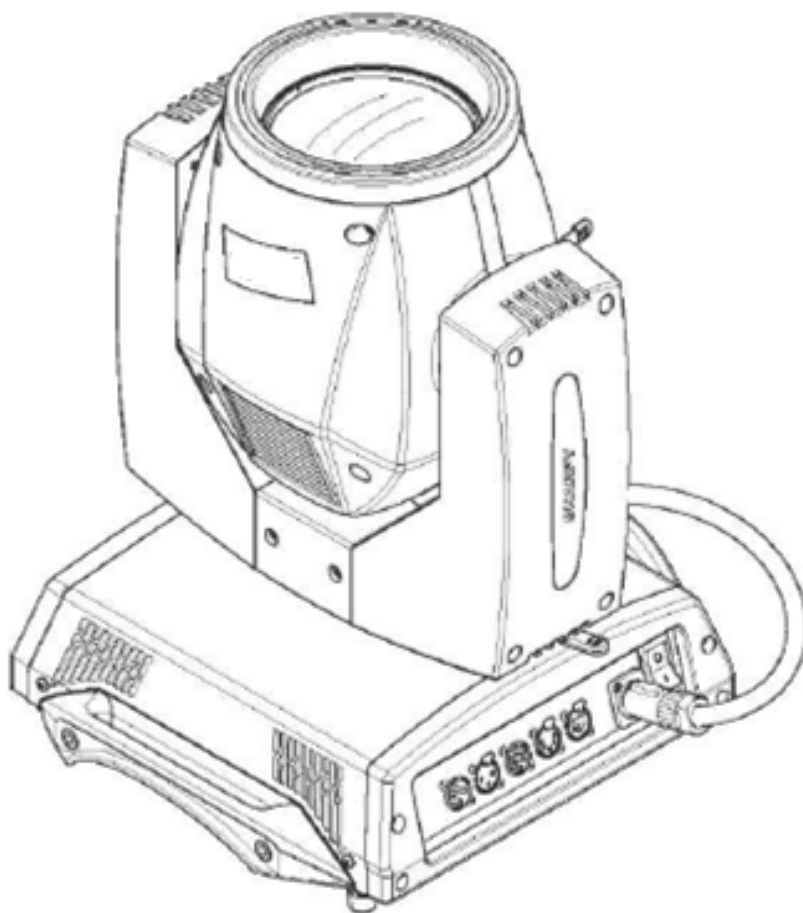


AZTEC
ELECTRONIC

BEAM SHARPY 200

Instruction Manual



USER INSTRUCTION
MANUAL

Unpacking: Thank you for purchasing the AZTEC BEAM SHARPY 200 Watt by AZTECELECTRONIC®. Every AZTEC BEAM SHARPY 200 Watt has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit has arrived intact. In the case damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

Introduction: The AZTEC BEAM SHARPY 200 Watt is part of AZTEC-ELECTRONIC's continuing pursuit for creating high quality affordable intelligent fixtures. The Beam Sharpy 200 is a DMX intelligent Moving Head Beam Effects Lights. This Beam Sharpy 200 is light weight and compact which makes it a great piece for mobile DJ's, clubs, theater, stage and many other applications. The Beam 200 Sharpy has 4 operating modes; sound-active, auto mode, Manual mode, or controlled via DMX controller. It can be used as a stand alone unit or in a master-slave configuration.

Customer Support: AZTEC-ELECTRONICS provides a toll free customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.aztec-electronics.com for any comments or suggestions. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Pacific Standard Time. E-mail: support@aztec-electronic.com

Warning! To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

Caution! There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact AZTEC-ELECTRONIC DEALER / DISTRIBUTOR.

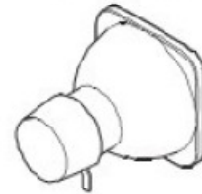
PLEASE recycle the shipping carton when ever possible.

UNPACKING AND PREPARATION

1

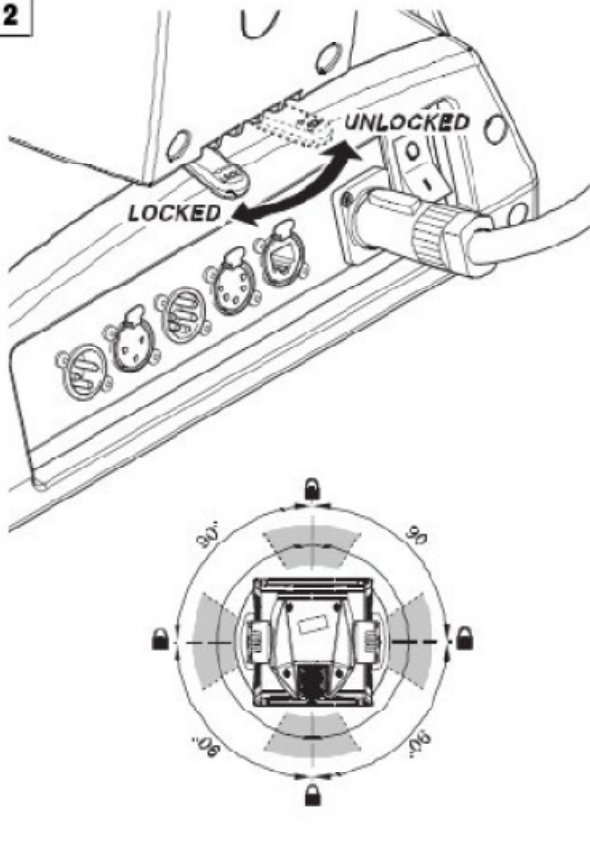


Lamp 189W
(fitted into projector)



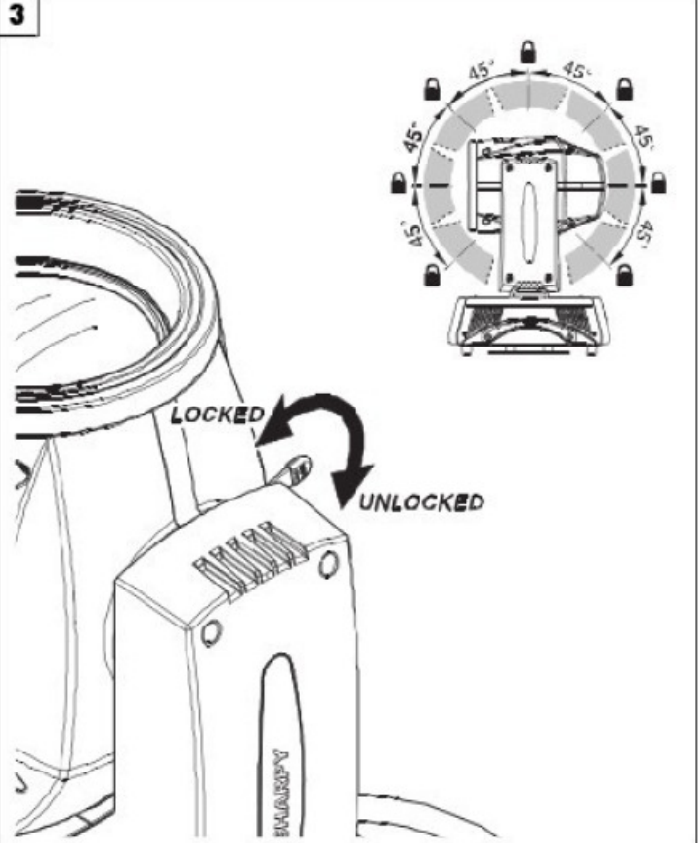
Packing contents - Fig. 1

2



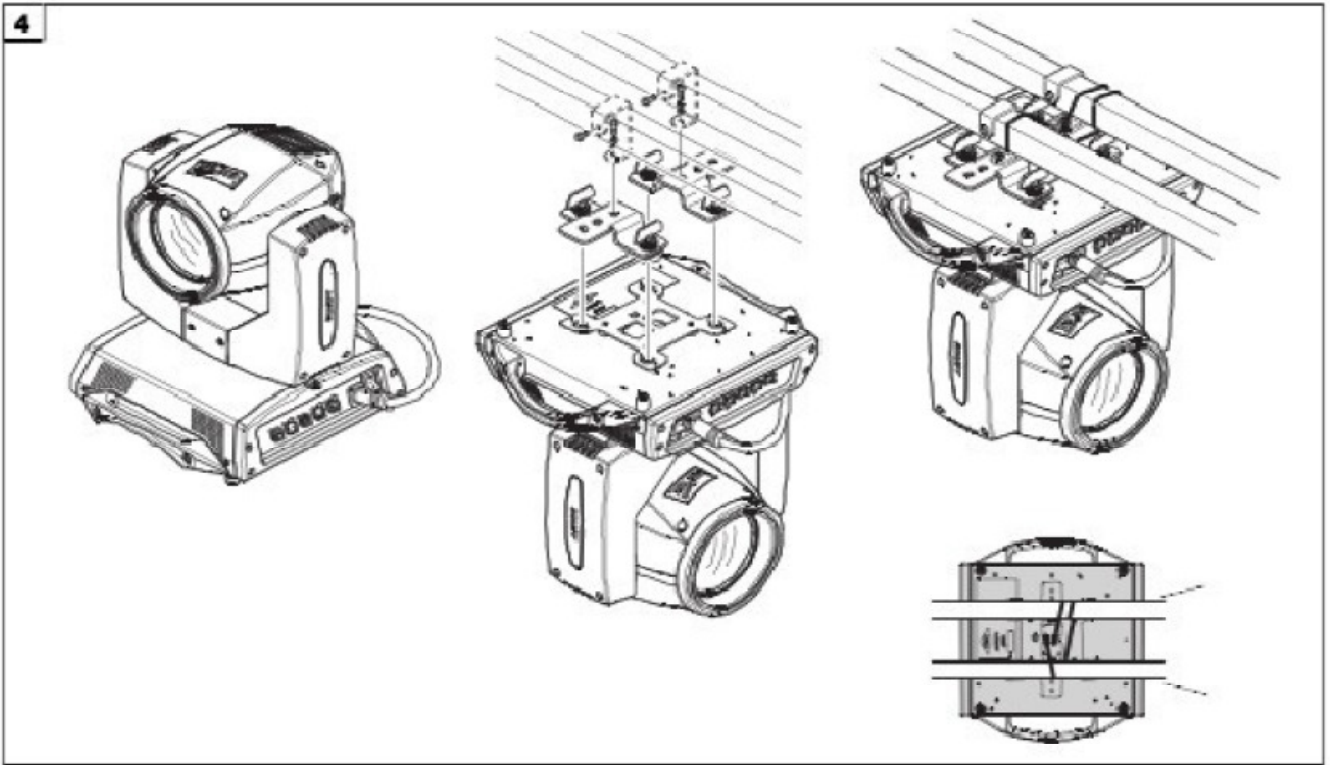
PAN Mechanism Lock and Release (every 90°) - Fig. 2

3



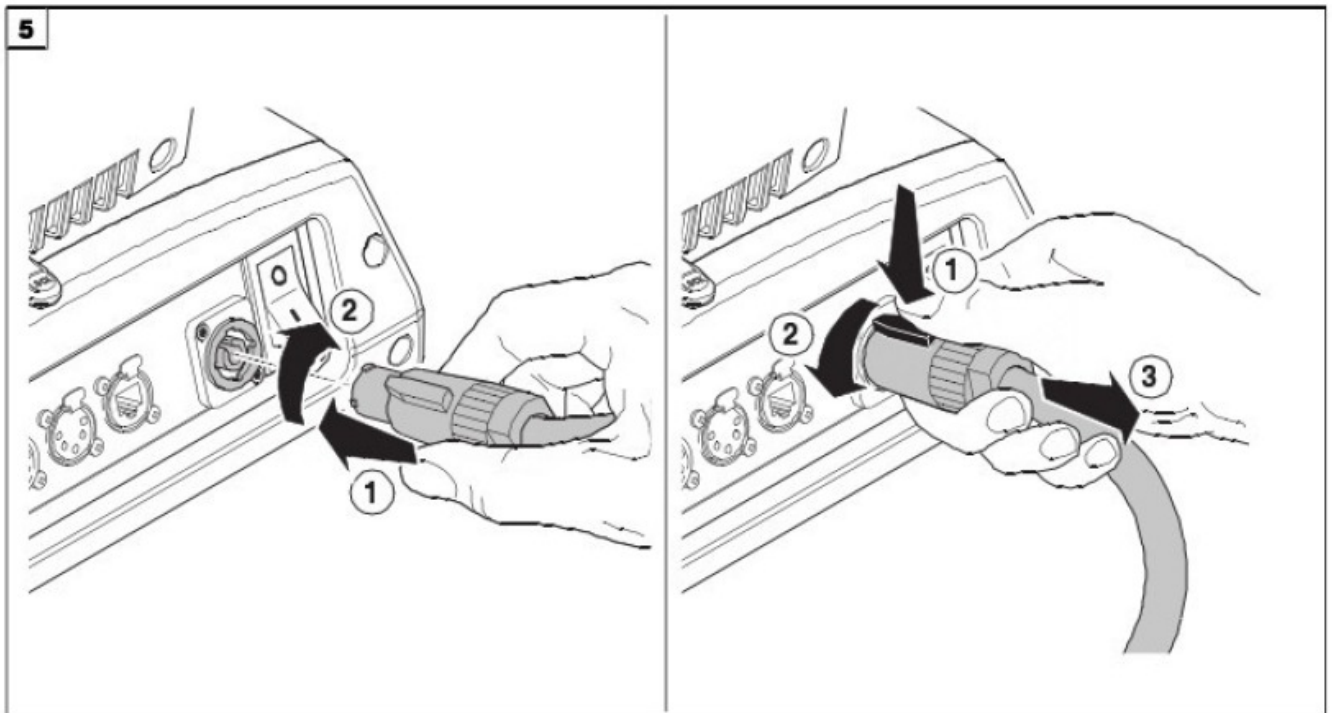
TILT Mechanism Lock and Release (every 45°) - Fig. 3

INSTALLATION AND START-UP

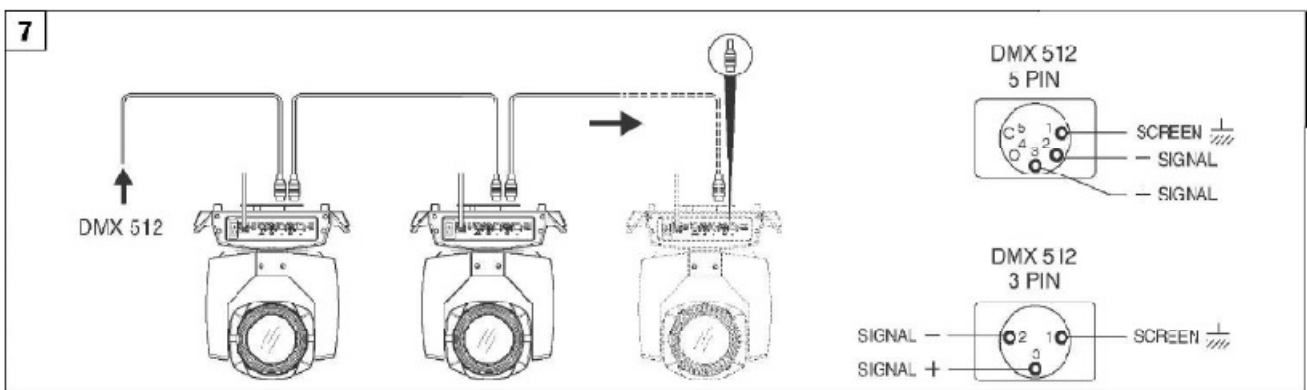
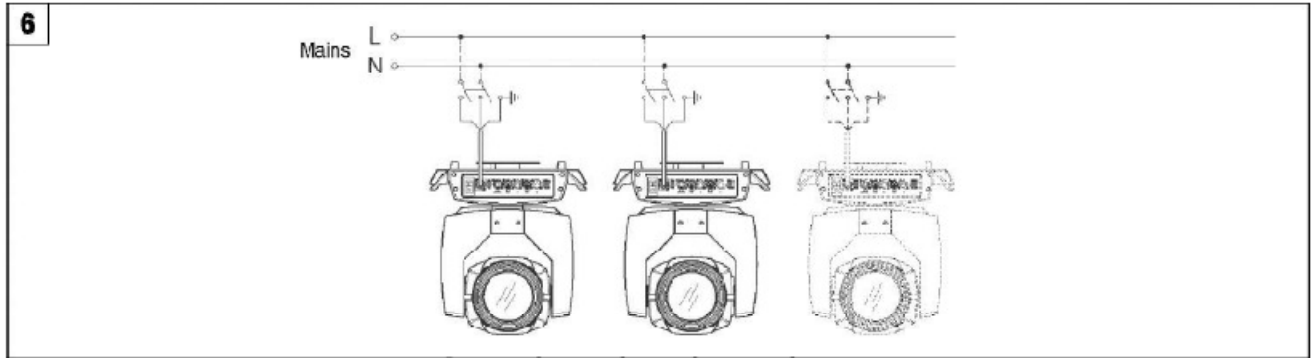


Installing the projector - Fig. 4

The projector can be installed on the floor resting on special rubber feet, on a truss or on the ceiling or wall
WARNING: with the exception of when the projector is positioned on the floor, the safety cable must be fitted. (Cod. 105041/003 available on request). This must be securely fixed to the support structure of the projector and then connected to the fixing point at the centre of the base.



Control panel

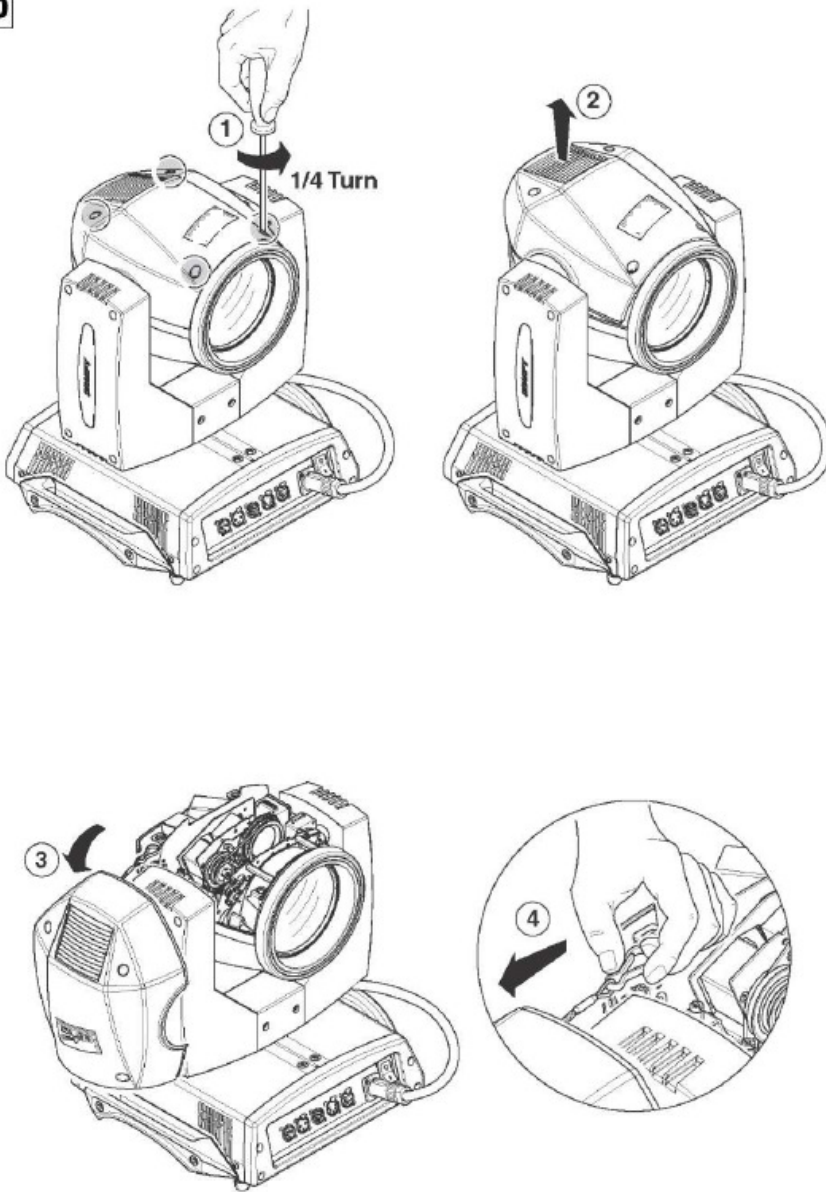


Connecting to the control signal line (DMX) - Fig. 7

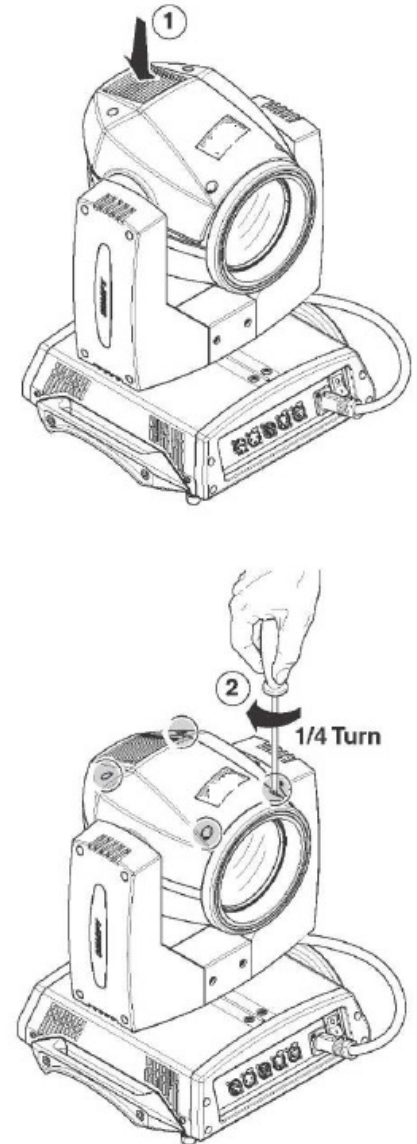
Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120 Ω characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections must be made using XLR type 3 or 5-pin male/female connectors. A terminating plug must be inserted into the last projector with a resistance of 120 Ω (minimum 1/4 W) between terminals 2 and 3. **IMPORTANT:** The wires must not make contact with each other or with the metal casing of the connectors. The casing itself must be connected to the shield braid and to pin 1 of the connectors.

Bulb Replacement / Gobo Adjustment

10



11



Lower Side

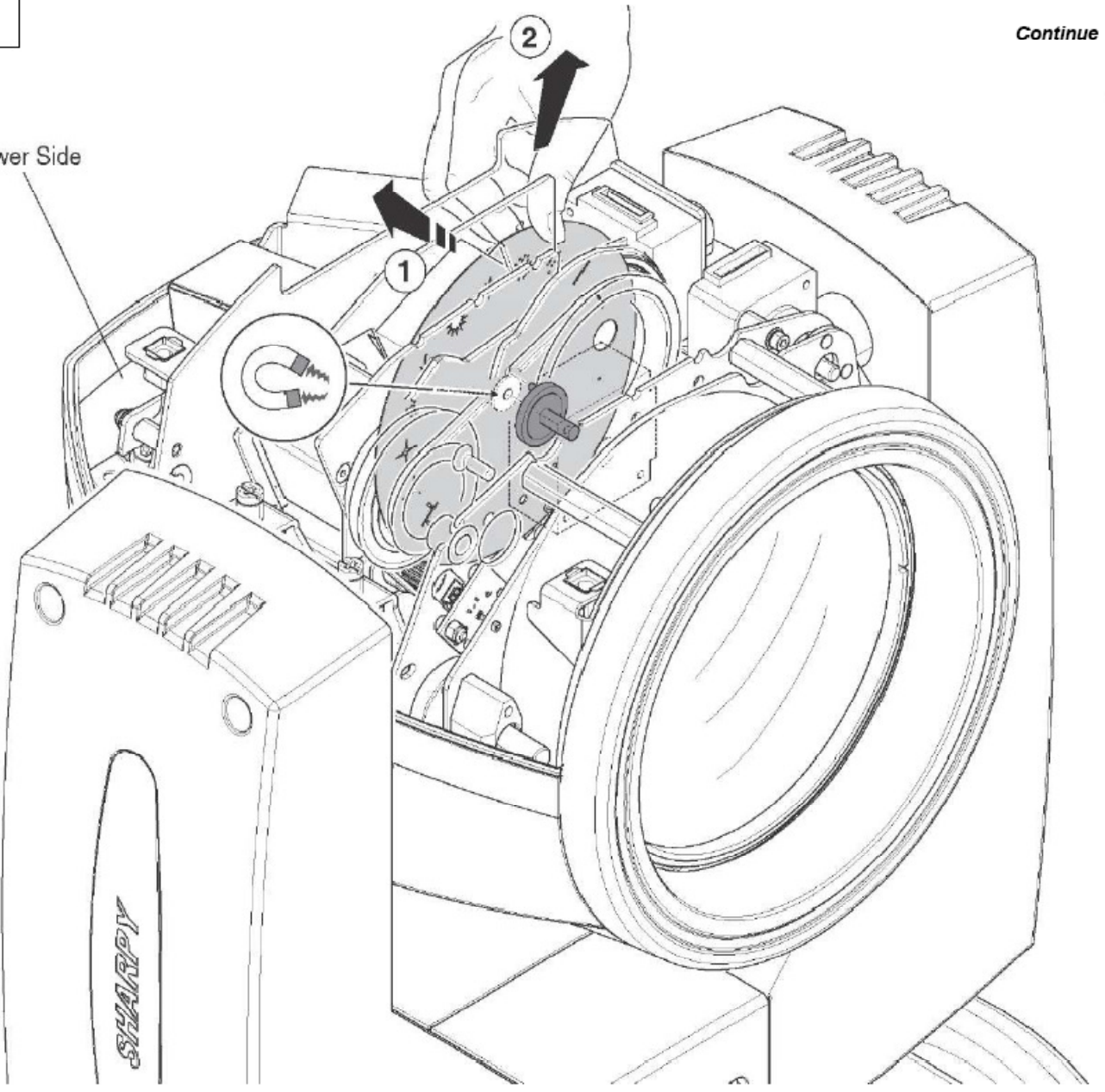
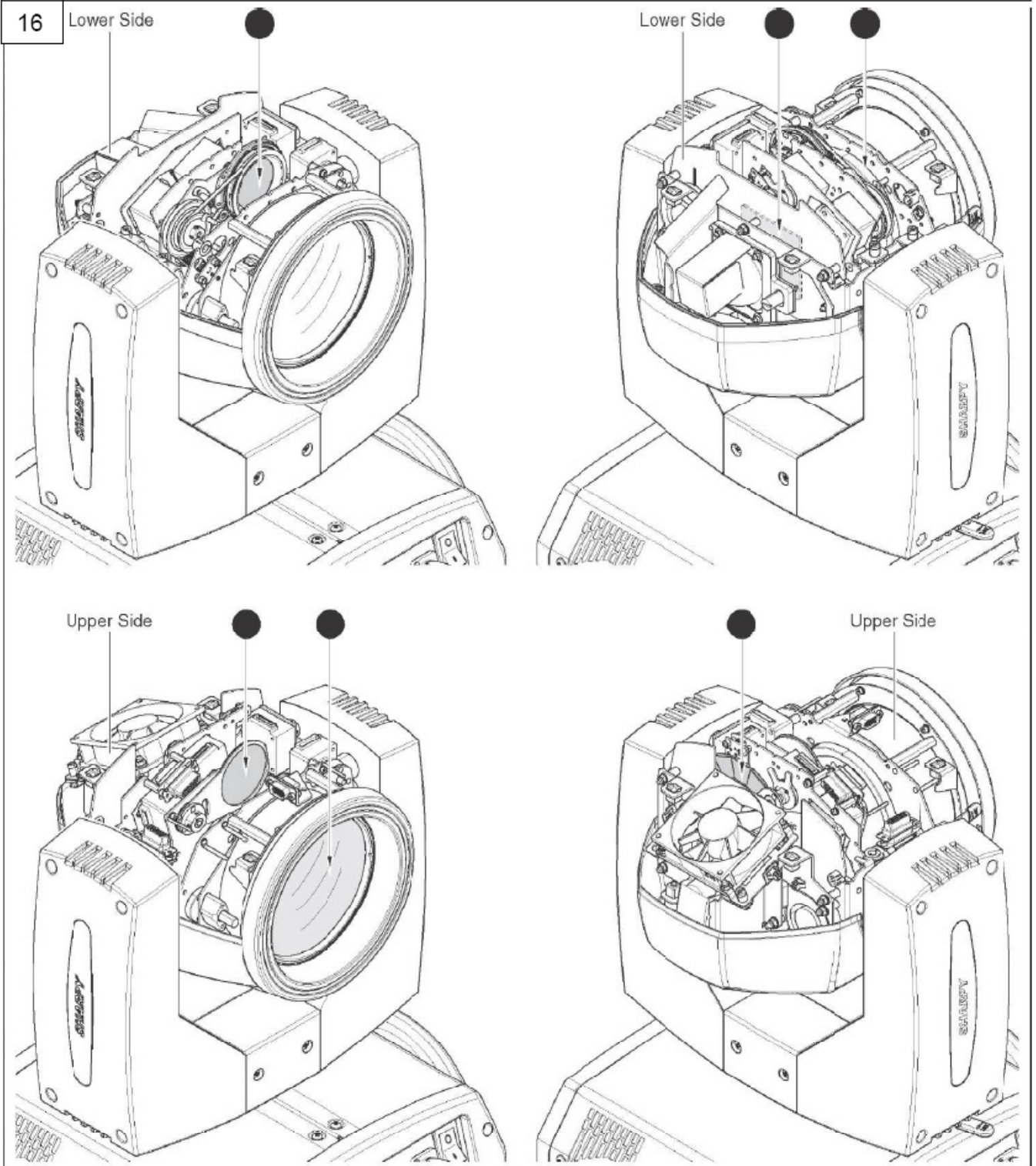


Figure 16. Periodical Cleaning



Periodical cleaning - Fig. 16

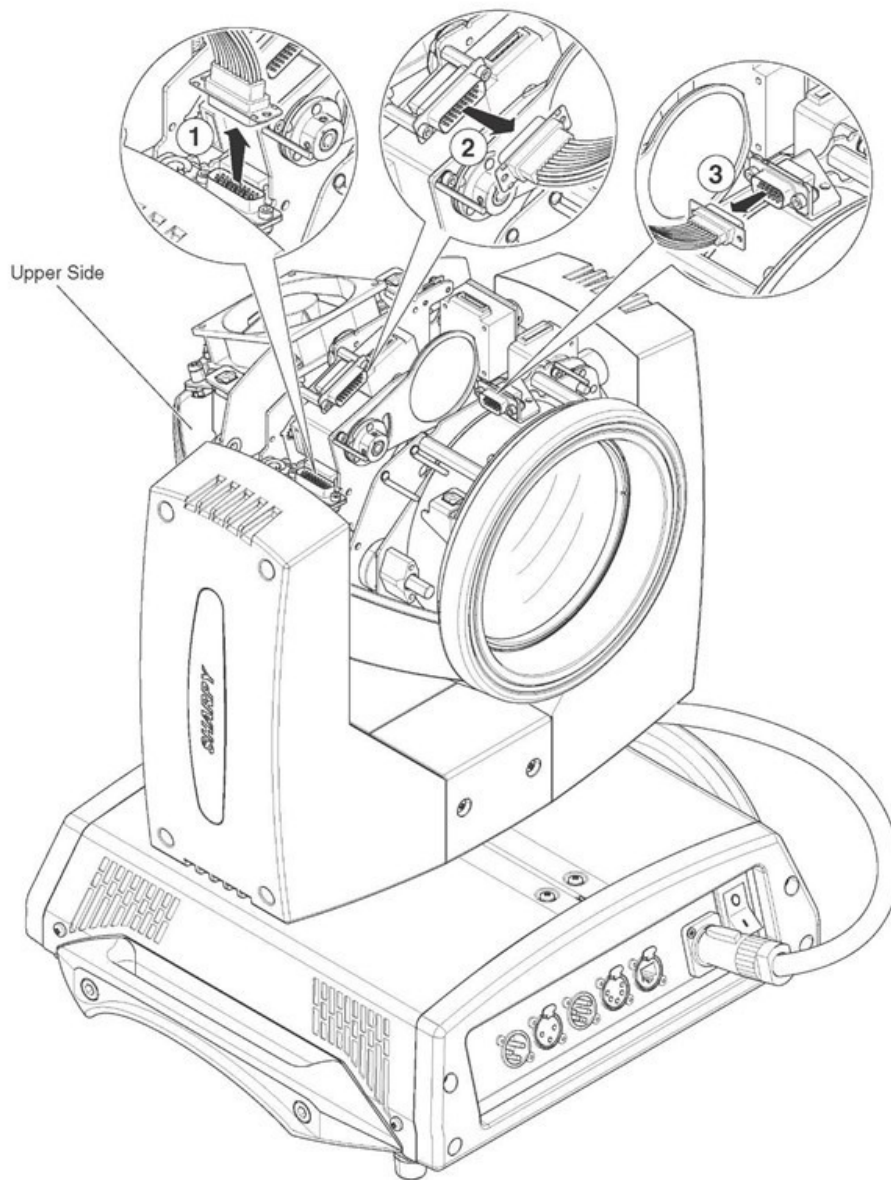
To ensure optimal operation and performance for a long time it is essential to periodically clean the parts subject to dust and grease deposits. The frequency with which the following operations are to be carried out depends on various factors, such as the amount of the effects and the quality of the working environment (air humidity, presence of dust, salinity, etc.).

Use a soft cloth dampened with any detergent liquid for cleaning glass to remove the dirt from the reflectors and filters.

It is recommended that the projector undergoes an annual service by a qualified technician for special maintenance involving at least the following operations:

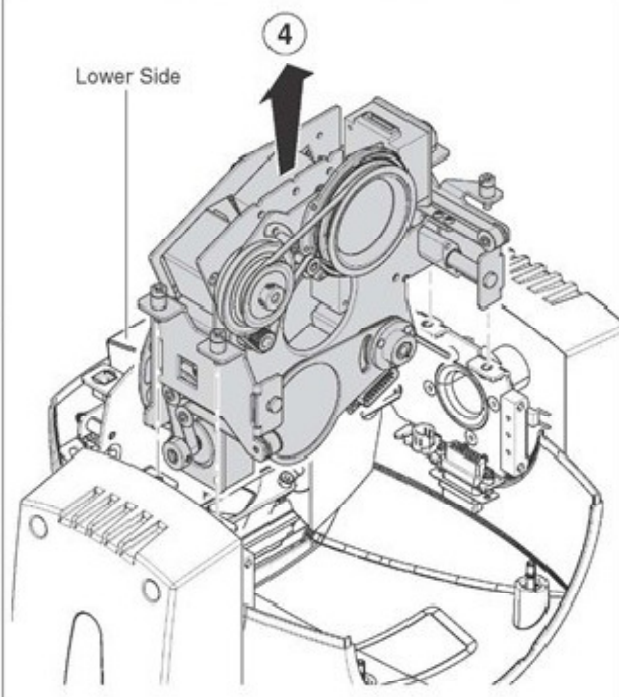
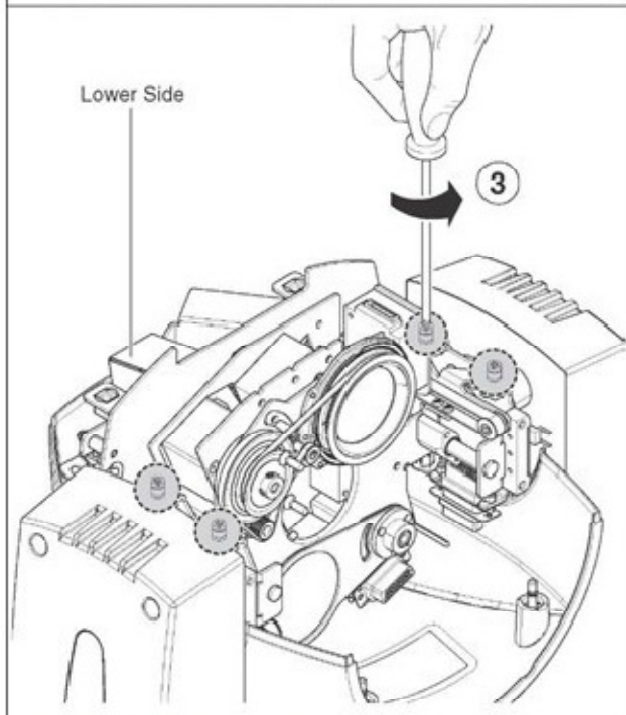
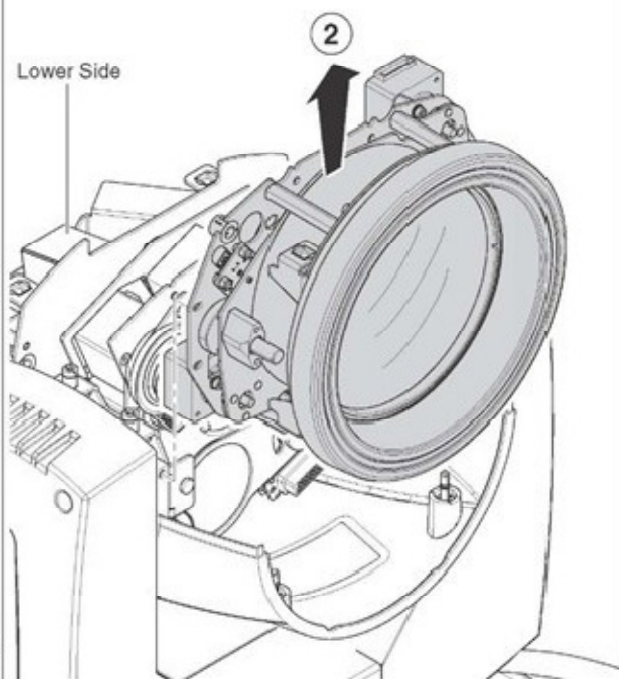
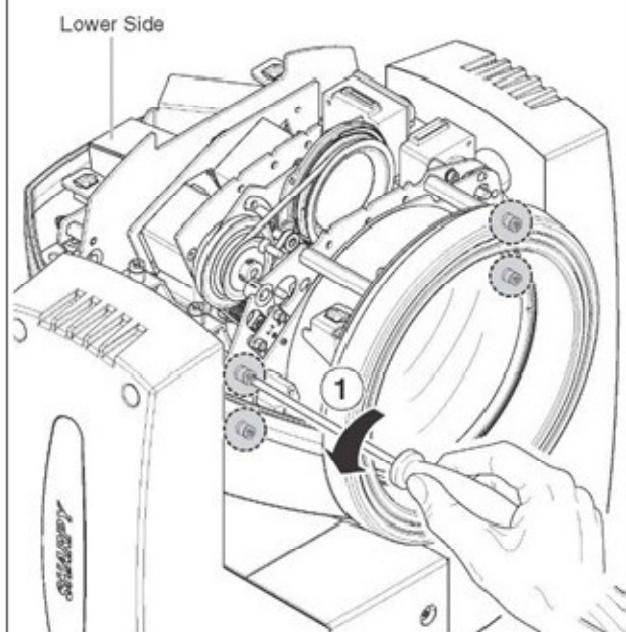
- General cleaning of internal parts.
- Restoring lubrication of all parts subject to friction, using lubricants specifically supplied by AZTEC.
- General visual check of the internal components, cabling, mechanical parts, etc.
- Electrical, photometric and functional checks; eventual repairs.

17



Extraction of the effect modules: Preliminary operations - Fig. 17

18

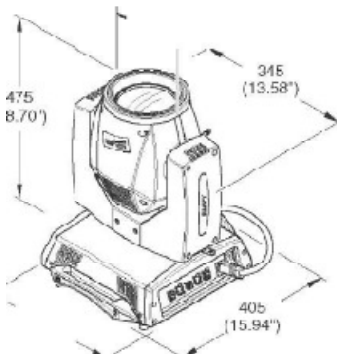
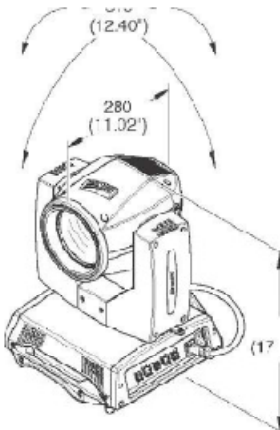


Extraction of the effect modules - Fig. 18.

IMPORTANT: Grasp the modules using the support structure and not the details which could get damaged.

Insertion of the effect modules: Repeat the operations indicated in Fig. 17 and 18 in reverse order.

TECHNICAL INFORMATION



Power supplies available

115/230V 50/60Hz

Input power:

350VA a 230V 50Hz.

Lamp:

Lamp system with a short arc burner in a reflector

- Type MSU Platinum BR (L1U1U3)
- Output Lamp power: 189W
- Colour temperature 8000 K
- Luminous flux 7900lm
- Average life 2000 h
- Any working position

Motors:

10 stepper motors, operating with microsteps, totally microprocessor controlled.

Channels:

Max 20 control channels.

Inputs:

- DMX 512

Movable body:

• Movement by means of two stepper motors, controlled by microprocessor.

• Automatic repositioning of PAN and TILT after accidental movement not controlled by control unit.

Travel:

- PAN = 540°
- TILT = 252°

Maximum speeds:

- PAN = 2.45 sec
- TILT = 1.30 sec

Resolution:

- PAN = 2.11°
- PAN FINE = 0.008°
- TILT = 0.98°
- TILT FINE = 0.004°

IP20 protection rating:

- Protected against the entry of solid bodies larger than 12mm (0.47").
- No protection against the entry of liquids.

CE Marking:

In conformity with the European Union Low Voltage

Directive 2006/95/CE and Electromagnetic

compatibility

Directive 2004/108/CE.

Safety Devices:

- Bipolar circuit breaker with thermal protection.
- Automatic break in power supply in case of overheating or failed operation of cooling system.

Cooling:

Forced ventilation with axial fans. **Body:**

- Aluminium structure with die-cast plastic cover.

- Two side handles for transportation.

- Device locking PAN and TILT mechanisms for transportation and maintenance.

Working position

Functioning in any position.

Weights:

about 10 Kg (35lbs 3ozs).

CAUSE AND SOLUTION OF PROBLEMS

THE PROJECTOR WILL NOT SWITCH ON		PROBLEMS
ELECTRONICS NON-OPERATIONAL		
DEFECTIVE PROJECTION		
REDUCED LUMINOSITY		
	POSSIBLE CAUSES	CHECKS AND REMEDIES
•	No mains supply.	Check the power supply voltage.
•	Lamp exhausted or defective.	Replace the lamp. (See instructions).
•	Signal transmission cable faulty or disconnected.	Replace the cables.
•	Incorrect addressing.	Check addresses (see instructions).
•	Fault in the electronic circuits.	Call an authorised technician.
•	Lenses or reflector broken	Call an authorised technician.
•	Dust or grease deposited.	Clean (see instructions).

Technical parameters:

Lamp Optional Model..

- Channel mode: 16, or 20CH
- Level scanning: 540 ° (16bit precision scan) electronic error correction
- Vertical scanning: 250 ° (16bit precision scan) electronic error correction
- Color Wheel: 14 colors with white, with rotating rainbow effect.
- Gobo Wheel: 17 gobos with rotating gradually change effect and pattern swing effect.
- Shut: up to 13 times per second with automatic pulse effect.
- Dimmer: 0-100% linear dimmer
- Focus: 5 meters to infinity
- Prism: 3 or 8 can be choosed
- Frost: 0% - 100% linear frost
- Control table reset function.
- Control table switch bubble function (Switch on or off bulb can choose when with power. light half-power function
- Power supply: AC110V-240V, 50 / 60HZ,
The light body size: 360X410X500
WT:20KG

Signal connection:

The connection of lights and the connection of light and controller must used two core shielding wire with its diameter not less than 0.5 mm. We should pay special attention that the connection of three core of XLR plugs and socket cannot contact with inner shell and between core and core also cannot contact.

When use XLR-XLR control line, connect the DMX outlet of controller with the DMX input of the first machine, and connect the DMX outlet of the first machine with DMX input the second machine. Repeating the process until all machines connected. At last connect the loop plug with the last lamp's signal output the connection of controller mode is completed.

This menu of control display board specifically designs for the various types of moving light equipped with various function control mode, operate easy. For some operation that some type of light without it is invalid corresponding menu options setting.

Menu Operation of Moving Head Light:

There are several features are offered in the base of control panel. Such as setting the DMX address, switch on or off the bulb, run the program and the selection of work mode.

Menu operation:

It provides various functions on the base of the control panel. Such as setting DMX address, switch the bulb, test program running, work mode selection and so on

DMX ADDRESS	1--512	
PARAMRTER	BACK	
	CONTROL	STANDARD EXTENDED SIMPLFY
MODELS	B200	
OPTION	BACK	
	X REVERES	No Yes
	Y REVERES	No Yes
	XY OPTOCOUPLER	No Yes
	LAMP CONTROL	close open
	LAMP ON-OFF	close open
	TURN SHORTEST	No Yes
	COLOUR HALF	No Yes
BISPLAY	BACK	
	LANGUAGE	English 中文
MAIN CONTROL	BACK	
	CH1	0-255
	CH2	0-255

	CH32	0-255
	CH2	0-255
TEST OPERATION	-----	
	BACK	
	SOUND	
RESUME BEFAULT	AUTO	
	BACK	
RESET	ENTRE	
	BACK	
	ENTER	

DMX STRUCTURE

DMX512 (16/20 Channel)

No	DMX Value		Feature
1	Color wheel	Color wheel	0~6: White→7~13: Color 1→14~20: Color 2→21~27: Color 3→28~34: Color 4→35~41: Color 5→42~48: Color 6→49~55: Color 7→56~62: Color 8→63~69: Color 9→70~76: Color 10→77~83: Color 11→84~90: Color 12→91~97: Color 13→98~104: Color 14→105~110: halftone 1→111~116: halftone 2→117~122: halftone 3→123~128: halftone 4→129~134: halftone 5→135~140: halftone 6→141~146: halftone 7→147~152: halftone 8→153~158: halftone 9→159~164: halftone 10→165~170: halftone 11→171~176: halftone 12→177~182: halftone 13→183~188: halftone 14→189~191: White; 192~223: Color wheel anti-clockwise rotation, from fast to slow, rainbow effect. 224~255: Color wheel clockwise rotation, from slow to fast, rainbow effect.
2	STOP/STROBE	STOP /STROBE	0~2 No function. 3~7 Open. 8~127 Strobe, from slow to fast. 128~251 Random strobe, from slow to fast. 252~255 Open
3	Dimmer	Dimmer	0~255 Prism Rotation
4	STATIC GOBO CHANGE	STATIC GOBO CHANGE	0~4: White→5~9: Gobo 2→10~14: Gobo 3→15~19: Gobo 4→20~24: Gobo 5→25~29: Gobo 6→30~34: Gobo 7→35~39: Gobo 8→40~44: Gobo 9→45~49: Gobo 10→50~54: Gobo 11→55~59: Gobo 12→60~64: Gobo 13→65~69: Gobo 14→70~74: Gobo 15→75~79: Gobo 16→80~84: Gobo 17→85~89: from Gobo 17 to White shaking in turn; 192~223: Gobo wheel anticlockwise rotation, from fast to slow, flow effect; 224~255: Gobo wheel clockwise rotation, from fast to slow, flow effect;
5	Prism INSERTION	Prism INSERTION	0~255 Prism
6	Prism Rotation	Prism Rotation	0~95 anticlockwise rotation, from fast to slow 160~255 clockwise rotation, from slow to fast
7	EFFECTS MOVEMENT	EFFECTS MOVEMENT	EFFECTS MOVEMENT
8	FROST	FROST	0 - 1 2 7 no frost
			1 2 8 - 2 5 5 frost
9	FOCUS	FOCUS	0 - 2 5 5 line focus
10	Pan	Pan	0~255 pan movement

DMX STRUCTURE (Cont.)

11	Fine pan movement	Fine pan movement	0~255 16-bit pan movement
12	Tilt	Tilt	0~255tilt movement
13	Fine Tilt movement	Fine Tilt movement	0~255 16-bit tilt movement
14	FUNCTION	FUNCTION	
15	RESET	RESET	
16	LAMP CONTROL (with Option "Lamp Dmx" ON)	LAMP CONTROL (with Option "Lamp Dmx" ON)	60-62 Control table close bulb
			255 Control table open bulb
17		PAN - TILT TIME	Speed from fast to slow
18		COLOUR TIME	Speed from fast to slow
19		BEAM TIME	Speed from fast to slow
20		GOBO TIME	Speed from fast to slow

• COLOUR WHEEL - channel 1



BIT	%	EFFECT
255	100	PAST ROTATION (50 rpm)
.....
100	50.0	SLOW ROTATION (50 rpm)
120	46.7	BLUE + WHITE
130	51.0	BLUE
135	53.3	CTB 50% + BLUE
145	57.7	CTB 50%
150	60.0	CTB 50% + CTB 50%
160	63.3	CTB 50%
165	65.7	CTB 50% + CTB 50%
170	68.0	CTB 50%
180	72.0	CTB 50% + CTB 50%
190	75.0	CTB 50%
200	78.0	CTB 50% + CTB 50%
210	82.0	CTB 50%
220	86.0	CTB 50% + CTB 50%
230	90.0	CTB 50%
240	94.0	CTB 50% + CTB 50%
250	98.0	CTB 50%
255	100	WHITE + RED

• STOP / STROBE - channel 2



BIT	%	EFFECT
252 - 255	99.7 - 100	OPEN
238 - 250	93.7 - 99.0	RANDOM FAST STROBE
223 - 238	88.2 - 96.0	RANDOM MEDIUM STROBE
194 - 220	76.7 - 88.0	RANDOM SLOW STROBE
208 - 212	81.7 - 83.0	OPEN
207	81.0	PAST FLUTTER (50 rpm)
.....
108	42.5	SLOW FLUTTER (50 rpm)
104 - 107	41.0 - 42.0	OPEN
103	40.5	PAST STROBE (12 1/2 Hz)
.....
0	0.0	SHUTTER (1/2500)
3 - 9	6.0 - 1.0	CLOSED

• DIMMER - channel 3



BIT	%	EFFECT
255	100	
.....
0	0.0	95-100%: 0.02 sec

• STATIC GODO CHANGE - channel 4



BIT	%	EFFECT
255	100	GODO (50% DEFLECT) (50 rpm)
250	98.0	GODO (50% DEFLECT) (50 rpm)
240	93.0	GODO (50% DEFLECT) (50 rpm)
244	96.5	GODO (50% DEFLECT) (50 rpm)
248	98.0	GODO (50% DEFLECT) (50 rpm)
257	99.0	GODO (50% DEFLECT) (50 rpm)
228	90.5	GODO (50% DEFLECT) (50 rpm)
221	86.5	GODO (50% DEFLECT) (50 rpm)
220	86.0	GODO (50% DEFLECT) (50 rpm)
224	88.0	GODO (50% DEFLECT) (50 rpm)
222	87.5	GODO (50% DEFLECT) (50 rpm)
218	85.5	GODO (50% DEFLECT) (50 rpm)
217	85.0	GODO (50% DEFLECT) (50 rpm)
210	82.0	GODO (50% DEFLECT) (50 rpm)
211	82.0	GODO (50% DEFLECT) (50 rpm)
206	80.5	GODO (50% DEFLECT) (50 rpm)
204	80.0	GODO (50% DEFLECT) (50 rpm)
190	76.0	GODO (50% DEFLECT) (50 rpm)
188	75.5	GODO (50% DEFLECT) (50 rpm)
180	72.0	GODO (50% DEFLECT) (50 rpm)
179	71.7	GODO (50% DEFLECT) (50 rpm)
174	70.5	GODO (50% DEFLECT) (50 rpm)
173	70.0	GODO (50% DEFLECT) (50 rpm)
172	69.5	GODO (50% DEFLECT) (50 rpm)
167	67.5	GODO (50% DEFLECT) (50 rpm)
166	67.0	GODO (50% DEFLECT) (50 rpm)
160	65.0	GODO (50% DEFLECT) (50 rpm)
158	62.5	PAST ROTATION (50 rpm)
.....
119	46.0	SLOW ROTATION (50 rpm)
114 - 117	43.7 - 45.0	STOP
113	44.2	SLOW ROTATION (50 rpm)
.....
72	28.2	PAST ROTATION (50 rpm)
.....
697	30.738	GODO 17
646	26.529	GODO 16
646	27.287	GODO 16
646	28.045	GODO 16
646	28.803	GODO 16
646	29.561	GODO 16
646	30.319	GODO 16
646	31.077	GODO 16
646	31.835	GODO 16
646	32.593	GODO 16
646	33.351	GODO 16
646	34.109	GODO 16
646	34.867	GODO 16
646	35.625	GODO 16
646	36.383	GODO 16
646	37.141	GODO 16
646	37.899	GODO 16
646	38.657	GODO 16
646	39.415	GODO 16
646	40.173	GODO 16
646	40.931	GODO 16
646	41.689	GODO 16
646	42.447	GODO 16
646	43.205	GODO 16
646	43.963	GODO 16
646	44.721	GODO 16
646	45.479	GODO 16
646	46.237	GODO 16
646	47.000	GODO 16

• PRISM INSERTION - channel 5

BIT	%	EFFECT
255	100	
.....
.....	PRISM INSERTED 0% - 100%: 0.50 sec
.....
103	59.0	
127	49.7	
.....
.....	PRISM EXCLUDED
.....
0	6.0	

• PRISM ROTATION - channel 6



BIT	%	EFFECT
255	100	PAST ROTATION (45 rpm)
.....
191	75.0	SLOW ROTATION (45 rpm)
181 - 182	74.7 - 75.0	STOP
180	74.2	SLOW ROTATION (45 rpm)
.....
125	50.0	PAST ROTATION (45 rpm)
120	48.0	PRISM TURN 540°
105	41.7	PRISM TURN 450°
84	33.0	PRISM TURN 360°
65	26.0	PRISM TURN 270°
42	16.2	POSITION 180°
21	8.2	POSITION 90°
0	0.0	POSITION 0°

• EFFECTS MOVEMENT - channel 7

BIT	%	EFFECT
255	100	
0	0.0	0% 100% 0.33 sec

• FROST - channel 8



BIT	%	EFFECT
255	100	FROST INSERTED
0	0.0	FROST EXCLUDED

0% 100% 0.31 sec

• FOCUS - channel 9

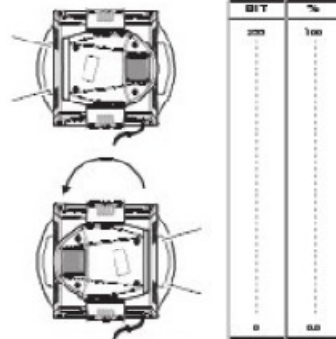


BIT	%	EFFECT
255	100	BLUR
0	0.0	SHARP

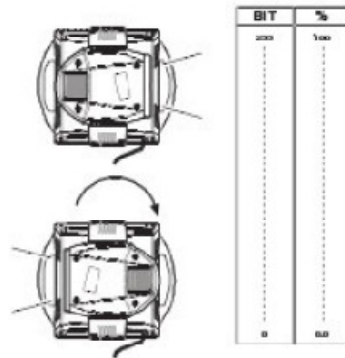
0% 100% 1.11 sec

• PAN - channel 10

Operation with option *InvertPan* : Off
(Tilt conventionally represented at 14% and option *Invert Tilt* : Off)

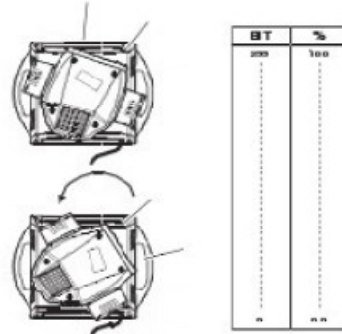


Operation with option *InvertPan* : On
(Tilt conventionally represented at 14% and option *Invert Tilt* : Off)

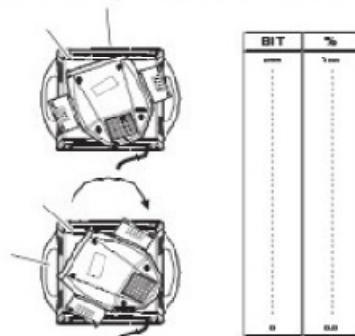


• PAN FINE - channel 11

Operation with option *InvertPan* : Off
(Tilt conventionally represented at 14% and option *Invert Tilt* : Off)

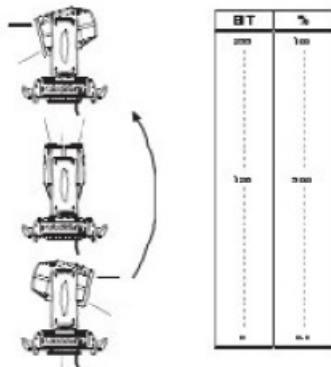


Operation with option *InvertPan* : On
(Tilt conventionally represented at 14% and option *Invert Tilt* : Off)



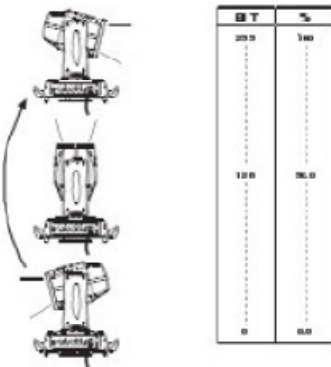
• TLT - channel 12

Operation with option Invert Tilt ⚡ Off
(Pan conventionally represented at 0% and option Invert Pan ⚡ Off)



BIT	%
255	100
100	33.3
0	0.0

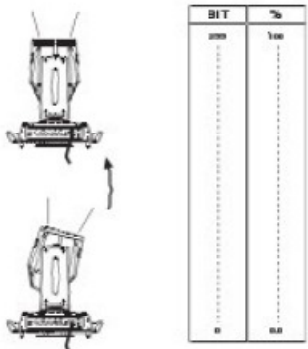
Operation with option Invert Tilt ⚡ On
(Pan conventionally represented at 0% and option Invert Pan ⚡ Off)



BIT	%
255	100
128	50.0
0	0.0

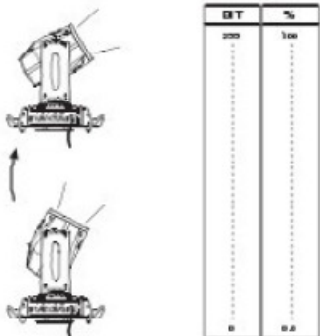
• TILT FINE - channel 13

Operation with option Invert Tilt ⚡ Off
(Pan conventionally represented at 0% and option Invert Pan ⚡ Off)



BIT	%
255	100
0	0.0

Operation with option Invert Tilt ⚡ On
(Pan conventionally represented at 0% and option Invert Pan ⚡ Off)



BIT	%
255	100
0	0.0

• FUNCTION - channel: 14

BIT	%	EFFECT	
255	100	UNUSED RANGE	
63	24.7		
51-62	20.0-24.2		CHIMMER CURVE FUNCTION
38-50	14.7-19.5		
25-37	9.7-14.2		NORMAL
12-24	4.7-9.5	FAST (Default)	PUSH-TILT FUNCTION
0-11	0.0-4.2	UNUSED RANGE	

The functions are activated passing through the unused range and staying 5 seconds in necessary level.

• RESET - channel: 15

BIT	%	EFFECT
255	100	COMPLETE RESET
128	50.0	COMPLETE RESET
127	49.7	PAN / TILT RESET
77	30.0	PAN / TILT RESET
76	29.7	EFFECTS RESET
26	10.0	EFFECTS RESET
25	9.7	UNUSED RANGE
0	0.0	UNUSED RANGE

• LAMP CONTROL (only with option LAMP DMX On) - channel: 16

IMPORTANT SHARPY is not provided with hot restrike ignition



BIT	%	EFFECT
255	100	LAMP ON
101	39.5	LAMP ON
100	39.0	LAMP OFF
26	10.0	LAMP OFF
25	9.7	UNUSED RANGE
0	0.0	UNUSED RANGE

TIMING CHANNELS

17		Timing Channel		Channel function									
		Pan		Pan - Tilt - (Pan fine - Tilt fine)									
BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds	BIT	Seconds	T	Seconds		
0	Full	43	8.6	86	24	129		172		6			
1	0.2	44	8.8	87		130	41	173	58	7	170		
2	0.4	45	9	88		131		174		8			
3	0.6	46	9.2	89	25	132		175		9	180		
4	0.8	47	9.4	90		133	42	176	59	0			
5	1		9.6	91	26	134		177		1			
6	1.2		9.8	92		135	43	178	60	2	190		
7	1.4	50	10	93		136		179		3			
8	1.6	51	10.2	94	27	137	44	180		4	200		
9	1.8	52	10.4	95		138		181	65	5			
10	2	53	10.6	96	28	139		182		6			
11	2.2	54	11	97		140	45	183	70	7	210		
12	2.4	55		98		141		184		8			
13	2.6	56	12	99	29	142		185		9			
14	2.8	57		100		143	46	186	75	0	220		
15	3	58	13	101		144		187		1			
16	3.2	59		102	30	145	47	188	80	2	230		
17	3.4	60	14	103		146		189		3			
18	3.6	61		104	31	147	48	190		4			
19	3.8	62	15	105		148		191	85	5	240		
20	4	63		106	32	149		192		6			
21	4.2	64	16	107		150	49	193	90	7	250		
22	4.4	65		108	33	151		194		8			
23	4.6	66	17	109		152		195	95	9			
24	4.8	67		110	34	153	50	196		0	260		
25	5	68	18	111		154		197	100	1			
26	5.2	69		112	35	155	51	198		2	270		
27	5.4	70	19	113		156		199		3			
28	5.6	71		114	36	157		200	110	4			
29	5.8	72	20	115		158	52	201		5	280		
30	6	73		116	37	159		202	120	6			
31	6.2	74	21	117		160	53	203		7	290		
32	6.4	75		118	38	161		204		8			
33	6.6	76	22	119		162	54	205	130	9			
34	6.8	77		120	39	163		206		0	300		
35	7	78	23	121		164		207		1			
36	7.2	79		122	40	165	55	208	140	2			
37	7.4	80		123		166		209		3	310		
38	7.6	81	24	124		167		210		4			
39	7.8	82		125	41	168	56	211	150	5	Follow cu		
40	8	83		126		169		212			e		
41	8.2	84		127		170		213			Data		
42	8.4	85		128		171	57	214	160				
								215					