

SG ARROW300SP

MOVING HEAD

USER MANUAL REL. 1.00



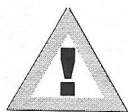
GENERAL INSTRUCTIONS

Read the instruction in this handbook carefully, as they give important information regarding safety during installation, use and maintenance.

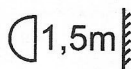
Be sure to keep this function manual with the fixture, in order to consult in the future. If the fixture is sold or given away, make certain he or she also receives the manual, to be able to read about its operation and follow the relative instructions.



- This unit is not for the home use, only professional applications.
- After having removed the packaging, check that the fixture is not damaged in any way and contact an authorized SAGITTER Technical Service Center.
- Packaging material (Plastic bags, polystyrene foam, Nails, etc.) must not be left within children as it can be dangerous.
- This fixture must only be operated by adults. Do not allow children to tamper or play with it.
- Electrical work necessary for installing the fixture must be carried out by a qualified electrician or experienced person.



- Never use the fixture under the following conditions:
 - In places subject to excessive humidity.
 - In places subject to vibrations or bumps.
 - In places with a temperature of over 45°C or less than 2°C.



- Protect the fixture from excessive dryness or humidity (ideal conditions are between 80%).
- Do not dismantle or modify the fixture.
- Make certain that no inflammable liquids, water or metal objects enter the fixture.
- The minimum distance between the fixture and the surface to be lit must be no less than 1,5m.
- Should any liquid be spilled on the fixture, disconnect the power supply to the fixture immediately.
- In the event of serious operating problems, stop using the fixture immediately and either contact the nearest SAGITTER sales point for a check or contact the manufacturer directly.



- Do not open the fixture, there are no user serviceable parts inside.
- Never try to repair the fixture yourself. Repair by unqualified people could cause damage or faulty operation. Contact your nearest authorized service centre.
- When carrying out any work, always comply scrupulously with all the norms (particularly regarding safety currently in force in the country in which the fixture is being used).
- Do not place the unit on inflammable parts or material.

General warranty conditions

- The unit is guaranteed for 12 months from the date of purchase against manufacturing material defects. Breakdown caused by carelessness and improper use of the fixture is excluded.
- The guarantee is no longer valid if the unit has been tampered with or repaired by unauthorized personnel. Replacement of the fixture is not foreseen by the guarantee.
- External parts, knobs, switches, removable parts are excluded from the guarantee: these are covered by their manufacturers' guarantee conditions.
- Transport cost and related risks are borne by the fixture's owner.
- The guarantee is valid to all effects only on presentation of the guarantee certificate to the manufacturer or the nearest Sagitter technical assistance centre.
- Always quote the unit's serial number and model when contacting your reseller for information or assistance.

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MAIN FEATURES

EFFECTS

- Linear zoom and motorised beam Patented
- Fast linear iris
- Linear dimmer (0-100%)
- Shutter / strobe 12 fps with music sync
- CMY system
- Colour wheel with 4 positions + wood + CTO
- Rotating index gobo wheel with 7 positions + white
- 3-face rotating prism
- Frost filter
- Macro

MOVEMENTS

- 540°Pan and 270°Tilt
- 8/16 bit movement resolution
- Automatic re-positioning in the event of accidental head movement
- Possibility of inverting Pan and Tilt movement
- Possibility of limiting Pan and Tilt range
- Variable acceleration and speed parameters

ELECTRONIC BALLAST

- Automatic universal power supply: 90-220V 50/60Hz
- Flicker-free

CONTROL SIGNAL

- Input signal DMX 512
- Channels mode 22/20

MOUNTING SYSTEM

- "Fast-lock" clamps supplied as standard with fixture
- Several clamp mounting points to enable the fixture to be mounted on any type of truss
- Safety chain/cable mounting point

ELECTRICAL SPECIFICATION



DANGER!! CLASS 1 FIXTURE. THIS UNIT MUST BE GROUNDED

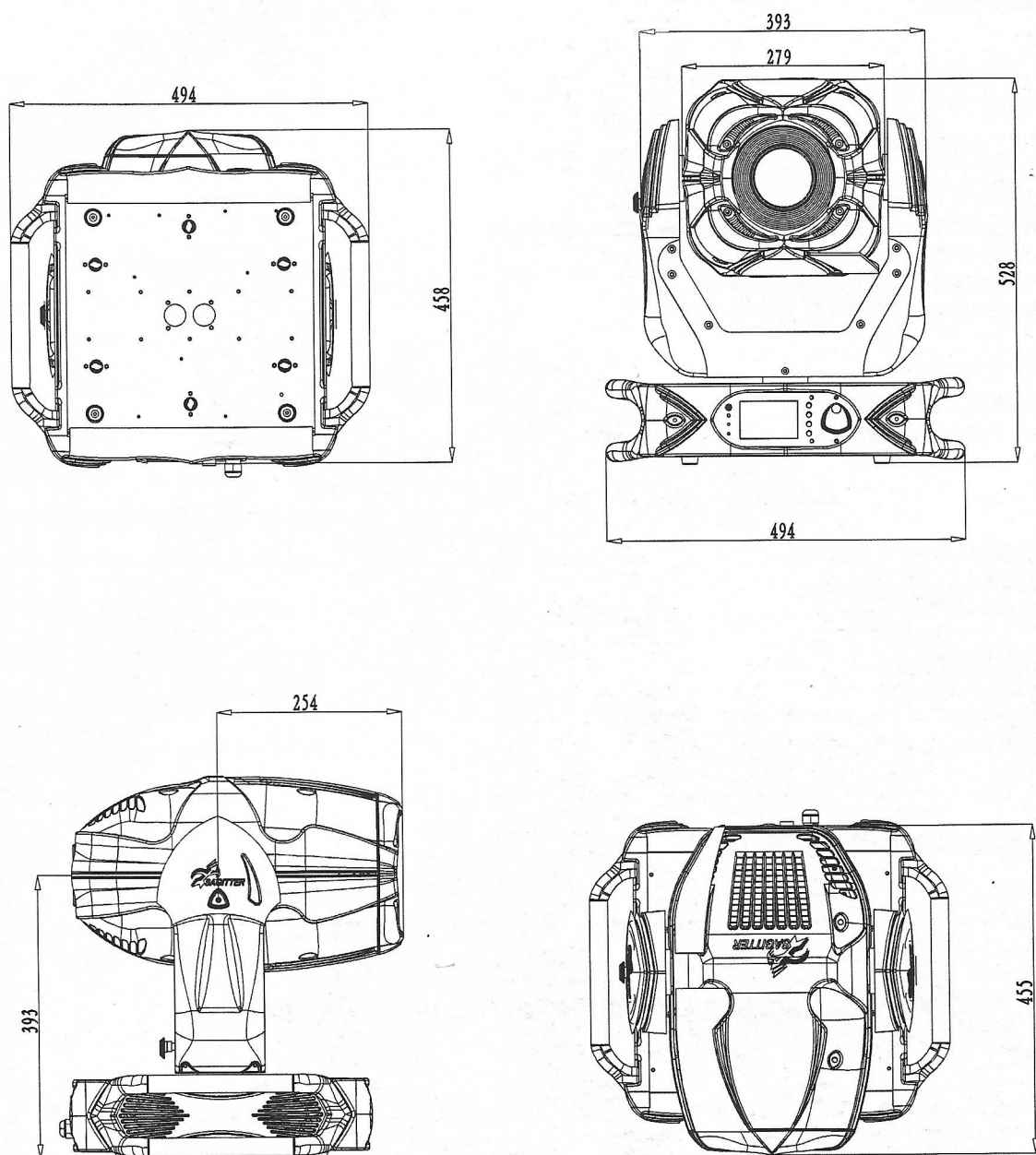
POWER REQUIREMENT:	Universal 90-220V 50/60Hz
POWER ABSORBED:	450W
FUSED:	2Pz- 8A CT
LAMP SPECIFICATIONS:	
Lamp:	MSR 300/2 MINI FASTFIT
Color temperatur:	8000°k
Luminous flux:	23000 Lumens
Average life (50%)	750 HR.

MECHANICAL FEATURES

BODY: Structure Iron, Casing in moulded termoplast

WEIGHT : 36 KG.

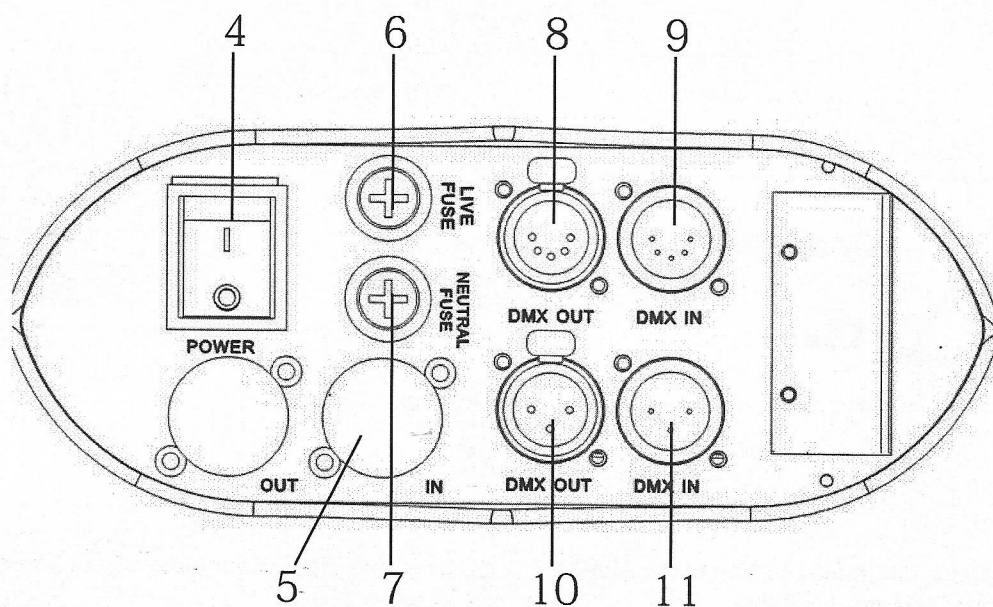
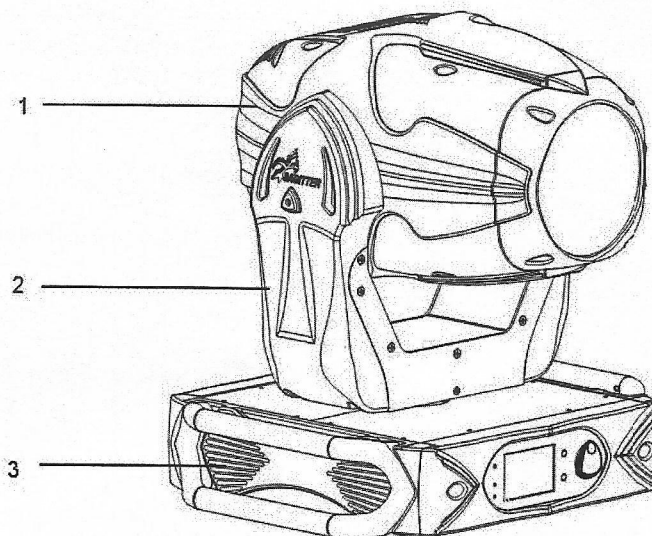
DIMENSIONS (MM)



1 INSTALLATION

1.1 Description on device

1. HEAD
2. ARM
3. BASE

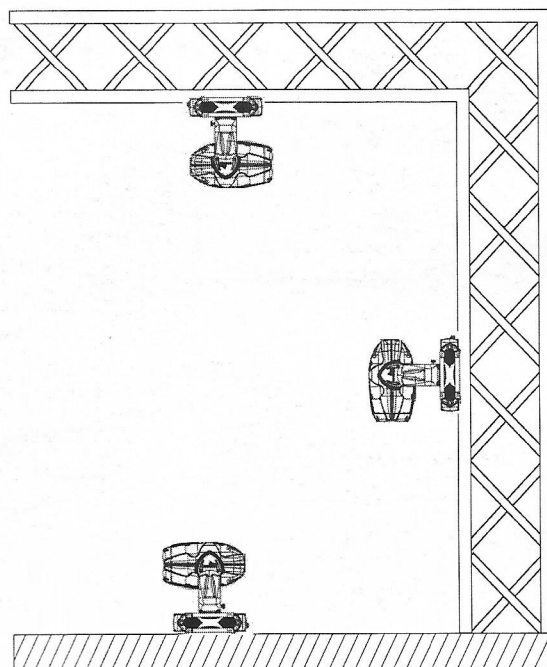


4. POWER SWITCH	8. 5-PIN DMX OUT
5. POWER-IN	9. 5-PIN DMX IN
6. LIVEFUSE	10. 3-PIN DMX OUT
7. NEUTRALFUSE	11. 3-PIN DMX IN

1 INSTALLATION

1.2 Mounting

- The ARROW 300SP can be installed in any position.



Pay attention to the regulations of CE

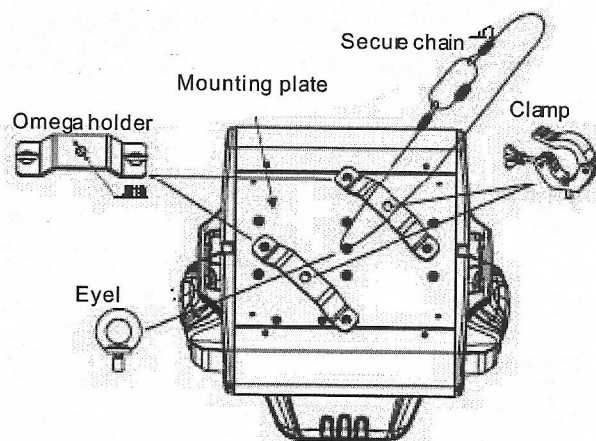
The installation shall be done by qualified staff only

- For the various mounting position of the ARROW 300SP (standing on the floor, sideways or hanging) different accessories kits are available.
- Through this safe installation is assured.
- You will find special connectors on the bottom side of the fixture which are put to use here.
- In addition the front side of the fixture is marked with "FRONT" as this is important for an even orientation during the installation.

1 INSTALLATION

1.3 Installing the Clamps

- Please consider the respective national norms during the installation!
- The installation must only be carried out by authorized dealer!
- Always use the clamps to hang the fixture.
- Fix the fixture to the support structure using safety chains fitted to the eyeloop on the underside of the fixture's base.
- Don't fix the safety chains to the handles.
- The fixture should be installed outside areas where persons may walk by or be seated.
- If the fixture shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The fixture must never be fixed swinging freely in the room.

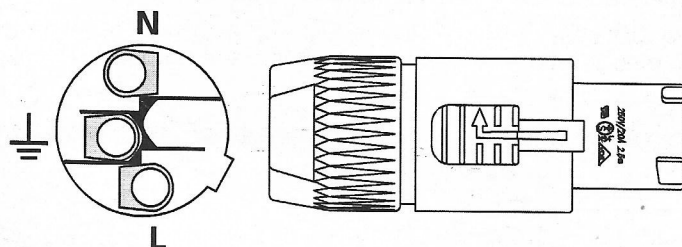


2 CONNECTION

2.1 Power Supply

- The POWER-CON type connector supplied along with the unit is indispensable for connecting the fixture to the power supply.
- The following design shows how to connect the connector to the cable, whereas the table shows the symbols normally used to indicate connections
- Don't power the fixture with a dimmer circuit.
- The fixture must be connected to a cut-off circuit.

CABLES	PIN	TYPICAL	US	UK
Brown	Phase	"L"	Yellow/Copper	Red
Blue	Neutral	"M"	Silver	Black
Yellow/Green	Ground		Green	Green



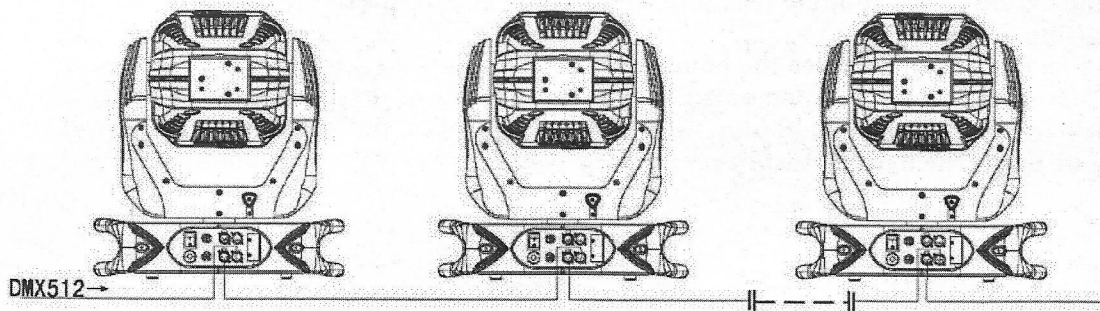
DANGER! ELECTRICAL SHOCK HAZARD

CLASS 1 DEVICE THE FIXTURE MUST BE SUITABLY EARTHED

2 CONNECTION

2.2 DMX Connection

- Only use astereo shielded cable and 3-pin XLR-plugs and connectors in order to conned the controller with fixture or one fixture with another.



2.3 DMX Cable Connection Diagram

DMX output
3-Pin XLR Socket



DMX Input
3-Pin XLR Socket



- 1: Ground
- 2: Signal (-)
- 3: Signal (+)

DMX Output
5-Pin XLR Socket

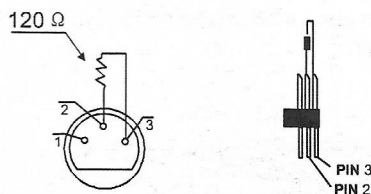


DMX Input
5-Pin XLR Socket

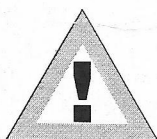


- 1: Ground
- 2: Signal (-)
- 3: Signal (+)
- 4: N.A.
- 5: N.A.

2.4 DMX Terminator Diagram



- For installations where the DMX cable has to run a long distance or is in an electrically noisy environment it is recommended to use a DMX terminator. This helps in preventing corruption of the signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and pins 3, which is then plugged into the output XLR socket of the last fixture in the chain.



ATTENTION: the screened parts of the cable (sleeve) must NEVER be connected to the system's earth, as this would cause faulty fixture and controller operation.

3 DISPLAY CONTROL

3.1 Navigation in the Menu

The Control Board offers several features: you can simply set the starting address, switch on and off the lamp, run the preprogrammed program or make a reset. The main menu is accessed by pressing the Mode-button until the display starts flashing. Browse through the menu by encoder. Press the Enter-button in order to select the desired menu.

You can change the selection by pressing the Enter-button. Confirm every selection by pressing the Enter-button. You can leave every mode by pressing the Mode-button.

The functions provided are described in the sections 3.3

3.2 Access by Internal Battery

The Control Board off display Menu via the internal battery, press the MODE button. Display will automatically switch off after about 10 seconds from last button press.

3 Display Operation

3.31 Function Mode

Set DMX address

With this function, you can adjust the desired DMX-address via the Control Board.

- Select "Set DMX address" via the encoder.
- Press the Enter-button, adjust the DMX address by turning the encoder.
- Press the Mode-button to confirm.
- Press the Mode-button in order to return to the main menu.

Value Display

With this function, you can display the DMX 512 value of each channel. The display automatically shows the channel with a value changing.

Auto Program

With this function, you can run the internal Programs.

Music control

With this function, you can run the internal program sound-controlled.

3.32 Information

Time information

With this function, you can display the Current Time the Total Run Time the Lamp Run Time and you can clear last run time of the fixture.

Temp. Info

With this function, you can display the temperature of the base and the Head.

Product Info

With this function, you can display the software version of the device and the unit model.

3.33 Lamp Control

With this function, you can display the Current Time the Total Run Time the Lamp Run Time and you can clear last run time of the fixture

Switch Lamp

With this function you can switch the lamp on or off via the Control Board.

- Select "Lamp on/off" by turning the encoder.
- Press the Enter-button, the display shows "ON" or "OFF".
- Turn the encoder to select "ON" if you wish to strike the lamp or "OFF" in order to switch it off.
- Press the MODE-button to confirm.
- Press the Mode-button in order to return to the main menu.

Power On Light

With this function you can select if the lamp will be switched on when switching the power on. Select "ON" by turning the encoder if you wish to enable this function or "OFF" if you don't.

Light by DMX

With this function you can select if you can switch the lamp on via an external controller (DMX-channel of internal programs, value 60-79). Select "ON" by turning the encoder if you wish to enable this function or "OFF" if you don't.

Lamp on Delay

Lamp on delay to 5~60 minutes.

Switch Lamp Half

Manual control half power switch "ON/OFF".

Lamp Half Time

Half power delay to 10s~200s.

3 .34 Personality

Status setting

Address via DMX

With this function, you can adjust the desired DMX-address via an external controller.

No DMX Status

With this function, when the drive is not DMX signal, it runs automatism, close, hold and music, the default is hold.

Pan Reverse

With this function you can reverse the Pan-movement.

Tilt Reverse

With this function you can reverse the Tilt-movement.

Feedback

With this function, you can feedback switch of pan movement or tilt movement.

Mic Sensitivity

With this function, the default is 70%, you can select the desired microphone sensitivity from 0 % to 99 %.

DMX Mode

With this function, you can select to work with mode 1 or mode 2

Fans Control

With this function, you can set the speed of the running fans. The selections have Auto, high and low.

Language Choose

With this function, you can select the operation language. (Only English available)

Reset Default

With this function, you can set the Reset on or off.

Display settings

With this function you can shut off the LCD display after 2 to 59 minutes.

Turn the encoder in order to select the desired shut off time.

Temperature C/F

With this function, Display the temperature for Celsius or Fahrenheit.

3.35 Reset Function

With this function you can reset the device via the Control Board.
You can select the different reset functions by turning the encoder.

36 Effect Adjust

With this function you can test each channel on its (correct) function.

3.4 Menu Map

Function Mode	Set Dmx Address	A001-AXXX	
	Value Display	PANMoving.....	
	Auto Program	Master	
		Alone	
		OFF	
	Music Control	Master	
		Alone	
		OFF	
Information	Time Info	Current time	ON/OFF
		Total Run Time	ON/OFF
		Lamp Run Time	ON/OFF
		Clear Fixture Time	ON/OFF
	Temp. Info	Base Temp	ON/OFF
		Head Temp	ON/OFF
	Product Info	Logo	
		Unit Model. VerXX	
		Company WEB	
Lamp Control	Switch Lamp	ON/OFF	
	Power on Light	ON/OFF	
	Light by DMX	ON/OFF	
	Lamp on Delay	05M	
	Switch Lamp Half	ON/OFF	
	Lamp Half Time	Xxs	
Personality	Status Settings	Addr.Via DMX	ON/OFF
		No DMX Status	Close
			Hold
			Auto
			Music
		Pan Reverse	ON/OFF
		Tilt Reverse	ON/OFF
		Feedback	ON/OFF
		Mic Sensitivity	70%,0-99%
	DMX Mode	Mode1/Mode2	
	Fans Control	Auto Speed	
		High Speed	
		Low Speed	
	Display Set	Dis Close Time	05M,02-59M
	Temperature C/F	Celsius/Fahrenheit	
	Language choose	English	
	Reset Default t	ON/OFF	
Reset Function	Reset All Reset Gob o	Reset Reset Pins	Pan/Tilt Reset Reset Color Reset Else
Effect Adjust	Test Channel	PAN.....xxx	PAN=xxx
	Regulate Value	__Password__	Password=XXX
		PAN	PAN=XXX

4 DMX Channel

4.1 DMX Map

SG ARROW300SP				
DMX channels functions and their values (Mode1=22DMX Mode2=20DMX):				
Mode1	Mode2	Name	Function	DMX Value
1	1	PAN 8BIT		0-255
2		PAN 16BIT		0-255
3	2	TILT 8BIT		0-255
4		TILT 16BIT		0-255
5	3	Speed pan/tilt movement	max to min speed	0-255
			blackout by movement	226-235
			blackout by all wheel changing	236-245
			no function	246-255
6	4	Color wheel	Open/white	0-17
			Color1	18-35
			Color2	36-53
			Color3	54-71
			Color4	72-89
			Color5	90-107
			Color6	108-127
			Forwards rainbow effect from fast to slow	128-187
			No rotation	188-193
			Backwards rainbow effect from slow to fast	194-255
7	5	Rotating gobos index, continue rotation	Open	0-9
			Rot.gobo 1	10-19
			Rot.gobo 2	20-29
			Rot.gobo 3	30-39
			Rot.gobo 4	40-49
			Rot.gobo 5	50-59
			Rot.gobo 6	60-69
			Rot.gobo 7	70-79
			Gobo 1 shake slow to fast	80-99
			Gobo 2 shake slow to fast	100-119
			Gobo 3 shake slow to fast	120-139
			Gobo 4 shake slow to fast	140-159
			Gobo 5 shake slow to fast	160-179
			Gobo 6 shake slow to fast	180-199
			Gobo 7 shake slow to fast	200-219
			Rot.gobo wheel cont. rotation slow to fast	220-255
8	6	Gobo rotating rotating	Gobo indexing	0-127
			Forwards gobo rotation from fast to slow	128-187
			No rotation	188-193
			Backwards gobo rotation from slow to fast	194-255

9	7	Rotating gobos index, continue rotation	Open	0-9
			Rot.gobo 1	10-19
			Rot.gobo 2	20-29
			Rot.gobo 2	30-39
			Rot.gobo 4	40-49
			Rot.gobo 5	50-59
			Rot.gobo 6	60-69
			Rot.gobo 7	70-79
			Rot.gobo 8	80-89
			Rot.gobo 9	90-99
			Gobo 1 shake slow to fast	100-109
			Gobo 2 shake slow to fast	110-119
			Gobo 3 shake slow to fast	120-129
			Gobo 4 shake slow to fast	130-139
			Gobo 5 shake slow to fast	140-149
			Gobo 6 shake slow to fast	150-159
			Gobo 7 shake slow to fast	160-169
			Gobo 8 shake slow to fast	170-179
			Gobo 9 shake slow to fast	180-189
			Rot.gobo wheel cont. rotation slow to fast	190-255
10	8	Cyan	Cyan(0-white,255-100% Cyan)	0-255
11	9	Magenta	Magenta(0-white,255-100% magenta)	0-255
12	10	Yellow	Yellow(0-white,255-100% Yellow)	0-255
13	11	CMY Speed	Speed Fast →Slow	0-255
		CMY Macros	No Function	0-15
			Macro 1	16-31
			Macro 2	32-47
			Macro 3	48-63
			Macro 4	64-79
			Macro 5	80-95
			Macro 6	96-111
			Macro 7	112-127
			Macro 8	128-143
			Macro 9	144-159
			Macro 10	160-175
			Macro 11	176-191
			Macro 12	192-207
			Macro 13	208-223
			Macro 14	224-239
			Macro 15	240-255
15	13	3 facet rotating prism, Prism / Gobo macros	Backwards rotation with increasing speed	68-127
			Macro 1	128-135
			Macro 2	136-143
			Macro 3	144-151
			Macro 4	152-159
			Macro 5	160-167
			Macro 6	168-175
			Macro 7	176-183

			Macro 8	184-191
			Macro 9	192-199
			Macro 10	200-207
			Macro 11	208-215
			Macro 12	216-223
			Macro 13	224-231
			Macro 14	232-239
			Macro 15	240-247
			Macro 16	248-255
16	14	Frost	Frost 0-100%	0-191
			Pulse opening fast to slow	192-223
			Pulse closing slow to fast	224-254
			Max. Frost	255
17	15	Iris	Max. diameter to Min. diameter	0-191
			Pulse opening fast to slow	192-223
			Pulse closing slow to fast	224-255
18	16	Zoom	Continuous adjustment from Max to Min	0-255
19	17	Focus	Continuous adjustment from near to far	0-255
20	18	Strobe	Shutter closed	0-31
			No function (shutter open)	32-63
			Strobe effect slow to fast	64-95
			No function (shutter open)	96-127
			Pulse-effect in sequences	128-159
			No function (shutter open)	160-191
			Random strobe effect slow to fast	192-223
			No function (shutter open)	224-255
21	19	Dimmer	Intensity 0 to 100%	0-255
22	20	Func 、 Reset 、 Lamp switch 、 program	colour change normal	0-19
			colour change to any position	20-39
			No function	40-59
			Lamp switch off	60-79
			All motor reset	80-84
			Scan motor reset	85-87
			Colors motor reset	88-90
			Gobo motor reset	91-93
			Shutter & Dimmer motor reset	94-96
			Other motor reset	97-99
			Internal program 1	100-119
			Internal program 2	120-139
			Internal program 3	140-159
			Internal program 4	160-179
			Internal program 5	180-199
			Internal program 6	200-219
			Internal program 7	220-239
			Lamp switch on	240-255