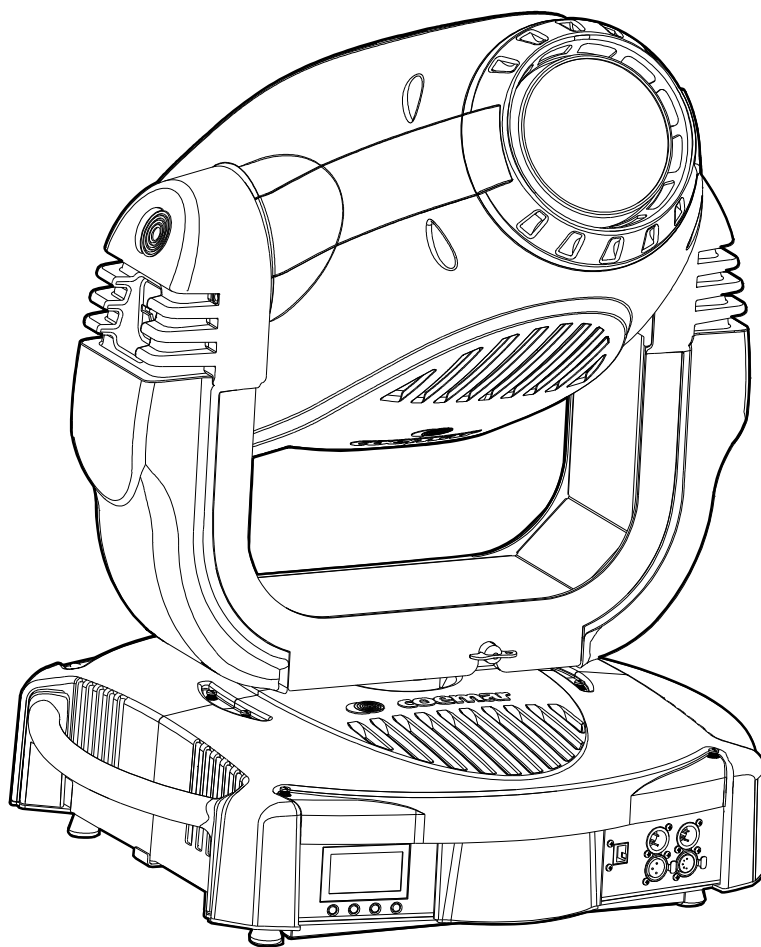


∞ Infinity Spot XL



**instruction manual
manuale di istruzioni**

**Version 1.1
DIS123**

 **coemar**

Infinity Spot XL

serial number / numero di serie

date of purchase / data di acquisto

retailer / fornitore

address / indirizzo

postcode, town / cap, città

province / provincia

state / stato

telephone, fax / telefono, fax

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

Prendete nota , nello spazio apposito, dei dati relative al modello e al rivenditore del vostro **Infinity Spot XL**: questi dati ci permetteranno di assistervi con la massima rapidità e precisione.

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

ATTENZIONE: la sicurezza dell'apparecchio è garantita solo con l'uso appropriato delle presenti istruzioni, pertanto è necessario conservarle.

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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 thoroughly 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 carrier 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 XL** projector.
2. the instruction manual.
3. two (2) cam-lock support brackets.

1.2 Transportation

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

2. General Information

Fire prevention:

1. **Infinity Spot XL** utilises a Philips MSR GOLD 1500 FastFit; 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: 2 m.
4. Minimum distance from the closest illuminable surface: 2 m.
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 XL** 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:

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 262° 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 IP 20.

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 or use by inexperienced operators.
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: 180~260 Vac 50/60 Hz Autosensing

Maximum current: 12A @ 230 V.

Power factor: $\cos\phi = 0,98$

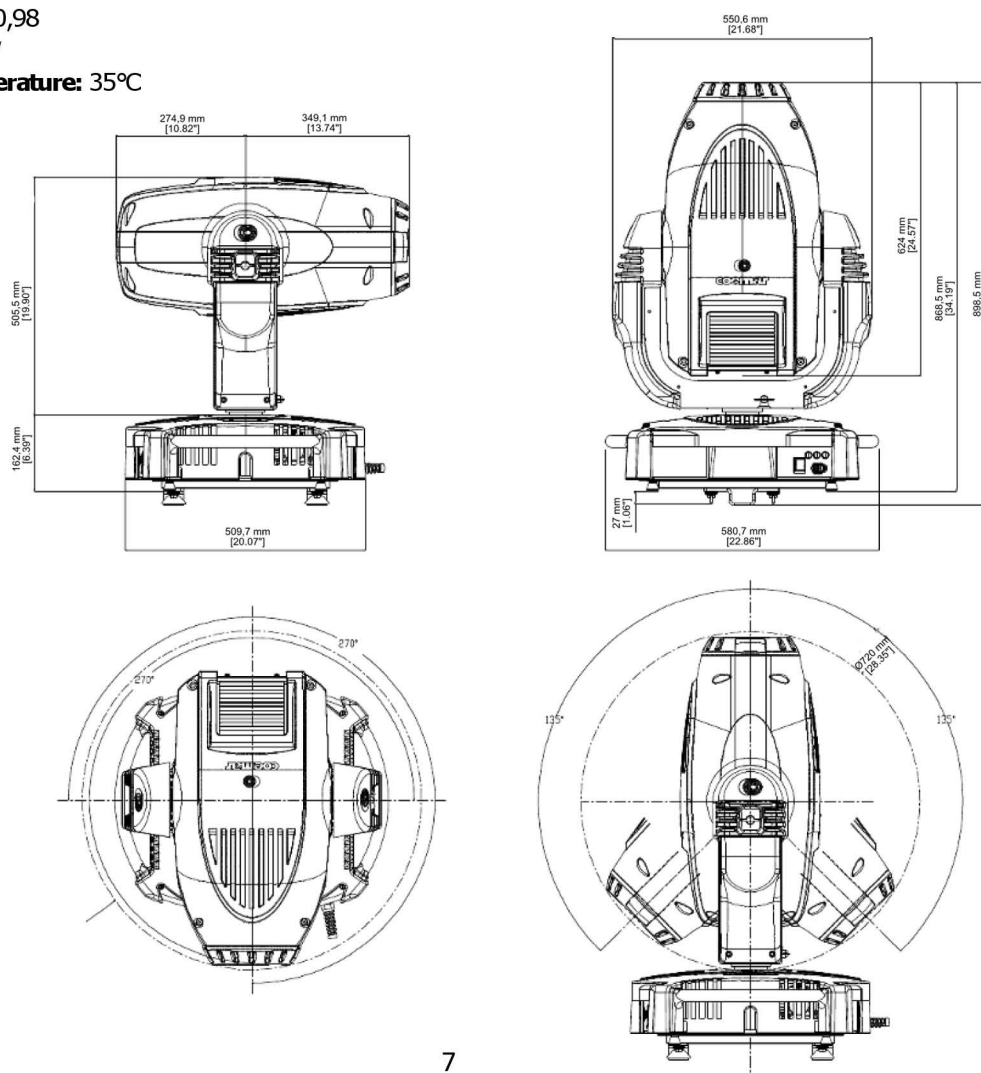
Lamp wattage: 1500W

Maximum room temperature: 35°C

Weight: 55 Kg

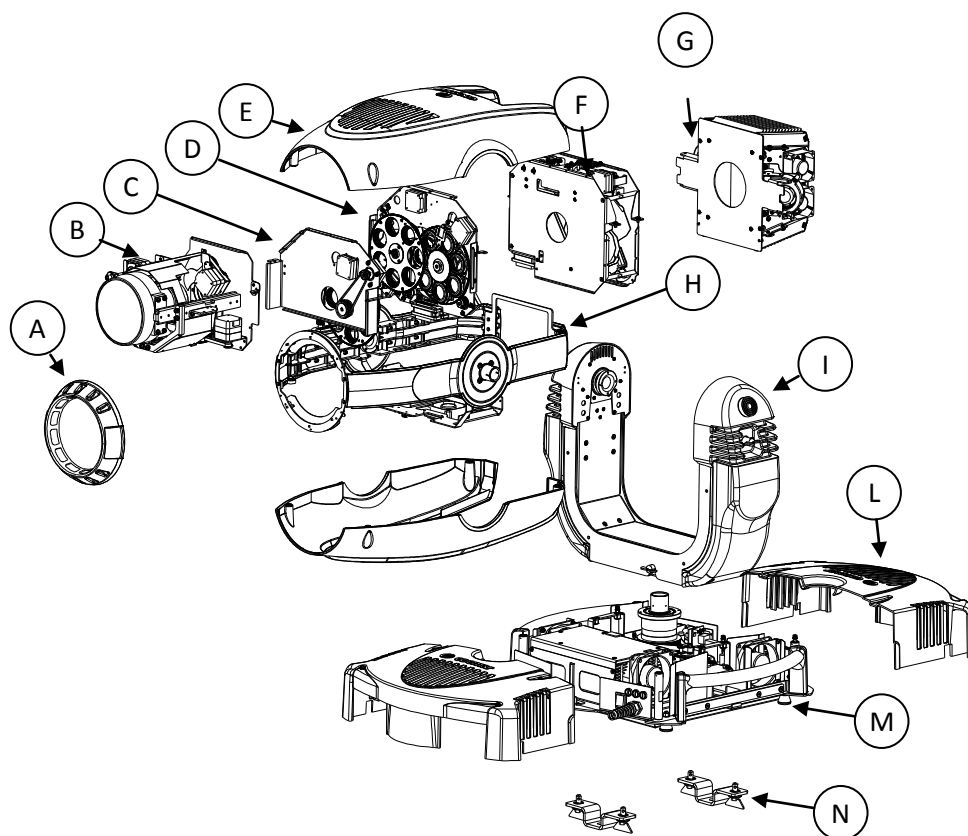
IP rating: IP 20

3.2 Dimensions:



English

3.3 Projector Components

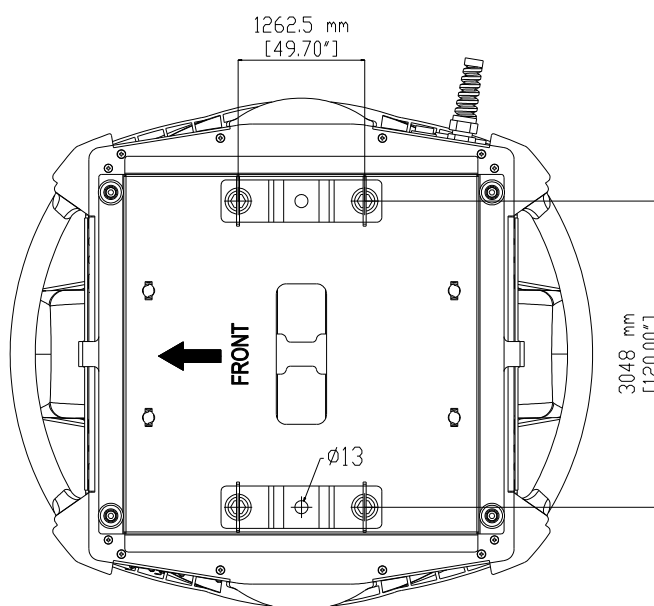


Components description	
A	Front ring
B	Zoom assembly
C	Effect assembly
D	Gobos assembly
E	Body casing
F	Color changer assembly
G	Lamp assembly
H	Body
I	Yoke
L	Base casing
M	Base
N	Cam Lock

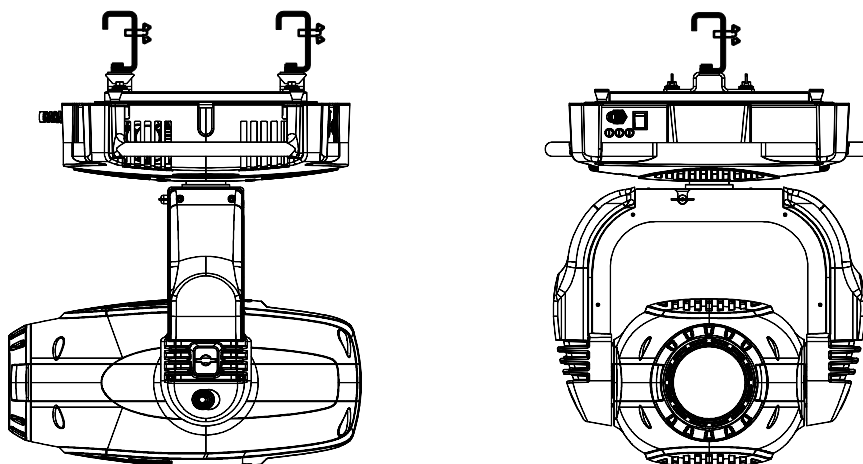
4. Installation

4.1 Mechanical installation

Infinity Spot XL 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 two cam-lock support brackets, which are included in the packaging. The cam-lock brackets are one-fourth-turn supports. Before using them for supporting the projector, make sure that they are 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.

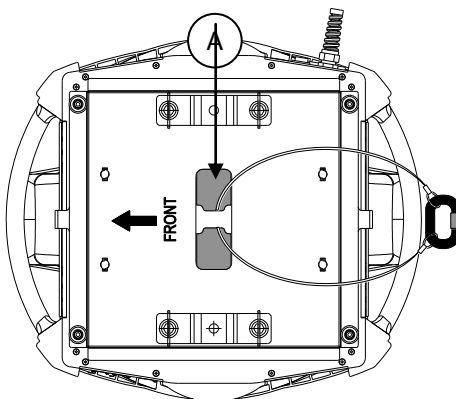
The structure must also be sufficiently rigid so as not to move or shake whilst the **Infinity Spot XL** projector moves during its operation. Make sure that the supporting structure is not subject to torsion.

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 XL** 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

Mains cable characteristics

The mains cable provided is a special thermally resistant cable, complying with the most recent international standards. It is VDE approved and complies with IEC norms, IEC 331, IEC 332 3C, CEI 20 35.

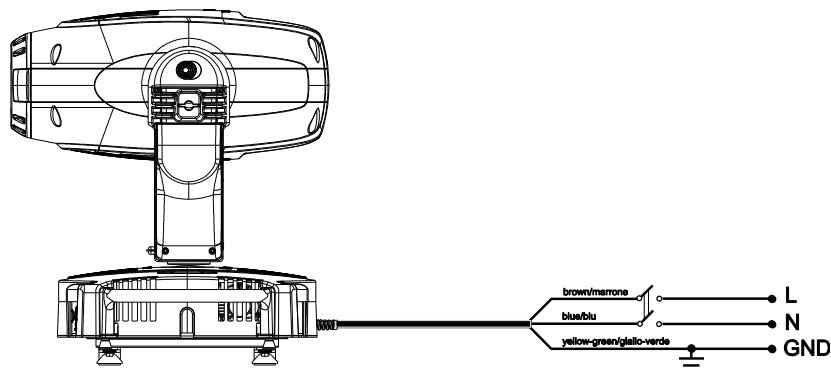
NB: In case of cable replacement, similar cable with comparable thermal resistant qualities must be used exclusively (cable 3x1.5 ø external 10 mm, rated voltage 300/500V, test voltage 2KV, operation temperature -40°C+ 180°C, Coemar CV5309).

English

Connection 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.



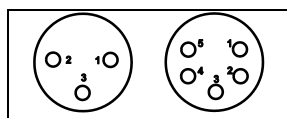
WARNING !

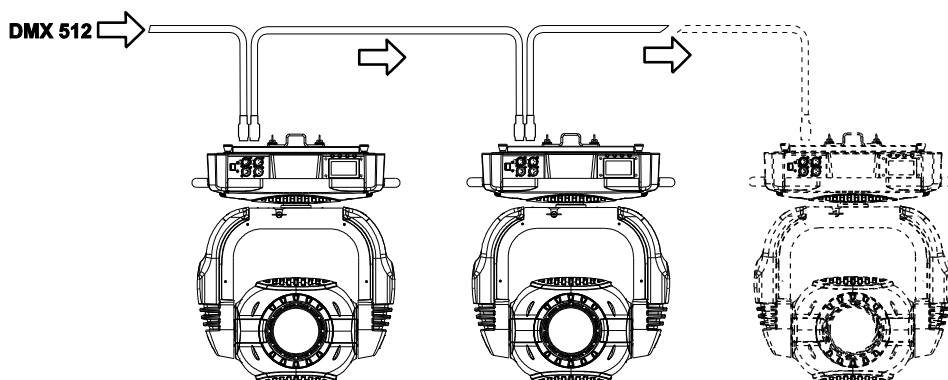
- The use of a thermal magnetic circuit breaker is recommended for each projector. Strictly adhere to all regulatory norms.
- Infinity Spot XL cannot be powered through Dimmer power units.
- A good earth connection is necessary for the correct operation of the Infinity Spot XL. Never connect the projector 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 XL**, labelled DMX 512 IN and OUT (see diagram)

The connection conforms to the international standards and connections must be carried out according to the following table:

	Pin 1= Ground
	Pin 2= DATA -
	Pin 3= DATA +
	Pin 4= NC
	Pin 5= NC



When signal arrives from a DMX 512 console with Cannon 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.**

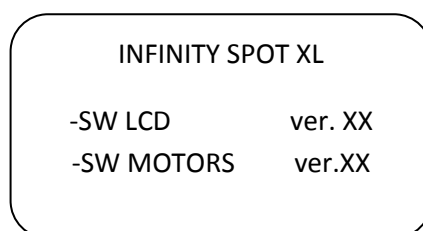
6.1 Connection through ArtNet protocol.

The ArtNet protocol allows enabled projectors to operate and to be seen as a normal network device, such as a standard P.C. connected to a company network.

Infinity Spot XL leaves the factory ready to be connected to an ArtNet network without any further settings. Just connect the projector by means of the specific RJ45 connector located on the side of the DMX connectors and the relative patch to a common HUB Ethernet which will be connected to an ArtNet controller. Each Coemar projector has its own IP address, therefore it is not necessary to set it when connecting it to the network. Should it be necessary to modify the IP address for reasons related to the net, each Coemar projector allows customization. In order to modify the net setting, access the MAIN FUNCTION/PROJECTOR CONTROL MODE/ARTNET ONLY menu (alternatively, Artnet to DMX) /CUSTOM IP ADDRESS (see complete menu, art. 8.3).

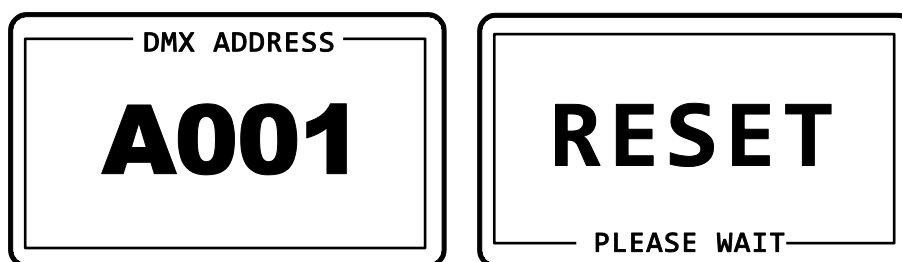
7. Turning on the projector

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:



Software version currently installed on the main board (LCD) and on motor cards (MOTOR)

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 the reset function the display will blink for a few seconds...

.. then the DMX address of the projector 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.

English

7.1 DMX address of the projector

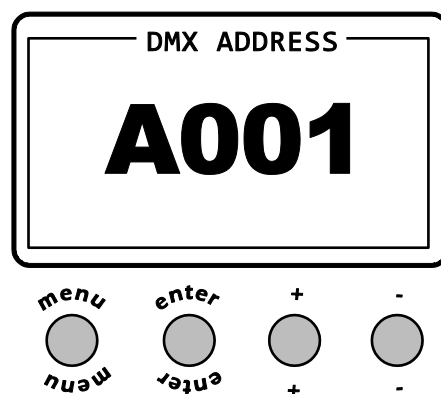
NB: The following section is valid only in the case where Infinity Spot XL is controlled by the signal DMX 512.

Each projector utilises 31 address channels (16 bit) 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 31 from your DMX 512 controller. A second unit must be addressed as A032, a third as A063 and so on. The operation must be carried out every Infinity Spot XL which has an address different from A001.

Altering DMX address

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



N.B. : by holding the + or - buttons 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.

7.2 DMX functions

channel		function	type of control	effect	decimal		percentage	
16 bit	8 bit							
1	1	X axis, base movement (pan) coarse	proportional	proportional coarse control of the base motor movement	0	- 255	0%	- 100%
2	2	X axis, base movement (pan) fine	proportional	proportional fine control of the base motor movement	0	- 255	0%	- 100%
3	3	Y axis, yoke movement (tilt) coarse	proportional	proportional coarse control of the yoke motor movement	0	- 255	0%	- 100%
4	4	Y axis, yoke movement (tilt) fine	proportional	proportional fine control of the yoke motor movement	0	- 255	0%	- 100%
5	5	movement speed	step	standard (fast)	0	- 10	0%	- 4%
			step	ultra fast movement (best for programming positions)	11	- 25	4%	- 10%
			proportional	vector mode (from fast to slow)	26	- 127	10%	- 50%
			proportional	tracking mode (from fast to slow)	128	- 247	50%	- 97%
			step	tracking mode (slow)	248	- 255	97%	- 100%
6	6	dimmer	proportional	gradual adjustment of luminous intensity from 0 to 100%	0	- 255	0%	- 100%
7	7	shutter, strobe and zap effect	step	shutter closed (zap off)	0	- 9	0%	- 4%
			proportional	strobe effect with variable speed from slow to fast	10	- 66	4%	- 26%
			step	shutter open (zap off)	67	- 68	26%	- 27%
			proportional	sequenced pulse effect, slow closing, fast opening (with variable speed from slow to fast)	69	- 125	27%	- 49%
			step	shutter open (zap off)	126	- 127	49%	- 50%
			proportional	sequenced pulse effect, fast closing, slow opening (with variable speed from fast to slow)	128	- 184	50%	- 72%
			step	shutter open (zap off)	185	- 187	73%	- 73%
			proportional	random strobe effect, non-synchronised, variable speed from slow to fast	188	- 244	74%	- 96%
8	8	iris diaphragm (LIN-Linear)	step	open	0	- 9	0%	- 4%
			proportional	from maximum to minimum aperture	10	- 255	4%	- 100%
8	8	iris diaphragm (with internal PULS effect)	step	open	0	- 9	0%	- 4%
			proportional	from maximum to minimum aperture	10	- 124	4%	- 49%
			step	minimum diameter	125	- 129	49%	- 51%
			proportional	pulsing with proportional increase in speed	130	- 189	51%	- 74%
			step	open	190	- 192	75%	- 75%
			proportional	pulse and flash effect with proportional increase in speed	193	- 255	76%	- 100%
Note 1: the iris diaphragm operation will vary according to the selection made for IRIS on the display panel (linear LIN or with internal PULS effect)								
9	9	zoom	proportional	proportional control of zoom effect wheel from narrow to wide beam	0	- 255	0%	- 100%
10	10	focus	proportional	proportional control of focus	0	- 255	0%	- 100%
11	11	rotation gobo selection on wheel 1 (standard)	step	no gobo	0	- 10	0%	- 4%
				gobo 1	11	- 40	4%	- 16%
				gobo 2	41	- 70	16%	- 27%
				gobo 3	71	- 100	28%	- 39%
				gobo 4	101	- 130	40%	- 51%
				gobo 5	131	- 160	51%	- 63%
				gobo 6	161	- 192	63%	- 75%
			proportional	continuous rotation of the gobo wheel from slow to fast	193	- 255	76%	- 100%
11	11	rotation gobo selection on wheel 1 (effect activated from channel 31/28)	step	no gobo	0	- 10	0%	- 4%
			proportional	from gobo 1 to gobo 6 through 360°				
				gobo 1 (central value 36)				
				gobo 2 (central value 62)				
				gobo 3 (central value 88)	11	- 192	4%	- 75%
				gobo 4 (central value 114)				
				gobo 5 (central value 140)				
				gobo 6 (central value 166)				
				continuous rotation of the gobo wheel from slow to fast	193	- 255	76%	- 100%
Note 2: channel 11 will vary according to the selection made for channel 31 (16 bit) / 28 (8 bit)								

English

channel		function	type of control	effect	decimal		percentage	
16 bit	8 bit							
12	12	indexing gobo rotation on wheel 1 through 360°	step	no effect	0	- 10	0%	- 4%
			proportional	proportional indexing of the gobos through 360°	11	- 255	4%	- 100%
13		fine indexing of the gobos	proportional	fine indexing of the gobo (gobo wheel 1)	0	- 255	0%	- 100%
14	13	gobo rotation on wheel 1	step	no effect	0	- 10	0%	- 4%
			proportional	continuous rotation of the gobo in a clockwise direction with proportional control over decreasing speed	11	- 131	4%	- 51%
			step	gobo stop	132	- 134	52%	- 53%
			proportional	continuous rotation of the gobo in a counter-clockwise direction with proportional control over increasing speed	135	- 255	53%	- 100%
Note 3: when channel 12 is set to a level between 0 and 10, gobo rotation does not effect indexing, the gobo stops instantly								
15	14	rotating gobo selection on wheel 2 (standard)	step	no gobo	0	- 10	0%	- 4%
				gobo 1	11	- 40	4%	- 16%
				gobo 2	41	- 70	16%	- 27%
				gobo 3	71	- 100	28%	- 39%
				gobo 4	101	- 130	40%	- 51%
				gobo 5	131	- 160	51%	- 63%
				gobo 6	161	- 192	63%	- 75%
			proportional	continuous rotation of the gobo wheel from slow to fast	193	- 255	76%	- 100%
15	14	rotating gobo selection on wheel 2 (effect activated from channe 31/28)	step	no gobo	0	- 10	0%	- 4%
			proportional	from gobo 1 to gobo 6 through 360°	11	- 192	4%	- 75%
				gobo 1 (central value 36)				
				gobo 2 (central value 62)				
				gobo 3 (central value 88)				
				gobo 4 (central value 114)				
gobo 5 (central value 140)								
gobo 6 (central value 166)								
	continuous rotation of the gobo wheel from slow to fast	193	- 255	76%	- 100%			
Note 4: channel 15 (16bit) / 14 (8bit) will vary according to the selection made for channel 31 (16 bit) / 28 (8 bit)								
16	15	indexing gobo rotation on wheel 2 through 360°	step	no effect	0	- 10	0%	- 4%
			proportional	proportional indexing of the gobos through 360°	11	- 255	4%	- 100%
17		fine indexing of the gobos	proportional	fine indexing of the gobo (gobo wheel 2)	0	- 255	0%	- 100%
18	16	gobo rotation on wheel 2	step	no effect	0	- 10	0%	- 4%
			proportional	continuous rotation of the gobo in a clockwise direction with proportional control over decreasing speed	11	- 131	4%	- 51%
			step	gobo stop	132	- 134	52%	- 53%
			proportional	continuous rotation of the gobo in a counter-clockwise direction with proportional control over increasing speed	135	- 255	53%	- 100%
Note 5: when channel 16 (16bit) / 15 (8 bit) is set to a level between 0 and 10, gobo rotation does not affect indexing, the gobo stops instantly								
19	17	rotating gobo selection on wheel 3 (standard)	step	no gobo	0	- 10	0%	- 4%
				gobo 1	11	- 40	4%	- 16%
				gobo 2	41	- 70	16%	- 27%
				gobo 3	71	- 100	28%	- 39%
				gobo 4	101	- 130	40%	- 51%
				gobo 5	131	- 160	51%	- 63%
				gobo 6	161	- 192	63%	- 75%
			proportional	continuous rotation of the gobo wheel from slow to fast	193	- 255	76%	- 100%
19	17	rotating gobo selection on wheel 3 (effect activated from channel 31/28)	step	no gobo	0	- 10	0%	- 4%
			proportional	from gobo 1 to gobo 6 through 360°	11	- 192	4%	- 75%
				gobo 1 (central value 36)				
				gobo 2 (central value 62)				
				gobo 3 (central value 88)				
				gobo 4 (central value 114)				
				gobo 5 (central value 140)				
gobo 6 (central value 166)								
	continuous rotation of the gobo wheel from slow to fast	193	- 255	76%	- 100%			
Note 6: channel 19 (16 bit) / 17 (8 bit) will vary according to the selection made for channel 31 (16 bit) / 28 (8 bit)								
20	18	indexing gobo rotation on wheel 3 through 360°	step	no effect	0	- 10	0%	- 4%
			proportional	proportional indexing of the gobos through 360°	11	- 255	4%	- 100%
21		fine indexing of the gobos	proportional	fine indexing of the gobo (gobo wheel 3)	0	- 255	0%	- 100%

channel		function	type of control	effect	decimal		percentage	
16 bit	8 bit							
22	19	gobo rotation on wheel 3	step	no effect	0	- 10	0%	- 4%
			proportional	continuous rotation of the gobo in a clockwise direction with proportional control over decreasing speed	11	- 131	4%	- 51%
			step	gobo stop	132	- 134	52%	- 53%
			proportional	continuous rotation of the gobo in a counter-clockwise direction with proportional control over increasing speed	135	- 255	53%	- 100%
Note 7: when channel 20 (16bit) / 18 (8 bit) is set to a level between 0 and 10, gobo rotation does not affect indexing, the gobo stops instantly								
23	20	colours selection from the colour wheel	step	no colour, white beam	0	- 5	0%	- 2%
				colour 1	6	- 14	2%	- 5%
				colour 2	15	- 22	6%	- 9%
				colour 3	23	- 30	9%	- 12%
				colour 4	31	- 38	12%	- 15%
				colour 5	39	- 45	15%	- 18%
			proportional	from colour 5 to colour 1, proportional positioning	46	- 127	18%	- 50%
				rainbow effect from fast to slow in an anticlockwise direction	128	- 190	50%	- 75%
				rainbow effect from slow to fast in a clockwise direction	191	- 255	75%	- 100%
24	21	cyan	proportional	proportional control of the percentage of cyan color in the light beam from 0 to 100%	0	- 255	0%	- 100%
25	22	magenta	proportional	proportional control of the percentage of magenta color in the light beam from 0 to 100%	0	- 255	0%	- 100%
26	23	yellow	proportional	proportional control of the percentage of yellow color in the light beam from 0 to 100%	0	- 255	0%	- 100%
27	24	CTO	proportional	proportional control of the percentage of CTO in the light beam from 6300°K to 3200°K	0	- 255	0%	- 100%
28	25	zap effect (effect varies depending upon channel 7 strobe)	step	no effect	0	- 10	0%	- 4%
				zap effect synchronised with the strobe effect, speed and mode selected by strobe channel 7	11	- 30	4%	- 12%
				zap effect, flicker and speed adjustable, speed and mode selected by strobe channel 7	31	- 249	12%	- 98%
				black-out of the light beam during PAN/TILT movement, colors wheel and effects wheel	250	- 255	98%	- 100%
29	26	gobo effect selection	step	no effect	0	- 10	0%	- 4%
				proportional movement of the gobo wheels through 360°	11	- 133	4%	- 52%
				proportional-stepmovement of the gobo wheels through 360°	134	- 255	53%	- 100%
30	27	lamp power control in conjunction with channel 31/28	proportional	lamp power adjustment from minimum to maximum (800W - 1500W) when channel 31/28 is between 171 - 195 dmx	0	- 255	0%	- 100%
31	28	lamp on/off and motors reset	step	park, no function	0	- 10	0%	- 4%
				lamp off	10	- 29	4%	- 11%
				pan and tilt reset (once only)	30	- 65	12%	- 25%
				all motor reset exept dimmer, pan and tilt (once only)	66	- 100	26%	- 39%
				all motor reset exept dimmer (once only)	101	- 135	40%	- 53%
				reset of all the motors (once only)	136	- 170	53%	- 67%
				lamp on, enabled power adjustment from 800W to 1500W	171	- 195	67%	- 76%
				lamp on, maximum power	196	- 255	77%	- 100%
Nota 8: the display panel may be used to disable the switching off of the lamp via DMX								
Nota 9: turning off the lamp and all reset functions are delayed by 6 seconds to prevent accidental activation								
Nota 10: the lamp on/off function can only be effected if an opposite level is set								
Projector: InfinitySpot XL			Table name: DMX 512 functions					
Table number: 287			Edition: 1	Date: 08/05/2009				

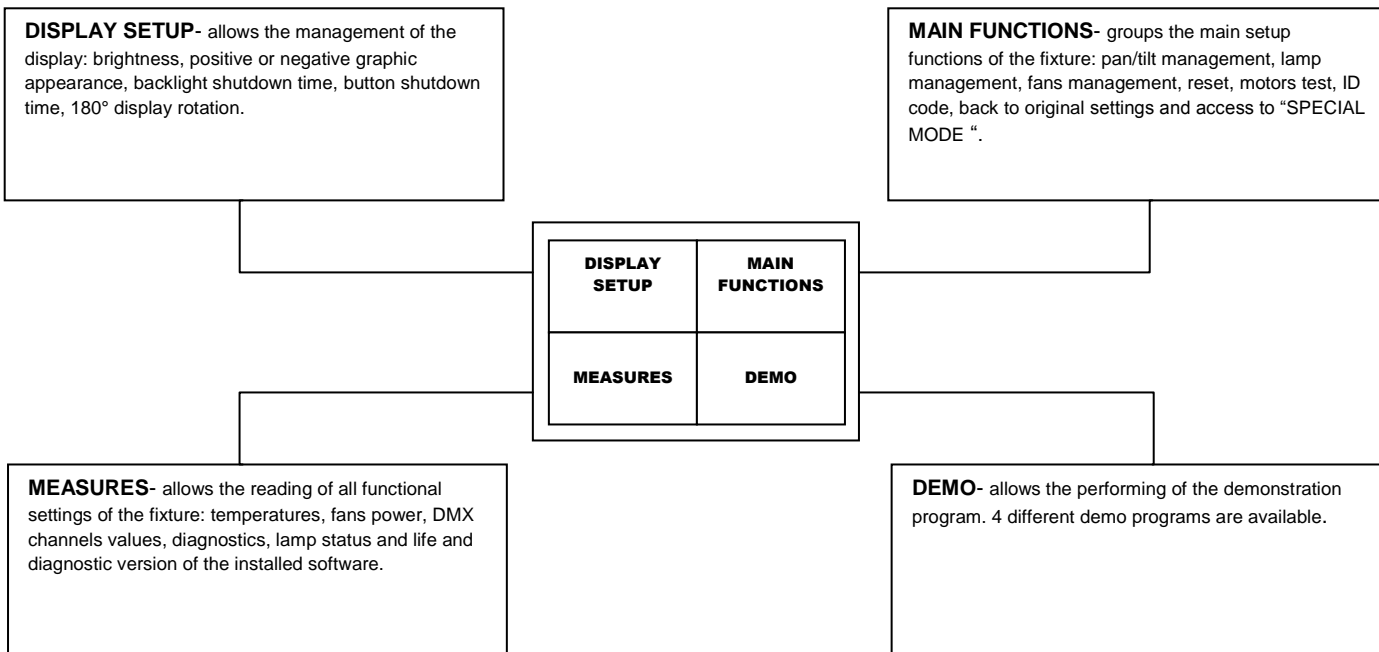
8. Display panel functions

By suitably using all the functions of **Infinity Spot XL** 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.

8.1 Quick guide to menu.

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”.



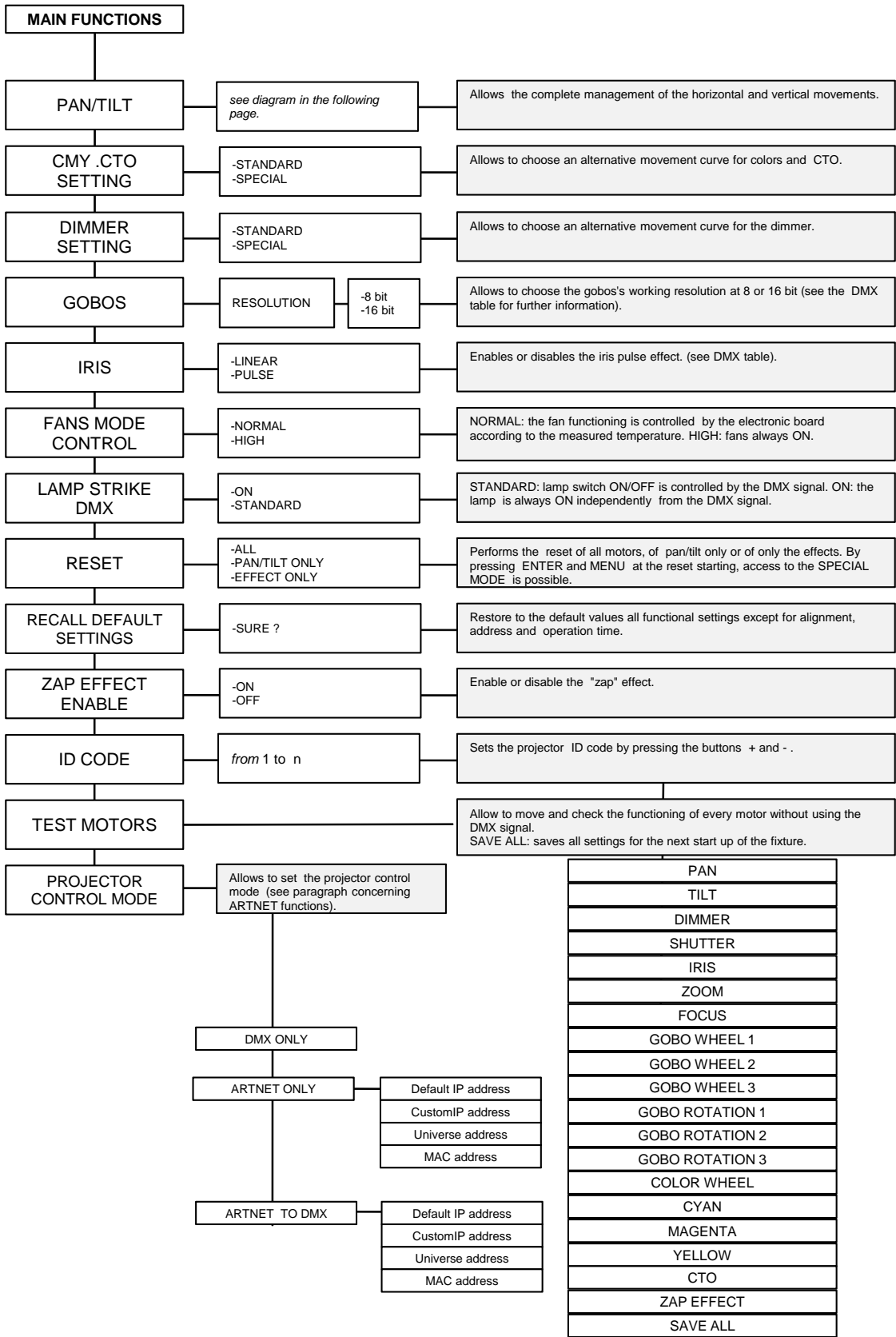
8.1 Rapid count

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.

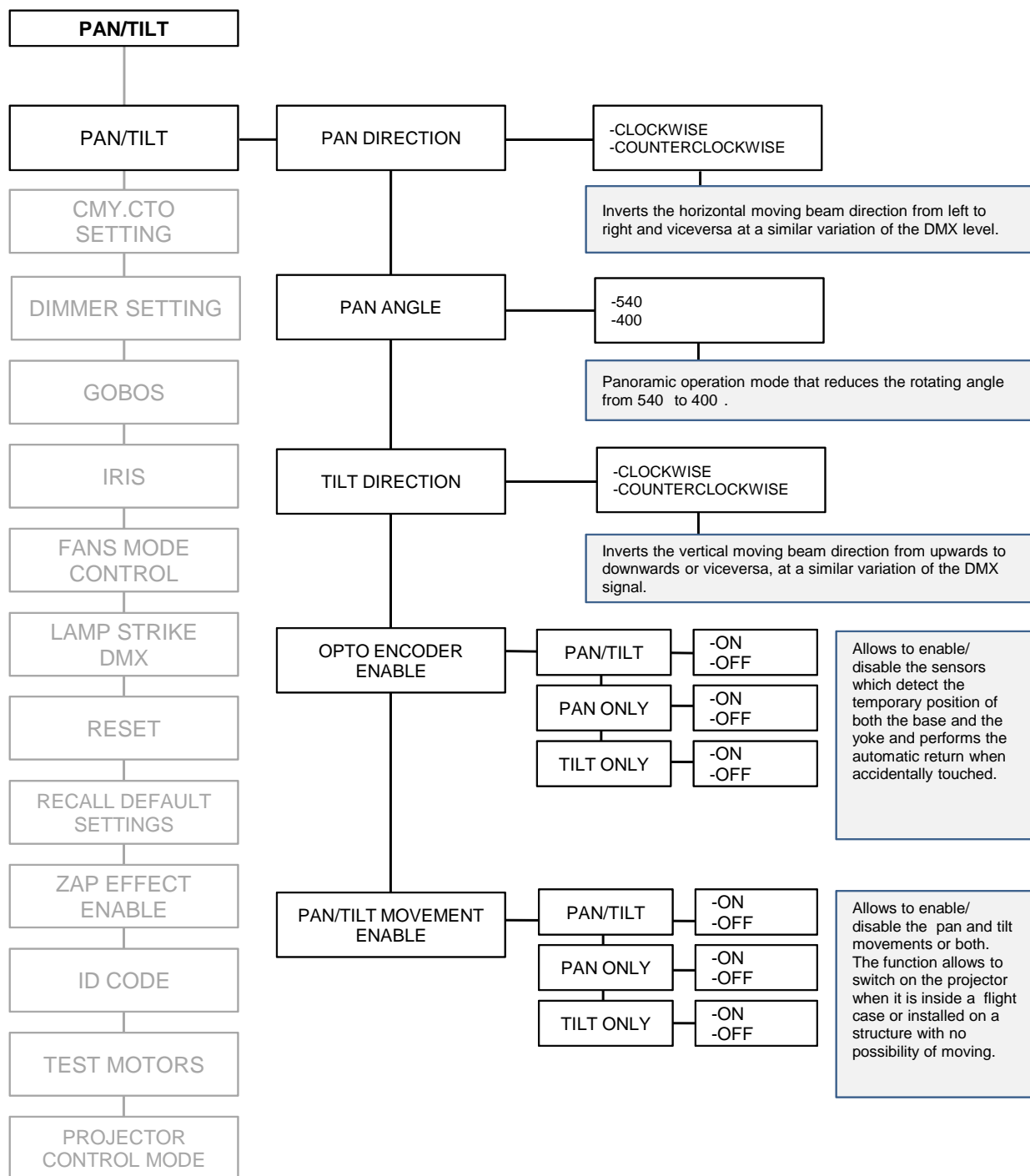
8.3 Main functions

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



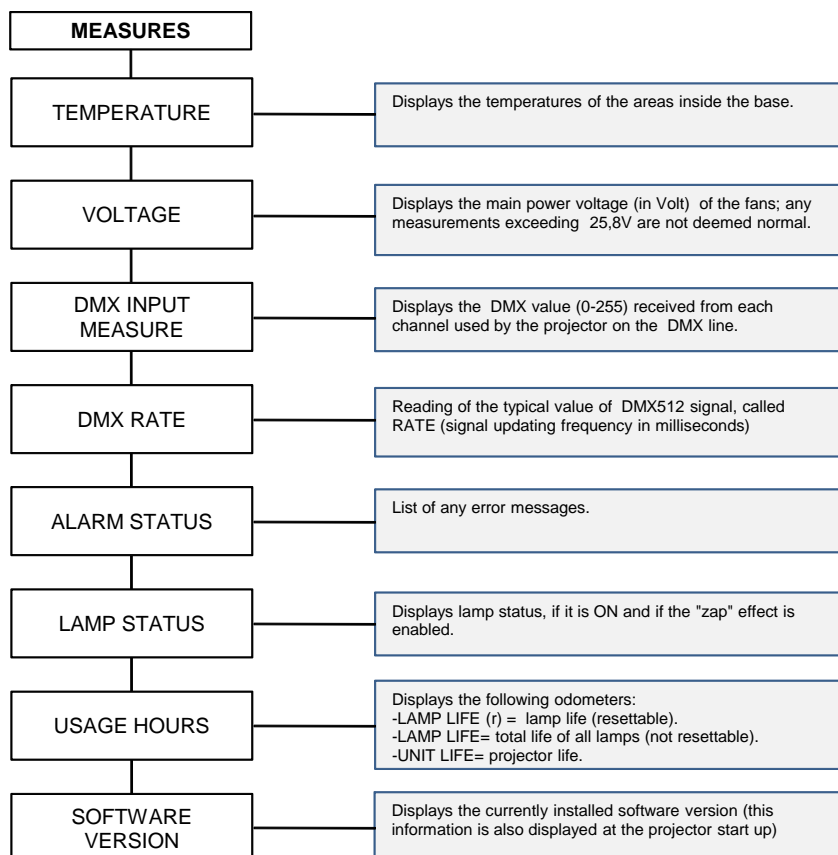
English

The following diagram explains the sub menu for the management of pan and tilt, which the pan/tilt menu item described in the diagram in the previous page refers to.



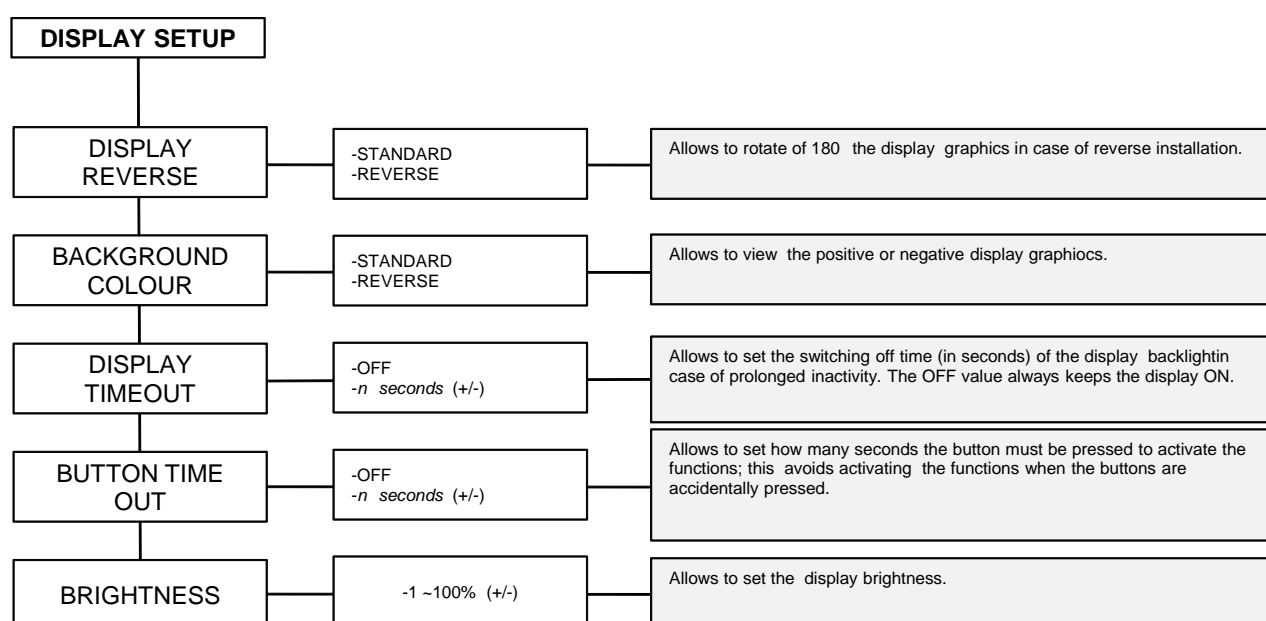
8.4 Measures

The electronic boards of **Infinity Spot XL** allow to perform self-diagnostics digital measures.



8.5 Display setup

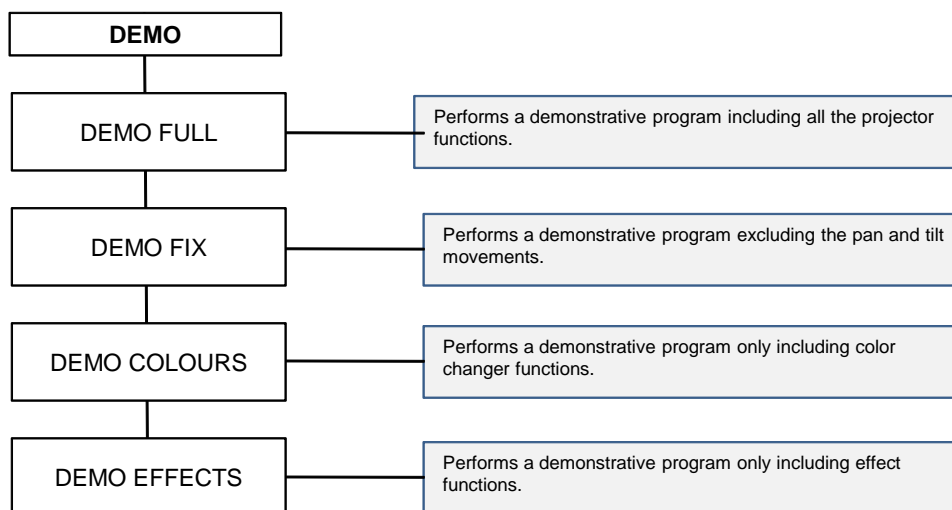
The Display setup allows to tune functioning of the Infinity Spot XL display functions according to your needs. The following diagram shows the section features.



English

8.6 Demo

The Demo section allows to select and perform one of the 4 demonstration programs available.



8.7 Special mode and electronic motor alignment

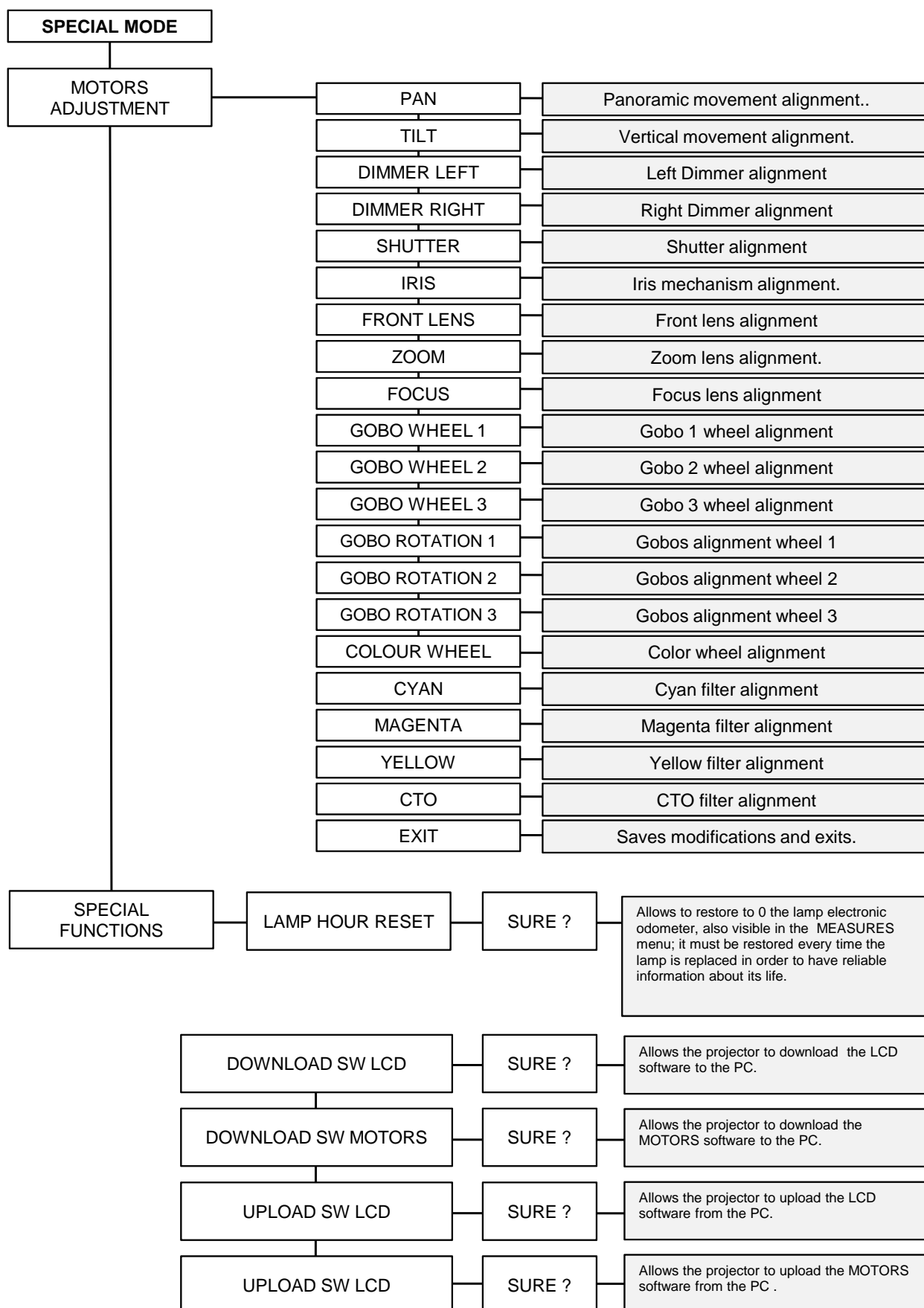
WARNING!
This section is for the exclusive use of qualified and experienced personnel.

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 tuning procedure is only possible when the DMX512 signal is on.

The display panel of Infinity Spot XL 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.

N.B. pressing the buttons + and – simultaneously the setting returns to 128 (default value).



9. Lamp installation and alignment

Infinity Spot XL utilises a Philips MSR Gold Fast Fit I with PGJ50 base lamp. The maximum power is 1500W. This lamp is available as a spare part at your Coemar's distributor or service centre.

Lamp	Philips MSR Gold 1500 Fast Fit
Coemar code	L105822
Power range	1500W
Lighting flow at 1500W	120000 lm.
Color temperature	6000 °K
Base	PGJX50
Life	750 hrs.

WARNING !

Disconnect the unit from main power before opening it and wait for the lamp to have sufficiently cooled down.

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.

9.1 Lamp installation

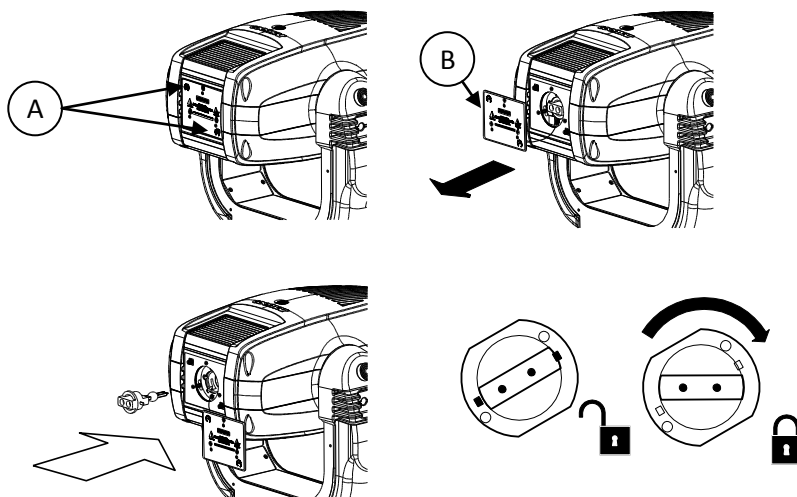
1. Use a suitable tool to loosen the 2 fixing screws A of the lamp holder cover at the rear of the projector body.
2. Remove the lamp holder cover B
3. Identify the lamp holder and correctly insert the lamp and the two contacts into the specific slots.
4. Insert the lamp into the holder and gently rotate it clockwise until it blocks.

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 screws "A" 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.

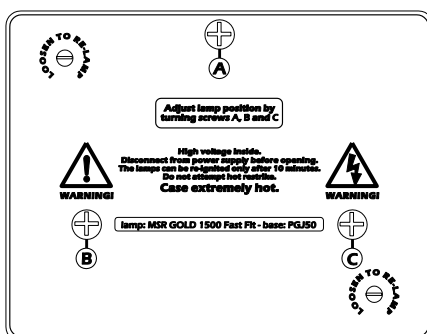
- realign the lamp in the optical system in order to avoid dichroic filters overheating and consequent effects.
- reset the lamp odometer to obtain reliable information about the residual life of the lamp.

9.2 Aligning the lamp in the optical system.

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 maximise output, to avoid the possible overheating of the internal components due to the incorrect focusing of the learning 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 shown in the figure below. The lamp should be on, the dimmer fully open and no colours selected. If the learning is not correctly aligned, a hot-spot will be readily noticeable. Using the 3 adjusters in unison, you will need to bring the hot-spot to the most central part of the beam possible and then flatten the beam to maximum learning à. The combined regulation of the 3 adjusters allows horizontal, vertical and axial regulation of the lamp.

**10. Operating on inside groups**

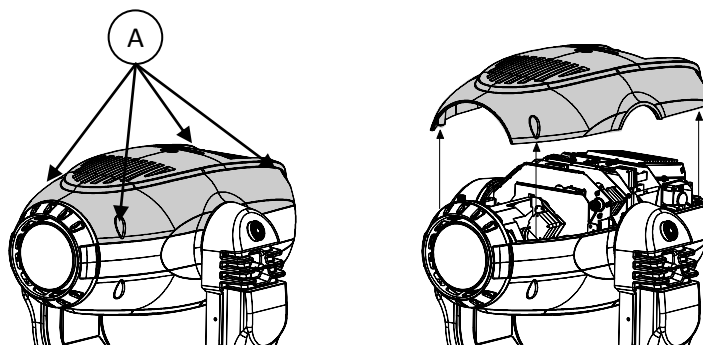
The fixture allows extraction of both gobos and colour changer assemblies in order to facilitate inspection, replacing and cleaning of gobos and coloured filters.

WARNING!

The following operations must be carried out by qualified and experienced technical personnel; handle with great care. Always disconnect all cables before proceeding and make sure that the unit is sufficiently cooled down.

10.1 How to open the projector body

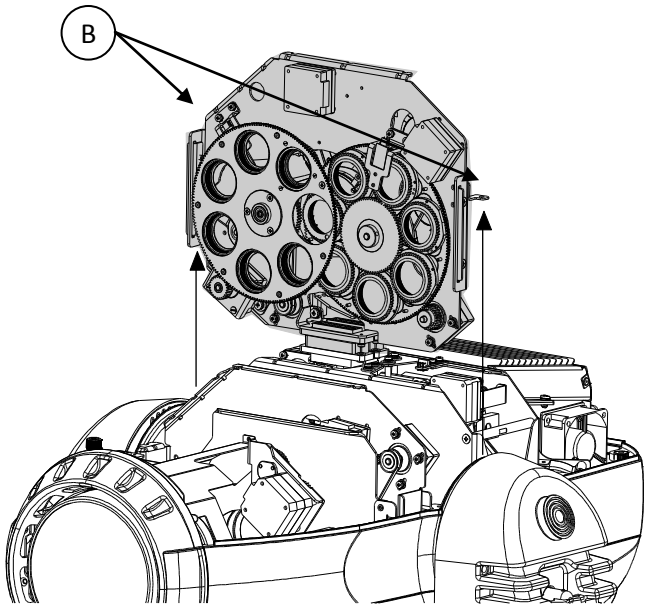
Using an appropriate screwdriver, remove screws "A" from the upper housing and remove this. In order to identify the upper housing to be removed, position the unit so that the printing on the lamp holder group can be read (the printing must not upside down). Once this operation has been carried out,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



English

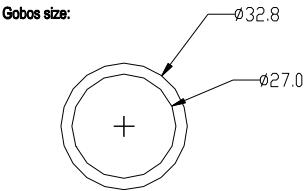
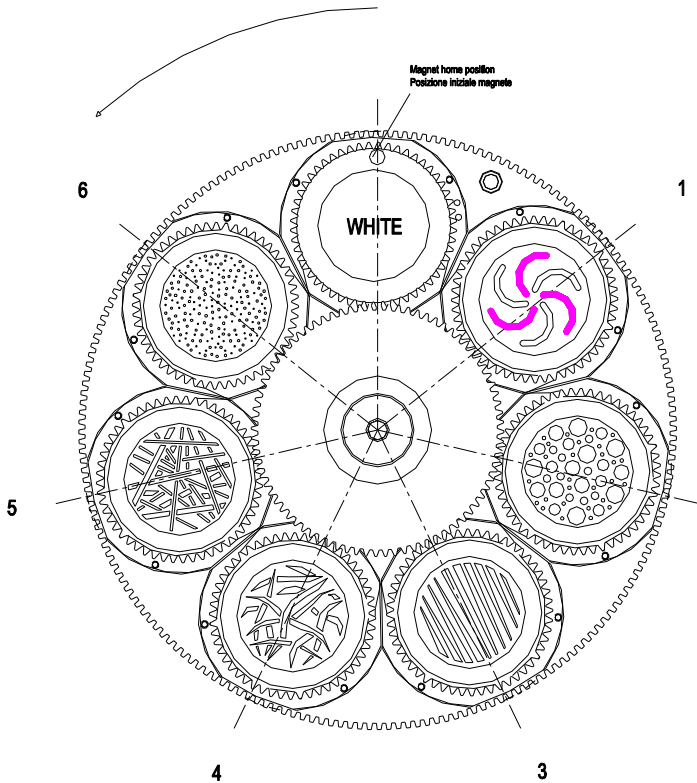
10.2 How to extract the gobos assembly.

1. Unscrew the two lateral fixing screws “B” and gently remove the gobos assembly.



10.3 Standard configuration of gobos wheel and colour wheel.

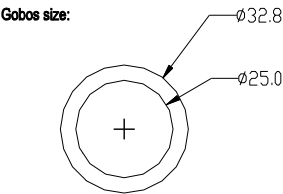
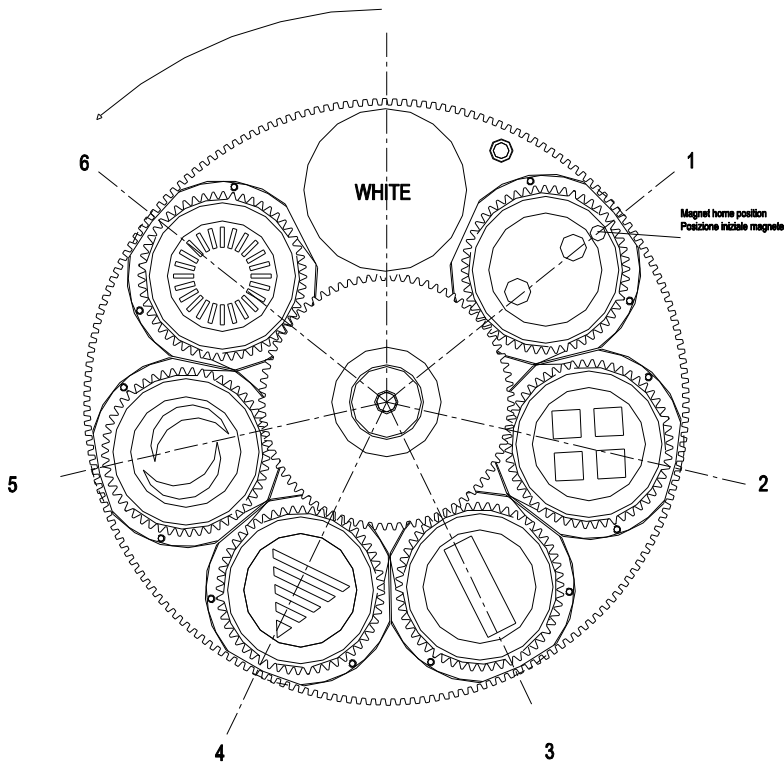
Gobos wheel 1



Gobos size			
	Metal Gobos	Glass Gobos undefined	Glass Gobos defined
Working area Ø mm. Diametro utile mm.	Up to 27 Fino a 27	Up to 27 Fino a 27	Up to 27 Fino a 27
Thickness mm. Spessore mm.	0.5 0.5	From 1 to 4 Da 1 a 4	From 1 to 4 Da 1 a 4

CODE / CODICE	POS.	DESCRIPTION	N°PCS
GV197	1	Bi-colour whirl	1
GO204	2	Bubbles	1
GO205	3	Comb	1
GO200	4	Snakes	1
GO201	5	Pickup sticks	1
GO202	6	Universe	1

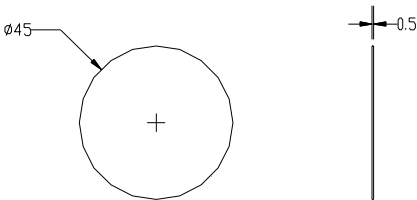
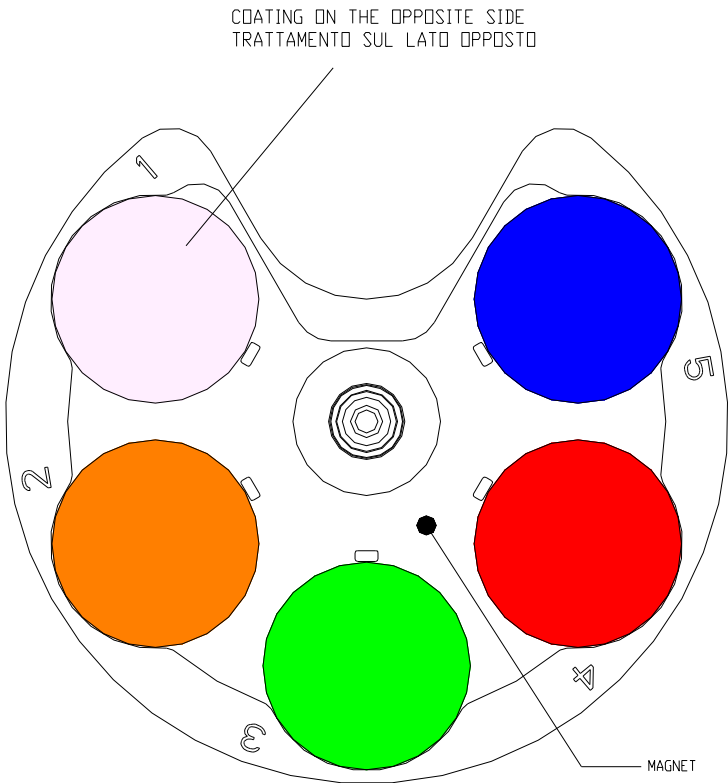
Gobos wheel 2



Gobos size			
		Metal Gobos	Glass Gobos defined
		Working area Ø mm. Diametro utile mm.	Up to 25 Fino a 25
		Thickness mm. Spessore mm.	Up to 25 Fino a 25
		0.5 0.5	From 1 to 4 Da 1 a 4

CODE / CODICE	POS.	DESCRIPTION	N°PCS
GO196	1	Two holes	1
GO203	2	Window	1
GO206	3	Bold Line	1
GO207	4	Broken triangle	1
GO198	5	Half moon	1
GO199	6	Breakup dashes	1

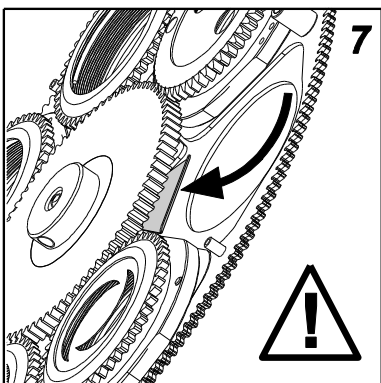
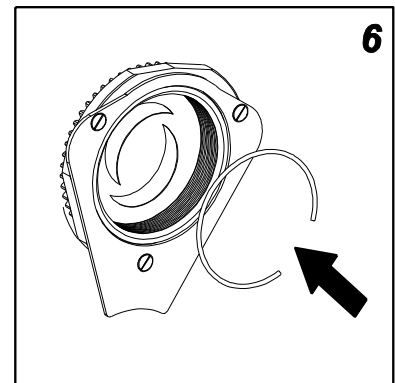
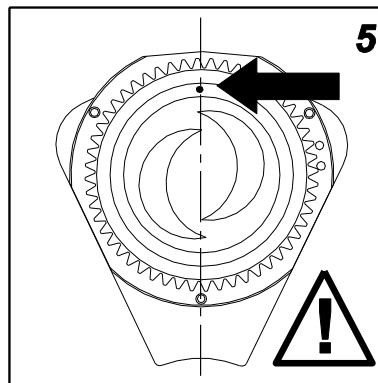
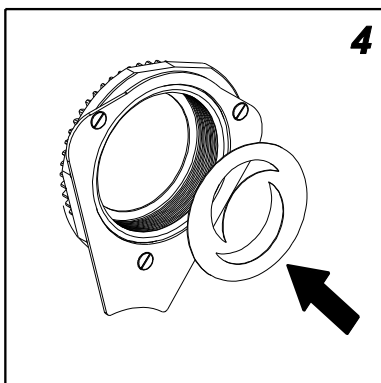
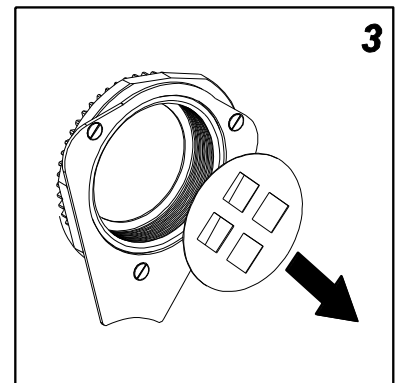
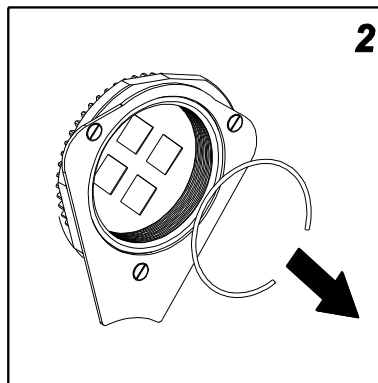
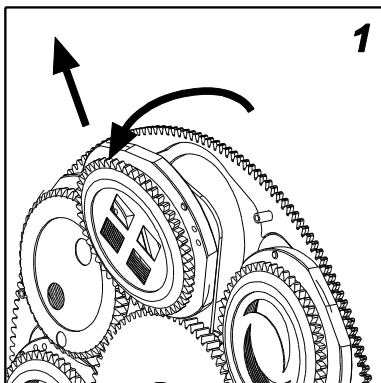
Color wheel



CODE / CODICE	POS.	DESCRIPTION	N°PCS
VT12MG	1	Half minus green	1
VT174/AM	2	Ambra	1
VT174/G	3	Green	1
VT192/R	4	Red	1
VT174/B	5	Blue	1

10.4 How to replace gobos

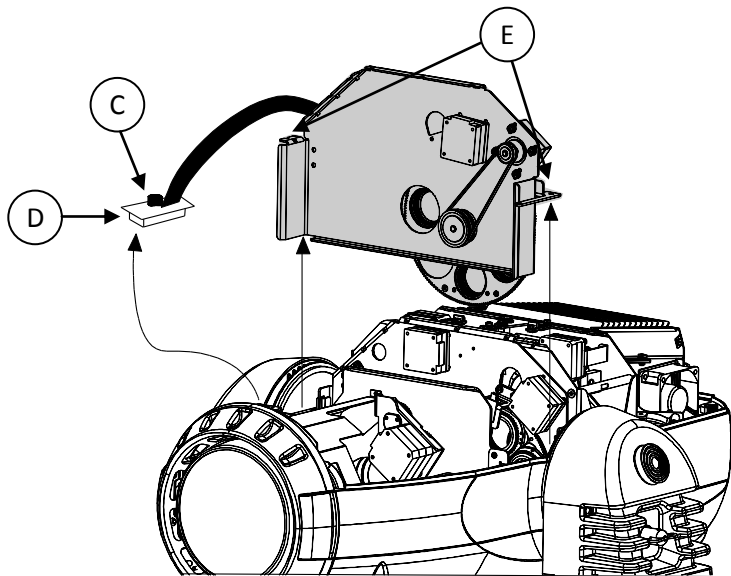
1. Lift and gently extract from the gobo wheel the support which contains the gobo you want to replace.
 2. Remove the spring that fixes the gobo to its seat.
 3. Remove the gobo to be replaced.
 4. Insert the new gobo considering the coated side.
 5. Locate the reference point on the toothed ring nut and use this to orient the gobo uniformly.
 6. Mount the spring in order to firmly fix the gobo into its seat.
 7. Mount the support back onto the wheel, making sure that the support foot is inserted under the spring shown in the picture and keeping the above mentioned reference point in a tangent line with the wheel (see picture).
 8. Check that the gobos rotate freely and mount the gobos assembly by reverse procedure.
- When repositioning the assembly, make sure it is correctly placed into the specific lateral guides.



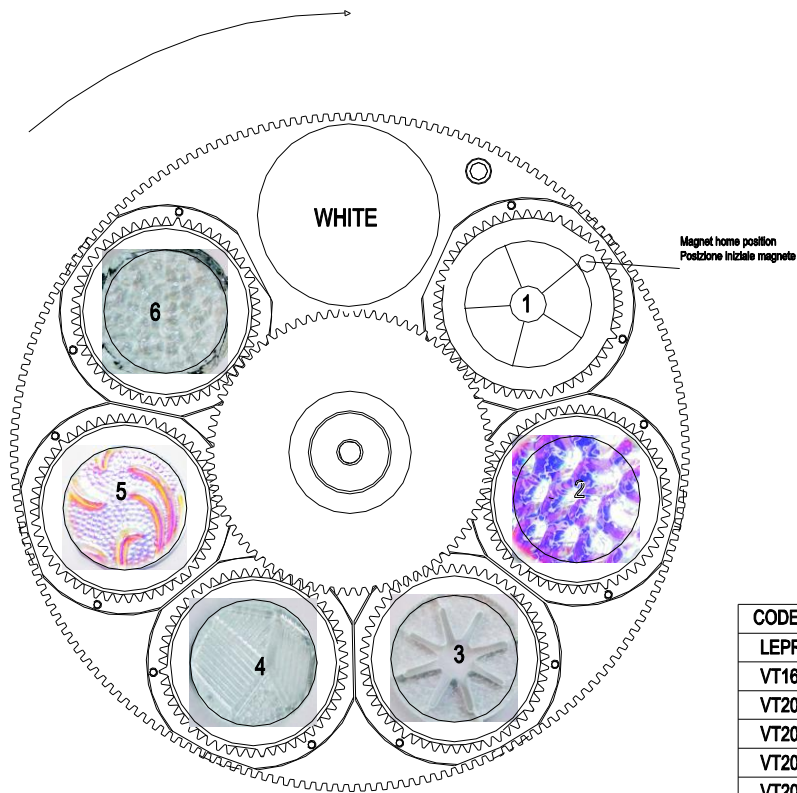
These gobos wheels only accept gobos with the following features:
External diameter: mm 32,8
Thickness: metal gobos from 0.2 to 0.5 mm, glass gobos up to 4 mm.

10.5 How to remove the effect assembly

Completely unscrew the blocking handle “C” of the “D” connector and remove it; unscrew the two lateral screws “E” fixing the effect assembly; if necessary manually move the internal lens forward and gently remove the effect assembly. When repositioning the assembly, make sure to insert it correctly into the specific lateral guides.



10.6 Standard colour wheel configuration

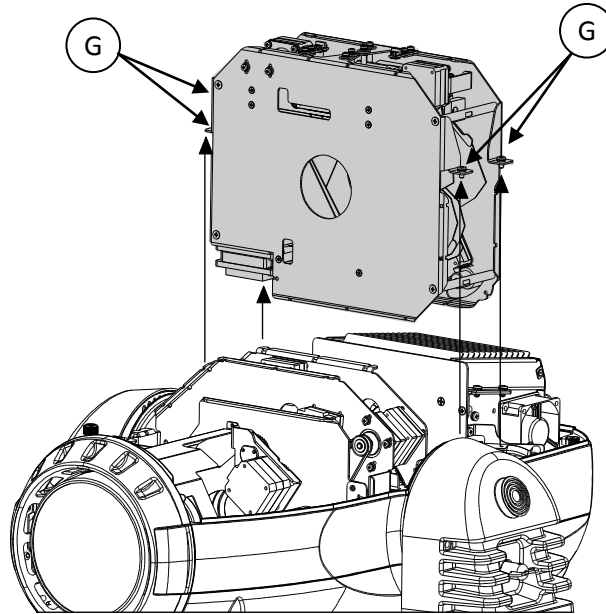


CODE / CODICE	POS.	DESCRIPTION	N°PCS
LEPR33	1	5 facets prism	1
VT167/1	2	Croc skin	1
VT208	3	Supernova	1
VT206	4	Cristal	1
VT204/1	5	Magic leaves	1
VT202	6	Freeze	1

English

10.7 How to remove the colour changer assembly.

Unscrew the four lateral locking screws "G" of the assembly and remove it carefully. When repositioning the assembly, make sure to insert it correctly into the specific lateral guides.



11. Maintenance

11.1 Periodic cleaning

Lenses and filters

Even a fine layer of dust can substantially 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 specific lens cleaning solution.

Fans and air passages

The fans and air passages must be cleaned approximately every 6 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.

11.2 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 sure the 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.

11.3 Fuse replacement

Check the conditions of the fuses using an appropriate instrument; if damaged, replace them with equivalent ones.

12. Error Messages

For cases of malfunctioning, Infinity Spot XL has an auto-diagnostics system that visualises one or more intermittent messages, preceded by “ERR”, in the lower part of the display. The following table will help you understand these messages correctly. If the problem persists despite carrying out the suggested operations, contact your Coemar Customer Service Centre.

Error message	Description and solution
ERR: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: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 #1	Control circuit error relating to position sensors for the motors Cyan, Magenta, Yellow and CTO. The sensor does not detect the magnet. Check sensor and motor cabling of colour changer assembly.
ERR:SENSORS LINE #2	Control circuit error relating to position sensors for the motors Zoom Lens, Zoom and Focus. The sensor does not detect the magnet. Check sensor and motor cabling of the Gobos assembly.
ERR:SENSORS LINE #3	Control circuit error relating to position sensors for the motors Colour Wheel, Gobo 1 and Gobo 2. The sensor does not detect the magnet. Check sensor and motor cabling of the Zoom.
ERR:SENSORS LINE #4	Control circuit error relating to position sensors for the motors of the effect assembly. The sensor does not detect the magnet. Check sensor and motor cabling of the effect assembly.
ERR: COLOUR WHEEL	Position error of the colour wheel. The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor of the colour wheel.
ERR:GOBO 1	Position error of the gobos 1 wheel: 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 2	Position error of the gobos 2 wheel: The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor of the gobos 2 wheel.
ERR: GOBO 3	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: GOBO 1 INDEX	Initial position error of the gobos in the gobos 1 wheel: 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 INDEX	Initial position error of the gobos in the gobos 2 wheel: The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on gobos 1.
ERR: GOBO 3 INDEX	Initial position error of the gobos in the effect wheel: The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on gobos 1.
ERR: ZOOM LENS	Initial position error of the front lens assembly: The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on the front lens carriage
ERR: ZOOM	Initial position error of the Zoom lens carriage: The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on the Zoom lens carriage
ERR: FOCUS	Initial position error of the Focus lens carriage: The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on the Focus lens carriage
ERR:CYAN	Initial position error of the Cyan filter: The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on the Cyan filter
ERR: MAGENTA	Initial position error of the Magenta filter: The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on the Magenta filter
ERR: YELLOW	Initial position error of the Yellow filter: The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on the Yellow filter
ERR: CTO	Initial position error of the CTO filter: The sensor does not detect the magnet. Check the functioning and the correct positioning of the magnetic sensor placed on the CTO filter
ERR: LINE SYNC	Network synchronization error. Contact Coemar service centre.

English

ERR: FLASH	EEPROM Error. The EEprom is either absent or defective; please refer to your Coemar service centre for a checking or replacing the component
ERR: CFG DATA FAILURE	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: NO SLAVE LINK	COMMUNICATION Error with motor board. 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: 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: SLAVE MEM FAILURE	Writing error in the motor board memory. Contact your authorized Coemar service centre.

13. Frequently asked questions

Question	Possible cause	Recommended solution
The projector does not move	<ul style="list-style-type: none"> - The projector is not powered. - The powering switch can be on OFF position. - The protection fuse could be faulty. 	<p>Check that the cable is connected to the main supply .</p> <p>Put the main supply switch on ON position.</p> <p>Switch off the projector and replace the faulty fuse.</p>
The projector resets correctly , but it does not respond or it responds in a wrong way to the DMX console.	<ul style="list-style-type: none"> - Incorrect data connection. -Incorrect DMX address. 	<p>Check the cable connection, correct the ineffective or unstable connections, repair or replace the damaged cables.</p> <p>Check the DMX addresses of the fixture.</p>
The lamp does not switch on at all or it functions intermittently	<ul style="list-style-type: none"> - The fixture is too hot. - The control channel 31 (28 at 8 bit) is not 100% operating. - DMX signal not present. 	<p>Let the projector cool down.</p> <p>Check that the air inlets are not obstructed.</p> <p>Make sure that the room temperature does not exceed 35°C.</p> <p>Check the fan functioning.</p> <p>Make the channel 31 100% operating (28 at 8 bit).</p> <p>Check the DMX link.</p>



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