



<http://www.coef.it>
e-mail: info@coef.it

MP 300 SPOT



• Code ZL-013101-01

• OPERATING INSTRUCTIONS

Revision 1.0

SUMMARY

DECLARATION OF CE CONFORMITY	3
ADVICES FOR A CORRECT INSTALLATION.....	3
GENERAL WARRANTY CONDITIONS	4
PACKING CONTENTS.....	4
1.0 DIMENSIONS & POSITIONING	5
2.0 TECHNICAL NOTES.....	5
3.0 INSTALLATION	6
3.1 LAMP MOUNTING OR REPLACING	6
3.2 PROJECTOR INSTALLATION	7
4.0 POWER SUPPLY CONNECTION	8
4.1 DMX 512 CONNECTIONS	8
5.0 SPECIAL FUNCTIONS AND PROJECTOR ASSIGNMENT	9
6.0 MENU, FUNCTION & SUB-FUNCTIONS	10
7.0 CHANNELS AND DIGITAL VALUES.....	11
7.1 SPECIAL ACTION	12
8.0 LAMP ADJUSTMENT	13
9.0 ORDINARY MAINTENANCE	13
9.1 EXTRAORDINARY MAINTENANCE	13
9.2 ELECTRONIC MAINTENANCE	15
10.0 WIRING DIAGRAMS	16-17
11.0 TROUBLESHOOTING	18

Please note that as part of COEF's ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of this manual COEF reserves the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.



Declaration of CE conformity

We Manufacturer **LAG** Room 2310-2311, Press Building, No 2 Shennan Zhong Road, Shenzhen, **China**, 518027
Declare that the product **MP300 SPOT DV** is in conformity with **89/336 EEC-EMC** directive and with the actual required safety standards in accordance with **LVD 73/23 EEC**

Shenzhen, 05 May 2006

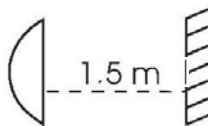
ATTENTION: carefully read the directions of this manual. Exclusively follow the safety rules in force and do not carry out assembly and/or maintenance operations without taking all precautions as indicated in the different sections or without the necessary specialization.

This manual must always accompany the equipment, therefore it must be available and readable at any moment if necessary. Also in case of sale, rent, change of place and/or ownership, these documents shall be enclosed with the relative equipment.

ADVICES FOR A CORRECT INSTALLATION

This equipment is destined to an exclusively Professional use.

- 1) Make sure that all the fastening parts of the spotlight are in good condition. Regulate the proportions of the fastening accessories (screws, bushes, nuts, supports, etc.) in order to be slightly over-dimensioned as compared to the actual requirements.
- 2) Carefully check the contents of the packaging and the completeness of the components. If any of the parts listed hereunder is missing, please contact your Dealer immediately.
- 3) Do not install the projector outside where the influence of atmospheric factors could damage the unit working (rain, wind, intense heat etc.) or indoor if there is a high percentage of humidity.
- 4) Do not clean the projector using water jets or immersion in different liquids. Scrupulously follow the indications given in the chapter MAINTENANCE.
- 5) Make the electric connections and the installation / replacement of the lamp after having disconnected the power supply and after having positioned the power switch to OFF. The apparatus is classified as belonging to Class 1 type of protection against electric shocks. Its connection to an earthed mains unit is compulsory. The equipment must be protected by an adequate magneto-thermal switch. You are recommended to equip the system with aptly dimensioned differential switches.
- 6) Do not touch in any case the internal and external parts of the projector without previous authorization of the constructor and make modifications only by the intervention of qualified staff.
- 7) Make sure that the projector is correctly fixed on the support as indicated in par. 3.2
- 8) If the bulb explodes, the particular design of the apparatus prevents the splinters from going outside the projector. All the parts, therefore, shall be complete and perfectly assembled. The lenses, if visibly damaged, shall be replaced by original spare parts.
- 9) **Minimum distance from illuminated objects:** The projector must be positioned in such a way that objects struck by the light beam are located at least 1,5 metres from the projector objective.



- 10) **Minimum distance from inflammable materials:** 0.4 meters
- 11) **MAX ambient temperature:** 40° C.
- 12) **MAX external surface temperature:** 80° C.
- 13) Don't look directly the lamp through the lens.
- 14) We recommend not to look at the lamp without wearing a proper protection; also ensure that the covers are assembled to the equipment.
- 15) Inside the equipment there are high temperatures and tension/current values which might be very dangerous. It is necessary to disconnect the equipment from the mains before removing its protection covers and wait for 30 minutes at least before touching any part inside.
- 16) Do not switch on the equipment if its lamp is not inserted.
- 17) Leave sockets and air outlets free from encumbrances and clean them periodically (see "Maintenance" section).
- 18) Do not leave the packaging elements (polystyrene, nylon, metal parts, etc.) unattended; they might be dangerous for children.

This manual has been organized in order support the user, the installer or the maintenance operator of the described unit with those necessary informations for a correct use of the installation and working procedures of the same unit. The various procedures will be just signalled by indicators (when necessary) evidencing the operation dangers and the necessity of technical support.

Please find here below a list of symbols and relative meaning.



OPERATOR : Not particulary qualified staff, that can operate when no specific knowledge is required.



COEF OPERATOR : Technical staff, qualified and trained by the constructor, for repair and extraordinary operations.



MECHANICAL OPERATORS: Staff employed in the ordinary mechanical maintenance.



SPECIALIZED MECHANICAL OPERATOR: Qualified staff employed in extraordinary authorized installations and repair.



ELECTRIC OPERATORS: Staff employed in the ordinary electric maintenance.



SPECIALIZED ELECTRIC OPERATORS: Qualified staff employed in extraordinary authorized installations and repairs.



DANGER SIGNAL: Generic danger signal and electric shock danger signal.

GENERAL WARRANTY CONDITIONS

- The guarantee is valid for a period of 12 months from the date of purchase of the equipment.
- The guarantee is not valid in case a wrong voltage or frequency is selected.
- The parts which are proved to have manufacturing defects are also covered by the guarantee.
- The external parts of the equipment, its removable elements and lamps are excluded from the guarantee; for these parts we recommend to follow the directions supplied by their manufacturers.
- The guarantee is not valid in case of tampering or repairs carried out by non-authorized personnel.
- The replacement of the equipment during the validity of the guarantee is not provided for.
- The transport freights from and to the manufacturer for repairs under guarantee are at Customer's charge.
- When applying for the repair, always mention the serial number and the model of the equipment.

PACKING CONTENTS

Carefully check the contents of the packaging and the completeness of the components. If any of the parts listed hereunder is missing, please contact your Dealer immediately:

- Complete **MP300 Spot** unit
- This user manual
- 1 cable with 1 XLR 3 pin male and 1 XLR 3 pin female
- 1 safety-chain equipped with two snaps.
- 1 complete bracket for the ceiling fixing



PROTECT NATURE.

DO NOT DISPOSE OF THE PACKAGING IN THE ENVIRONMENT.

CAREFULLY KEEP THE BOX AND THE COMPONENTS OF THE PACKAGING FOR ANY DISPLACEMENT OR RE-SHIPMENT OF THE EQUIPMENT.

Do not leave the packaging elements (polystyrene, nylon, metal parts, etc.) unattended; they might be dangerous for children.

1.0 DIMENSIONS & POSITIONING

It is possible to set up the MP300 Spot in any position.



2.0 TECHNICAL NOTES

MP300 Spot

Code: ZL-013101-01

- Lamp: MSD 250/2 –250 W – 2000 H life – 8000 K
- 16 bit movement resolution -PAN 540° / TILT 270°with automatic repositioning
- Optical system with 3 lenses + dichroic reflector
- 10 colors + white + bi-colors (with Black light filter)
- 7 rotating dichroic / metal gobos all interchangeable and indexable on 540°
- Adjustable strobe
- Shutter motorized
- Linear Dimmer from 0 to 100%
- Rainbow effect adjustable in speed
- Focus motorized
- Rotating 3 faces prism adjustable in speed for both directions
- Multifunction display
- Remote reset via DMX
- Remote On/Off lamp via DMX
- Software upgrade via DMX (with UNI-PROG 8 Accessory)
- Automatic fault survey
- Internal power factor correction
- DMX 512 standard
- Weight:22Kg

Power supply Absorbed power			
Volts	Hz	I	W
230V~	50Hz	1.7A	380W

3.0 INSTALLATION

The constructor is not be considered responsible in case of:

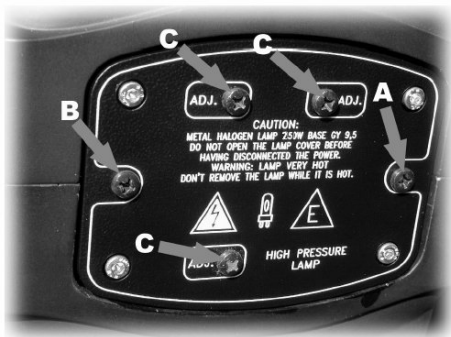
- *Improper use of the unit or use by not trained staff*
- *Use in contrast with the directions on work safety*
- *Wrong installation*
- *Defective power supply*
- *Serious lacks in the necessary maintenance*
- *Unauthorized modifications and interventions*
- *Use of spare parts that are not original or not specific for the unit*
- *Total or partial inobservance of instructions*
- *Unusual events*

3.1 LAMP MOUNTING OR REPLACING

WARNING: read carefully



- *Switch off the projector before operating.*
- *The lamp used in the fixture is a high pressure lamp and must be handled very carefully.*
- *The unit is realized to use only MSD 250/2 or compatible lamps; absolutely don't use other types of lamp.*
- *The lamp must be changed if damaged or deformed by heat.*
- *Wait at least 15 minutes after the projector has been switched off before operating again, in order to let it cool down and avoid the lamp explosion.*
- *Wear protection gloves and glasses.*
- *Read carefully the lamp builder's instructions.*
- *Don't look directly the lamp.*



Wait 30 minutes in order to avoid burns.

- Unscrew with a cross screwdriver the first screw A for a single turn; unscrew the second one completely B; unscrew completely the screw A and to remove the cover that supports the lampholder.
- Insert delicately the lamp in the projector support, driving it with the round cover. Pay attention: the lampholder's wires must correctly reenter in the projector.
- Block the cover screwing the screws up (part. A-B).

3.2 PROJECTOR INSTALLATION

To fix the **MP 300 Spot** is necessary, when the installation has to be on a raised-from-the ground support, to block the quick lock / release brackets of the unit by means of a screw provided with nut and locknut measuring not less than **M10 X 50**, to insert in the central pre-arranged hole on the fixing bracket.

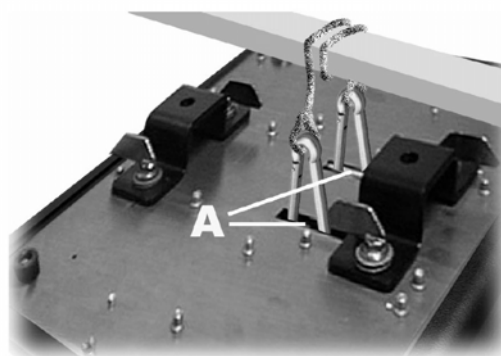
In addition to the provided quick lock/release (omega) brackets, in order to guarantee a necessary security and in respect of the actual safety rules concerning the projectors' installation, it is compulsory to install a safety-chain, equipped with two snaps, provided with the projector, to connect the **MP 300 Spot's** body to the fixing structure.



ATTENTION: the safety chain, equipped with two snaps which can be hooked to the two pivots placed under the base of the **MP 300 Spot**, (see part. **A**), must be properly installed and fixed to the supporting structure, in a way that an incidental giving in of the main bracket would lead to the shortest possible fall of the projector. **After such an intervention the safety-chain must be replaced with another original part.**



ATTENTION: COEF is not responsible for installations not correctly made or made without respecting the above indications: those installations are considered dangerous.



4.0 POWER SUPPLY CONNECTION

WARNING: In order to guarantee the utmost safety, connect the apparatus only to a properly earthed mains system.

The projector is designed to work at the tension and frequency indicated by the electrical data label on the rear. Before connecting the projector to the mains, a qualified electrician must check its conformity.

- *The projector must be protect by an adeguated magneto-thermal switch .*
- *Don't power the unit with a dimmer circuit.*



Power : indicated in the the serigraphy table (tollerance: +5% / -10%)

Should there be different electrical characteristics or special steps to be carried out, please contact COEF by telephone or e-mail info@coef.it



Supply the projector by connecting it as indicated in picture.

4.1 DMX 512 CONNECTIONS

Connect the projector and the control unit to a wire in conformity with the EIA RS-485 standards: braided bipolar, shielded, 120 ohm of characteristic impedance, 22-24 AWG, equipped with Cannon 3 Pin XRL plugs. Respect the DMX 512 signal input and output according to the panel indications. A terminal pin with 120 ohm resistance ($\frac{1}{4}$ Watt minimum) must be inserted between the terminals 2 and 3 in the last piece of apparatus.



5.0 SPECIAL FUNCTIONS AND PROJECTOR ASSIGNMENT



On the front panel of **MP 300 Spot** you'll find a section for the additional functions and for setting the projector.

Following the picture, you can see all the offered possibilities in detail.

All operations are to be carried out with the **E, F, G, H** buttons, respectively indicated as **MENU, ENTER, DOWN** and **UP**.

The display **D** will inform you about the selected functions.

The 3 **A, B** and **C** leds will allow you to know:

A = reception of the DMX line.

B = lamp ON.

C = errors indicated on the ERR table (see table 6.0).

On switching the projector on, the display will indicate the type of projector and the version of control software which have been installed. To this purpose, please remember that this type of projector belongs to a new generation of projectors, designed with the possibility of updating the software version through the normal DMX connection by means of a programmer deliberately created: **UNI-PROG 8**.

After the indication **MSTR HOME**, the projector carries out the **RESET** and gets ready to be controlled from the connected console.

The display will indicate 1 as default value. This means that the first channel occupied by the projector will respond to the values sent to channel 1 by the DMX line. This enables us to make **MP 300 Spot** (which we are installing) completely independent from control or integral with any other installed projector.

General Rules:

Refer to the Table of Section 6.0 in the following page.

By each pressure, Button **MENU** (E) permits to go backwards by one level.

G and H (**DOWN** and **UP**) buttons select functions and sub-functions.

Button F (**ENTER**) enters the function and confirms a control.

By pressing Button **MENU** (E) and buttons **UP** and **DOWN** (H and G) you can select the menu you have to modify.

Once the wished menu is reached, press Button F (**ENTER**) to confirm your selection and enter the function.

Press G or H to enter the sub-functions if available.

Always confirm your selection with **ENTER**.

Press **MENU** to go out of the function and press again to go back to the starting level.

Example: We installed our projector on the ceiling and for this reason we want the visualization of the display to be correct.

Press **MENU**

Press H (**UP**) 15 times up to "**MISC**"

Press **ENTER** the Display will show "**RSET**"

Press H (**UP**) twice up to "**DSPL**"

Press **ENTER** the Display will show "**ONOF**"

Press H (**UP**) once up to "**STRV**"

Press **ENTER** the Display will show "**STND**"; this is the actual configuration state.

Press H (**UP**) once up to **R.E.V.**; the blinking point indicate the available configuration.

Press **ENTER** The Display visualization as been rotated to 180°.

Press **MENU** 3 times to return to starting MENU.

The indication of the display will automatically come back after 120 sec. and inform on the set starting channel DMX.

If we are now in a sub-function, this automatic device will not assume control.

6.0 MENU, FUNCTION & SUB-FUNCTIONS (*) = default value -factory assigned

DMX	1/498		DMX start channel
TIME	LAMP	SHOW KH,H	LAMP working hours (KH = thousand H = hours)
		RST GO?	LAMP working hours reset (confirm by ENTER)
	MACH	SHOW KH,H	PROJECTOR working hours (KH = thousands H = hours)
ERR	E OK		No error
	E110		EEPROM failure
	E220		Malfunction of the COLOR motor/sensor
	E230		Malfunction of the GOBOS motor/sensor
	E240		Malfunction of the ROTATION GOBOS motor/sensor
	E250		Malfunction of the PAN motor/sensor
	E260		Malfunction of the TILT motor/sensor
	E270		Malfunction of the FOCUS motor/sensor
	E280		Malfunction of the GOBOS II motor/sensor
	E290		Malfunction of the PRISM motor/sensor
	E420		No ignition of the LAMP beyond 3 attempts.
	E510		Malfunction encoder PAN
	E520		Malfunction encoder TILT
	W310		Checksum Setup not valid
	W410		LAMP working hours for more than 1500 hours
SHUT	HOME		Home SHUTTER
	TEST		Test SHUTTER
	ADJ	P1 -49/49	Fine regulation of the closing SHUTTER
	SET		Reserved
COL	HOME		Home COLOR
	TEST		Test COLOR
	CSHUT	(*) OFF/ ON	COLOR change in black-out position
	ADJ	P1/P20 -29/29	Fine regulation of the COLOR position (P1/P20)
GOBO	HOME		Home GOBOS
	TEST		Test GOBOS
	GSHUT	(*) OFF/ ON	GOBOS change in black-out position
	ADJ	P1 -29/29	Fine regulation of the Neutral GOBO position
RGOB	HOME		Home ROTATION GOBOS
	TEST		Test ROTATION GOBOS
FCUS	HOME		Home FOCUS
	TEST		Test FOCUS
GOBF	HOME		Home GOBOS FIXED
	TEST		Test GOBOS FIXED
	ADJ	P1 -29/29	Fine regulation of the Neutral GOBO FIXED Position
PRIS	HOME		Home PRISM
	TEST		Test PRISM
	ADJ	P1 -50/50	Fine regulation of the PRISM Position
RPRS	TEST		Test of the PRISM ROTATION
PAN	HOME		Home PAN
	TEST		Test PAN
	STRV	(*) STDN / REV	Switch movements direction (DX / SX)
	ENCO	(*) ON / OFF	ON/OFF the automatic repositioning of the PAN
TILT	HOME		Home TILT
	TEST		Test TILT
	STRV	(*) STDN / REV	Switch movements direction (UP / DOWN)
	ENCO	(*) ON / OFF	ON/OFF the automatic repositioning of the TILT
SCH	CH1 / CH14		DMX value for the indicate channel
LAMP	ONOF	(*) ON / OFF / AUTO	Lamp ON / OFF / Lamp Off after 1 hours of no DMX change
	CDMX	(*) NO / YES	Lamp switching on by DMX control
MISC	RSET		MASTER HOME (Starting RESET)
	RDMX	(*) YES / NO	MASTER HOME via DMX control
	DSPL	(*) ON / OFF	Display On / Display OFF
		(*) STND / REV	180 degree rotation of the visualitation display
	SWPT	(*) STND / SWAP	Channel control switch PAN / TILT
	VER		Show the installed software version

CHANNEL	DMX VALUE	FUNCTION			
5	PAN MOVEMENT				
6	PAN MOVEMENT FINE ADJUSTMENT				
7	TILT MOVEMENT				
8	TILT MOVEMENT FINE ADJUSTMENT				
9	GOBOS FIXED				
	0-10	NEUTRAL			
	11-20	GOBO 1	BEAM REDUCER		
	21-30	GOBO 2			
	31-40	GOBO 3			
	41-50	GOBO 4			
	51-60	GOBO 5			
	61-70	GOBO 6			
	71-80	GOBO 7			
	81-90	GOBO 8			
	91-100	GOBO 9			
	101-110	GOBO 1	shake	BEAM REDUCER	Adjustment speed
	111-120	GOBO 2	shake		Adjustment speed
	121-130	GOBO 3	shake		Adjustment speed
	131-140	GOBO 4	shake		Adjustment speed
	141-150	GOBO 5	shake		Adjustment speed
	151-160	GOBO 6	shake		Adjustment speed
	161-170	GOBO 7	shake		Adjustment speed
	171-180	GOBO 8	shake		Adjustment speed
	181-190	GOBO 9	shake		Adjustment speed
	191-197	GOBOS			Random FAST
	198-205	GOBOS			Random SLOW
	206-230	CW			Rotation Adjustment
	231-255	CCW			Rotation Adjustment
10	FOCUS ADJUSTMENT				
	0-255	FOCUS	Linear Adjustment		
11	PRISM				
	0-10	NEUTRAL			
	11-80	PRISM 3 FACES			
	81-170	CW PRISM		rotation with speed adjustment	
	171-255	CCW PRISM		rotation with speed adjustment	
12	DIMMER				
	0-5	DIMMER	Closed		
	6-250	DIMMER	Regolation		
	251-255	DIMMER	Open		
	Warning: Channel 1 at a value between 6 and 250, in order to control DIMMER whit this channel				
13	EFFECT TIME ADJUSTMENT (WORK ON CHANNEL 10)				
	0-5	NO	delay		
	6-250	ADJUSTMENT	delay		
	251-255	MAX	delay		
14	MOVIMENTS TIME ADJUSTMENT (WORK ON CHANNELS 5-7)				
	0-5	NO	delay		
	6-250	ADJUSTMENT	delay		
	251-255	MAX	delay		

7.1 SPECIAL ACTION

When the lamp control via **DMX (CDMX)** and the reset via **DMX (RDMX)** function have been activated in the configuration menu, it's possible, by a combination of the channels values, to control the lamp switch **ON/OFF** or to allow the projector **MASTER RESET**.

Lamp ON via DMX:

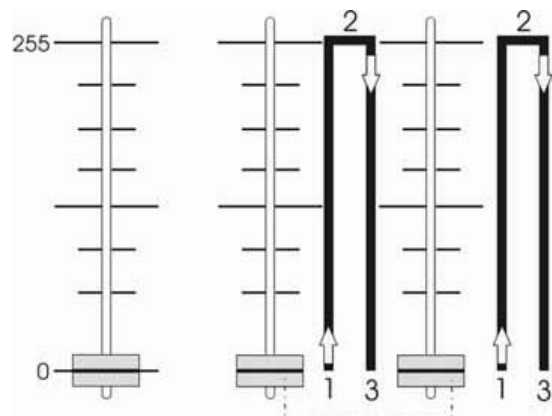
CHANNEL 2 = value 0
CHANNEL 3 and CHANNEL4=value0>255>0

Lamp OFF via DMX:

CHANNEL 2 = value 255
CHANNEL 3 and CHANNEL4=value0>255>0

MASTER RESET via DMX:

CHANNEL 1 = value 0
CHANNEL 2 and CHANNEL3=value0>255>0



8.0 LAMP ADJUSTMENT



- *Don't look directly the beam trough the lens.*
- *The lamp is pre-regulated by the factory. Only fine-adjustment.*
- *Don't move the screws " C " up to upper or lower extremities.*



Lamp adjustment is necessary to obtain a uniform and powerful light beam. Switch on the projector and set the channels without gobo and colors. Adjust the three screws **C** until you reach the ideal condition between power and homogeneity.

9.0 ORDINARY MAINTENANCE

Ordinary maintenance on the projectors **MP 300 Spot** is necessary to maintain the perfect efficiency of the unit and to avoid defects like the low luminosity of the light beam or the elevated overheating of the equipment.

In the figures you can see those components that can easily accumulate dust and grease. Clean them using a soft cloth and common glass-cleaners.



9.1 EXTRAORDINARY MAINTENANCE

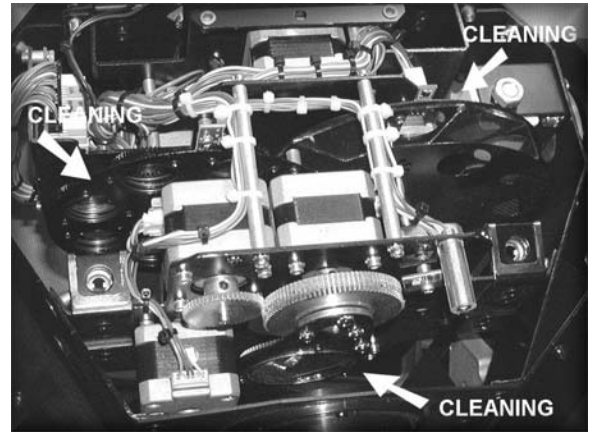
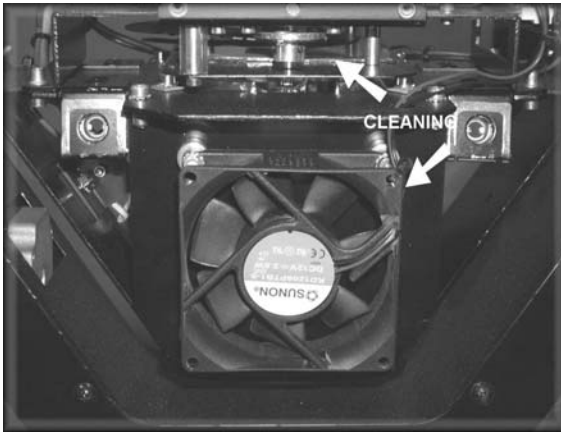


WARNING: Switch Off the projector before operating



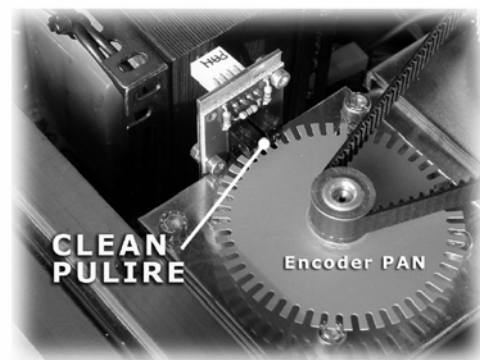
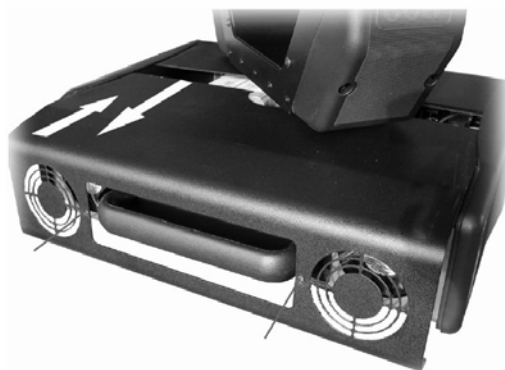
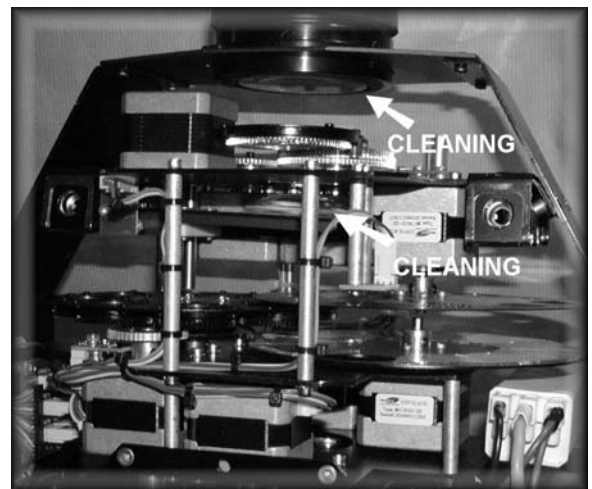
To make an extraordinary maintenance, it is necessary the presence of a generic or qualified mechanical operator, according to the type of the needed intervention.

Open the cover of **MP 300 Spot** by the 4 + 4 screw indicated in the picture. Clean carefully the indicated parts.



It is very important that the two fans of the ventilation system located over the lamp are kept clean by carefully using slightly compressed air to remove dust.

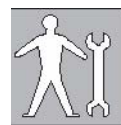
To obtain a correct projection, we recommend that the entire optical trajectory with its components (the parabolic reflector, the anti-heat filters, the gobos, the colour wheel, the focusing lens and the external lenses) are kept clean.



The sensors of the encoders concerning PAN and TILT movements are located in the base and in the arm of MP 300 Spot respectively. The picture clearly shows how you can reach these components and where you can correctly operate for their maintenance.

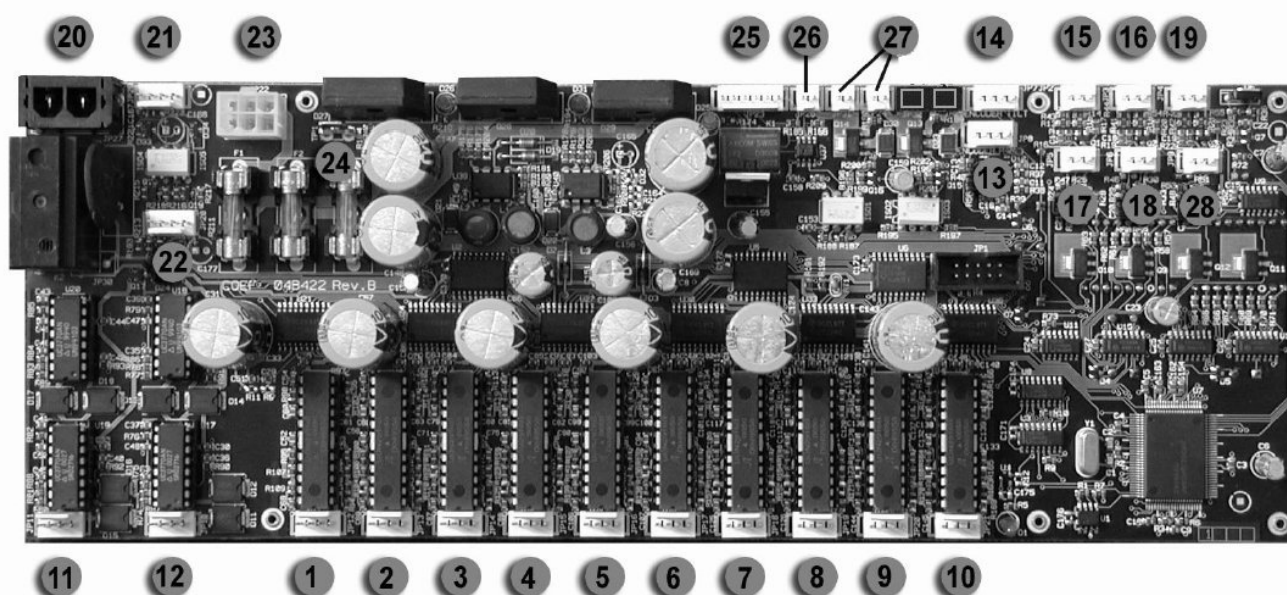
9.2 ELECTRONIC MAINTENANCE

WARNING: switch off the projector before operating.



This section is dedicated in detail to the electronic connections between the card and the mechanical components, assembled in the projector. This information will be absolutely necessary when the mechanical unit has to be removed from the projector for maintenance and / or repair.

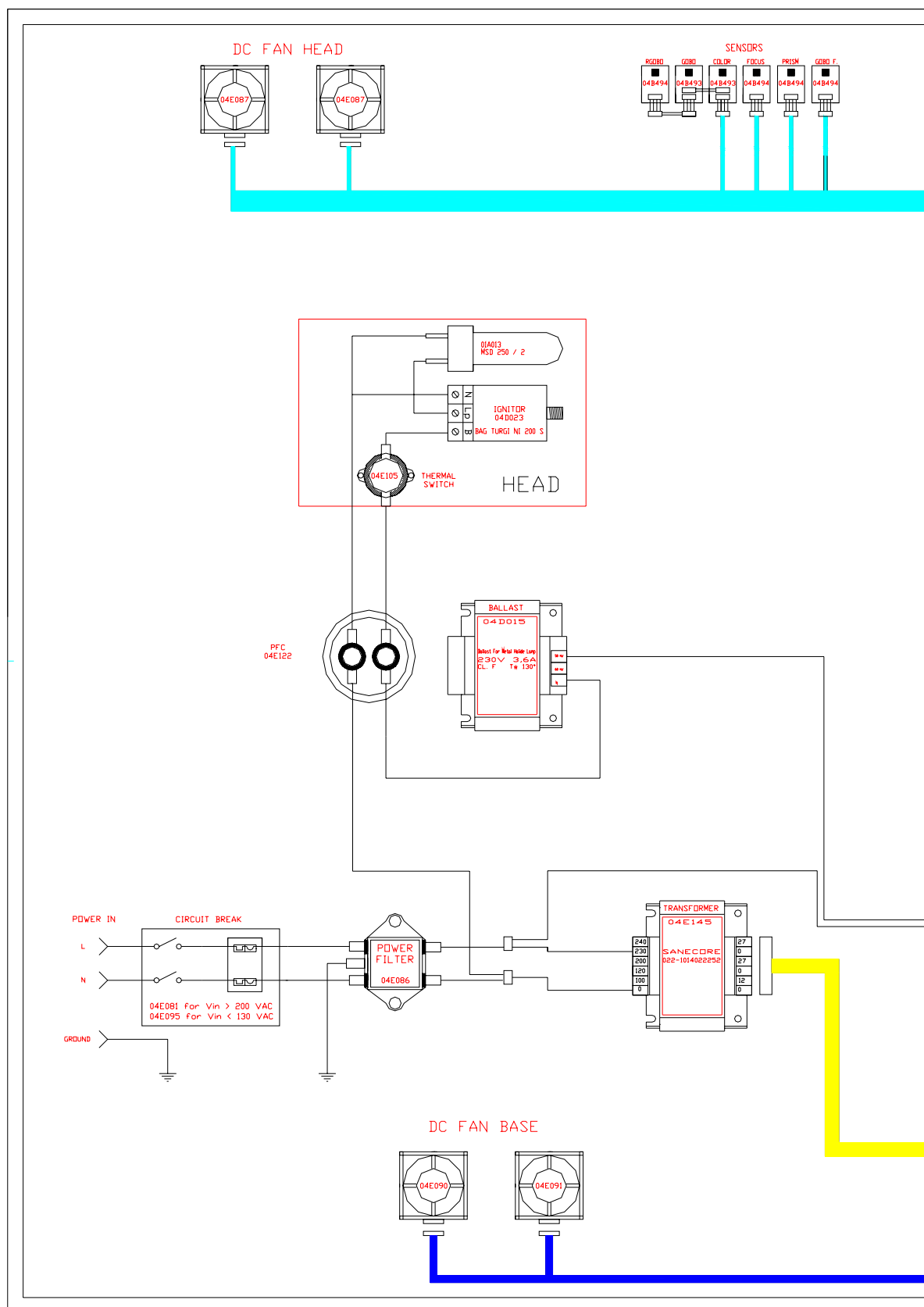
The connections are made using handy connectors and are detailed in figure where you can find indications about the connection between a specific connector and a specific component of the mechanical unit. This includes the motors and the sensors of the various effects wheels (color, gobos, prisms, shutter etc.).

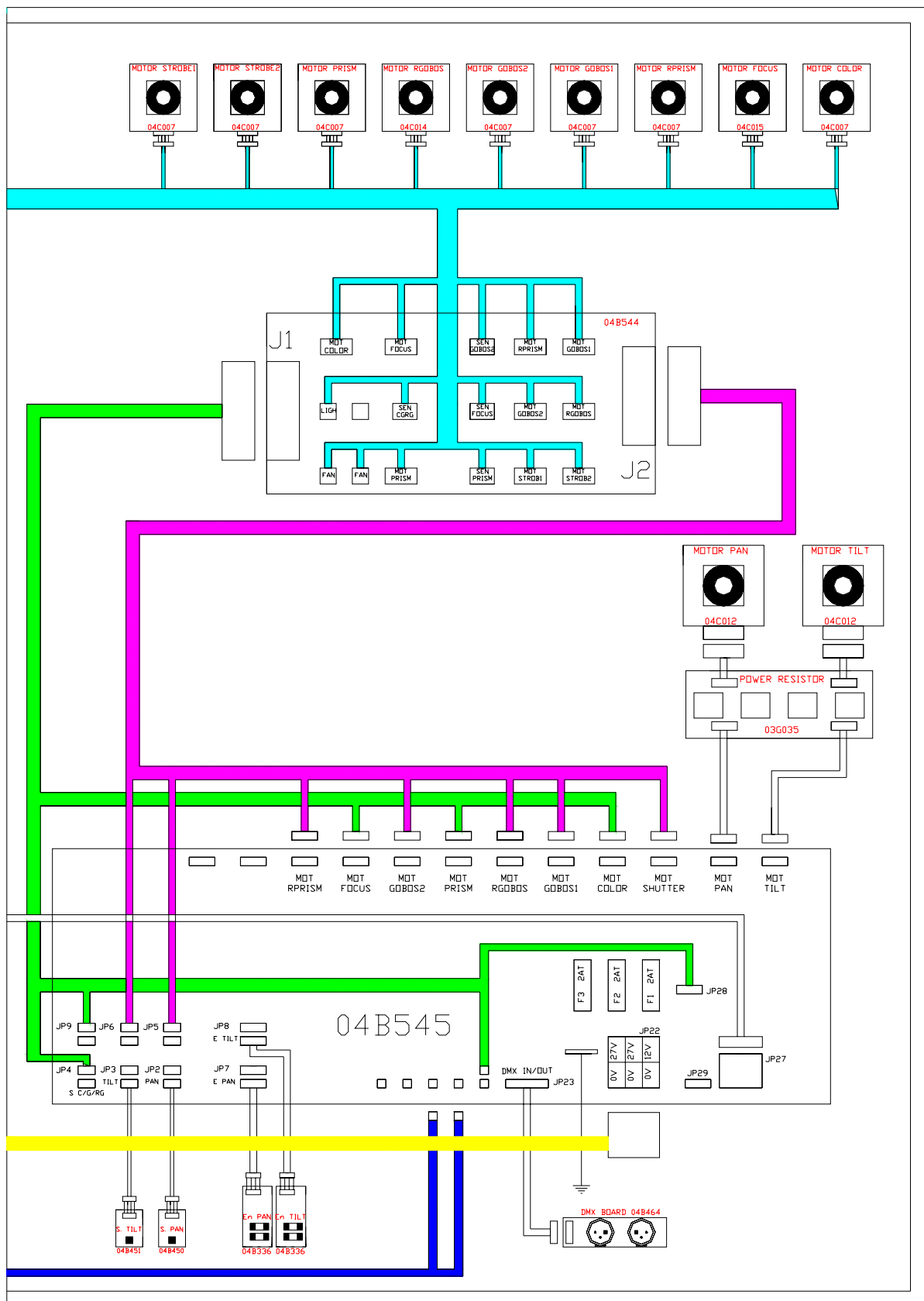


WARNING! An improper use of this documentation made by not specifically qualified staff can damage irretrievably the electronic and/or mechanical components of the projector.

1	Motor SHUTTER / STROBE	15	Sensor PAN
2	Motor COLOR	16	Sensor TILT
3	Motor GOBOS	17	Sensor PRISM
4	Motor ROTATION GOBOS	18	Sensor GOBOS FIX
5	Motor PRISM	19	Sensor COLOR / GOBOS / GOBOS ROT.
6	Motor GOBOS FIX	20	ON / OFF Lamp
7	Motor FOCUS	21	Electronic ballast connector (not in use)
8	Motor PRISM ROTATION	22	LIGHT Sensor
9	No connect	23	Power Connector
10	No connect	24	Faston Ground Connection
11	Motor TILT	25	DMX IN / OUT
12	Motor PAN	26	Head FAN
13	Encoder TILT	27	Base FAN
14	Encoder PAN	28	Sensor FOCUS

10.0 WIRING DIAGRAMS





ACTION		
The projector doesn't switch on	- The power supply is not present	- Check if the regular power supply is present on the projector.
	- The lamp is not working	- Replace the lamp.
	- The thermal switch is active	- Just to wait for little of time.
The projector switches on but doesn't answer to commands.	- Wrong DMX configuration	- Make sure that the projector is correctly configured.
	- Defective cables	- Replace or repair the DMX cable.
	- LED A is off	- Check the control unit & DMX cable.
	- Defective control unit	- Check the control unit by means of other working projectors. Technical aid is required.
Defecting projection.	- The lens is broken	- Check that the lens are not broken.
	- Dust or grease stored on the all parts of projector	- Remove dust or grease stored on lenses.
Projection with halo.	- Dust or grease stored on the all parts of projector	- Carefully clean the optical group lenses and the projector components (see "Maintenance" chapter).
The color or other effects doesn't coincide to the selected value.	- Defective motor	- Technical aid is required.
	-Electronic board	- Technical aid is required.
The PAN and TILT movement doesn't coincide to the selected value.	- Defective motor	- Technical aid is required.
	-Electronic board	- Technical aid is required.
The projector does not carry out the automatic repositioning of the PAN or TILT movements.	-ENCO off in the PAN/TILT configuration menu (cap. 6.0)	- Set ON ENCO Function of PAN/TILT configuration menu (cap. 6.0).

