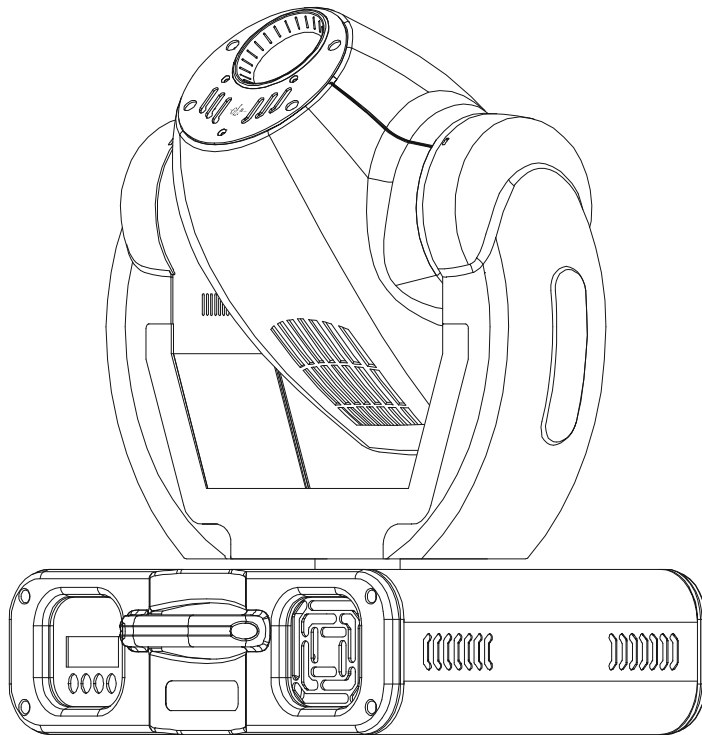


# YPOC 250

## Instruction Manual



from software version 1.5  
(manual version 1.41)



**GERMAN LIGHT**  
PRODUCTS

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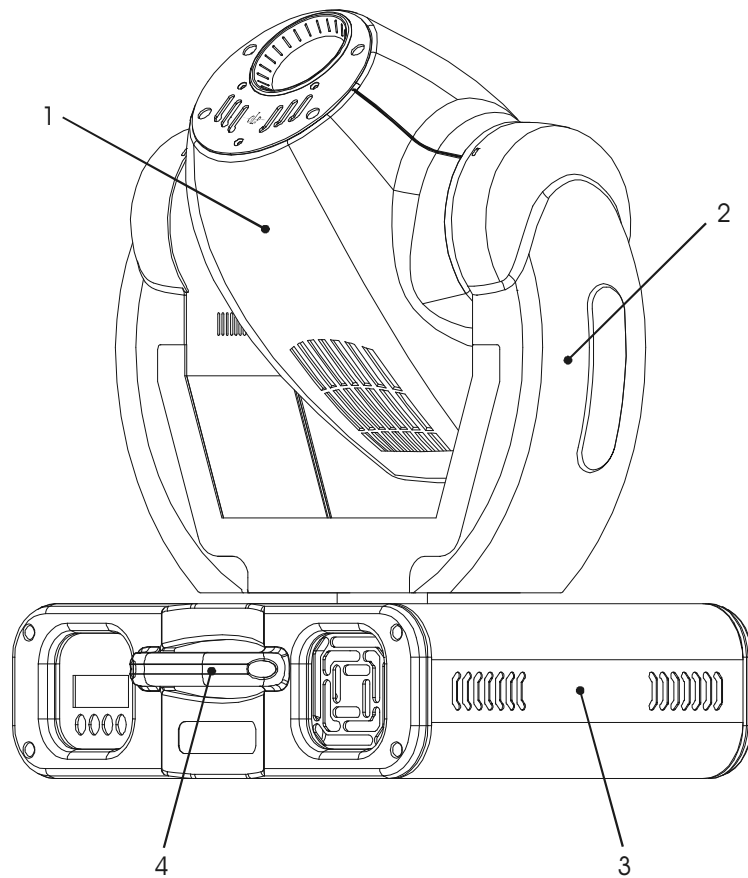
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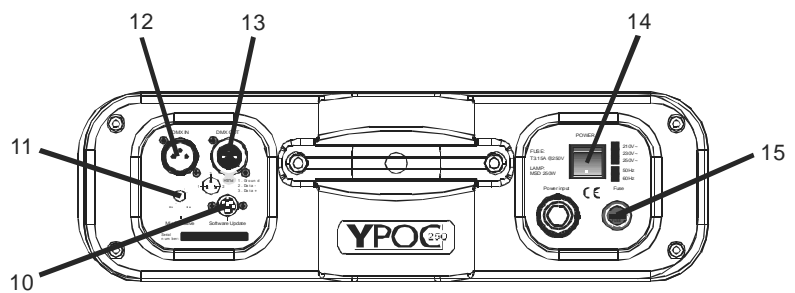
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# 1 Description of Device

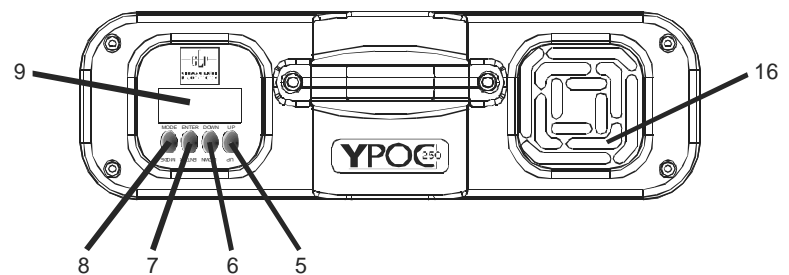


- 1. Moving Head
- 2. Arm
- 3. Base
- 4. Carrying handles

- 5. Up- button
- 6. Down- button
- 7. Enter- button
- 8. Mode- button
- 9. LED- Display
- 10. Software-Update connector



- 11. Microphone- Intensity
- 12. DMX- Input
- 13. DMX- Output
- 14. Power On/Off
- 15. Fuse F3,15 A
- 16. Fan (air inlet)



## 1.1 Safety Instructions



The **YPOC 250** is a High-Tech Product. To guarantee a smooth operation, it is necessary to keep following rules.

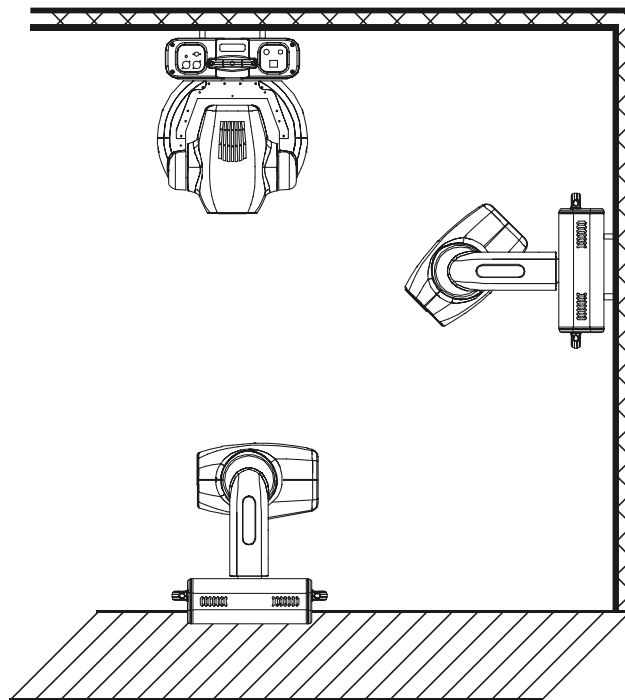
The manufacturer of this device will not take responsibility of damages through disregard of the information in this manual. Warranty adjustments will be canceled.

1. Make sure before putting into operation, that the fan and the air inlets are clean and not blocked by anything.
2. **Attention:** Don't touch the device during the operation. This can cause injuries or damages.
3. **Unplug the YPOC 250 from the AC outlet before any service.**
4. It is necessary to wait at least 30 minutes after disconnecting the AC before you open the **YPOC 250**. Please do not touch the bulb of the lamp if you are not absolutely sure it is cold. **-Danger of BURNING-**
5. Never look directly into the beam of the lamp. You risk injury of your retina and blindness.
6. Pay attention of the maximum lamp operation time. You have to change it if the lamp shows any deformations or damages. The same is with all glass components, color filters, lenses and mirrors.
7. To allow a secure operation, follow also the Installation guide described in chapter 2. Operating the **YPOC 250** without suited safety aids like Safety cables or clamps/hooks can increase the risk of an accident.
8. The installation should be done by qualified staff only. You need to pay attention to the common rules of technology that are not explicit mentioned in this manual.
9. Use only original spare parts. Any structural modification will cancel all warranty adjustments.

## 2 Preparation and Installation

### 2.1 Mounting

The **YPOC 250** is fully operational whether it hangs or is mounted to the wall. It can also be operated while standing on the floor. Keep a safety distance of 0.5 m towards any easy inflammable materials (decoration etc.). Install a safety wire that can hold at least 10 times the weight of the fixture. Never use the carrying handles for secondary attachment.



**Pay attention to the regulations of: BGV C1 (former VBG 70) and DIN VDE 0711-217 !  
The installation should be done by qualified staff only.**

#### 2.1.1 Clamps

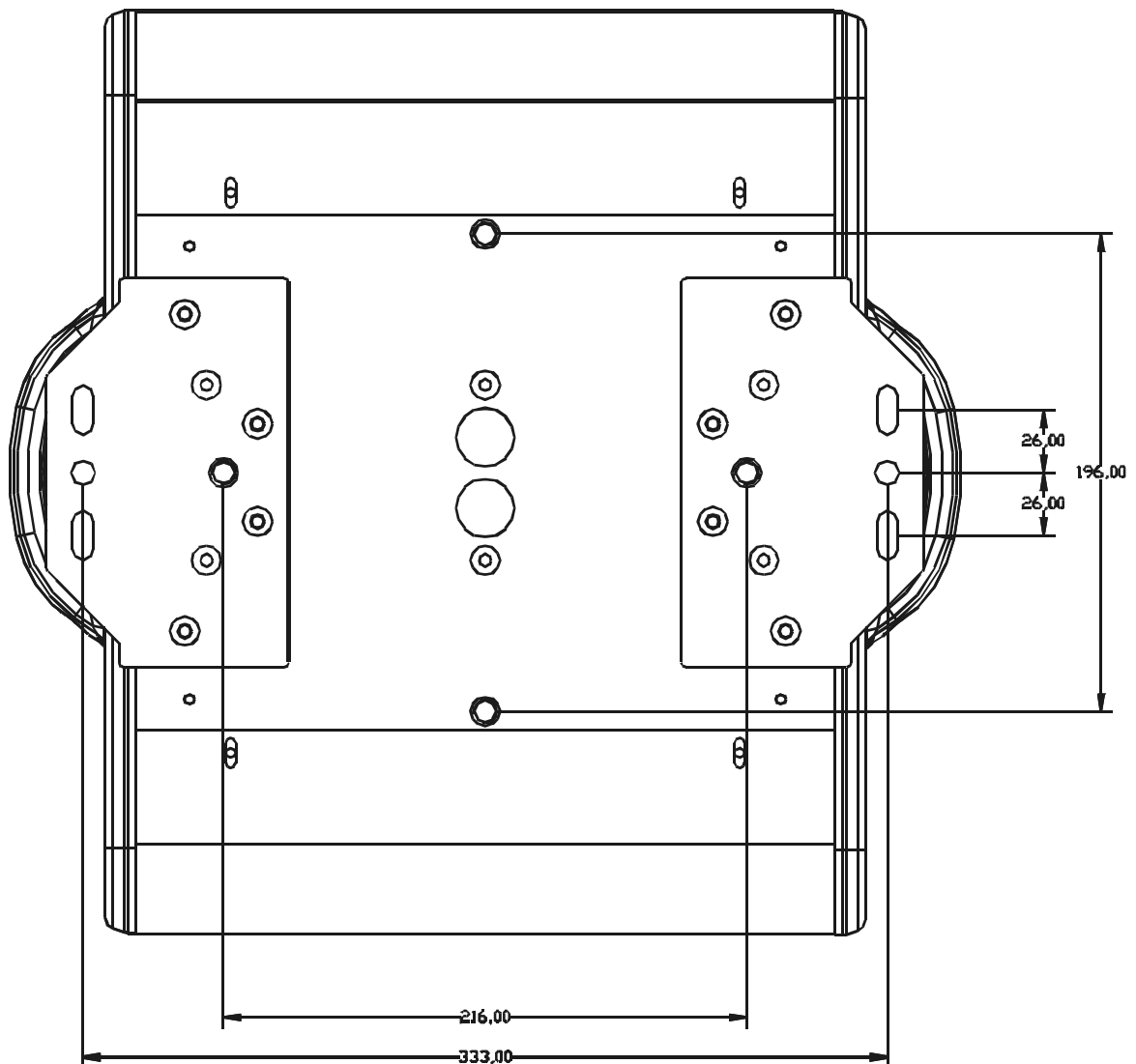
Use two clamps on the backside of the **YPOC 250** to mount the unit on a truss (each two opposite threads max. M10x20). See also printing on the backside of the case.

#### 2.1.2 Mounting plate

For a permanent installation of the **YPOC 250** you can use an optional mounting plate to fix the unit on a wall. The plate uses 4x screws M6x20.

## 2.2 Secure the YPOC 250

Regardless of the rigging of the **YPOC 250** you have to use a stipulated safety wire. Therefore you have to thread to safety wire through to two provided holes on the backside of the fixture and connect it with the truss-support. Pay attention to a safe and proper fastening.





## 2.3 Connections

### 2.3.1 Power supply

230 Volt, 50 Hz,

Connected load 500W  $\Leftrightarrow$  2,2 A (blind current compensation).

or 115V, 60 Hz

Connected load 500W  $\Leftrightarrow$  4,4 A (blind current compensation).

Please see printing on the case for the right Power supply !

### 2.3.2 DMX

DMX 512 Standard input/output. See also printing on the case for the right pin assignment.

[+] = Pin 3 / [-] = Pin 2 / [Ground] = Pin 1

The DMX- Addressing starts at the DMX- Address [001].

## 2.4 Fuse

The **YPOC 250** electronic system is protected by a 5x20 mm fuse.

230V / T 3,15A (EU model) or 115V / T 6,3A (US model)

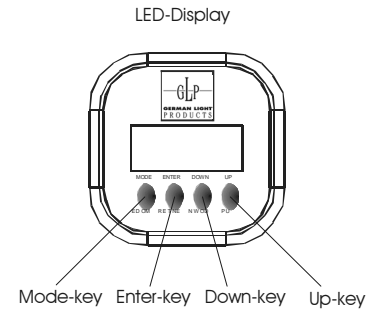
Please see the printing on the **YPOC 250** for more details.

### Attention:

- **Disconnect AC outlet before changing a fuse!**
- **Use only the original declared fuse type!**

### 3 The Menu Field

You find the control board on the side part of the base. It allows you to make all necessary adjustments of the **YPOC 250**. With the **Mode**-key you get into the main menu. Afterwards you can navigate through the menu with the **Up/Down**-keys. Push the **Enter**-key to get in the next menu level or to confirm your settings. Make them and set functions **ON/OFF** with the **Up/Down**-keys. Confirm and save it with the **Enter**-key (the display shows *OK*). Push the **Mode**-key to cancel the entry and go back to the main menu.



Level 1	Level 2	Level 3	Remark
MOD 1			Define the DMX start address
TEST	MOD 1		Test program of all functions
AUDI	ASLW		Self-running audio program (slow)
	AFST		Self-running audio program (fast)
	MSTR		Master for the audio program
	SVPT		Basic position for the audio program
	SIZE		Size for the audio program (NORM-BIG-MIDL-SMAL)
LAMP			Switch on/of the lamp direct at the <b>YPOC 250</b>
RESE			Reset
TIME	POWR		Running time of the fixture (no destructible)
	LA 1		Running time of the lamp (erasable)
	LA 2		Running time of the lamp (no destructible)
RPRN			Reverse Pan-direction
RTL T			Reverse Tilt-direction
MODE	GDMX		DMX Mode, Standard GLP
	MDMX		DMX Mode 'M'
	HDMX		DMX Mode 'H'
SPEC	MANU		Manual drive of all device functions
	LAPU		Automatic lamp start
	DLDF		Switch off lamp via DMX
	DMX 1		Reed out actual DMX-values
	DISP	DISP ON REV	
	TEMP		Reed out internal temperature
	FANS	HIGH	Maximum cooling fan velocity
		REG	Automatic cooling fan control
		LODF	Low cooling fan speed → lamp off
		LOHI	Low cooling fan speed → automatic
	ADJU	CODE XXXX	Use the code for entering the calibration menu (for authorized person only)
		COLD	Calibration of the color wheel
		G0B0	Calibration of the gobo wheel
		PRIS	Calibration of the prism wheel
		SHT 1	Calibration of the shutter 1
		SHT 2	Calibration of the shutter 2
		CLRE	Settings in the internal memory (superuser only)
		FACC	Must read <i>ON</i> . Protected with a code.
		DFSE	Call on the default function values
		FEEJ	Pan/Tilt feedback (error correction) On/Off
	EFLG	Correction of faults	

### 3.1 Adjust the DMX- Address [100 ]

Right after turning on the **YPOC 250** you can see the current DMX- Address. If there is no DMX- Signal the display flashes.



For the address setting please follow this procedure:

1. Switch On the **YPOC 250** and wait until the fixture reset has finished ('*RESE*' is flashing in the display).
2. Press the **Mode**-key in order to access the main menu. Browse through the menu by pressing the **Up/Down**-keys until the display shows *100.* Confirm by pressing the **Enter**-key (the decimal point is flashing)
3. Use the **Up/Down**-keys to select the desired address. Confirm the setting by pressing the **Enter**-key (the display shows *OK*) or press the **Mode**-key to cancel.

The DMX- Address is stored also while switching off the **YPOC 250!**

### 3.2 The Test Program [TEST]



The **Test**-Program allows you to run a complete self test procedure of all functions. Press **Enter** to confirm or **Mode** to cancel.

### 3.3 The Audio Program [AUDI]



The **Audio**-menu allows you to run a stand alone audio program. This chaser can run either fast or slow. *AFST*: Every soundimpulse on step of the chaser. *ASLW*: Every second soundimpulse one step of the chaser.

Additional you can choose a basic position for this audio chaser. Use therefore either the internal manual mode or an external controller to set the desired Pan/Tilt position. Confirm this setting in the *SVPT* menu by pressing the **Enter**-key.

You can also set the size of the audio chaser in the *SIZE* menu. You have the choice between: NORM (no basic position has to be chosen), 'BIG', 'MIDL' and 'SMAL').

If you want to run the systems simultaneously, one of the **YPOCs** must be switched as the master. All others must be "Slave" Master = OFF. **Notice:** The Audio function is only working when **no** DMX is connected. This function can work e.g. on small events or as an emergency program.

### 3.4 Lamp On/Off [LAMP]

LAMP

Use the **Up/Down**-keys to select lamp **ON** or lamp **OFF** Press **Enter** to confirm or **Mode** to cancel and return to the main menu. (The lamp **OFF** command is only working if the shutter is closed at the same time. Use an external controller or the manual drive mode, see 3.10.1)

### 3.5 Reset [RESE]

RESE

Press the **Enter**-key to run a reset of all fixture functions (**RST** is shown in the display).

### 3.6 Running time of lamp and unit [TIME]

TIME

By this option can read out three different running times of the fixture.

<b>POWR</b>	Running time of the fixture (no destructible).
<b>LA 1</b>	Running time of the lamp (erasable). Push the <b>Up/Down</b> -keys at one time to delete this running time.
<b>LA 2</b>	Running time of the lamp (no destructible).

### 3.7 Invert Pan Movement [RPAI]

RPAI

This function allows you to invert the Pan movement. Use the **Up/Down**-keys to select invert **ON** or **OFF**. Press **Enter** to confirm or **Mode** to cancel and return to the main menu.

### 3.8 Invert Tilt Movement [RTL T]

RTL T

This function allows you to invert the Tilt movement. Use the **Up/Down**-keys to select invert **ON** or **OFF**. Press **Enter** to confirm or **Mode** to cancel.

### 3.9 DMX Mode [MODE]

MODE

This function allows you to choose between three different DMX modes. The three modes are different in order of the DMX channels. Use this function for example to adapt the **YPOC 250** to an older setup of other fixtures or if you use a fader DMX desk. The standard mode is the GLP mode **GLMX**.

DMX	GLP- Mode [GLMX]	M- Mode [MLMX]	H- Mode [HDMX]
1	Pan (coarse)	Shutter, Strobe, Lamp On/Off, Reset, Spec.	Pan (coarse)
2	Pan (fine)	Dimmer	Pan (fine)
3	Tilt (coarse)	Color, Color rotation	Tilt (coarse)
4	Tilt (fine)	Gobo, Gobo rotation	Tilt (fine)
5	Color	Gobo wheel rotation	Color wheel effect/rotation
6	Gobo	Focus	Color
7	Gobo positioning/rotation	Prism, Prism rotation	Gobo effect
8	Prism, Prism rotation	Pan (coarse)	Gobo 1 (rotating)
9	Shutter	Pan (fine)	Gobo 1 rotation
10	Dimmer	Tilt (coarse)	Effect wheel
11	Focus	Tilt (fine)	Effect wheel rotation
12	Special	Speed Pan/Tilt	Focus
13	Movement	Effect, Speed	Iris
14	Speed Pan/Tilt	---	Shutter
15	---	---	Dimmer
16	---	---	Speed
17	---	---	Macros
18	---	---	Special

### 3.10 Special Functions [SPEC]

SPEC

This menu allows you to enter further special functions of the **Ypoc 250**.

In detail they are:

### 3.10.1 Manual Drive (MANU)

MANU

This function allows you to drive all the fixture functions manually. Select the desired function with the **Up/Down**-keys and confirm with **Enter**. Now choose the desired value with the **Up/Down**-keys and confirm again with **Enter** or cancel and return to the menu with the **Mode**-key.

Function	Value	Remark
PAN	000 - 255	Pan Position
TILT	000 - 255	Tilt Position
COLOR	000 - 255	Color wheel
GOBO	000 - 255	Gobo wheel
GROT	000 - 255	Gobo rotation
PRIS	000 - 255	Prism rotation
SHUT	000 - 255	Shutter / Strobe function (the lamp strikes at DMX 255 if dimmer is "open" = DMX 255)
DIMR	000 - 255	Dimmer
FOCU	000 - 255	Focus
SPEC	000 - 255	Lamp Off, Reset, ...

### 3.10.2 Lamp On automatically (LAAU)

LAAU

This function enables to switch On the lamp automatically after switching On the fixture. Use the **Up/Down**-keys to select **ON** if you want to switch on the lamp automatically after switching on the fixture or **OFF** if you don't want this function. Press **Enter** to confirm or **Mode** to cancel and return to the menu.

If you have chosen **OFF** you have the possibility to start the lamp either via DMX or direct at the **Ypoc 250** in the Lamp menu.

### 3.10.3 Lamp Off via DMX (DLOF)

DLOF

This function enables to switch off the lamp via DMX or not. Use the **Up/Down**-keys to select **ON** if you want to switch off the lamp via DMX or **OFF** if you don't want this function. Press **Enter** to confirm or **Mode** to cancel and return to the menu.

If you have chosen **OFF** you have the possibility to switch off the lamp either direct at the **Ypoc 250** in the Lamp menu or switch off the main switch.

### 3.10.4 DMX Input [DMX I]

**DMX I**

Readout DMX values of each channel received by the fixture. Use the **Up/Down**-keys to select desired channel and press **Enter** to read its value.

Function	Value	Remark
PAN	0 - 255	Pan Position
TILT	0 - 255	Tilt Position
COLO	0 - 255	Color wheel
GOBO	0 - 255	Gobo wheel
GROT	0 - 255	Gobo rotation
PRIS	0 - 255	Prism wheel
SHUT	0 - 255	Shutter / Strobe function
DIMR	0 - 255	Dimmer
FOCU	0 - 255	Focus
SPEC	0 - 255	Lamp Off, Reset, ...
MOVE	0 - 255	Movement
SPEED	0 - 255	Speed Pan/Tilt

### 3.10.5 Display [DISP]

**DISP**

Use this function to choose between different display indications. Use the **Up/Down**-keys to select desired function and press **Enter** to confirm or **Mode** to cancel and return to the menu.

<b>DISP ON</b>	Display On/Off (If you've chosen <b>OFF</b> , the display will go out within 15 seconds after the last input. The next key touch will reactivate the display).
<b>REV</b>	Turn around the display

### 3.10.6 Fixture Temperature [TEMP]

**TEMP**

This function allows you to read out the actual temperature of the **Ypoc 250**. Press **Enter** to confirm or **Mode** to cancel. Inside temperatures below 80°C are not critical. 80°C and more lead the lamp being switched off at a

critical point. Please note for a save operation that the outside temperature should not exceed 45°C.

### 3.10.7 Fan Control [FANS]

FANS

By using this function you can choose between 4 types of fan speed operations. Use the **Up/Down**-keys to select desired function and press **Enter** to confirm or **Mode** to cancel and return to the menu.

<i>HIGH</i>	The cooling fan works continuously at max. speed.
<i>REG</i>	The fan automatically raises its speed in order to control inside temperature of the fixture.
<i>LOOF</i>	The fan keeps the adjusted low speed until the temperature exceeds max. inside temperature, then the <b>Ypoc 250</b> automatically <b>switch off</b> the lamp.
<i>LOHI</i>	The fan keeps the adjusted low speed until the temperature exceeds max. inside temperature, then the <b>Ypoc 250</b> automatically switch from low to high fan speed.

### 3.10.8 Adjustments and Calibrations [ADJU]

ADJU

By this function you can adjust and calibrate the positions of the different wheels and other motors. This can be necessary after a service or repair work.

For this function you have to entry the fixture code. This work should be done only by authorized persons.

Use the **Up/Down**-keys to select desired function and press **Enter** to confirm or **Mode** to cancel and return to the menu. Use now the **Up/Down**-keys to set the adjustment values and confirm once more with the **Enter**-key or cancel with the **Mode**-key.

Function	Value	Remark
<i>COLO</i>	- 99 - + 99	Color wheel
<i>GOBO</i>	- 99 - + 99	Gobo wheel
<i>PRIS</i>	- 99 - + 99	Prism wheel
<i>SHT 1</i>	- 99 - + 99	Shutter 1
<i>SHT 2</i>	- 99 - + 99	Shutter 2
<i>CLRE</i>	Adjustments in the internal circuit.	



### 3.10.9 Default Settings [DFSE]

DFSE

Press **Enter** to reset all fixture personalities (not the adjusted functions) to the default values. On the display will appear **OK** to indicate that the defaults are set.

Function	Display	Default Settings	
DMX Address	DMX 1	DMX 1	
Pan reverse	R PAN	ON	OFF ✓
Tilt reverse	RTL T	ON	OFF ✓
Automatic lamp on	L A A U	ON	OFF ✓
Lamp on via DMX	DMX	ON ✓	OFF
Display	DISP	ON ✓	
Cooling fan	FAN S	HIGH REG ✓	LOOF LOHI
Feedback	FEED	ON ✓	OFF

### 3.10.10 Feedback [FEE]

FEE

The **YPOC 250** is provided with a automatic position correction (feedback) for the Pan and Tilt movement. Use the **Up/Down**-keys to select **ON** if you want to enable the feedback function or **OFF** if you don't want this function. Press **Enter** to confirm or **Mode** to cancel and return to the menu.

### 3.10.11 Correction of faults [EFLG]

EFLG

(Function available for authorized persons only)

## 3.11 Error and Information Messages

<b>HEAT</b>	This message appears if you try to switch on the lamp within 5 minutes after having switched off (lamp too hot). The message will appear on the display if the lamp doesn't ignite within 20 seconds. The fixture will store this command and automatically ignite the lamp after 5 minutes.
<b>LAER</b>	After the ignition of the lamp was two times not successful the display will show <b>LAER</b> . That means the lamp could be damaged or even missed, the fixture is overheating or there could be a failure on the igniter or ballast. Switch off the power supply and solve the possible problem.

<b>OTMP</b>	This error message informs you that the fixture was overheating and that the relay switches off the lamp. Please look for possible reasons (fan faulty, air in/outlets blocked or very dirty, lamp broken or very old, too high ambient temperature. Switch off the power supply and solve the possible problem.
<b>RSER</b>	This message informs you that one of the fixture function wasn't able to do its reset correct (magnetic sensor, stepping motor, driver on the PCB, cables, etc.). Repair the defect and start the fixture again.

#### 4 DMX Channel Selection (DMX Protocol)

Channel	Function	Time and Value	DMX	HEX	%
1) PAN-coarse	0 .. 530°	min. 2,65 s	0..255	00..FF	0..100
2) PAN-fine	High- Pos ... High- Pos + 2,1° (16 Bit)		0..255	00..FF	0..100
3) Tilt-coarse	0 .. 285°	min. 1,8 s	0..255	00..FF	0..100
4) Tilt-fine	High- Pos ... High- Pos + 1,1° (16 Bit)		0..255	00..FF	0..100
5) Color	open (fast)	Chaser from color to color max. 140 BPM => 0,43 s	0..1	00..01	0,2
	open / color 1 (fast)		2..3	02..03	1,0
	color 1, Brilliant Blue (fast)		4..5	04..05	1,8
	color 1 / color 2 (fast)		6..7	06..07	2,5
	color 2, Blue (fast)		8..9	08..09	3,3
	color 2 / color 3 (fast)		10..11	0A..0B	4,1
	color 3, Blue Purple (fast)		12..13	0C..0D	4,9
	color 3 / color 4 (fast)		14..15	0E..0F	5,7
	color 4, Pink (fast)		16..17	10..11	6,5
	color 4 / color 5 (fast)		18..19	12..13	7,3
	color 5, Orange (fast)		20..21	14..15	8,0
	color 5 / color 6 (fast)		22..23	16..17	8,8
	color 6, Italian Blue (fast)		24..25	18..19	9,6
	color 6 / color 7 (fast)		26..27	1A..1B	10,4
	color 7, Turquoise (fast)		28..29	1C..1D	11,2
	color 7 / color 8 (fast)		30..31	1E..1F	12,0
	color 8, Jade (fast)		32..33	20..21	12,7
	color 8 / color 9 (fast)		34..35	22..23	13,5
	color 9, CTB 001 (fast)		36..37	24..25	14,3
	color 9 / color 10 (fast)		38..39	26..27	15,1
	color 10, CTO 002 (fast)		40..41	28..29	15,9
	color 10 / color 11 (fast)		42..43	2A..2B	16,7
	color 11, Red (fast)		44..45	2C..2D	17,5
	color 11 / open (fast)		46..47	2E..2F	18,2
open (fast)	48..63	30..3F	19,0		
open (slow)	Chaser from color to color max. 70 BPM => 0,86 s	64..65	40..41	25,3	
open / color 1 (slow)		66..67	42..43	26,1	
color 1, Brilliant Blue (slow)		68..69	44..45	26,9	
color 1 / color 2 (slow)		70..71	46..47	27,6	

Channel	Function	Time and Value	DMX	HEX	%
	color 2, Blue (slow)		72..73	48..49	28,4
	color 2 / color 3 (slow)		74..75	4A..4B	29,2
	color 3, Blue Purple (slow)		76..77	4C..4D	30,0
	color 3 / color 4 (slow)		78..79	4E..4F	30,8
	color 4, Pink (slow)		80..81	50..51	31,6
	color 4 / color 5 (slow)		82..83	52..53	32,4
	color 5, Orange (slow)		84..85	54..55	33,1
	color 5 / color 6 (slow)		86..87	56..57	33,9
	color 6, Italian Blue (slow)		88..89	58..59	34,7
	color 6 / color 7 (slow)		90..91	5A..5B	35,5
	color 7, Turquoise (slow)		92..93	5C..5D	36,3
	color 7 / color 8 (slow)		94..95	5E..5F	37,1
	color 8, Jade (slow)		96..97	60..61	37,8
	color 8 / color 9 (slow)		98..99	62..63	38,6
	color 9, CTB 001 (slow)		100..101	64..65	39,4
	color 9 / color 10 (slow)		102..103	66..67	40,2
	color 10, CTO 002 (slow)		104..105	68..69	41,0
	color 10 / color 11 (slow)		106..107	6A..6B	41,8
	color 11, Red (slow)		108..109	6C..6D	42,5
	color 11 / open (slow)		110..111	6E..6F	43,3
	open (slow)		112..127	70..7F	44,1
	color rotation, slow-fast, CW	min. 1,4 turns/h	128..191	80..BF	50..75
	color rotation, fast-slow, CCW	max. 2,9 turns/sec.	192..253	C0..FD	76..98
	Audio color chaser slow	each 4 <sup>th</sup> sound impulse → new color	254	DE	99
	Audio color chaser fast	each sound impulse → new color	255	FF	100
<b>6) Gobo</b>	Gobo 1 (open, fast)	Chaser from gobo to gobo max. 100 BPM => 0,6 s	0..7	0..7	0..2,9
	Gobo 2 (fast)		8..15	8..F	3..5,9
	Gobo 3 (fast)		16..23	10..17	6..8,9
	Gobo 4 (fast)		24..31	18..1F	9..11,9
	Gobo 5 (fast)		32..39	20..27	12..14,9
	Gobo 6 (fast)		40..47	28..2F	15..17,9
	Gobo 7 (fast)		48..55	30..37	18..20,9
	Gobo 1 (open, fast)		56..63	38..3F	21..23
	Gobo 1 (open, slow)	Chaser from gobo to gobo max. 40 BPM => 1,51 s	64..71	40..47	24..26,9
	Gobo 2 (slow)		72..79	48..4F	27..29,9
	Gobo 3 (slow)		80..87	50..57	30..33,9
	Gobo 4 (slow)		88..95	58..5F	34..36,9
	Gobo 5 (slow)		96..103	60..67	37..39,9
	Gobo 6 (slow)		104..111	68..6F	40..42,9
	Gobo 7 (slow)		112..119	70..77	43..45,9
	Gobo 1 (open, slow)		120..127	78..7F	46..49
	Gobo rotation, slow-fast, CW	min. 1,4 turns/h	128..191	80..BF	50..75
	Gobo rotation, fast-slow, CCW	max. 1.0 turns/sec.	192..253	C0..FD	76..98
	Audio gobo chase, slow	each 4 <sup>th</sup> sound impulse → new gobo	254	FE	99
	Audio gobo chase, fast	each sound impulse → new gobo	255	FF	100
<b>7) Gobo Posi./Rot</b>	Gobo position 0 ... 540°		0..131	00..7F	0..50
	Gobo rotation, slow-fast, CW	min. 2,0 turns/h	132..191	80..BF	51..75
	Gobo rotation, fast-slow, CCW	max. 3,8 turns/sec.	192..253	C0..FD	76..100
	Audio gobo rotation, slow	each 4 <sup>th</sup> sound impulse → new position	254	FE	99

Channel	Function	Time and Value	DMX	HEX	%	
	Audio gobo rotation, fast	each sound impulse → new position	255	FF	100	
<b>8) Prism</b>	Prism swing out		0.5	00..02	0.2	
	Prism position 0 ... 540°		6..129	00..7F	0..50	
	Prism rotation, slow-fast, CW	min. 1,6 turns/h	130..191	80..BF	51..75	
	Prism rotation, fast-slow, CCW	max. 4,4 turns/sec.	192..253	C0..FD	76..100	
	Audio prism rotation, slow	each 4 <sup>th</sup> sound impulse → new prism	254	FE	99	
	Audio prism rotation, fast	each sound impulse → new prism	255	FF	100	
<b>9) Shutter</b>	Shutter closed		0..15	00..0F	0.6	
	Random Strobe (different pattern)		16..31	10..1F	7..11,9	
	Strobe Pulse effect , slow - fast	min. frequent 0,7 Hz	32..47	20..2F	12..12,9	
	Strobe effect , slow - fast	max. frequent 10 Hz	48..239	30..EF	13..93	
	Shutter open (lamp start)		240..255	F0..FF	94..100	
<b>10) Dimmer</b>	Dimmer closed (0%)		0.3	0.3	0.1	
	Dimmer 1%...99%	movement time 0,3 sec.	4..251	4..FB	2..98	
	Dimmer open (100%)		252..255	FC..FF	99..100	
<b>11) Focus</b>	in - out	full distance 1,5 sec.	0..255	0..FF	0..100	
<b>12) Special</b>	no function		0..15	00..0F	0.6	
	Gobo-seesaw+/- 10° slow – fast	3,5 moves / min. up to 60 moves / max.	16..31	10..1F	7..12	
	Gobo-seesaw +/- 20° slow – fast	3,5 moves / min. up to 60 moves / max.	32..47	20..2F	13..18	
	Gobo-seesaw +/- 30° slow – fast	3,5 moves / min. up to 60 moves / max.	48..63	30..3F	19..24	
	Color-chaser C / C+1 slow – fast	0,7 BPS ... 2,3 BPS => 1,43 s ... 0,43 s	64..79	40..4F	25..31	
	Color-chaser C / C+2 slow – fast	0,7 BPS ... 2,0 BPS => 1,43 s ... 0,5 s	80..95	50..5F	32..37	
	Audio Pan / Tilt slow	each 4 <sup>th</sup> sound impulse → new position	96..111	60..6F	38..43	
	Audio Pan / Tilt fast	each sound impulse → new position	112..127	70..7F	44..50	
	no function		128..249	80..F9	50..97	
	Lamp OFF (3 sec.)		230..249	6E..9F	92..97	
	Reset		250..255	FA..FF	98..100	
	<b>13) Move- ment</b>	no movement		0	00	0
<b>Movement</b>		<b>Size</b>	<b>Phase</b>			
PAN		1	0°	01..01	01..01	0,5
		1	90°	02..03	02..03	1,0
		1	180°	04..05	04..05	1,7
		1	270°	06..07	06..07	2,5
PAN		2	0°	08..09	08..09	3,3
		2	90°	10..11	0A..0B	4,1
		2	180°	12..13	0C..0D	4,9
		2	270°	14..15	0E..0F	5,7
PAN		3	0°	16..17	11..11	6,5
		3	90°	18..19	12..13	7,3
		3	180°	20..21	14..15	8,0
		3	270°	22..23	16..17	8,8
PAN		4	0°	24..25	18..19	9,6
		4	90°	26..27	1A..1B	10,4
		4	180°	28..29	1C..1D	11,2
	4	270°	30..31	1E..1F	12	

Channel	Function	Time and Value	DMX	HEX	%
	TILT	size / phase see also PAN	32..63	20..3F	13..25
	PAN / TILT	size / phase see also PAN	64..95	40..5F	26..37
	PAN / TILT (inverse)	size / phase see also PAN	96..127	60..7F	38..50
	Circle	size / phase see also PAN	128..159	80..9F	51..62
	Circle (inverse)	size / phase see also PAN	160..191	A0..BF	63..75
	lying eight	size / phase see also PAN	192..223	C0..DF	76..87
	random movement	size see also PAN	224..255	E0..FF	88..100
14) Speed Pan/Tilt	Pan/Tilt relative movement		0..15	00..0F	0..6
	Pan/Tilt slow – fast Use this channel 14) also for the speed of the movements (channel 13).	Pan min. 530° = 200 s Pan max. 530° = 2,65 s Tilt min. 285° = 110 s Tilt max. 285° = 1,8 s	16..255	10..FF	7..100
Lamp ON	Shutter open		240..255	F0..FF	94..100
Lamp OFF	Channel 12 ( min. 3 sec. ) (only if shutter is closed, channel 9 = 0 ..15)		230..249	6E..9F	92..97

## 5 Change the Lamp

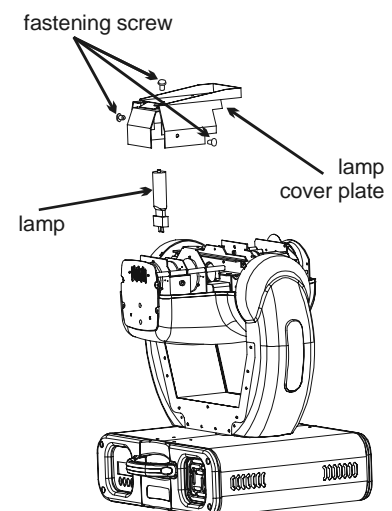
For a frictionless operation please read this chapter carefully and follow all instructions.

### 5.1 Safety Regulations

- **Pull out the main plug!**
- Wait min. 20 minutes after the last operation to cool down the fixture.
- Don't touch the bulb of the lamp with bare fingers (this can cause damages).
- Before you put the **YPOC 250** into operation close the casing, otherwise your retina can be hurt!

### 5.2 Realize the Lamp Change

1. **Pull out the main plug!**
2. Open the upper shell of the head casing by loosening the 4 Phillips screws. Two on the front side and 2 on the back side of the head.
3. Open the 3 screws at the lamp sheet and remove it.
4. Remove the old or broken lamp out of the socket.  
**Attention:** The glass bulb of the lamp can splinter. For that reason remove the lamp with



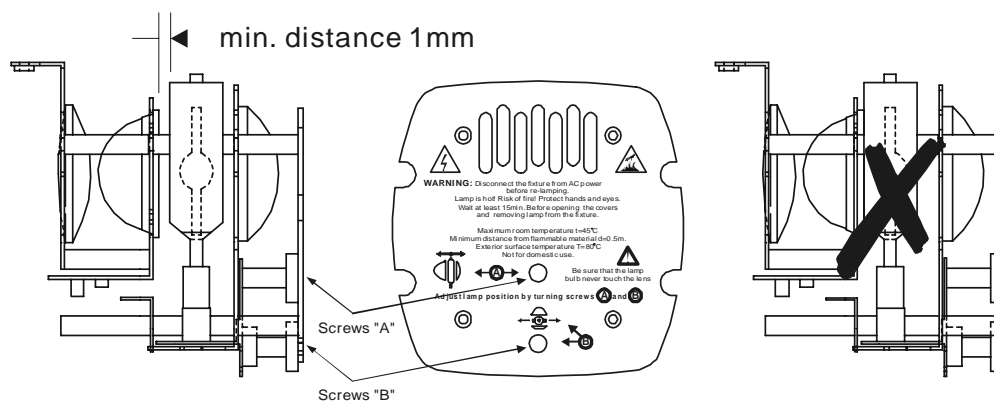
- safety gloves or some cloth.
- Put in the new lamp securely into the socket. **Attention:** Use only the original lamp type!
  - Adjust the optimum distance between the lamp bulb and the lens (1.0-1.5 mm) with the adjusting screw [A]. This can be necessary through different manufacturer.
  - Close the **YPOC 250** in reverse order.
  - The running time of the lamp *LRI* can be reset in the *TIME* Menu.

**Attention:**

**Pay attention on a firm fit of the lamp and on the optimum distance between the lamp and the lens (1.0 - 1.5 mm)!**

### 5.3 Lamp adjustment

The optimum distance between the lamp and the lens must be controlled after every lamp change. The lower deviation amount is **min. 1.0mm**. Running the fixture within a lower deviation can cause damages of lamp and/or lens.



The **Ypoc 250** lamp holder is aligned at the factory. Due to differences between lamps, fine adjustments may improve light performance.

Pease follow this procedure:

- Strike the lamp (for example in the *LAMP* menu) and wait a while until full intensity of the lamp.
- Direct the beam straight on a flat and bright surface/wall (beam open, white, no gobo, no effects).

**Remark:** As the optimum distance of the lamp from lens was adjusted during

the installation or changing the lamp (by turning the screw **A**), it is necessary to adjust only the second position by turning the screw **B**, in order to center the so-called '**Hot-Spot**' (the brightest part of the beam).

3. If the Hot-Spot is not in the middle, you can adjust this by turning the screw **B**.
4. If the Hot-Spot is too bright and the beam not even, you can adjust this again by turning the screw **A** clockwise (get nearer towards the reflector). **Remark:** A complete even beam can't be reached because of the design of the lamp.
5. Appears the beam more bright at the edge, you can adjust this by turning the screw **A** counter-clockwise (get nearer towards the lens).

**Attention: Never remain the minimum distance between lamp and lens (1.0mm). Is there any doubt, open the fixture and control the distance!**

## 6 Change a Gobo

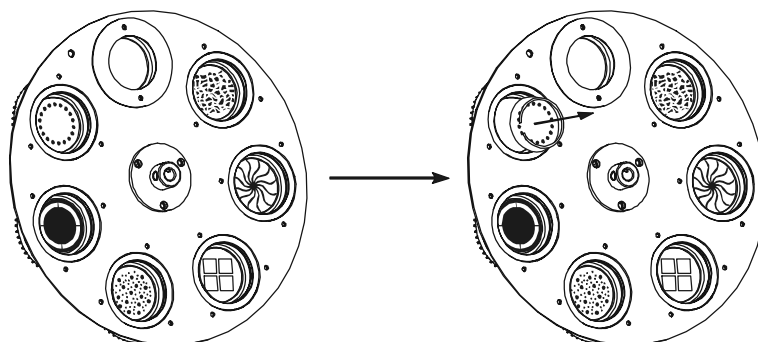
The **YPOC 250** is fitted with standard gobos (outside diameter 27 mm, image size 23 mm). You can use ether steel or glass gobos.

### 6.1 Safety Regulations

- **Pull out the main plug!**
- Wait min. 20 minutes after the last operation to cool down the fixture.
- Before you put the **YPOC 250** into operation close the casing, otherwise your retina can be hurt!

### 6.2 Realize the Gobo Change

1. **Pull out the main plug!**
2. Open the upper shell of the head casing by loosening the 4 Phillips screws. Two on the front side and 2 on the back side of the head.
3. Remove the gobo springs with a small screwdriver.
4. Change the gobo and fix it again with the gobo spring. Pay attention on a safe fit.
5. Close the **YPOC 250** in reverse order.

**Attention:**

If you use glass gobos, the non-vaporized side must be fitted towards the lamp direction.

## 7 Maintenance and Cleaning the YPOC 250

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not built up on or within the fixture. Otherwise the fixture's light-output will be significantly reduced. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliable throughout its life.

**A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!**

The inside optical system should be maintained only by authorized persons. Please contact your local dealer.

### 7.1 Safety Regulations

- **Pull out the main plug!**
- Wait min. 20 minutes after the last operation to cool down the fixture.
- Before you put the **YPOC 250** into operation close the casing, otherwise your retina can be hurt!

### 7.2 Circumference and Interval (rule-of-thumb)

The contamination of the fixture depends on the environment details. Therefore no general guidelines can be given. From this it follows that the intervals are only suggestions from our practice experience.



Position	Interval	In this way
Outside optic	weekly	soft cloth and glass cleaning fluid
Color filter	monthly	soft cloth and glass cleaning fluid
Gobos	yearly	vacuum cleaner, airbrush, etc.
Glass gobos	monthly	soft cloth and glass cleaning fluid
Prism	monthly	soft cloth and glass cleaning fluid
Dimmer/Shutter	yearly	vacuum cleaner, airbrush, etc.
Inside lens	monthly	soft cloth <b>no</b> glass cleaning fluid
Fan and air channel	monthly	vacuum cleaner, airbrush, etc.
Reflector	<b>never</b>	
Lamp	<b>never</b>	
Moveable parts	yearly	suitable fatty oil

**Attention:**

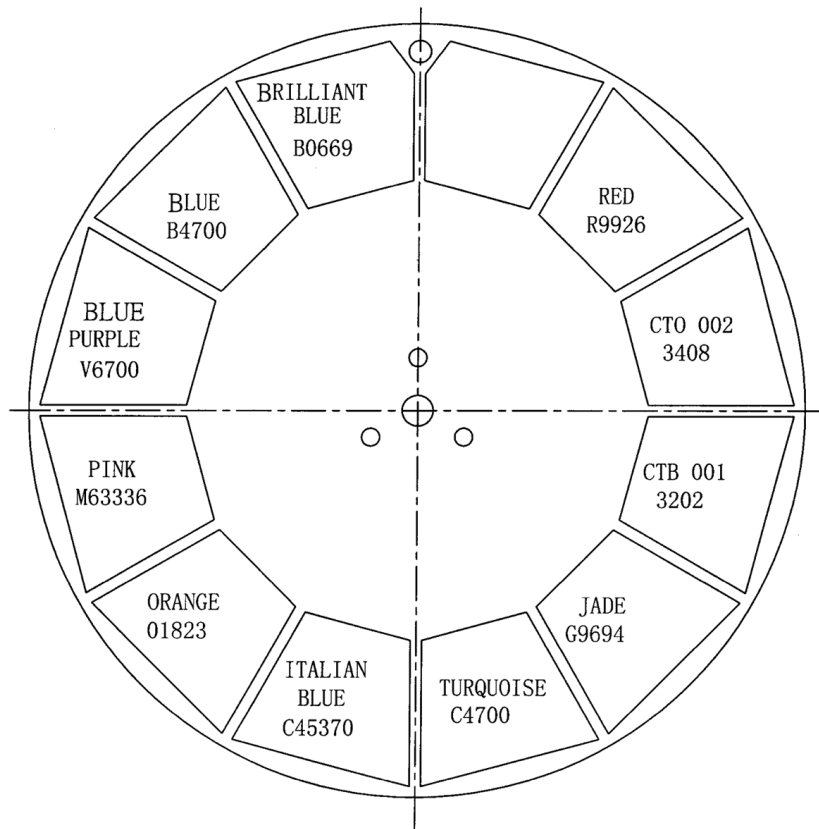
1. **Never** let optical parts come into contact with oil or fat.
2. Before running the fixture wait until all parts are dried up.
3. **Never** clean the aspheric lens with water or other cleaners. Change the lens if it looks milky (about 1-2 years). For that please contact your local dealer.

### 7.3 *Cleaning the Optical System*

1. **Pull out the main plug!**
2. Wait min. 20 minutes after the last operation to cool down the fixture.
3. Open the upper shell of the head casing by loosening the 4 Phillips screws.  
Two on the front side and 2 on the back side of the head.
4. Do the work as explained in the list above.
5. Before you put the **YPOC 250** into operation close the casing, otherwise your retina can be hurt!

## 8 Technical Specification

<b>Power supply</b>	
<b>Power consumption</b>	500 Watt (blind current compensated)
<b>EU-model</b>	AC 230V / 50 Hz~
<b>Fuse protection</b>	T3,15A, 250V, 5x20 mm (fine-wire fuse)
<b>US-model</b>	AC 115V / 60 Hz~
<b>Fuse protection</b>	T6,3A, 115V, 5x20 mm (fine-wire fuse)
<b>Lamp</b>	
<b>Type 1</b>	MSD 230V/250W, socket GY-9,5
<b>Type 2</b>	MSD 230V/200W, socket GY-9,5
<b>Optical system</b>	
Parabolic reflector	
Doubles condenser lens	
15° standard objective (optional 12° or 18°)	
Lens anti-reflex	
<b>Color</b>	
11 dichroic filter plus white	
<b>Gobos</b>	
6 exchangeable standard gobos plus open	
Gobo outside diameter 27 mm, image size 23 mm	
All gobos rotating and positioning	
<b>Shutter / Strobe / Dimmer</b>	
Strobe- effect with variable speed 1 - 10 flashes per second	
Continuously mechanical dimmer 0 - 100%	
<b>Prism</b>	
Rotating 3-face prism, rotating and variable in speed	
<b>Focus</b>	
Motor driven focus from near to far away	
<b>Drive</b>	
Standard DMX-512, 3 pole XLR; [+] = Pin 3 [-] = Pin 2 [Ground] = Pin 1. The DMX- addressing starts at the DMX- address [001].	
<b>Pan / Tilt</b>	
<b>Pan- movement</b>	<b>530° in max. 2,65 seconds, 16 bit resolution</b>
<b>Tilt- movement</b>	<b>280° in max. 1,68 seconds, 16 bit resolution</b>
<b>Weights and measures</b>	
<b>Width of the base</b>	<b>380 mm</b>
<b>Length of the base</b>	<b>380 mm</b>
<b>height (head vertical)</b>	<b>500 mm</b>
<b>Weight (net)</b>	<b>22,2 kg</b>
<b>Weight (gross)</b>	<b>24,6 kg</b>



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