

**i** | **SPOT 575**

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**coemar**

**instructions  
manual**

1<sup>st</sup> edition, february 2002

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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

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

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 **iSpot 575**
- 1 **instruction manual**

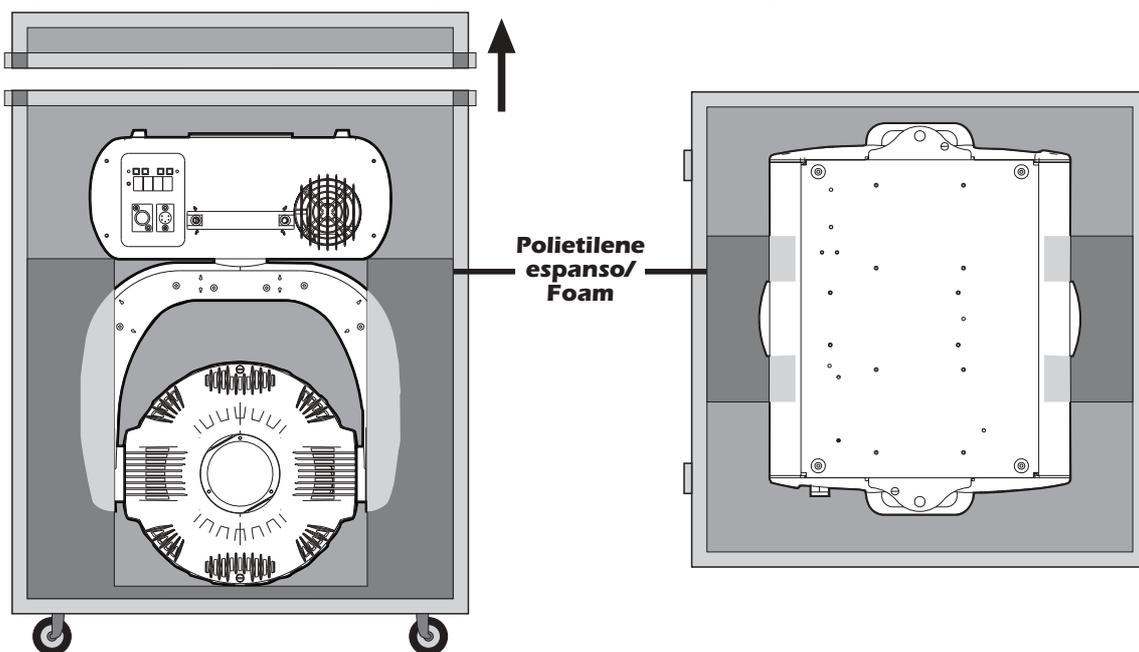
## 2. Transportation

The **iSpot 575** should be transported in its original packaging or in a **coemar** approved flight case.

In order to manufacture a suitable flight case, we recommend the following simple procedure to be followed, which will stop the articulated movement of the **iSpot 575** during transportation.

The following diagram illustrates **coemar**'s recommended construction of the internal for a roadcase to suit this fixture.

A) Padding around the entire projector, including the base, with suitable padding materials.



### 3. Important safety information

#### Fire prevention:

1. **iSpot 575** utilises a Phillips 575 MSD or 575 MSR/2 lamp; 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.

#### prevention of 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 section 7 of this manual.
3. The level of technology inherent in the **iSpot 575** 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. Never operate the unit without proper earth connection.
5. 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. always wait for at least 10 minutes to elapse after the unit has been turned off prior to attempting to replace the lamp.  
Always wear suitable hand protection when handling the lamp.

#### Protection against penetration by external agents

1. The fixture is classified ordinary appareil ; its protection grade against penetration by external agents, solid or liquid, is IP 20

## 4. Lamp: Installation and replacement

**iSpot 575** utilises a Philips 575 MSD or a Philips 575 MSR/2 lamp at 575 watts with a GX 9,5 lamp base. The lamp is available from your authorised **coemar** sales agent.

### Philips 575 MSD

<b>coemar code</b>	<b>105215</b>
wattage	575 w
luminous flux	43.000 lm
color temperature	6000° K
base	GX 9,5
rated life	2000 hours

### Philips 575 MSR/2

<b>coemar code</b>	<b>105245/2</b>
wattage	575 w
luminous flux	49.000 lm
color temperature	7.200° K
base	GX 9,5
rated life	1000 hours

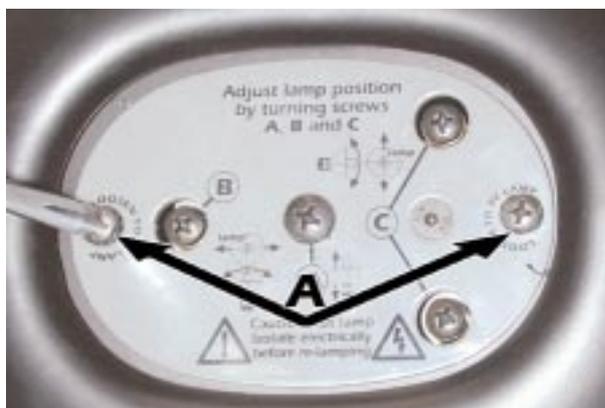
### Attention

Turn off the power prior to opening up the unit..

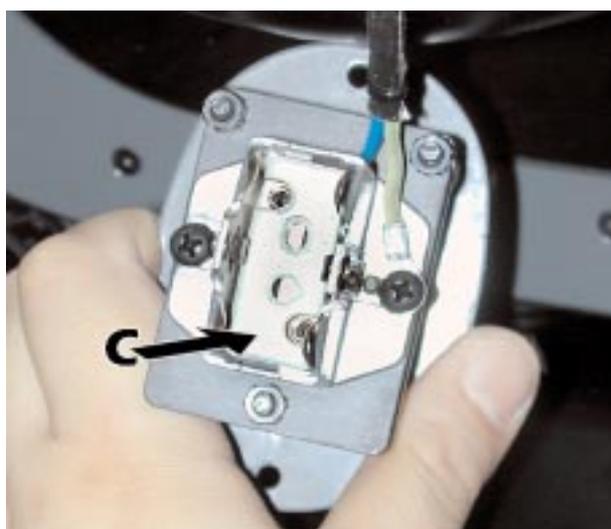
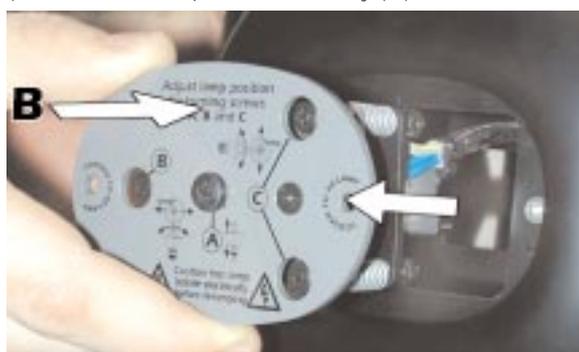
The fixture's internal temperature can reach 250° C after 5 minutes, with a maximum peak of 350° C; ensure that the lamp is cold prior to attempting removal. The fixture should be allowed to stand and cool for 10 minutes prior to its removal. MSR/SA lamps are part of the mercury vapour family of discharge 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 of 1000/2000 hours. We recommend, therefore, that the lamp be replaced within the manufacturer's specified lamp life.

### installing the lamp

- 1) Using a Phillips head screwdriver, remove the screws **(A)** which hold the lampholder in place, located at the rear of the projector head.



- 2) Remove the lampholder assembly **(B)**.



- 3) locate 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 GY 9,5 lampbase is asymmetrical in construction, with one lamp pin socket larger than the other; make sure therefore that the correct pin is lined up into its respective pin socket. **DO NOT USE UNDUE FORCE.** In case of difficulty, re-read the instructions and repeat the procedure.



5) Replace the lamp assembly **(B)** and replace and tighten the screws **(A)** which were previously removed.



**Attention:** we recommend that the lamp be realigned in the optical train of the unit to avoid overheating of the dichroic filters and other internal components of the unit. refer to section **13** for instructions about this procedure.

## 5. Operating voltage and frequency

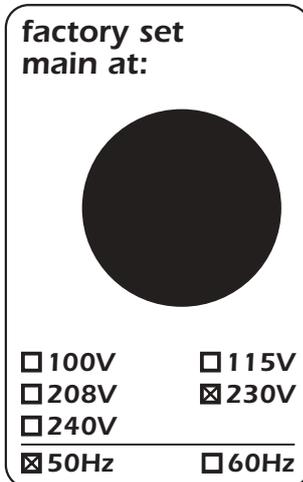
The projector may operate at voltages including 208, 230 or 240 V. **coemar** presets (barring specific requests) a voltage of 240v. The preset voltage is indicated on a sticker located on the base of the projector near the position of the voltage selector switch.

**iSpot 575** may operate at either 50 or 60 Hz without any changes required.

### selecting an operating voltage different to the factory preset

It is possible to alter the operating voltage of the projector at any time, by using the selector located on the base of the projector.

The selector allows you to choose from 2 preset voltages indicated on the sticker located adjacent to the switch.



Select the required voltage by simply sliding the switch to the correct position.

Should you wish to operate the projector at a voltage other than those indicated on the selector switch, contact your authorised **coemar** service centre. This procedure should only be carried out by qualified service personnel.

## 6. Installation

### mounting

**iSpot 575** may be either floor or ceiling mounted.

For floor mounting installations, the **iSpot 575** is provided with four rubber mounting feet

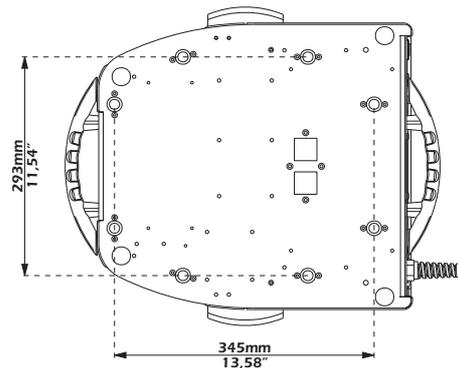
For ceiling mounted installations we suggest the use of appropriate clamps or fixings to attach the fixture to the mounting surface.

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 **iSpot 575** moves during its operation.

### safety chain

We recommend the use of two safety chains (cod. 069) - connected to the **iSpot 575** and to the suspension truss in order to avoid the fixture accidentally falling. 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.

You may attach the safety chain to **iSpot 575** via the holes in the fixture's base (**B**)



### protection against liquids

The projector contains electric and electronic components that must not come into contact with water, oil, or any other liquid.

### movement

The projector has a maximum movement of 630° in the base and 260° in the yoke; **DO NOT** place any obstructions in the path of the projector's movement.

### safety chain

The use of a safety chain (cod. 069) - fixed to the **iSpot 575** and to the primary suspension point, is highly recommended to protect against accidental failure, however unlikely, of the primary suspension point.

If using an after-market safety chain not manufactured by **coemar**, ensure that it is of sufficient rating to hold the weight of the fixture.

### risk of fire

Each fixture produces heat and must be installed in a well-ventilated position. The minimum recommended distance from flammable material is: 0.5m. Minimum distance from the object being illuminated is: 2 m.

## 7. Mains connection

### cabling

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.

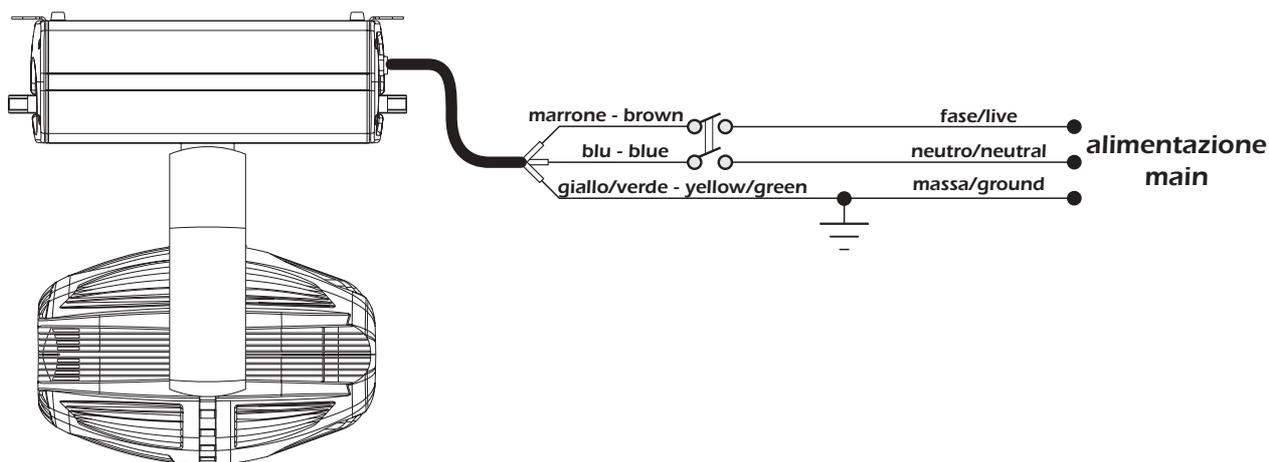
NB: In case of cable replacement, similar cable with comparable thermal resistant qualities must be used exclusively (cable 3x1.5  $\varnothing$  external 10 mm, rated 300/500V, tested to 2KV, operating temperature  $-40^{\circ} +180^{\circ}$ , **coemar** cod. CV5309).

### mains connection

The **iSpot 575** can operate at voltages from 208V-230V-240V at 50 or 60Hz (operating voltage and frequency can be selected as described in section 5 of this manual).

Prior to connecting the unit to your mains supply, ensure that the model in your possession correctly matches the mains supply available to you. For connection purposes, ensure your plug is of a suitable rating of 8 amps.

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



### protection

The use of a thermal magnetic circuit breaker is recommended for each **iSpot 575**.

A good earth connection is essential for the correct operation of the fixture. Strict adherence to regulatory norms is strongly recommended.

## 8. Signal connection

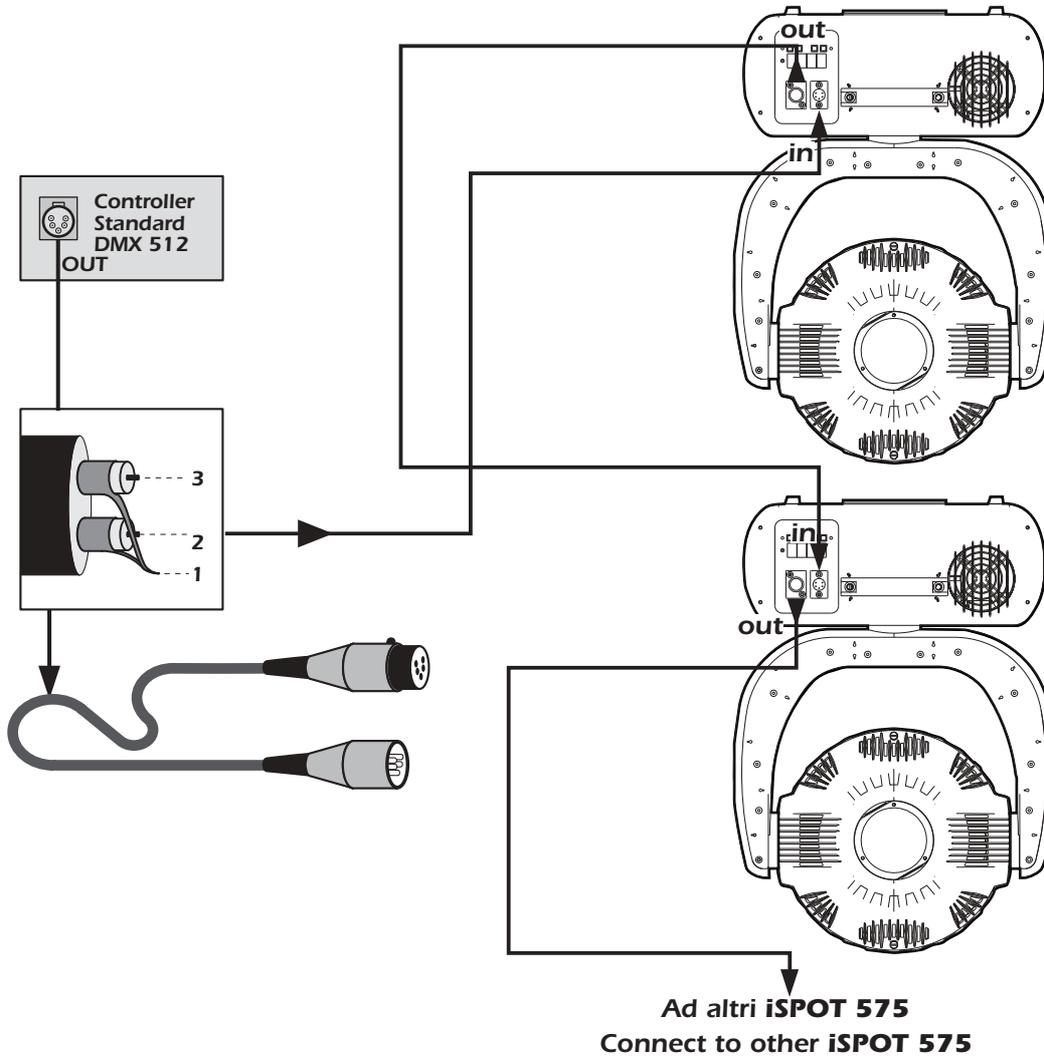
Control signal is digital, and is transmitted via two pair screened  $\varnothing 0.5\text{mm}$  cable.

Connection is serial, utilising XLR 3 or XLR5 male and female sockets located on the base of the **iSpot 575**, labelled **DMX 512** and **DMX 512 standard** (see diagram).

Pin connections conform to the international standard:

- pin 1= screening 0 volt
- 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, leaving them unconnected.

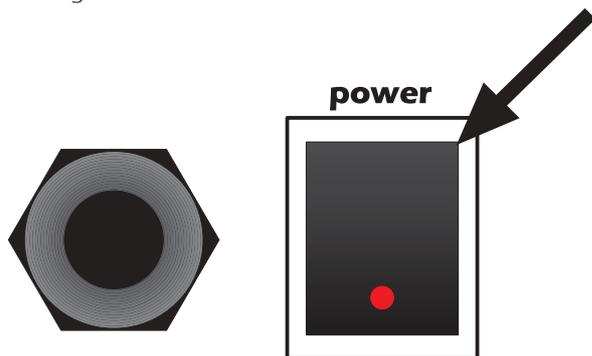


Ensure that all data conductors are isolated from one another and the metal housing of the connector.

**Note: the housing of the cannon XLR 3 or 5 must be isolated.**

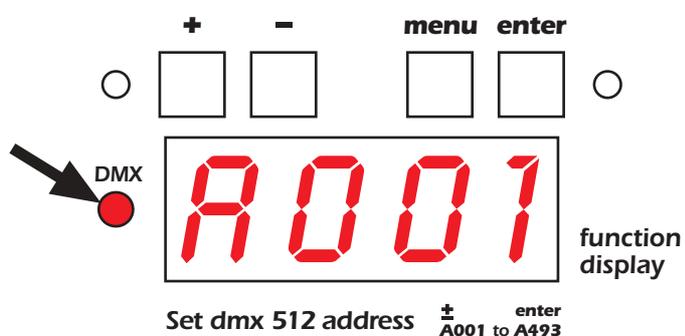
## 9. Powering up

After having followed the preceding steps, turn on the DMX 512 controller which will be used to control the **iSpot 575**. Following this, turn on the power to the projector, and turn on the projector's power switch. 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.



### DMX led

The DMX **led** will be static on to indicate that **DMX 512** signal is being correctly received by the projector.



If the led is off, the projector is not receiving signal. check the cabling and the functioning of the controller.

## 10. DMX addressing

Each **iSpot 575** utilises **20** or **21** channels of DMX 512 signal for complete control. The number of channels varies depending on the mode (**Mode**) selected; **Mod1** (20 channels), **Mod2** (21 channels). The additional channel offers further functions (for more details see paragraph **12. DMX 512 signal functions**)

### DMX coding

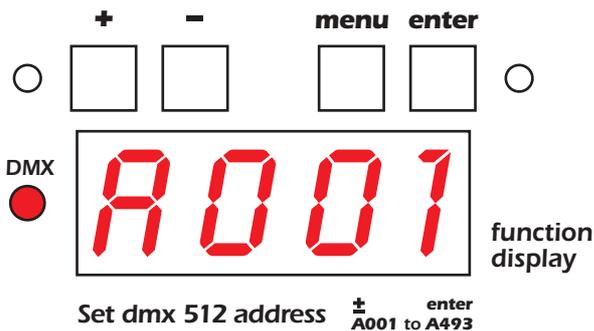
To ensure that each projector accesses the correct signal, it is necessary to correctly address each fixture. Any number between 1 and 493 can be generated via the multifunction panel of the **iSpot 575**.

This procedure must be carried out on every **iSpot 575** being used.

When powered up initially, each projector will show **A001** which indicates **DMX address 1**; a projector thus addressed will respond to commands on channel **1** to **20** from **DMX 512 controller**. A second unit should be addresses as **21**, a third as **41** and so on until the final **iSpot 575** has been addressed.

### Altering DMX addresses

- 1) Press the **+** or **-** button until the display shows the **DMX** required, the characters in the display panel will flash to indicate that the selection is not stored in memory.



- 2) Press the **enter** button to confirm your selection; the display will stop flashing and the projector will now respond to the new DMX address.
- 3) To better understand the function of each channel, we refer you to section 12 "Control channel functions from a **DMX 512** controller".

**Important Note:** Keeping the **+** or **-** button pressed will cause the display to alter at increased speed, allowing a faster selection to be effected.

By pressing the **-** button, you may inadvertently select a DMX address which is not being communicated to the fixture by the controller, for example 500. If this is the case, the display will slow the data reception, (since it does not exist), and you will note that it is slow to respond to your commands (for example altering an address or requesting or confirming a reset). You may solve this problem by either sending data to this address, or by altering the incorrect DMX setting of the **iSpot 575** in question.

## 11. Display panel functions

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

Changing the setting made by coemar can vary the functions of the device so that it will not respond to the **DMX 512** controller 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 function desired.

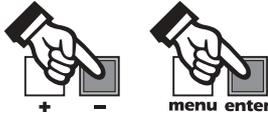
<b>ROOT</b>  menu	<b>+ O -</b>  <b>DIRP</b> <b>pan movement inversion</b> To reverse horizontal movement direction of the beam from left to right and vice versa on DMX level variation	<b>enter</b> <b>+ O -</b>  <b>CW</b> clockwise <b>+ O -</b>  <b>CCW</b> counterclockwise	<b>enter</b> 
<b>+ O -</b>  <b>DIRT</b> <b>tilt movement inversion</b> To revert vertical movement direction of the beam from the bottom upwards and vice versa on DMX level variation	<b>enter</b> <b>+ O -</b>  <b>CW</b> clockwise <b>+ O -</b>  <b>CCW</b> counterclockwise	<b>enter</b> 	
<b>+ O -</b>  <b>OPTO</b> <b>optic sensor deactivation</b> To deactivate optic sensors that sense the position of the eyoke and the base of the unit and that allow the return in position of the unit if accidentally knocked out of place.	<b>enter</b> <b>+ O -</b>  <b>ON</b> sensors activation <b>+ O -</b>  <b>OFF</b> sensors deactivation	<b>enter</b> 	
<b>+ O -</b>  <b>LAMP</b> <b>lamp control</b> Lamp on/off control inhibition by DMX signal	<b>enter</b> <b>+ O -</b>  <b>STRD</b> ignition by DMX 512 <b>+ O -</b>  <b>ON</b> lamp permanently on	<b>enter</b> 	
<b>+ O -</b>  <b>FANS</b> <b>fans control</b> Fans function controlled through PCB (strd). Fans always on (on)	<b>enter</b> <b>+ O -</b>  <b>STRD</b> automatic on/off <b>+ O -</b>  <b>ON</b> fans always on	<b>enter</b> 	
<b>+ O -</b>  <b>DISP</b> <b>reverse display</b> Reverses display's reading verse depending on the mounting position. (on the ground or suspended)	<b>enter</b> <b>+ O -</b>  <b>AA</b> suspended position <b>+ O -</b>  <b>BB</b> reversed	<b>enter</b> 	
<b>+ O -</b>  <b>LED</b> <b>display control</b> To disable display visualization.	<b>enter</b> <b>+ O -</b>  <b>OFF</b> switching off display (  any key to reactivate it)	<b>enter</b> 	
<b>+ O -</b>  <b>TEST</b> <b>motors test</b> Device operation test without using DMX signal	<b>enter</b> <b>+ O -</b>  <b>PAN</b> pan movement test <b>+ O -</b>  <b>ALL</b> motors test	<b>enter</b> 	
<b>+ O -</b>  <b>RESE</b> <b>reset</b> Reset function	<b>enter</b>  <b>---</b> reset activation	<b>enter</b> 	
<b>+ O -</b>  <b>DEMO</b> <b>demo program</b> To demonstrate the fixture's operativity	<b>enter</b>  <b>---</b> demo program activation	<b>enter</b> 	
<b>+ O -</b>  <b>RATE</b> <b>DMX speed</b> DMX signal reception speed.	<b>enter</b>  <b>24.50</b> numeric value	<b>enter</b> 	
<b>+ O -</b>  <b>TEMP</b> <b>internal temperature</b> reading of the lamphouse's internal temperature	<b>enter</b>  <b>100</b> numeric value in C°	<b>enter</b> 	
<b>+ O -</b>  <b>HOUR</b> <b>working time (lamp on)</b> visualization of unit's working time (lamp on) (reset not possible)	<b>enter</b>  <b>0550</b> numeric value in hours	<b>enter</b> 	
<b>+ O -</b>  <b>LIFE</b> <b>lamp life</b> visualization of lamp life (time covered by mains supply from last reset operation)	<b>enter</b>  <b>0280</b> numeric value in hours	<b>enter</b> 	
<b>+ O -</b>  <b>HTOT</b> <b>total working time</b> total visualization of unit's working time (time covered by mains supply) (reset not possible)	<b>enter</b>  <b>0600</b> numeric value in hours	<b>enter</b> 	

## English

### 11.1. Powering up the iSpot 575 without articulated movement

This function may be useful should you need to power up the **iSpot 575** to readdress it or alter any parameters and you wish to do this in the absence of any articulated movement.

- 1) Turn on the projector whilst holding down both the **enter** button and the **-** button.



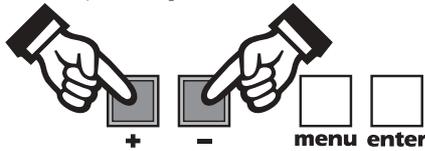
The projector will proceed with a reset of all the motors with the exception of those which control articulated movement, the pan and tilt motors, which remain static because not supplied.

- 2) You may alter the DMX address, or any other parameters available via the menu system without any articulated movement.
- 3) To return to normal functioning the projector needs simply be turned off and then turned on once again.

### 11.2. Counter reset

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

- 1) Turn off the projector
- 2) Power up the **iSpot 575** whilst simultaneously holding down the **+** and **-** buttons.



- 3) Press the **menu** button.
- 4) Press the **+** or **-** button until the display shows **LIFE** (for lamp life).
- 5) Press the **enter** button to confirm your selection; the display will show **0000** confirming that the counter has been reset.

### 11.3. test

This function allows for a test sequence to be carried out on the respective motors of the unit in the absence of any DMX signal.

- 1) Press the **menu** button.
- 2) Press the **+** or **-** button until the display shows **TEST** (for test).
- 3) Press the **enter** button to confirm your selection; the display will show **PAN** (for pan movement test). Press the **+** or **-** buttons for subsequent tests from **PAN** to **ALL**.

**PAN**= pan axis movement

**TILT**= tilt axis movement

**DIMM**= dimmer movement

**SHUT**= shutter and strobe

**IRIS**= iris diaphragm movement

**FOCU**= focus

**STZ0**= step zoom

**GOB1**= gobo 1 selection

**GR1**= gobo 1 fine rotation and positioning

**GOB2**= gobo 2 selection

**GR2**= gobo fine rotation and positioning

**PRIS**= prism

**COL1**= color wheel 1 (closest to the lamp)

**COL2**= color wheel 2

**ALL**= all motors reset

**NOFU**= no function

In these tests the projector simulates the reception of a DMX 512 signal which is increasing from 1 to 255 on the selected channel.

- 4) Press the **enter** button to confirm your selection of test to be carried out.

## 12. DMX 512 signal functions

As described on paragraph **10 DMX addressing**, the **iSpot 575** can be DMX controlled through your DMX board selecting the **MODE** function on the fixture's display; **iSpot 575** will operate at 20 channels

To select the desired mode on the unit refer to the following instructions:

- 1) Press the **menu** button.
- 2) Press the **+** or **-** until the display shows **MODE** (to select the function mode).
- 3) Press the **enter** button to confirm your selection; the display will show **MODE**

Below are the functions of the 20 channels when operating in standard **MODE**

channel	function	type of control	effect	decimal
1	<b>Base (pan) coarse</b>	proportional	coarse control of the base movement	0-255
2	<b>Base (pan) fine</b>	proportional	fine control of the base movement	0-255
3	<b>Yoke (tilt) coarse</b>	proportional	coarse control of the Yoke movement	0-255
4	<b>Yoke (tilt) fine</b>	proportional	fine control of the Yoke movement	0-255
5	<b>dimmer</b>	step	closed	0-7
		proportional	from close to open	8-255
6	<b>Shutter, Strobe</b>	step	Shutter closed	0-9
		proportional	Synchro strobe-effect from slow to fast (max. 10)	10-66
		step	Shutter open	67-68
		proportional	Pulse-effect in sequences, close slow, open fast (adjustment from slow to fast)	69-125
		step	Shutter open	126-127
		proportional	Pulse-effect in sequences, close fast, open slow (adjustment from fast to slow)	128-184
		step	Shutter open	185-187
		proportional	Random strobe-effect from slow to fast	188-244
7	<b>iris</b>	step	open	0-9
		proportional	from large to small	10-124
		step	iris small	125-129
		proportional	iris pulse, with increasing pulse speed	130-189
		step	open	190-192
		proportional	iris pulse, with increasing pulse speed plus flash effect	193-251
8	<b>step Zoom (channel 20 between 171 and</b>	step	iris lens	0-85
			21 ° beam size	86-171
			25 ° beam size	172-255
8	<b>step Zoom (channel 20 between 250 and</b>	step	21 ° beam size	0-127
			25 ° beam size	128-255
9	<b>focus</b>	proportional	proportional focus control	0-255
10	<b>Rotating gobo 1, selection</b>	step	Open	0-10
		step or proportional depending on ch 19	gobo 1	11-40
		step or proportional depending on ch 19	gobo 2	41-70
		step or proportional depending on ch 19	gobo 3	71-100
		step or proportional depending on ch 19	gobo 4	101-130
		step or proportional depending on ch 19	gobo 5	131-160
		step or proportional depending on ch 19	gobo 6	161-192
11	<b>gobo 1 360° indexing</b>	step	no effect	0-10
		proportional	proportional indexable gobo positioning 360°	11-255
12	<b>gobo 1 rotation &amp; fine indexing</b>	proportional	proportional indexable fine gobo positioning 360°	0-100
		proportional	continuous gobo rotation clockwise with proportional speed from max to min.	101-176
		step	gobo stop	177- 179
		proportional	continuous gobo rotation counter-clockwise with proportional speed from min. to max	180-255

## English

18	ruota colori 2	livello unico	bianco	0-7
		livello unico o proporzionale selezione da canale 19	colore 1	8-27
		livello unico o proporzionale selezione da canale 19	colore 2	28-47
		livello unico o proporzionale selezione da canale 19	colore 3	48-67
		livello unico o proporzionale selezione da canale 19	colore 4	68-87
		livello unico o proporzionale selezione da canale 19	colore 5	88-107
		livello unico o proporzionale selezione da canale 19	colore 6	108-127
		proporzionale	effetto arcobaleno da veloce a lento in senso orario	128-190
		livello unico	nessuna rotazione	191-192
		proporzionale	effetto arcobaleno in senso antiorario da lento a veloce	193-255
19	modo di posizionamento gobo e colori	livello unico	Gobo e colori si muovono centrati rispetto all'asse ottico	0-10
	agisce sui canali 10, 13, 17 e 18	livello unico	il posizionamento dei gobo nell'asse ottico diventa proporzionale (livelli da 11 a 192)	11-125
		livello unico	il posizionamento a 360° dei colori nell'asse ottico diventa proporzionale (livelli da 8 a 127)	126-239
		livello unico	il posizionamento dei gobo e dei colori diventa proporzionale	240-255
20	Accensione/spegnimento lampada, reset motori e inibizione automatismo lenti	livello unico	lampada spenta	0-10
		livello unico	park, nessuna funzione	11-29
		livello unico	reset di pan e tilt (solo una volta)	30-65
		livello unico	reset di tutti i motori eccetto dimmer pan e tilt	66-100
		livello unico	reset di tutti i motori eccetto dimmer	101-135
		livello unico	reset di tutti i motori	136-170
		livello unico	inibizione funzione inserimento automatico lente iris nell'asse ottico	171-249
		livello unico	lampada accesa (movimento standard di pan e tilt)	250-255
<b>Agendo sul pannello posteriore può essere impedito lo spegnimento della lampada via DMX</b>				
<b>N.B. lo spegnimento lampada e la funzione di reset hanno un ritardo di 6 secondi per prevenire attivazioni accidentali</b>				
<b>N.B. la funzione lampada on/off può subire variazioni solo se viene impartito un comando di valore opposto</b>				
Proiettore: coemar iSpot 575			Nome della tabella: DMX 512	
Tabella numero: 201		Edizione: 1	Data: 16/01/2002	

13	Rotating gobo 2, selection	step	Open	0-10
		step or proportional depending on ch 19	gobo 1	11-40
		step or proportional depending on ch 19	gobo 2	41-70
		step or proportional depending on ch 19	gobo 3	71-100
		step or proportional depending on ch 19	gobo 4	101-130
		step or proportional depending on ch 19	gobo 5	131-160
		step or proportional depending on ch 19	gobo 6	161-192
		proportional	Gobo wheel rotation from slow to fast	193-255
14	gobo 2 360°	step	no effect	0-10
		proportional	proportional indexable gobo positioning 360°	11-255
15	gobo 2 rotation & fine indexing	proportional	proportional indexable fine gobo positioning 360°	0-100
		proportional	continuous gobo rotation clockwise with proportional speed from max to min.	101-176
		step	gobo stop	177- 179
		proportional	continuous gobo rotation counter-clockwise with proportional speed from min. to max	180-255
16	prism selection & rotation	step	no prism	0-10
		step	prism	11-20
		proportional	from fast to slow	21-136
		step	prism stop	137- 139
		proportional	continuous prism rotation counterclockwise with proportional speed from slow to fast	140-255
17	color wheel 1	step	Open/white	0-7
		step or proportional depending on ch 19	color 1	8-27
		step or proportional depending on ch 19	color 2	28-47
		step or proportional depending on ch 19	color 3	48-67
		step or proportional depending on ch 19	color 4	68-87
		step or proportional depending on ch 19	color 5	88-107
		step or proportional depending on ch 19	color 6	108-127
		proportional	Forwards rainbow effect from fast to slow	128-190
		step	No rotation	191-192
		proportional	Backwards rainbow effect from slow to fast	193-255
		18	color wheel 2	step
step or proportional depending on ch 19	color 1			8-27
step or proportional depending on ch 19	color 2			28-47
step or proportional depending on ch 19	color 3			48-67
step or proportional depending on ch 19	color 4			68-87
step or proportional depending on ch 19	color 5			88-107
step or proportional depending on ch 19	color 6			108-127
proportional	Forwards rainbow effect from fast to slow			128-190
step	No rotation			191-192
proportional	Backwards rainbow effect from slow to fast			193-255
19	gobo and color positioning mode Act on channels 10, 13, 17 and 18			step
		step	From no gobo to gobo 6, 360° gobo positioning became proportional (level 11/192)	11-125
		step	From no color to color 6, 360° color positioning became proportional (level 8/127)	126-239
		step	Gobo and color positioning became proportional	240-255
20	Lamp ON, motor Reset, pan/tilt	step	lamp off	0-10
		step	park, no function	11-29
		step	pan/tilt reset (only once)	30-65
		step	all motor reset except dimmer, pan, tilt (only once)	66-100
		step	all motor reset except dimmer (only once)	101-135
		step	all motor reset (only once)	136-170
		step	inhibit auto lens on iris	171-249
		step	lamp on (pan/tilt standard movement)	250-255
<b>Back panel can modify function channel (inhibit lamp off)</b>				
<b>note 1: function channel (20) has a delay time of 6 seconds to prevent accidental activation.</b>				
<b>note 2 :on/off lamp mode is not affected unless an opposite value is received</b>				
Fixture type: coemar iSpot 575			Chart name: DMX 512	
Chart number: 201		Release: 1	Date: 16/01/2002	

### 13. 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 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 via the 3 adjusters **A**, **B** and **C** operating in conjunction with each other. The lamp should be on, black-out and dimmer fully open, and no colour filters inserted.

If the lamp is not correctly aligned, a hot-spot will be noticeable. This is a function of the lamp's positioning. Use the two adjusters (**A** and **B**) to bring the hot-spot to the centre of the beam. Use the third adjuster (**C**) to flatten the beam to maximum uniformity.

#### vertical adjustment

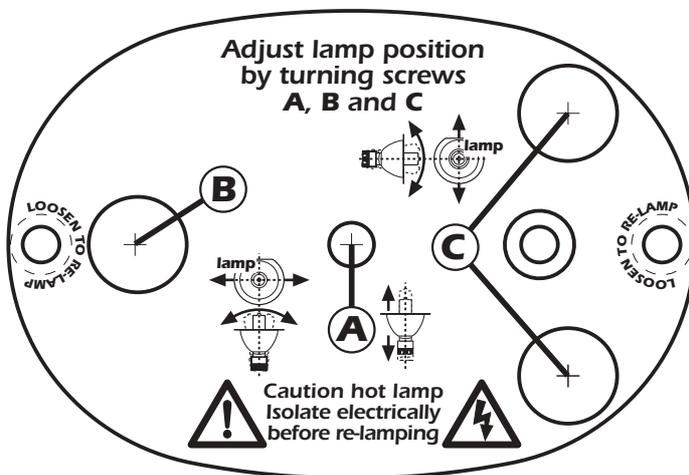
Screw (**B**) acts on a lever and spring assembly to position the lamp via a vertical movement within the reflector; rotate it until correct positioning is achieved.

#### horizontal adjustment

Screw (**A**) 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

Screw (**C**) moves the entire lamp assembly axially within the unit; rotate it until correct positioning is achieved, resulting in a flat, even beam.



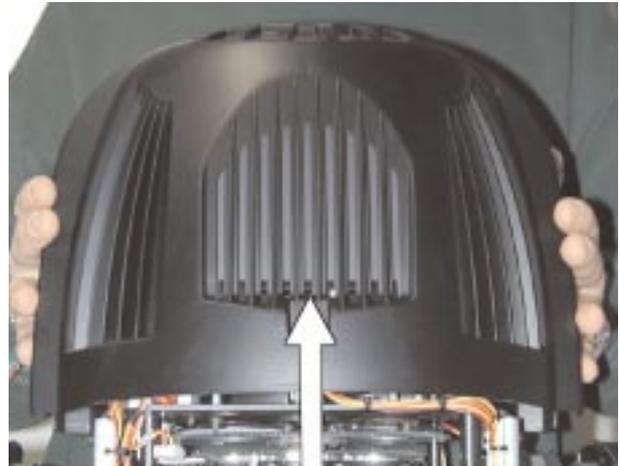
## 14. Opening up the projector housing

By removing the carbon fibre casing, complete access is available to the internals of the projector.

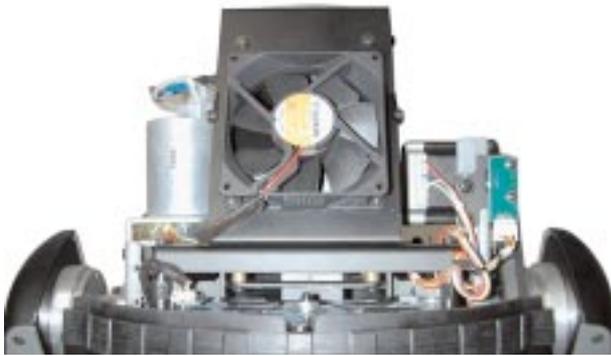
### Attention

Remove mains power prior to accessing the internal components of the projector.

- 1) Loosen the screws which affix the upper and lower covers



- 1) Once unscrewed, simply lift the covers to access the internal components of the fixture.



## 15. Interchanging gobos

The **iSpot 575** 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.

### replacing gobos on the rotating gobo wheel

Gobos may be replaced as required to produce special effects as required.

Gobos dimensions are as follows:

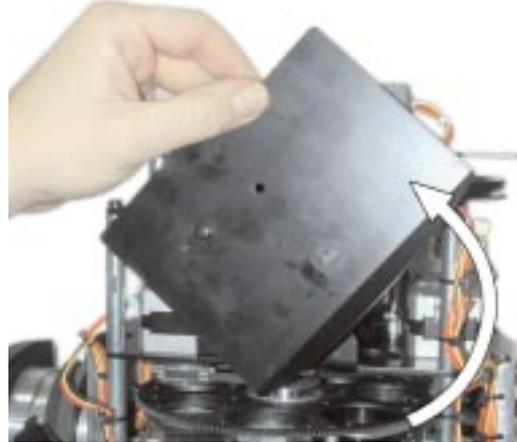
#### **gobo wheel 1** (closest to the lamp):

ø external= 32,9 mm  
ø image area= 26 mm  
thickness= 0,2/3,5 mm

#### **gobo wheel 2:**

ø external= 32,9 mm  
ø undefined image area= 30 mm  
ø outlined image area= 28 mm  
thickness= 0,2/3,5 mm

Gobos should be replaced only when the projector is unpowered and the housing removed as described in the previous-section **Opening up the projector housing**



1) Release the gobo retaining spring and thereby the gobo as shown in the following diagrams.

Make sure you replace every retaining spring on the appropriate gobo wheel once you are done



2) Reverse the procedure to install a replacement gobo.

## 16. Altering the operating voltage and frequency (Only for technical staff.)

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.

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

### 16.1. Selecting the voltage on the autotransformer

- 1) Loosen the screws on the cover of the base of the unit, as shown in the diagram below, using a Philips head screwdriver, thereby removing the cover completely and allowing access to the internal components of the base of the **iSPOT 575**.



- 2) Locate the autotransformer in the base of the unit.



- 3) Select a voltage from amongst 100, 115, 208, 230 and 240V by removing cable n° 6 and moving it to the required voltage. To determine which is the correct tap, refer to the sticker located on the autotransformer. Cables number 11 and 21 should not be moved under any circumstances.
- 4) If the operating voltage selected is 115V replace the 8 Amp T fuse (which is suitable for 208/230/245 V operation) with one rated at 15 Amps T. The fuseholder is located in the base of the unit. The operation should be reversed should the voltages be reversed. Replacement fuses of suitable ratings were provided in the packaging of your fixture with this manual.

## English



  
T8A @230V  
T15A @115V

- 5) Operating frequency may now be set (if necessary) or the base cover replaced with the four screws previously removed.
- 6) Note on the sticker on the outside of the iSpot 575 the new voltage which you have selected, as shown in diagram 1.

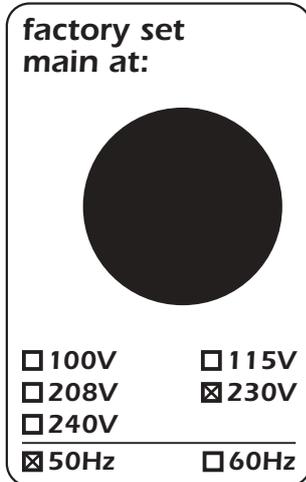
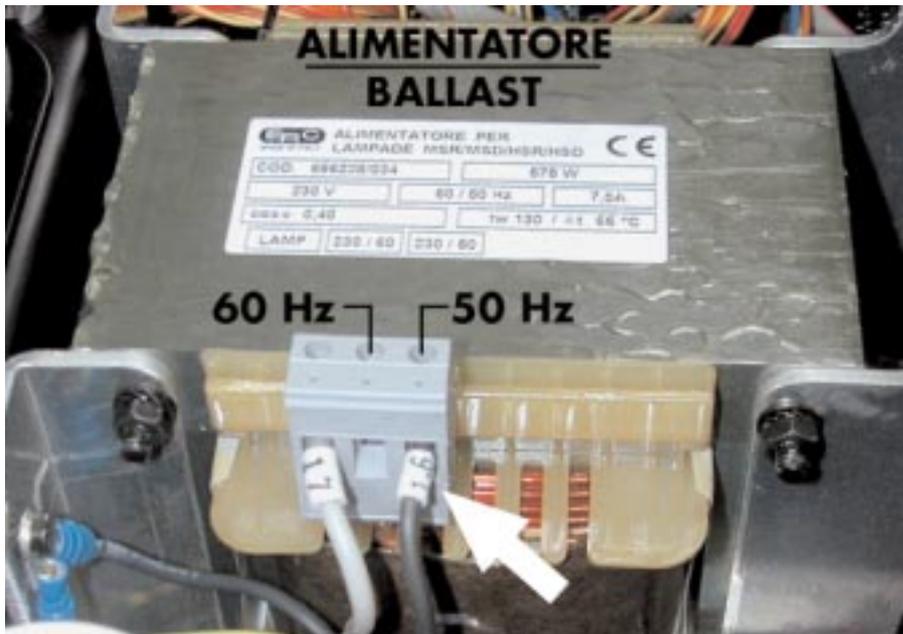


Diagram 1

### 16.2. Selecting the frequency on the power supply of the *iSPOT 575*

- 1) Locate the power supply on the left of the base.
- 2) Select from either 50 or 60Hz by moving cable n° 16 to the required position. To ensure you have selected the correct tap, refer to the sticker located on the power supply.



Cable number 17 should not be moved under any circumstances.

- 3) Replace the base cover and fasten using the four screws previously removed.
- 4) Note on the sticker on the outside of the iSpot 575 the new frequency which you have selected, as shown in diagram 1 below.

## 17. Automatic internal functions

The **iSpot 575** has several automatic functions and features which at first glance may not be noticed. However, they serve to add functionality to the projector, and to assist in extending the serviceability of the unit.

### **on-board hot-strike timer**

This on-board feature ensures that the operator cannot re-ignite the lamp until 6 minutes have passed since the lamp was switched off.

This is designed to avoid damage to the lamp ignition circuit which can occur if an operator continually attempts to strike a hot lamp. It further protects the lamp from possible damage due to voltage spikes which may occur at this time.

**NOTE:** The timer is reset only when the projector is switched off.

### **on-board lamp ignition timer**

This feature ensures that an operator cannot repeatedly attempt to strike a lamp for more than 3 seconds if the lamp does not ignite. It will automatically attempt to restrike the lamp for 3 seconds in every subsequent minute.

This is designed to protect the ballast and lamp ignitor from prolonged usage in less than ideal conditions.

**NOTE:** it is important to replace a lamp that is at the end of its useful life and replace it. Old lamps are generally progressively more difficult to strike.

### **thermal protection**

Two thermal sensors in the body and base of the **iSpot 575** protect the unit against overheating.

The thermal sensors operate 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.

### **automatic realignment**

An internal 4 point encoder system allows the **iSpot 575** to return to its correct position in case the unit is accidentally knocked out of alignment whilst operating. This is particularly useful if the projector is to be mounted on the floor in a position where the performer or artist may accidentally bump the unit.

**NOTE:** this facility may be deactivated if desired (see section 11 opto).

## **18. Maintenance**

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

### **Attention**

Disconnect mains power prior to removing the projector housing.

To gain access to the internals of the unit refer to section **14.** of this manual, *Opening the projector housing.*

### **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.

### **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.

### **fuse replacement**

Locate the fuse, which protects the lamp and electronics, in the base of the **iSpot 575**. Using a multimeter, test the condition of the fuse, replacing it with one of equivalent type if necessary.

## 19. Electronic motor alignment

### INSTALLER INSTRUCTIONS ONLY

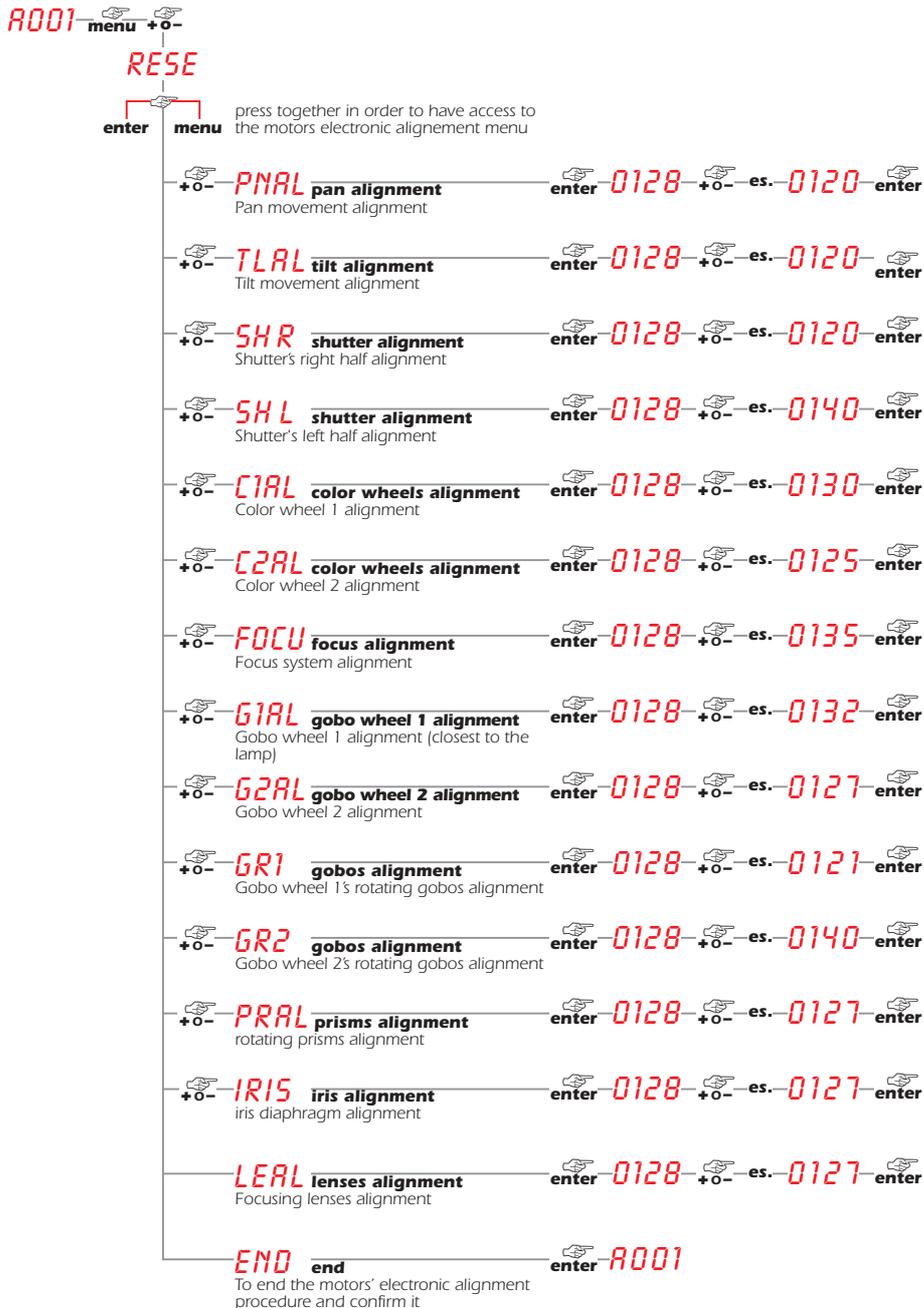
The display panel at the rear of the **iSpot 575** allows for the electronic alignment of the projector's motors in the optical system. This procedure is performed by **coemar** at the factory. It may be useful to perform this procedure in the case of internal components being replaced.

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

**Important Note:** electronic calibration is only possible if the projector is connected to a **DMX 512** source.

- 1) Press the menu button.
- 2) Press the + or - button until the display shows **RESE** (for reset).
- 3) Press the enter button to confirm your selection then immediately and simultaneously press and hold the **menu** button, holding both pressed for at least **30** seconds. The motors of the unit will perform a reset and the display will show **---** for some few seconds, indicating that you have entered the electronic calibration mode.



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

## **20. Spare parts**

All the components of the **iSpot 575** are available as replacement spares from your authorised **coemar** sales agent. Accurate description of the fixture, model number, and type will assist us in providing for your requirements in an efficient and effective manner.