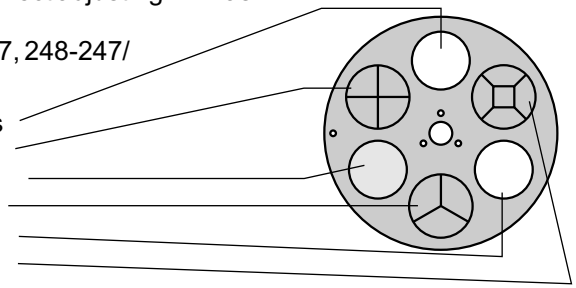
**Optic system**
Parabolic mirror + 2x aspheric condenser
Double objective with balancing corrective fail
**Gobo,Colours, effects....**
4 static gobos, 3rotary gobos, 1 rotary dichro gobo , 2 static dichro gobo, 2 multicolour gobos, 3 alternative intensity,
Frost filter, 4 multiple prisms, 5 multiple prisms, 3 multiple prisms, 8 dichro colour
light bar for blackout position, steady setting dimmer
strobo effect with frequency 1-7 flash per second, Rainbow effect
**Motors:**
8 steps motors controlled by processor
**Electronic**
Functions of the device adjusts by microprocessor
Output and input controlling signal in DMX 512 protocol
8 DMX channels

# Mercury RotoScan DMX512

Your distributor :

# USER MANUAL

| | |
|---|---|
| 225 | Dichro Gobo 2 /Convertible/ |
| **Channel 7.** | Dimmer, Strobo effect, Reset |
| 0 | Iris closed |
| 1-129 | Linear Dimmer / beam suppression/ |
| 130-140 | Iris open |
| 141-150 | Iris closed |
| 151-240 | Stroboscope effect adjusting 1-7 flash |
| 241-245 | Iris open |
| 246-248 | Reset /246-247, 248-247/ |
| 249-255 | Iris open |
| **Channel 8.** | Special effects |
| 0-47 | full circle |
| 50-49 | Prism 4 |
| 100-149 | Frost filter |
| 150-199 | Prism |
| 200-249 | full circle |
| 250-255 | Prism 5 |



Disconnect the device from the mains before any maintenance work!

To secure no failure operation and long lifetime it is essential to clean the device regularly. Dust with smoke from fog machines, air-moisture and cigarette smoke is being built up on the body of the device, but mainly on optical system-objective. Dust penetrates through the ventilator inside of the device and settles on internal optical system consequently the light output is reduced radically.
Because there is a bigger danger of failure it is necessary to maintain regularly. Follow these rules for cleaning:
Objective requires cleaning weekly by soft-cloth moistened in weak soapy solution. Internal parts, like optical system, gobo, dichroic filters clean by soft brush. The interior of the projector should be cleaned monthly using a vacuum cleaner. Adapt cleaning interval to density of operating time.

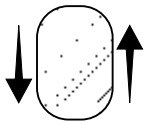
NEVER use for cleaning any solvents and similar chemicals, grinding sponge for dishwashing, washing powder or cleaning agents with grinding effect.
Always replace the lamp by consistent with used type or its equivalent.
/ look chapter "Installation" /

**Technical specification**

| | |
|---|---|
| Supply voltage | 230V/50Hz |
| Power consumption | 650W |
| Fuse | T5A |
| Light source | discharge HMI 575/GS |
| Socket cap | SFc10 |
| Lamp life | 50-300h |
| Weight | 28 Kg |
| Dimensions | 765x300x1850 |
| Temperature | 6000 K |

**Channel 2.** Moving the mirror vertically /Y/-TILT

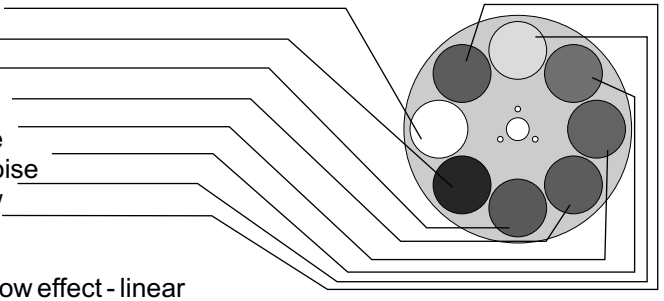
Range 0-255 adjusts mirror position vertically . Values 0 and 255 adjust the mirror in one of the end position. Value 128 adjusts optical centre. Switching DIP switch no.1 /PAN/ in opposite position causes that the end positions will exchange / if 0 is right after switching it will be left /.



**Channel 3.** Colour change

Range 0-127 adjusts one of colours :

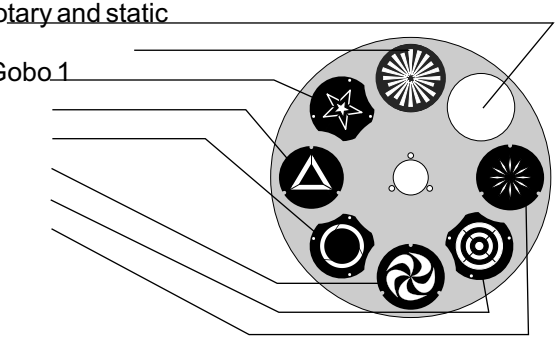
| | |
|---|---|
| 0 | white |
| 16 | blue |
| 32 | red |
| 48 | green |
| 64 | purple |
| 80 | turquoise |
| 96 | yellow |
| 112 | lilac |
| 127 | white |
| 128-255 | Rainbow effect - linear change of colours, Raising value causes acceleration change. |



**Channel 4.** Change gobo rotary and static

| | |
|---|---|
| 0-31 | full circle |
| 32-63 | Rotary Dichro Gobo 1 |
| 64-95 | Static Gobo 1 |
| 96-127 | Rotary Gobo 2 |
| 128-159 | Static Gobo 2 |
| 160-191 | Rotary Gobo 3 |
| 192-223 | Static Gobo 3 |
| 224-255 | Rotary Gobo 4 |

All gobos is possible to change.

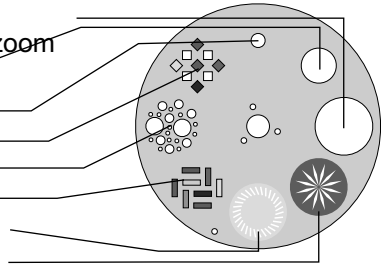


**Channel 5.** Rotary

| | |
|---|---|
| 0 | stop without rotary |
| 1-127 | Set angle of gobos position |
| 128-190 | Rotary retrograde hour-hands with deceleration /value 128 is max speed/ |
| 191-192 | Stop without rotary |
| 193-255 | Rotary retrograde hour-hands with acceleration /value 255 is max speed/ |

**Channel 6.** Change background gobo, zoom

| | |
|---|---|
| 0 | full circle |
| 33 | 60 % beam |
| 65 | 10% beam |
| 97 | Multicolour Gobo 1 |
| 129 | Gobo 2 |
| 161 | Multicolour Gobo 2 |
| 193 | Dichro Gobo 1 /Convertible/ |



**Location**

Don't install the device at places with mechanical shakings and vibrations, high dustiness or high temperature. Not keeping these conditions can lead to shorter lifetime or its damage.

DON´T expose the device to influence of water, rain or moisture. It could lead to electric shock or fire.

**Ventilation**

It is necessary to ensure fans against their covering and secure the devices to have admission of air.

**SUPPLY voltage**

Don´t use any other supply voltage meant in technical specification and manufacture label. Not keeping proper supply voltage could lead to damaging the device, starting a fire or its wrong function.

**Power cord**

Check if power cord is not mechanical damaged and if it is connected properly. Check also if the socket is designed sufficiently for needed loading. Otherwise there is a danger of electric shock or a fire. Power cord must not be bent excessively, led through sharp edges or given to mechanical stress. Don´t pull the supply lead out by the flex but only by the plug. The device must always be connected behind the main switch. Do not touch the supply lead with vet hands, you are threatened by electric shock.

**Other important cautions**

Don´t poke any objects into cooling fans and ventilator, it could lead to serious electric shock or damaging the device. Be careful of no water or other liquid entering.

**Maintenance and cleaning**

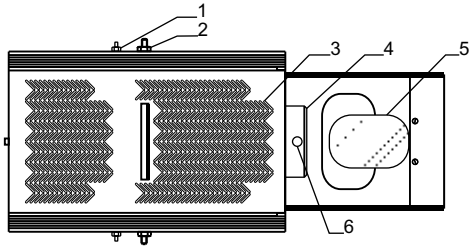
Don´t use any solvent and similar chemicals which could damage surface finish or some parts of device. Use soft and smooth cloth for cleaning optical parts of device and its surface. Never use washing powders or other cleaning agents with grinding effect. Connect the device to power supply after complete drying.

**Service**

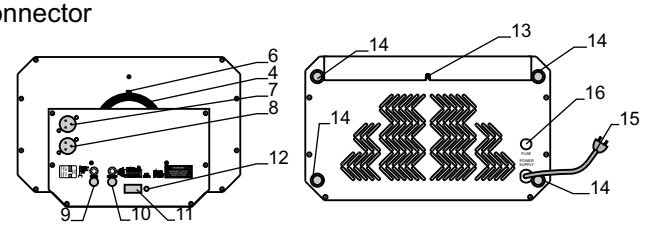
Never try to repair, dismantle or do some construction changes in case of any failure. Always consult qualified employee or dealer. Not keeping this rule you can suffer dangerous electric shock. Disconnect the device from mains before replacing the lamp or dismantling the housing. Not keeping this procedure you can suffer dangerous electric shock. Unplug mains lead before opening the housing and cleaning internal parts of device./ optical system, dichroic filters, etc/ You can suffer electric shock.

**Description of the device**

1 Detent screw
2 Bracket screw
3 Upper cover
4 Objective
5 Mirror
6 Detent objective
7 DMX OUTPUT XLR connector
8 DMX INPUT XLR connector
9 DMX INPUT Jack 6,35 connector



10 DMX OUTPUT Jack 6,35 connector
11 DIP switch
12 LED indication condition
13 Fastening screw
14 Feet of device
15 Power cord
16 Fuse




**Unpacking**
Unpack the device and after acclimatisation take off the protective foil. Make sure that there are no damages caused by transportation.

**Installation**
The device can be installed in any position without alerting its operation. For mounting use bracket of device, which is a mounting hole in. First make sure that the structure you are going to attach the projector is secure.
When installing the projector over the ground use the safe chain and steel-wire rope as a double protection against falling down. Make sure the housing is closed firmly with the screw tightened up.
It is necessary to ensure cooling fans against their covering and secure ventilator and cooling fans to have admission of air.

Before removal of the cover you must be sure that device is switched off! Otherwise you risk damaging electronic control of faulty operating. The device is supplied from manufacturer without light power.

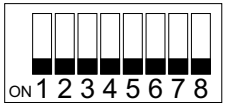
**Procedure**
1 Loose fastening screw
2 Pull out the upper cover
3 If you replace the lamp, first take out original one you used before.
4 Insert new lamp into the socket. Never touch the glass-bulb discharge lamp bare-handed-always use bulb cover or dry cotton cloth or gloves.
5 Make sure that the lamp is installed tightly-it must be in vertical direction.
6 Close the cover and tighten fastening screw.

NEVER try lamp without cover ! Otherwise you risk damaging your sight by light.

**Connection to the mains**
The device must always be connected behind the main switch .

**Connection to the control signal**
Each function of device is addressed according to standard protocol DMX 512 /1990/4 ms. It means, we can control this device by any other device, which provides signal included in protocol DMX 512 by serial line. Connection is secured provided by screened double-line ended by connector JACK 6,35 /1/4"/ or connector XLR.
CAUTION!
In case of device has XLR connector last scaner has to be ended by 120 resistor /switch between "Data+" and" Data-"/. Connection XLR and Jack 6,35 is parallel

**Function of the device**
Function of the device are controlled by 8 DMX channels .
Addressing you make by switch on DIP SWITCH on top of the device.




| DIP switch no. | function |
|---|---|
| 3-8 | DMX address |
| 2 | PAN- reversion X |
| 1 | TILT reversion Y |

**Device addressing**
Control signal DMX can digitally transfer data for 512 channels. Choosing channels is being done by setting the base address on DIP switch according the table:

| | | DIP8 | DIP7 | DIP6 | DIP5 | DIP4 | DIP3 | CHANNEL |
|---|---|---|---|---|---|---|---|---|
| Projector 1 | OFF | | | | | | | 1 - 8 |
| | ON | ■ | ■ | ■ | ■ | ■ | ■ | |
| Projector 2 | OFF | ■ | | | | | | 9 -16 |
| | ON | | ■ | ■ | ■ | ■ | ■ | |
| Projector 3 | OFF | | ■ | | | | | 17 - 24 |
| | ON | ■ | | ■ | ■ | ■ | ■ | |
| Projector 4 | OFF | ■ | ■ | | | | | 25 - 32 |
| | ON | | | ■ | ■ | ■ | ■ | |
| Projector 5 | OFF | | | ■ | | | | 33 - 40 |
| | ON | ■ | ■ | | ■ | ■ | ■ | |
| Projector 6 | OFF | ■ | | ■ | | | | 41 - 48 |
| | ON | | ■ | | ■ | ■ | ■ | |
| Projector 7 | OFF | | ■ | ■ | | | | 49 - 56 |
| | ON | ■ | | | ■ | ■ | ■ | |
| Projector 8 | OFF | ■ | ■ | ■ | | | | 57 - 64 |
| | ON | | | | ■ | ■ | ■ | |
| Projector 9 | OFF | | | | ■ | | | 65 - 72 |
| | ON | ■ | ■ | ■ | | ■ | ■ | |
| Projector 10 | OFF | ■ | | | ■ | | | 73 - 80 |
| | ON | | ■ | ■ | | ■ | ■ | |
| Projector 11 | OFF | | ■ | | ■ | | | 81 - 88 |
| | ON | ■ | | ■ | | ■ | ■ | |
| Projector 12 | OFF | ■ | ■ | | ■ | | | 89 - 96 |
| | ON | | | ■ | | ■ | ■ | |
| Projector no. xxx ..... | | | | | | | | 97 - 512 |

**Functions of the control channels**

| | |
|---|---|
| Channel 1 | Moving of the mirror horizontally /X/- PAN |
| Channel 2 | Moving of the mirror vertically /Y/ TILT |
| Channel 3 | Colour change |
| Channel 4 | Gobo change rotating and static |
| Channel 5 | Rotating |
| Channel 6 | Change background gobo, zoom |
| Channel 7 | Dimmer, Strobo effect, Reset |
| Channel 8 | Prism and Special effects |

**Channel 1.** Moving the mirror horizontally /X/-PAN
Range 0-255 adjusts mirror position horizontally. Values 0 and 255 adjust the mirror in one of the end position. Value 128 adjusts optical centre. Switching DIP switch no.1 /PAN/ in opposite position causes that the end positions will exchange / if 0 is right after switching it will be left /.