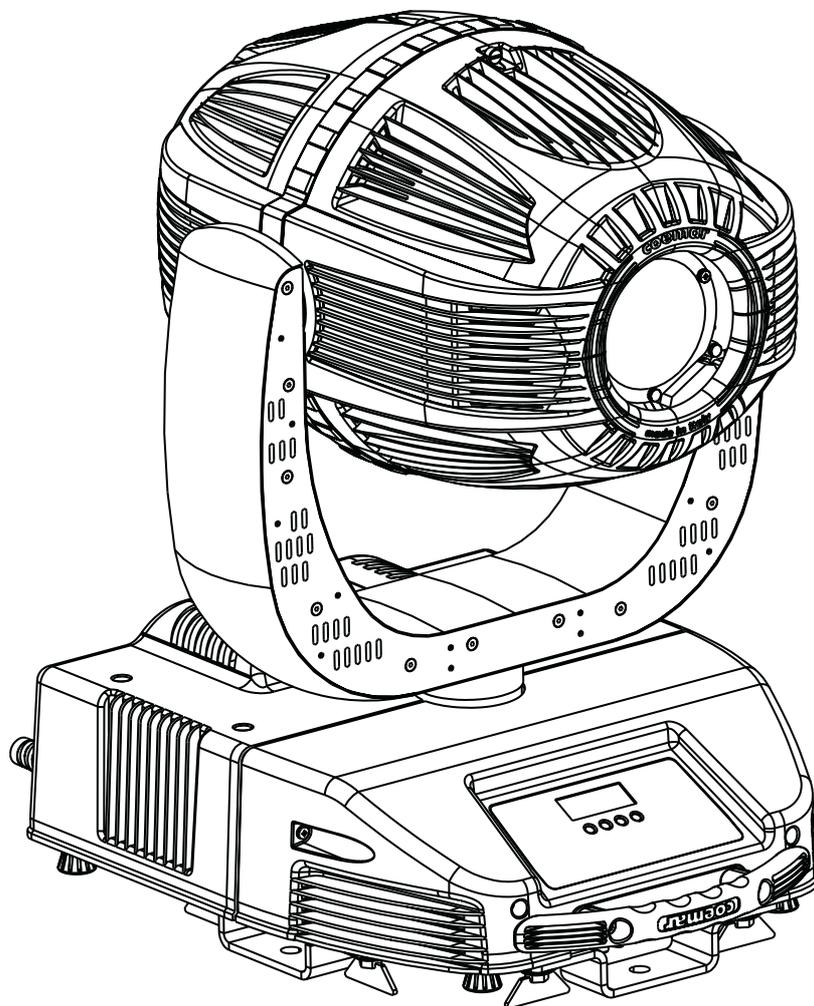


# ProSpot 575 MB

...magneticballast



**manuale di istruzioni  
instructions manual**

1<sup>a</sup> edizione Settembre 2005  
1st edition September 2005

 **coemar**  
L I G H T E M O T I O N

# ProSpot 575 MB

numero di serie/serial number

data di acquisto/date of purchase

fornitore/retailer

indirizzo/address

cap/città/suburb

provincia/capital city

stato/state

tel./fax/

Prendete nota, nello spazio apposito, dei dati relativi al modello e al rivenditore del vostro **ProSpot 575 MB**: in caso di richiesta di informazioni, pezzi di ricambio, servizi di riparazione o altro ci permetteranno di assistervi con la massima rapidità e precisione.

*Please note in the space provided above the relative service information of the model and the retailer from whom you purchased your **ProSpot 575 MB**: This information will assist us in providing spare parts, repairs or in answering any technical enquiries with the utmost speed and accuracy.*

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

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

# Index

<b>1. Packaging and transportation</b>	Pag. 4
1.1. Packaging	" 4
1.2. Transportation	" 4
<b>2. General information</b>	Pag. 4
2.1. Important safety information	" 4
2.2. Warranty conditions	" 5
2.3. CE norms	" 5
<b>3. Product specifications</b>	Pag. 5
3.1. Technical characteristics	" 5
3.2. Dimensions	" 5
3.3. Projector components	" 5
<b>4. Installation</b>	Pag. 6
4.1. Mechanical installation	" 6
4.2. Safety connections	" 6
<b>5. Powering up</b>	Pag. 7
5.1. Operating voltage and frequency	" 7
5.2. Altering the operating voltage	" 7
5.3. Mains connection	" 8
<b>6. DMX signal connection</b>	Pag. 9
<b>7. Turning on the projector</b>	Pag. 10
7.1. DMX addressing	" 10
7.2. DMX functions	" 11
<b>8. Display panel functions</b>	Pag. 13
8.1. Quick guide to menu navigation	" 13
8.2. Measure and test (MEAS)	" 14
8.3. Function settings (FUNC)	" 15
8.4. Rapid scrolling	" 15
8.5. Connecting the DR1	" 16
8.6. Turning on the projector with no articulated movement	" 16
8.7. Resetting counters	" 16
<b>9. Lamp installation and alignment</b>	Pag. 17
9.1. Lamp installation	" 17
9.2. Aligning the lamp in the optical path	" 18
<b>10. Interchanging gobos</b>	Pag. 19
10.1. Gobo dimensions	" 19
10.2. Opening up the projector housing	" 19
10.3. Gobo replacement	" 20
<b>11. Thermal protection</b>	Pag. 21
<b>12. Maintenance</b>	Pag. 21
12.1. Periodic cleaning	" 21
12.2. Periodic maintenance	" 21
12.3. Fuse replacement	" 21
12.4. Electronic motor alignment	" 22
<b>13. Spare parts</b>	Pag. 22
<b>14. Error messages</b>	Pag. 23
<b>15. Frequently asked questions</b>	Pag. 24

## English

Congratulations on having purchased a Coemar product. You have assured yourself of a fixture of the highest quality, both in componentry and in the technology used. We renew our invitation to you to complete the service information on the previous page, to expedite any request for service information or spares (in case of problems encountered either during, or subsequent to, installation). This information will assist in providing prompt and accurate advice from your Coemar service centre.

## 1. Packaging and transportation

Following the instructions and procedures outlined in this manual will ensure the maximum efficiency of this product for years to come.

### 1.1. Packaging

Open the packaging and ensure that no part of the equipment has suffered damage in transit. In case of damage to the equipment, contact your carrier immediately by telephone or fax, following this with formal notification in writing.

#### Packing list

Ensure the packaging contains:

- 1 ProSpot 575 MB
- 1 instruction manual
- 2 cam-lock support brackets

### 1.2. Transportation

The ProSpot 575 MB should be transported in its original packaging or in an appropriate flight case.

## 2. General information

### 2.1. Important safety information

#### Fire prevention:

- 1. ProSpot 575 MB utilises a Philips 575 MSR/2 or 575 MSD; the use of any alternative lamp is not recommended and will null and void the fixture's warranty.
- 2. Never locate the fixture on any flammable surface.
- 3. Minimum distance from flammable materials: 0,5 m.
- 4. Minimum distance from the closest illuminable surface: 2 m.
- 5. Replace any blown or damaged fuses only with those of identical values. Refer to the schematic diagram if there is any doubt.
- 6. Connect the projector to mains power via a thermal magnetic circuit breaker.

#### Preventing electric shock:

- 1. High voltage is present in the internals of the unit. Isolate the projector from mains supply prior to performing any function which involves touching the internals of the unit, including lamp replacement.
- 2. For mains connection, adhere strictly to the guidelines outlined in this manual.
- 3. The level of technology inherent in the ProSpot 575 MB 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 proper functioning of the projector.
- 5. Non lasciate mai che il cavo di alimentazione venga in contatto con altri cavi. Never operate the unit without proper earth connection.
- 6. Do not operate the projector with wet hands or in an area where water present.
- 7. The fixture should never be located in an exposed position, or in areas of extreme humidity. A steady supply of circulating air is essential.

#### Protection against ultraviolet radiation:

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

#### Safety:

- 1. The projector should always be installed with bolts, clamps, and other fixings which are suitably rated to support the weight of the unit.
- 2. Always use a secondary safety chain of a suitable rating to sustain the weight of the unit in case of the failure of the primary fixing point.
- 3. The external surface of the unit, at various points, may exceed 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 ambient temperature should not exceed 35°C.
- 6. A hot lamp may explode. Wait at least 10 minutes after the unit has been turned off prior to attempting to replace the lamp.
- 7. The projector contains electronic and electrical components which should under no circumstances be exposed to contact with water, oil or any other liquid. Failure to do so will compromise the proper functioning of the projector.

#### Articulated movement

The projector has a pan range of 540° in its base and a tilt range 252° in its yoke; do not obstruct the projector whilst it is undertaking articulated movement.

#### Forced ventilation

You will note several air vents on the body of the projector. To avoid any problems associated with overheating, never obstruct any of these vents as this may seriously compromise the proper operation of the unit.

#### Protection rating against penetration by external agents:

- 1. The fixture is classified 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 operated or dismantled by unauthorised personnel
4. The warranty does not extend to fixture replacement
5. The serial number of the projector is required for any advice or service from your authorised coemar service centre

## 2.3. CE norms

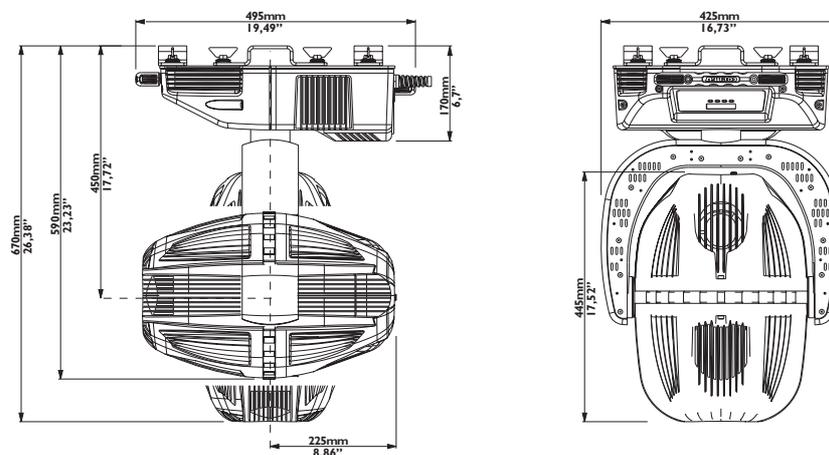
The projector meets or exceeds all applicable CE requirements.

## 3. Product specifications

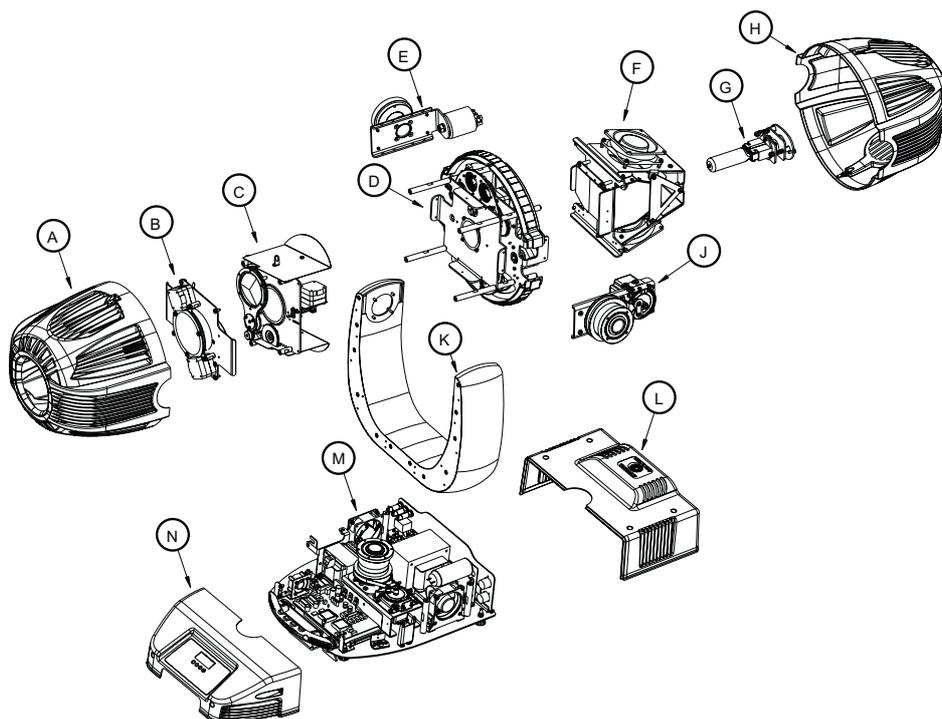
### 3.1. Technical characteristics

Power:	208/230/240 Vac 50/60Hz
Nominal current:	4,5A
Maximum current:	6,5A
Power factor:	$\cos \phi = 0,9$
Lamp wattage:	575W MH
Maximum ambient temperature:	35°C / 95° F
Weight:	37 Kg / 81.57 Lbs
IP rating:	IP20

### 3.2. Dimensions



### 3.3. Components



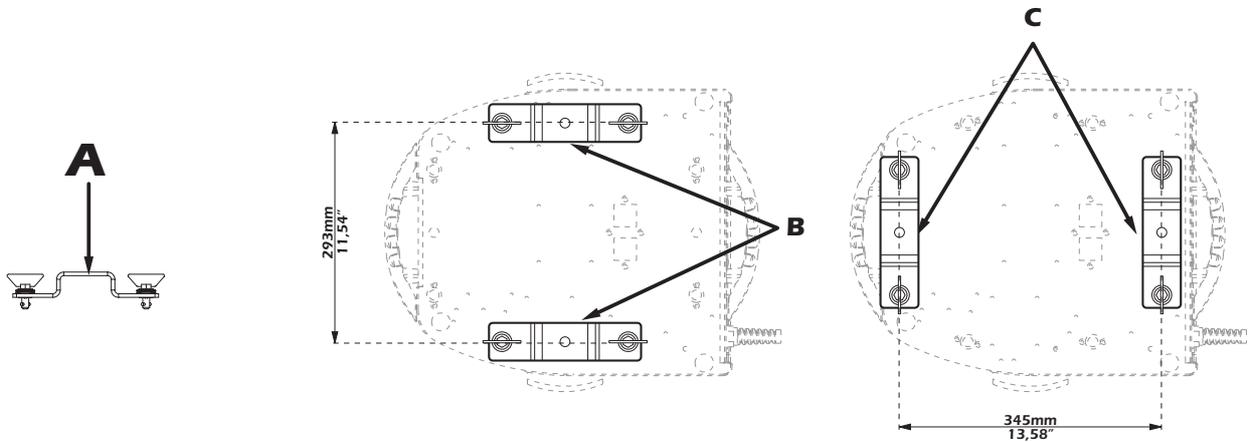
#### Component description

- A.** Front body housing
- B.** Dimmer group
- C.** Zoom group
- D.** Gobo wheel group
- E.** Ignitor group
- F.** Reflector group
- G.** Lampholder group
- H.** Rear body housing
- J.** Body rotation group
- K.** Yoke
- L.** Rear base housing
- M.** Base
- N.** Front base housing

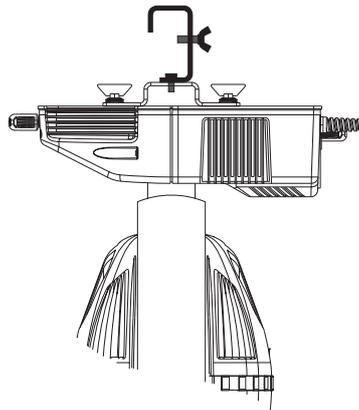
## 4. Installation

### 4.1. Mechanical installation

**ProSpot 575 MB** may be either floor or ceiling mounted. For floor mounting, the unit is provided with four rubber mounting feet. For ceiling mounted installations, **Coemar** includes two cam-lock (**A**) support brackets. The two cam-lock brackets may be mounted in two different positions (**B** & **C**) on the base of the **ProSpot 575 MB**. The cam-lock brackets are affixed via a 1/4 nut. Please ensure that they are correctly seated and firmly tightened into position.



For ceiling mounted installations we suggest the use of appropriate clamps or fixings to attach the fixture to the mounting surface. Clamps may be attached to the central hole provided in the cam-lock brackets, as shown in the following diagram.



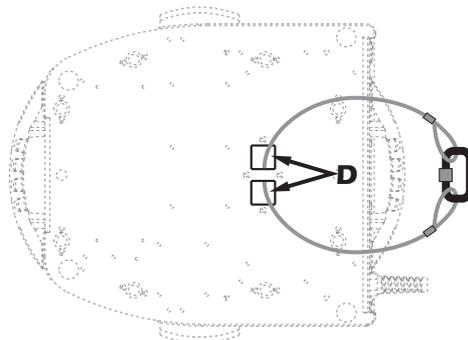
### ATTENTION!!

Ensure that the structure from which the unit is hung is of sufficient rating to hold the weight of the unit, as are any clamps, nuts and bolts used to hang the unit.

The structure from which the unit is hung should be of sufficient rating to hold the weight of the unit, as should any clamps used to hang the unit. The structure should also be sufficiently rigid so as not to move or shake whilst the projector moves during its operation. Do not install the projector in locations where it is readily accessible by authorised or untrained personnel.

### 4.2. Safety connections

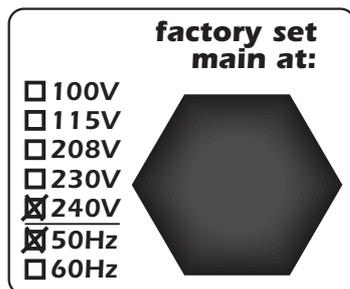
If the **ProSpot 575 MB** is affixed to a mobile structure the use of a safety chain designed to meet relevant safety standards is recommended. You may attach the safety chain to the holes "**D**" located on the base of the fixture and to the structure itself. If using an after-market safety chain not manufactured by **Coemar**, ensure that it is of sufficient rating to hold the weight of the unit.



## 5. Powering up

### 5.1. Operating voltage and frequency

The projector may operate at voltages of 208, 230 or 240VAC at a frequency of 50 or 60Hz. **Coemar** presets (barring specific requests) a voltage of 240v at a frequency of 50Hz.. The preset voltage is indicated on the base of the projector.



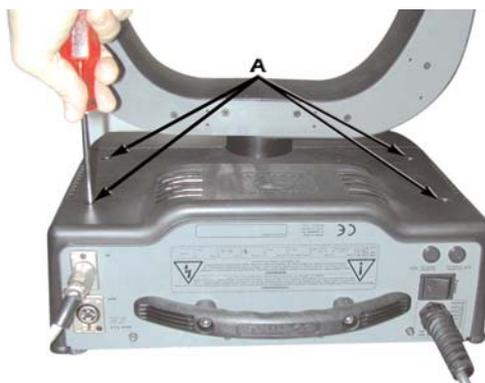
### 5.2. Altering the operating voltage and frequency (Reserved for technical personnel only)

If the factory preset operating voltage and frequency do not correspond to those in use in your country of operation, you may alter the settings as described in the following paragraphs.

#### **ATTENTION!!**

**Incorrect selection of operating voltage and frequency will seriously compromise the functioning of the projector and will immediately void the warranty.**

Loosen the screws on the cover of the base of the unit, as shown in the diagram below, using an appropriate screwdriver, thereby removing the cover completely and allowing access to the internal components of the base of the **ProSpot 575 MB**.



Locate the transformer in the base of the unit.

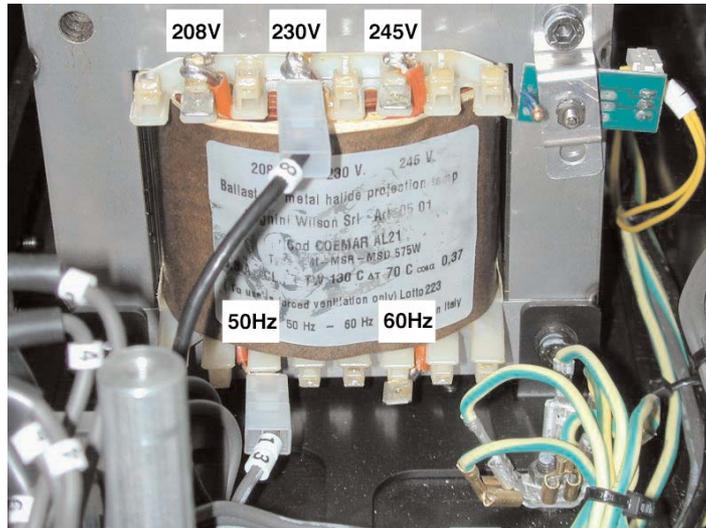


Select a voltage from amongst 208, 230 or 240V by disconnecting cable n° 5 and moving it to the correct voltage. Refer to the sticker located on the transformer to ensure the proper terminal is selected for your requirements.

**Cable number 11 must not have its position altered under any circumstances!**

## English

Locate the lamp ballast inside the base.



Select a voltage from amongst 208, 230 or 240V by disconnecting cable n° 8 and moving it to the correct voltage. Select a frequency from amongst 50 or 60Hz by disconnecting cable n° 13 and moving it to the correct frequency. Refer to the sticker located on the ballast to ensure the proper terminals are selected for your requirements.

When you have made changes, note these on the outside of the **ProSpot 575 MB**. Replace and fasten all the housings as per their original positions.

### 5.3. Mains connection

#### Mains cable characteristics

The mains cable provided is thermally resistant, complying to the most recent international standards. It meets or exceeds VDE and IEC norms, IEC 331, IEC 332 3C, CEI 20 35.

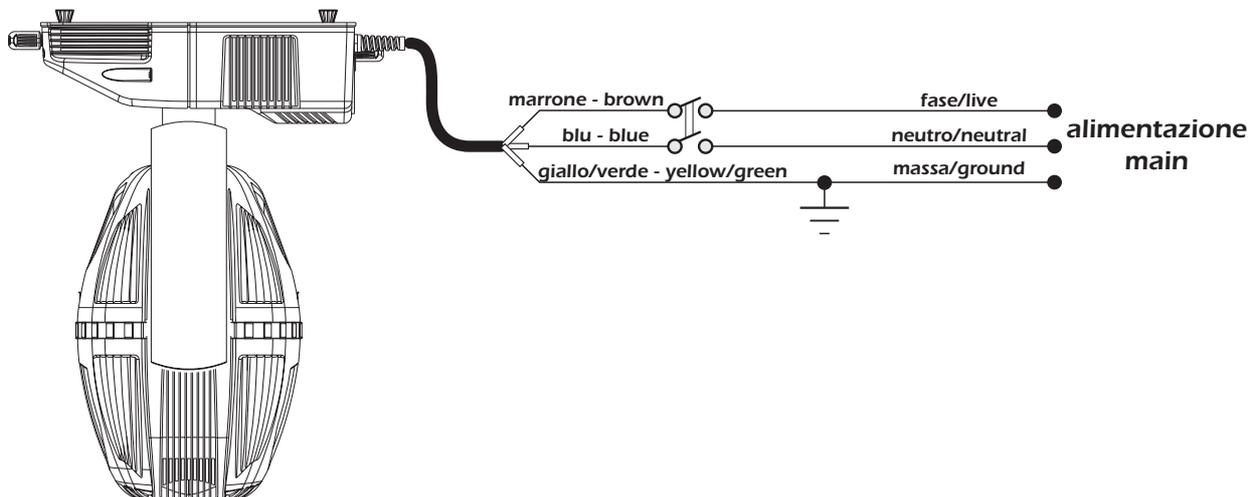
NB: In case of cable replacement, similar cable with comparable thermal resistant qualities must be used exclusively (cable 3x1.5  $\phi$  external 10 mm, rated 300/500V, tested to 2KV, operating temperature -40° +180°, **Coemar** cod. CV5309).

#### Connecting to mains power

For connection purposes, ensure your plug is of a suitable rating to sustain the maximum current:

- 208/230/240V 4.5 amps constant current in normal operation

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



### ATTENTION!!

- The use of a thermal magnetic circuit breaker is recommended for each projector. Strict adherence to all regulatory norms is highly recommended.
- ProSpot 575 MB should never be supplied mains power via a Dimmer; this is potentially dangerous.
- Prior to powering up the projector, ensure that the model in your possession correctly matches the mains supply available to you.
- A good earth connection is essential for the correct operation of the ProSpot 575 MB. Never connect the projector to main power if the green/yellow earth cable is not correctly connected
- All cable and plug connections should be carried out by fully qualified and licenced personnel only.

## 6. DMX signal connection

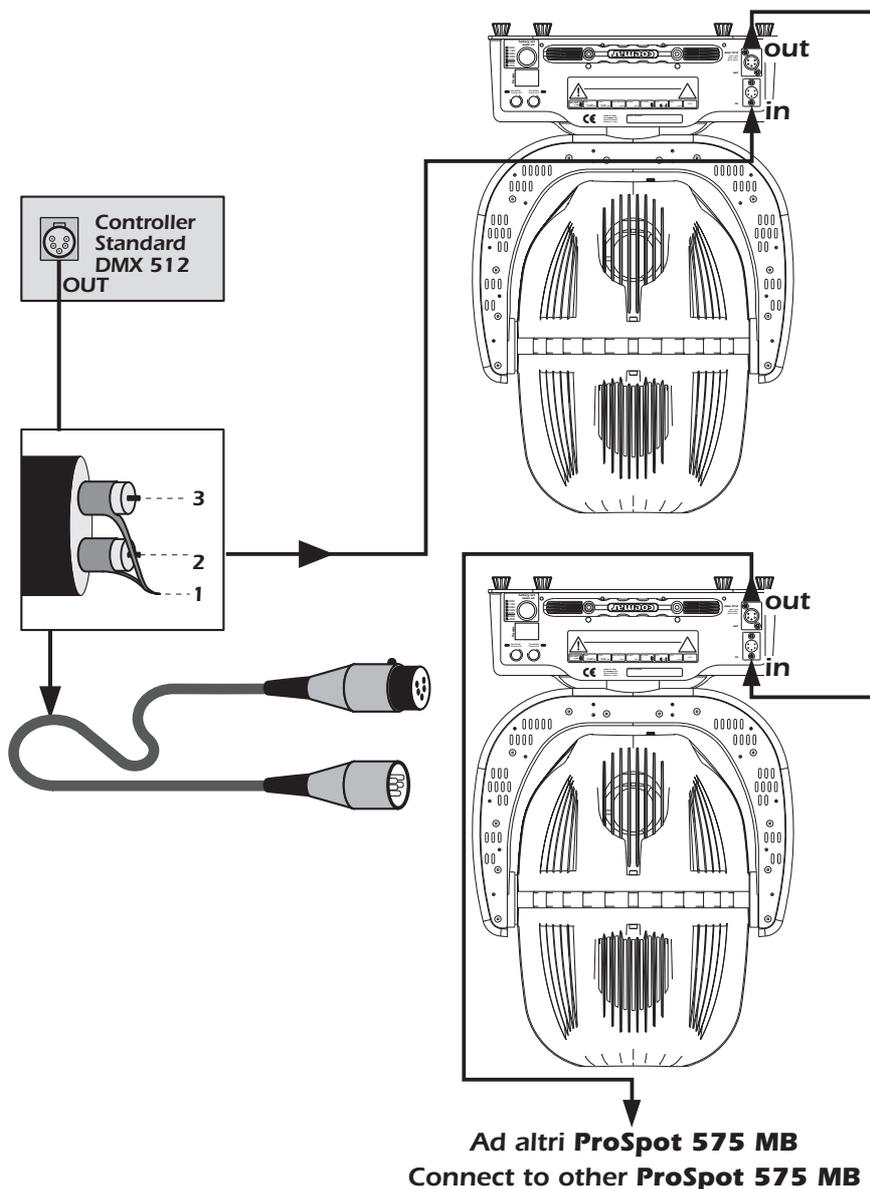
Control signal is digital and is transmitted via two pair screened  $\varnothing 0.5\text{mm}$  cable as per international standards for the transmission of DMX512 data. Connection is serial, utilising XLR 3 male and female sockets located on the base of the **ProSpot 575 MB**, labeled **DMX 512 IN** and **OUT** (see diagram).

### Plug/socket connections for XLR3 connectors:

Pin connections conform to the international standard as per the following table:

- pin 1 = GND
- pin 2 = data -
- pin 3 = data +

If using a controller which output signal via an XLR 5 (5 pin) socket, do not use pins 4 and 5, leave them unconnected.



### ATTENTION!!

Ensure that all data conductors are isolated from one another and the metal housing of the connector. Pin number 1 should never be connected to the device's power supply.

## 7. Turning on the projector

After having followed the preceding steps, turn on the projector via the main **Power** switch.

The display will show in sequence the software version installed in the 3 onboard microprocessors - the display "0" and the two master "A" and "B".

For example, upon turning on power, the **ProSpot 575 MB** may show:

**01.02** (display pcb "0" software version)

**A1.03** (master pcb "A" software version)

**B1.00** (master pcb "B" software version)

The projector will perform a reset function on all the internal and external motors. This will last some few seconds, after which it will be subject to the external signal from the controller. The display will remain fixed on indicating correct **DMX 512** signal reception.

**If the display flashed, there is no DMX signal being received.** Check your cabling and your controller.

### 7.1. DMX addressing

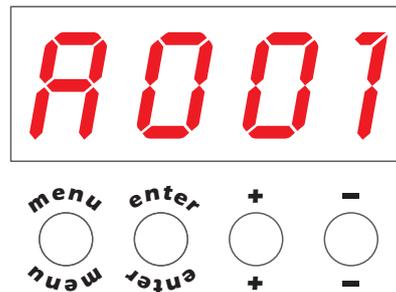
Each projector utilises **22** channels of **DMX 512** for complete control (for further information, see section **7.2. DMX functions**).

#### DMX addresses

To ensure that each projector accesses the correct signal, it is necessary to correctly address each fixture. Any number between 1 and 490 can be generated via the multifunction panel of the unit. This procedure must be carried out on every projector being used. When powered up initially, each projector will show **A001** which indicates **DMX address 001**; a projector thus addressed will respond to commands on channel **1** to **22** from your **DMX controller**. A second unit should be addressed as **23**, a third as **45** and so on until the final projector has been addressed.

#### Altering DMX addresses

1. Press the **+** or **-** buttons until the display shows the required **DMX** address. The characters in the display will flash to indicate that the selection is not yet stored in memory.
2. Press the **enter** button to confirm your selection. The display panel will cease to flash and the projector will now respond to the new **DMX 512** address.



**Important Note:** holding down the **+** or **-** buttons will cause the display to alter at an increased speed, allowing a faster selection to be made.

#### **ATTENTION!!**

**If you alter the DMX with no DMX controller connected, the characters in the display panel will continue to flash even after you have pressed the ENTER button.**

## 7.2. DMX functions

channel	function	type of control	effect	decimal		percentage	
1	X axis, base movement (pan)	proportional	control of the pan movement of the beam of light via proportional rotation of the base motor	0	- 255	0%	- 100%
2	X axis, fine base movement (pan)	proportional	fine control of the pan movement of the beam of light via proportional rotation of the base motor	0	- 255	0%	- 100%
3	Y axis, yoke movement (tilt)	proportional	control of the tilt movement of the beam of light via proportional rotation of the yoke motor	0	- 255	0%	- 100%
4	Y axis, fine yoke movement (tilt)	proportional	fine control of the tilt movement of the beam of light via proportional rotation of the yoke motor	0	- 255	0%	- 100%
5	movement speed	step	standard (fast)	0	- 10	0%	- 4%
		step	ultra fast movement (ideal for positioning during programming)	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	dimmer	step	closed	0	- 7	0%	- 3%
		proportional	adjust output intensity from 0 to 100%	8	- 255	3%	- 100%
7	shutter, strobe	step	shutter closed	0	- 9	0%	- 4%
		proportional	variable speed strobing effect, from slow to fast	10	- 66	4%	- 26%
		step	shutteropen	67	- 68	26%	- 27%
		proportional	sequenced pulse effect, slow closing, fast opening (variable speed pulsing, from slow to fast)	69	- 125	27%	- 49%
		step	shutteropen	126	- 127	49%	- 50%
		proportional	sequenced pulse effect, fast closing, slow opening (variable speed pulsing, from fast to slow)	128	- 184	50%	- 72%
		step	shutteropen	185	- 187	73%	- 73%
		proportional	random strobe effect with variable speed from slow to fast	188	- 244	74%	- 96%
8	iris diaphragm (LIN-Linear)	step	open	0	- 9	0%	- 4%
		proportional	from maximum opening to minimum opening	10	- 255	4%	- 100%
<b>Note 1: the iris diaphragm has different effects depending upon the settings made when selecting IRIS on the display (linear LIN or with internal effects PULS)</b>							
8	iris diaphragm (with internal effects PULS)	step	open	0	- 9	0%	- 4%
		proportional	from maximum open to minimum	10	- 124	4%	- 49%
		step	minimum diameter	125	- 129	49%	- 51%
		proportional	pulse effect 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%
9	no function	step	spare channel, allows the compatibility with iSpot 575 version	0	- 0	0%	- 0%
10	focus	proportional	proportional control of focus	0	- 255	0%	- 100%
11	selecting rotating gobos wheel 1 (gobo wheel far to the lamp)	step	nogobo	0	- 10	0%	- 4%
		step or proportional selectable via channel20	gobo1	11	- 40	4%	- 16%
			gobo2	41	- 70	16%	- 27%
			gobo3	71	- 100	28%	- 39%
			gobo4	101	- 130	40%	- 51%
			gobo5	131	- 160	51%	- 63%
			gobo6	161	- 192	63%	- 75%
proportional	continuous rotation of the gobo wheel from slow to fast	193	- 255	76%	- 100%		
12	indexing the rotating gobos (wheel 1) through 360°	step	noeffect	0	- 10	0%	- 4%
		proportional	proportional positioning of the gobo through 360°	11	- 255	4%	- 100%
<b>Note 2: when channel 12 is set to between 0 and 10, gobo rotation (channel 13) has no effect on indexing, the gobo stops instantaneously</b>							

channel	function	type of control	effect	decimal		percentage	
13	gobo rotation on wheel 1 and fine indexing control	proportional	fine indexing / accurate positioning of the gobo (if channel 12 is above of level 10)	0	100	0%	39%
		proportional	continuous rotation of the gobo in a counterclockwise direction with a proportional decrease in speed	101	176	40%	69%
		step	gobostop	177	179	69%	70%
		proportional	continuous rotation of the gobo in a clockwise direction with a proportional increase in speed	180	255	71%	100%
14	selecting static gobos on wheel 2	step	nogobo	0	10	0%	4%
		step or proportional selectable via channel20	gobo1	11	40	4%	16%
			gobo2	41	70	16%	27%
			gobo3	71	100	28%	39%
			gobo4	101	130	40%	51%
			gobo5	131	160	51%	63%
			gobo6	161	192	63%	75%
proportional	continuous rotation of the gobo wheel from slow to fast	193	255	76%	100%		
15	no function	step	spare channel, allows the compatibility with iSpot 575 version	0	0	0%	0%
16	no function	step	spare channel, allows the compatibility with iSpot 575 version	0	0	0%	0%
17	selecting and rotating the prism	step	no effect	0	10	0%	4%
		step	prism inserted into the light beam	11	20	4%	8%
		proportional	continuous rotation of the prism in a clockwise direction with a proportional speed from maximum to minimum	21	136	8%	53%
		step	stop the prism rotation	137	139	54%	55%
		proportional	continuous rotation of the prism in a counterclockwise direction with a proportional speed from minimum to maximum	140	255	55%	100%
18	colour wheel	step	no colour, white beam	0	7	0%	3%
		step or proportional selectable via channel20	colour 1	8	27	3%	11%
			colour 2	28	47	11%	18%
			colour 3	48	67	19%	26%
			colour 4	68	87	27%	34%
			colour 5	88	107	35%	42%
			colour 6	108	127	42%	50%
		proportional	rainbow effect in a clockwise direction from fast to slow	128	190	50%	75%
step	no rotation	191	192	75%	75%		
proportional	rainbow effect in a counterclockwise direction from slow to fast	193	255	76%	100%		
19	no function	step	spare channel, allows the compatibility with iSpot 575 version	0	0	0%	0%
20	gobo and colour positioning	step	gobos and colours are centred in the optical path	0	10	0%	4%
			proportional positioning of <b>gobos</b> in the optical path	11	125	4%	49%
			proportional positioning of <b>colours</b> in the optical path	126	239	49%	94%
			proportional positioning of both <b>gobos</b> and <b>colours</b> in the optical path	240	255	94%	100%
21	black-out activation synchronised with PAN/TILT movement, colour and gobo selection	step	no effect	0	249	0%	98%
			black-out of the beam light when PAN/TILT movement occurs or when colours and/or gobos change	250	255	98%	100%
22	lamp on/off and resetting motors	step	park, no function	0	10	0%	4%
			lamp off	11	29	4%	11%
			pan and tilt reset (once only)	30	65	12%	25%
			reset of all the motors with the exception of the dimmer, pan and tilt (once only)	66	100	26%	39%
			reset of all the motors with the exception of the dimmer (once only)	101	135	40%	53%
			reset of all the motors (once only)	136	170	53%	67%
			park, no function	171	209	67%	82%
			fans at maximum speed (only when lamp on)	210	249	82%	98%
lamp on, silent fans (if internal temperature allows)	250	255	98%	100%			

Note 3: the display panel may be used to disable the switching off of the lamp via DMX

Note 4: turning off the lamp and all the reset functions are delayed by 6 seconds to prevent accidental activation

Note 5: lamp On/Off function and fan status can be modified only if an opposite level is set

## 8. Display panel functions

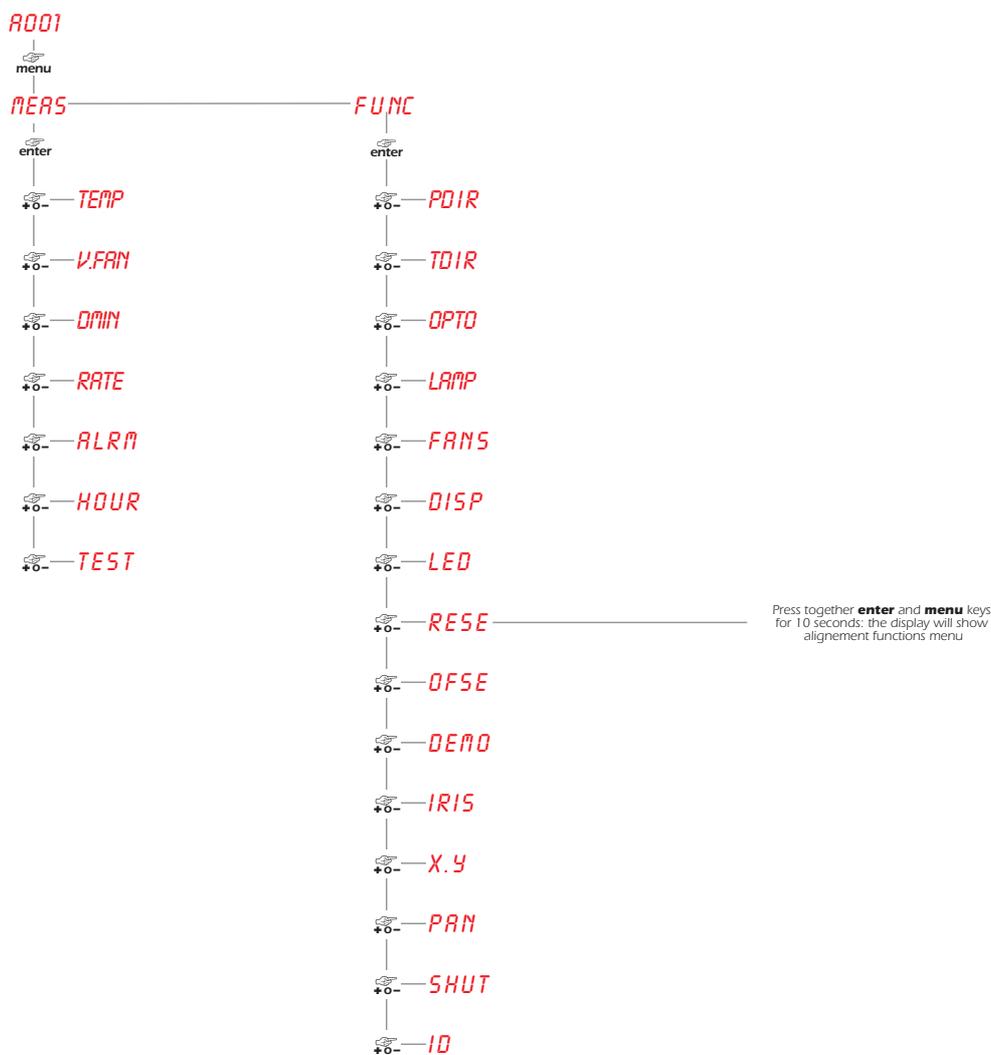
The display panel of the **ProSpot 575 MB** shows all the functions available; it is possible to change some of those parameters and to add some functions.

Changing the preset settings made by **Coemar** can vary the functions of the device so that it may not respond to a **DMX 512** controller being used to control it. Carefully follow the instructions before applying any variations or selections.

**NOTE:** the symbol  shows which key has to be pushed to obtain the desired function .

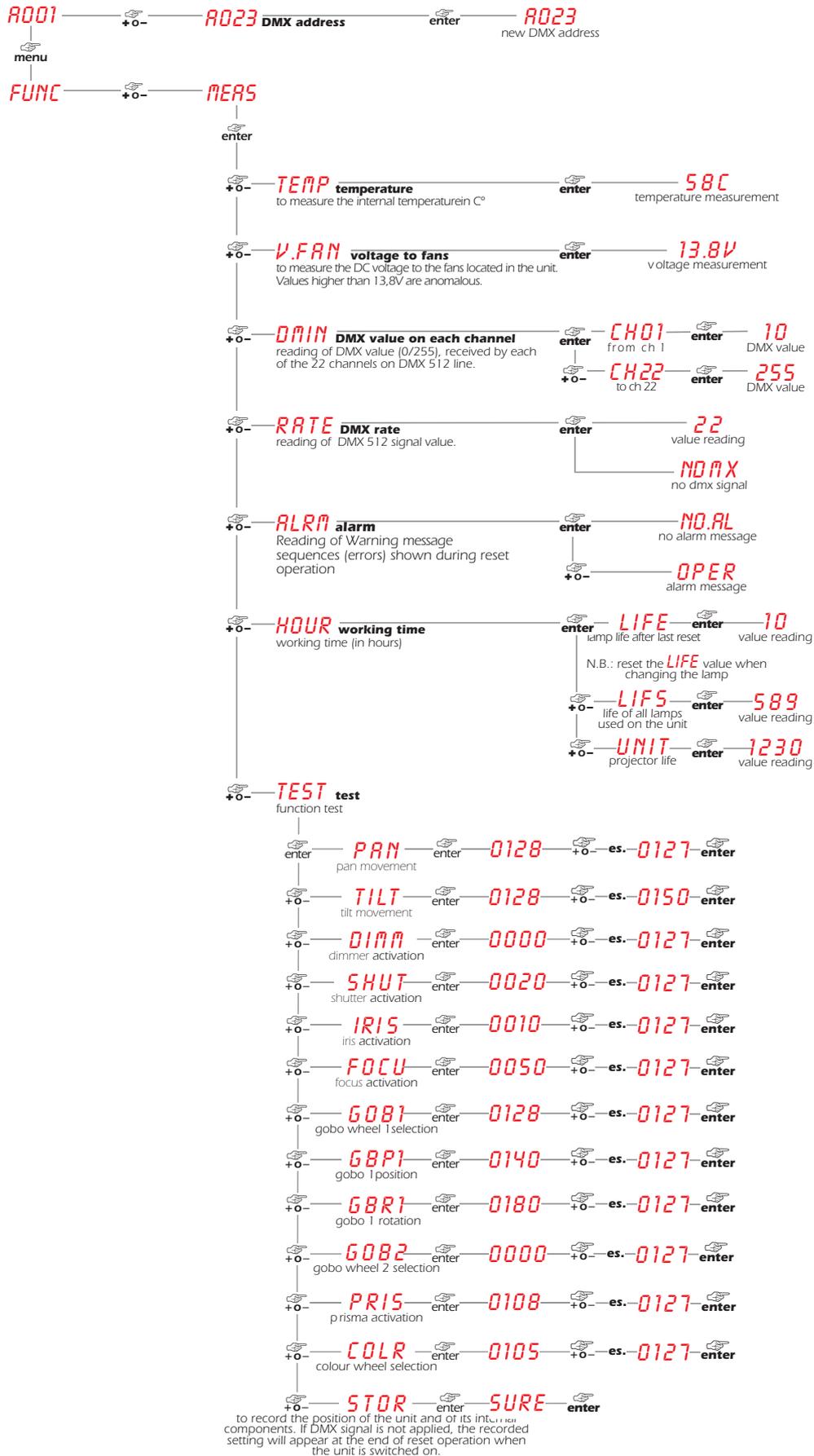
### 8.1. Quick guide to menu navigation

For your convenience, the following is a guide to navigating the menu system of the projector.



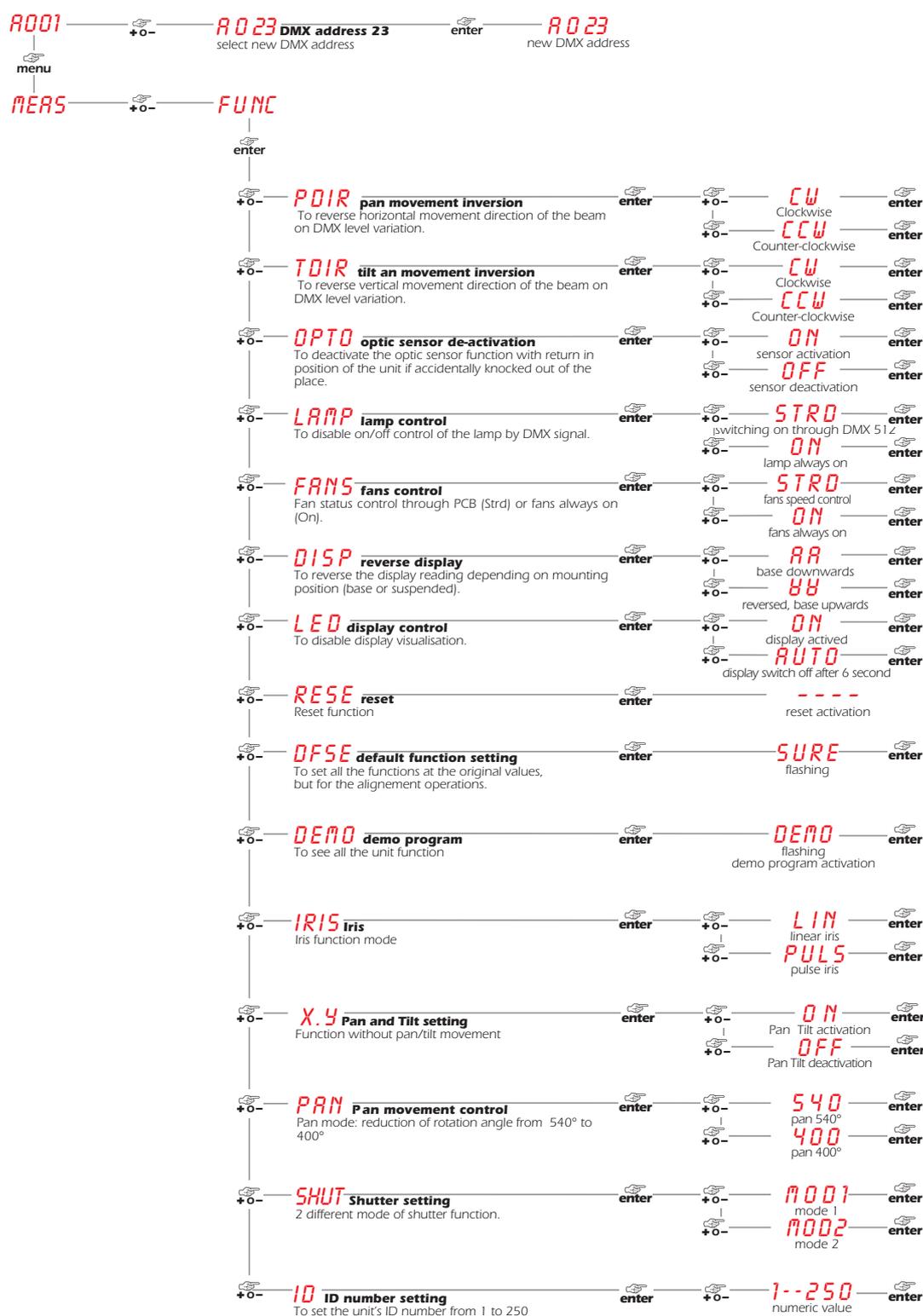
## 8.2. Measure and test (MEAS)

The internal microprocessor of the **ProSpot 575 MB** allows for several diagnostic and output parameters to be displayed. You may record, in this menu, determine the position in which the projector will come to rest when turned on with no dmx signal attached.



## 8.3. Function settings (FUNC)

The projector allows the altering of several functions and for selecting personalised settings.



## 8.4. Rapid scrolling

Via the **ProSpot 575 MB** display it is possible to rapidly scroll through the various numbers displayed in the menu in the following manner:

1. Pressing the **+** or **-** buttons will cause the number to scroll more quickly.
2. Pressing and holding the **+** button and then the **-** button will cause the numbers to jump to the highest value.
3. Pressing and holding the **-** button and then the **+** button will cause the numbers to jump to the lowest value.

## English

### 8.5. Connecting the DR1

All the functions available via the display menu are also available via the **DR1** (cod. **CO9703**).

The **DR1** is a remote device designed for technical users who need to perform tasks on the projectors whilst they may be located in inaccessible positions. It acts as a remote control.

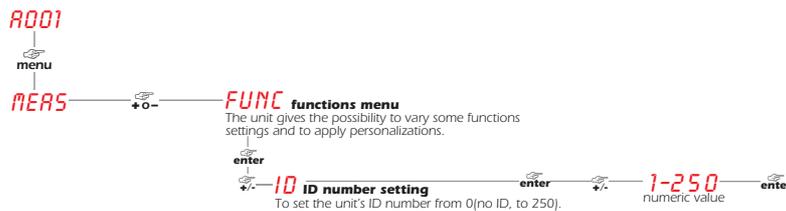
The **DR1** eliminates the need for climbing up truss structures to gain direct physical access to the projector to alter such parameters as **DMX** address, reading outputs such as lamp life, setting master/slave configurations as well as all other functions available via the digital display unit on the projector.

In order to utilise the **DR1** remote device, you must first activate the identifying number of the projector **ID**, which must be unique in the particular DMX universe in which it is currently installed.

#### ATTENTION!!

- If you set a projectors identification number to "0" it will not be able to communicate with the DR1.
- Never assign the same ID to two or more projectors. This may jeopardise the functioning of the entire system. (The DR1 will show an error message).

The method for setting an identification number **ID** is shown below.



For further information, consult the **DR1** instruction manual.

### 8.6. Turning on the projector with no articulated movement

This function may be useful should you need to power up the **ProSpot 575 MB** whilst it is in its flight case or to re-address it or alter any parameters and you wish to in the absence of any articulated movement.

1. Turn on the projector whilst holding down the **enter**, **menu** and **-** buttons

The The projector will proceed with a reset of all its motors with the exception of those which control articulated movement, the pan and tilt motors, which remain static.



2. You may alter the DMX address or any other parameter without any articulated movement occurring
3. To return to normal functioning of the **ProSpot 575 MB** simply turn the projector off and on via the **Power** switch or activate the **Reset** function.

### 8.7. Resetting the counter

The lamp life counter needs to be reset to zero at every lamp change to provide accurate information on lamp life.

When turning on the **ProSpot 575 MB**, simultaneously hold down the **+** and **-** buttons. The projector will restart with its counter reset.



The projector has reset the **LIFE** counter.  
To verify that this operation has occurred:

1. Press the **menu** button and then press **enter**.
2. Press the **+** or **-** buttons until **MEAS** is displayed, then press **enter**.
3. Press the **+** or **-** buttons until **HOUR** (hours) is displayed, then press **enter**.
4. Press the **+** or **-** buttons until **LIFE** (lamp life) is displayed, then press **enter**.
5. If the display shows **0000**, the counter has been reset.

**N.B.** You may also wish to verify that other electronic counters such as **LIFS** (total lamp operating lives) and **UNIT** (total projector operating life) have remained unaltered.

## 9. Lamp installation and alignment

The **ProSpot 575 MB** utilises the Philips 575 MSR/2 or Philips 575 MSD 575W GX 9,5 base lamps. These lamps are available via your **Coemar** distributor or service centre.

Lamp	Philips 575 MSR/2	Philips 575 MSD
Coemar code	105245/2	105215
Power	575W	575W
Luminous flux	49.000 lm	43.000 lm
Colour temperature	7200° K	6000° K
Base	GX 9,5	GX 9,5
Approximate lamp life	1000 hours	3000 hours

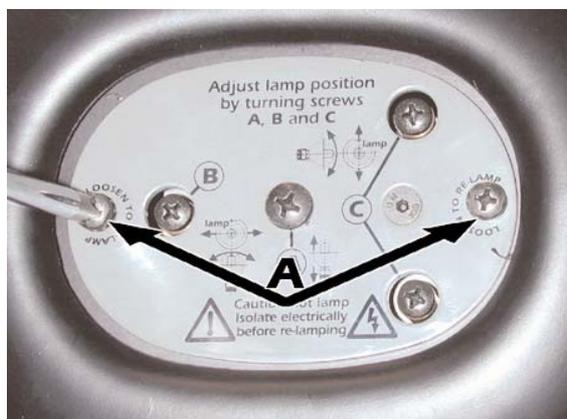
### ATTENTION!!

**Disconnct the unit from mains power prior to attempting lamp installation or replacement**  
**Make sure the projector is sufficiently cooled.**

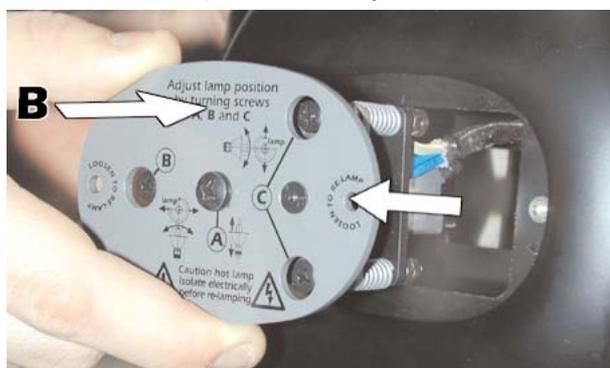
The fixture's internal temperature can reach 250° C after 5 minutes, with a maximum peak of 350° C; ensure that the lamp is cold prior to attempting removal. The fixture should be allowed to stand and cool for 10 minutes prior to its removal. MSR/2 and MSD lamps are part of the mercury vapour family of discharge lamps and must be handled with great care. The lamp operates at high pressure, and the slight risk of explosion of the lamp exists if operated over its recommended life. We recommend, therefore, that the lamp be replaced within the manufacturer's specified lamp life.

### 9.1. Lamp installation

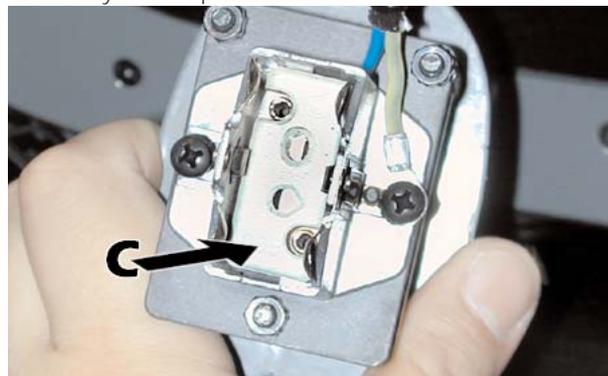
**1.** Use a suitable tool to loosen the two screws "A" which affix the lampholder assembly at the rear of the projector.



**2.** Remove the lampholder assembly "B".



**3.** Identify the lampholder "C".



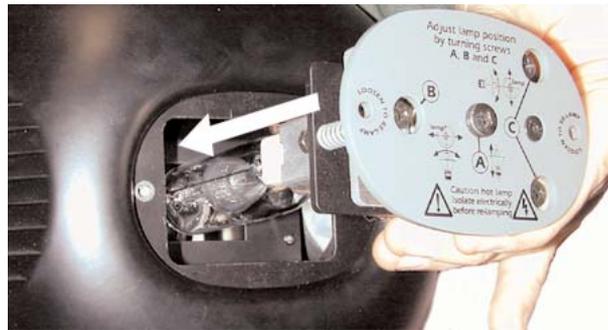
## English

### 4. Insert the lamp

The lamp used is manufactured from quartz glass and should be handled with care; always adhere to the instructions supplied in the lamp's packaging. Never touch the glass directly, use the tissue provided in the lamp's packaging. The GX 9,5 lampbase is symmetrical in construction. DO NOT USE UNDUE FORCE. In case of difficulty, re-read the instructions and repeat the procedure.



5. Replace the lampholder assembly in its original position and refasten the two screws "A" which were previously removed.



### ATTENTION!!

Each time you change the lamp, we recommend the following be carried out:

- realign the lamp in the optical path to avoid overheating dichroics and/or gobos .
- reset the lamp life counter (as described in section 8.7. Resetting the counter).

## 9.2. 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 maximise output, properly align the lamp in the optical system and to avoid the possible overheating of the internal components due to the incorrect focusing of the beam onto components not intended to be exposed to this.

### Alignment procedure

Alignment is effected by the 3 adjusters **A**, **B** and **C** located on the lampholder assembly. The lamp should be on, black-out and dimmer fully open, and no colours or gobos selected. If the lamp 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 centre of the beam (adjusters **B** and **C**) and then flatten the beam to maximum uniformity (adjuster **A**).

### Vertical adjustment

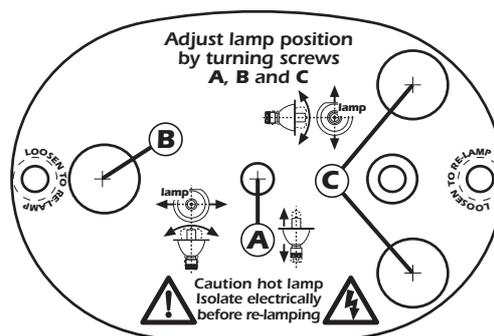
Adjuster "**C**" acts on a lever and spring assembly to position the lamp via a vertical movement within the reflector; rotate it until correct positioning is achieved.

### Horizontal adjustment

Adjuster "**B**" acts on a lever and spring assembly to position the lamp via a horizontal movement within the reflector; rotate it until correct positioning is achieved.

### Axial adjustment

Adjuster "**A**" moves the entire lamp assembly axially within the unit; rotate it until correct positioning is achieved, resulting in a flat, even beam.



## 10. Interchanging gobos

**ProSpot 575 MB** utilises a mechanical system which allows the fixture's gobos to be removed without the need for specialised equipment. Replacement gobos should be made of either heat resistant glass or metal. An ever-increasing range of gobos is available from your **Coemar** sales network.

### 10.1. Gobo dimensions

**ProSpot 575 MB** utilises gobos with thicknesses between 0.2 and 3.5 mm. The external gobo and image dimensions are:

Gobo dimensions	Ø external (mm)	Ø image (mm)
Metal	33	28
Glass undefined image	32.8	32.8
Glass defined image	32,8	28

### 10.2. Opening up the projector housing

By removing the housing in the manner shown below, complete access to the projector's internals is possible.

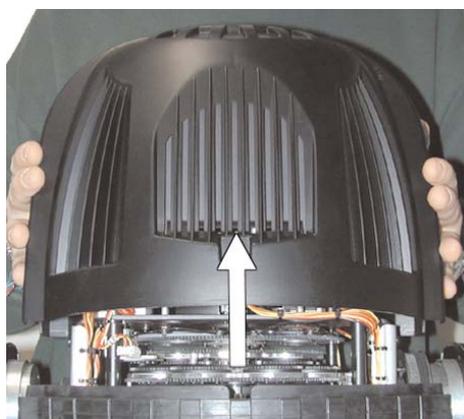
#### **ATTENTION!!**

**Always remove mains power and ensure the unit is sufficiently cooled prior to opening up the housing.**

Using an appropriate screwdriver, remove the screws which affix the front and rear housings as shown in the diagram below:



Remove the housings to expose the projector's internals.

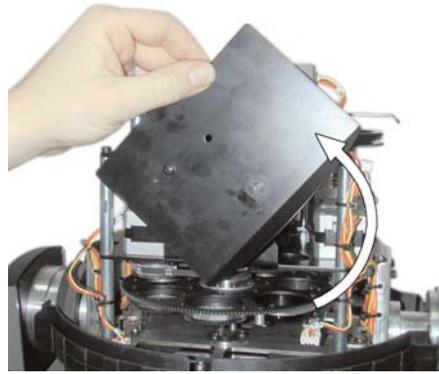


## English

### 10.3. Gobo replacement

To replace gobos, proceed as follows:

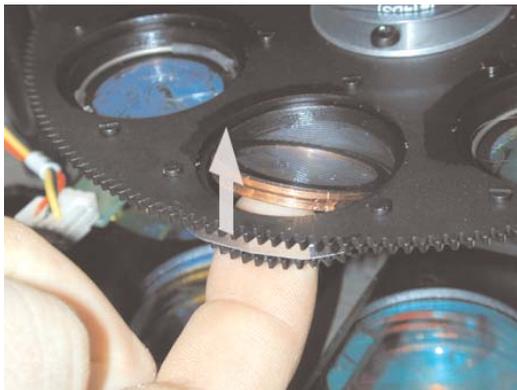
1. Open up the projector housing as discussed in section **10.3. Opening up the projector housing.**
2. Loosen the thumbscrew shown in the diagram below and remove the guard to gain full access to the gobo wheel.



3. Remove the gobo retaining spring.



4. With extreme care, remove the gobo.



5. Repeat the above procedure in reverse to replace a gobo into the gobo wheel.

## 11 Thermal protection

A thermal sensor in the body of the **ProSpot 575 MB** protects the unit against overheating.

The thermal sensor operates by removing voltage to the lamp if the ambient temperature rises above a preset maximum due to either less than ideal air circulation around the fixture or in the event of cooling fan failure.

## 12. Maintenance

Whilst every possible precaution has been taken to ensure the trouble-free operation of your **ProSpot 575 MB**, the following periodic maintenance is highly recommended.

### **ATTENTION!!**

**Always remove mains power and ensure the unit is sufficiently cooled prior to opening up the housing.**

To gain access to the internals of the unit refer to section **10.2. Opening up the projector housing** of this manual.

### 12.1. Periodic cleaning

#### **Lenses and reflectors**

Even a fine layer of dust can reduce the luminous output substantially. Regularly clean all lenses and the reflector 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 6 weeks; the period for this periodic 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.

### 12.2. Periodic maintenance

#### **Lamp**

The lamp should be replaced if there is any observable damage or deformation due to heat. This will avoid the danger of the lamp exploding.

#### **Mechanicals**

Periodically check all mechanical devices for wear and tear; gears, guides, belts, etc., replacing them if necessary. Periodically check the lubrication of all components, particularly the parts subject to high temperatures. If necessary, lubricate with suitable lubricant, available from your coemar distributor.

#### **Electrical components**

Check all electrical components for correct earthing and proper attachment of all connectors, refastening if necessary.

### 12.3. Fuse replacement

Locate the fuse, which protects the lamp and electronics, in the base of the **ProSpot 575 MB**.

Using a multimeter, test the condition of the fuse, replacing it with one of equivalent type if necessary.

## 12.4. Electronic motor alignment

### ATTENTION!!

This procedure should only be undertaken by qualified and experienced technical personnel..

The display panel of the **ProSpot 575 MB** allows for the electronic alignment of the projector's motors in the optical system. This procedure is performed by **Coemar** at the factory. It may be useful to perform this procedure in the case of internal components being replaced.

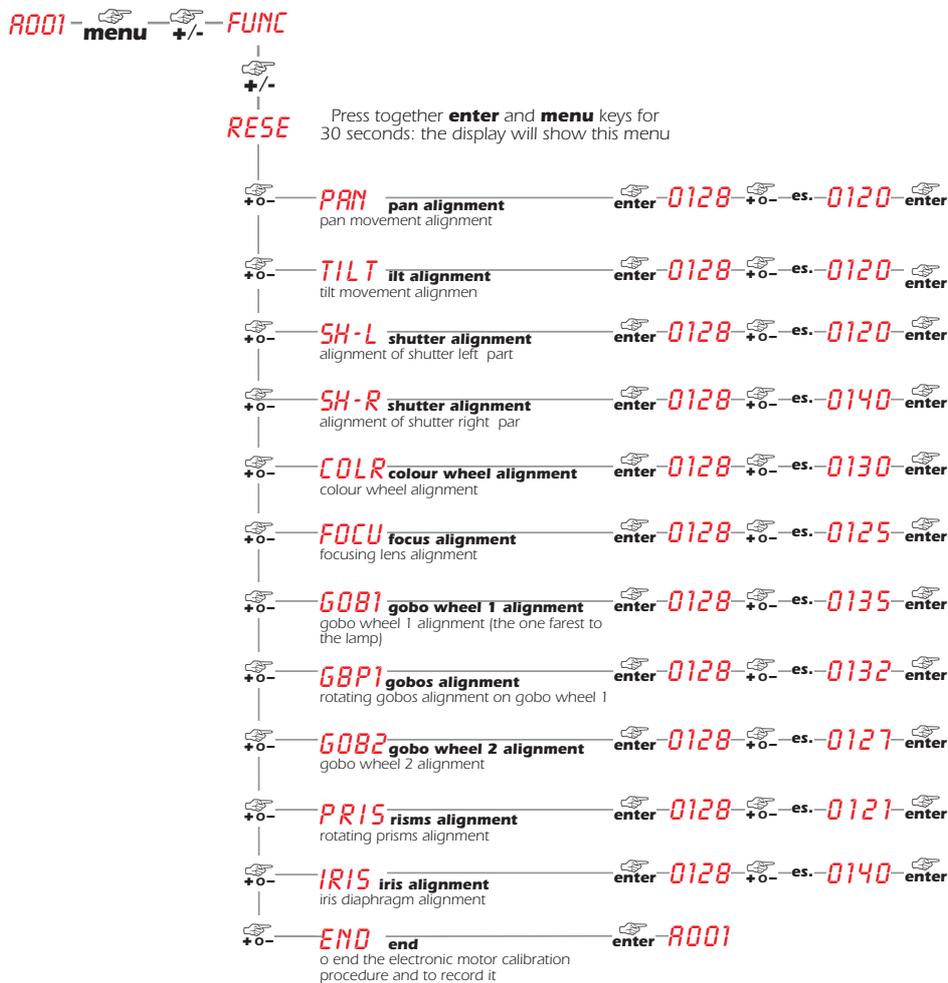
Altering the factory settings may radically alter the functioning of the projector. Carefully read all of the following prior to attempting any changes.

### Electronic calibration

### ATTENTION!!

The alignment procedure can only be carried out when DMX 512 signal is connected.

1. Press the **menu** button and then **enter** to confirm.
2. Press the **+** or **-** button until **FUNC** is displayed. Then press **enter**.
3. Press the **+** or **-** button until **RESE** is displayed.
4. Press the **enter** and **menu** buttons simultaneously, holding them for at least **10"**. The motors will perform a reset and the display will show **-----** for a few seconds. After this, the display will show **PAN** confirming that you have entered electronic calibration mode.



**Note:** Simultaneously pressing the **+** and **-** buttons will return the calibration value to 128 (default).

## 13. Spare parts

All the components of the **ProSpot 575 MB** are available as replacement spares from your authorised **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

<b>MBER:</b>	<p><b>COMMUNICATION Error</b> This message indicates that the motherboard within the unit is not communicating properly with the control source. Check the connectors located on both boards.</p>
<b>OPER:</b>	<p><b>PAN ENCODER Error</b> This message indicates that there is a problem with the PAN encoders. Check the sensors on the encoder wheel located near the pan movement motor, as well as the relevant cabling.</p>
<b>OTER:</b>	<p><b>TILT ENCODER Error</b> This message indicates that there is a problem with the TILT encoder locate on the fixture yoke. Check the sensors on the encoder wheel located near the pan movement motor, as well as the relevant cabling.</p>
<b>SNER:</b>	<p><b>SYNCHRONISATION Error</b> Check and possibly replace the U9 opto-isolator.</p>
<b>EPER:</b>	<p><b>EEPROM Error</b> The EEPROM is either defective or absent; refer to your coemar service centre for a replacement component.</p>
<b>OTER:</b>	<p><b>DATA Error</b> The initial parameter settings are incorrect or corrupt; the projector has reloaded its factory default settings. Turn the projector off and on again. Should the error reoccur, refer the unit to your authorised coemar service centre to have the EEPROM check and possibly replaced.</p>
<b>ADER:</b>	<p><b>DMX ADDRESS Error</b> The projector is not receiving all DMX channels needed to operate correctly. Check the DMX address indicated on the display and the channel numbers being outputted from the controller. Note that not all controllers will output all 512 channels.</p>
<b>S1ER:</b>	<p><b>Control circuit error relating to position sensors for 5 motors</b> Check for the presence of power to the PCB and the condition of the connectors and cabling between the PCB and the sensors. Additionally, check motors and/or cogs for any impediments as well as the proper position of the cabling connectors.</p>
<b>S2ER:</b>	<p><b>Control circuit error relating to position sensors for 4 motors (located in the yoke at right when viewed from the rear of the unit):</b> Check the cabling and the RESET sensors. Additionally, check motors and/or cogs for any impediments as well as the proper position of the cabling connectors.</p>
<b>COER:</b>	<p><b>COLOUR WHEEL POSITION Error</b> Check for correct functioning of the motor and the magnetic sensor and the correct positioning with respect to the sensor and encoder wheel.</p>
<b>G1ER:</b>	<p><b>GOBO WHEEL 1 POSITION Error</b> Check for correct functioning of the motor and the magnetic sensor of GOBO WHEEL 1 (wheel furthest from lamp).</p>
<b>G2ER:</b>	<p><b>GOBO WHEEL 2 POSITION Error</b> Check for correct functioning of the motor and the magnetic sensor of GOBO WHEEL 2 (wheel closest to lamp).</p>
<b>R1ER:</b>	<p><b>GOBO WHEEL 1 INDEXING Error.</b> Check for correct functioning of the motor and the magnetic sensor for gobo indexing</p>
<b>PRER:</b>	<p><b>PRISM POSITION Error.</b> Check for correct functioning of the motor and the magnetic sensor of the prism.</p>
<b>FCER:</b>	<p><b>FOCUSING LENSE POSITIONING Error.</b> Check for correct functioning of the motor and the magnetic sensor of the focusing lense.</p>
<b>ER20÷ER99:</b>	<p><b>SYSTEM Error</b> Turn the unit off and on again. If the error persists, contact your authorised coemar service centre.</p>

## 15. Frequently asked questions

Question	Possible cause	Possible solution
The projector is completely immobile.	<p>Projector not powered up.</p> <p>The circuit breaker is switched off.</p> <p>The protection fuse is blown.</p>	<p>Check that the mains power cable is connected to power.</p> <p>Set the circuit breaker to ON.</p> <p>Disconnect the projector and replace the fuse.</p>
The projector resets correctly, but either does not respond, or responds incorrectly, to DMX signal.	<p>Incorrect signal connection.</p> <p>Incorrect DMX addressing</p> <p>The wiring of the cannon plug may be incorrect.</p>	<p>Inspect the signal cable, rectify any incorrect wiring, repair or replace any damaged cables or connectors.</p> <p>Check the DMX address.</p> <p>Repair or replace the signal cable.</p>
The lamp turns off intermittently.	The projector is too hot.	<p>Let the fixture cool down.</p> <p>Check that the air vents above the cooling fans are not obstructed and that the fans are working correctly.</p> <p>Ensure that the ambient temperature is below 35 °C.</p>



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**Coemar** reserves the right to effect modifications without notification

manuale istruzioni  
instruction manual  
**ProSpot 575 MB**  
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