERR: EFFECT Wheel	Position error of the effect wheel. The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor of the effect wheel.
ERR: EFFECT Index	Initial position error of the effect. The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on effect #1.
ERR: COLOR Wheel	Position error of the color wheel. The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor of the colour wheel. Check the correct tightening of the transmission belt.
ERR: GOBO 1 Wheel	Position error of the gobo wheel 1. The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor of the gobos 1 wheel.
ERR: GOBO 1 Index	Initial position error of the gobo wheel 1. The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on gobos 1.
ERR: GOBO 2 Wheel	Position error of the gobo wheel 2. The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor of the gobos 2 wheel.
ERR: ZOOM	Zoom error. The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on the Zoom lens carriage. Check the correct tightening of the transmission belt.
ERR: FOCUS	Focus error. The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on the Focus lens carriage. Check the correct tightening of the transmission belt.

15. Frequently asked questions

Domanda	Causa Possibile	Possibile Soulzione
The projector is completely still.	Projector not powered up:. The circuit breaker is switched off. The protection fuse is blown.	Check that the mains power cable is connected to power. Set the circuit breaker to ON. Disconnect the projector and replace the fuse.
The projector resets correctly, but either does not respond, or responds incorrectly, to DMX signal.	Incorrect DMX address. Incorrect signal connection.	Inspect the signal cable, rectify any incorrect wiring, repair or replace any damaged cables or connectors. Check the DMX address
The lamp functions intermittently or does not turn on at all.	The projector is too hot.	Let the fixture cool down. Check that the air vents above the cooling fans are not obstructed and that the fans are working correctly. Ensure that the ambient emperature is below 35°C
Projection brightness appears reduced	Lamp may be exhausted or not properly aligned to optical path. Replace the lamp if exhausted.	Replace the lamp if exhausted. Align the lamp to optical path.

Information on disposal of the equipment

The equipment at the end of its useful life must be disposed of at an appropriate recycling center for waste electrical and electronic equipment. The treatment and disposal of environmentally friendly, helps prevent potential negative environmental and health and promote the reuse and / or recycling of materials making up the equipment. Illegal disposal by the user includes the application of administrative sanctions provided by law.

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