

SYNERGY5  
PROFILE



User's Manual rel 1.1 GB



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## 1- SYMBOLS

Graphic symbols used on this manual:



THIS SYMBOL INDICATES A HOT SURFACE



THIS SYMBOL INDICATES ELECTRIC  
SHOCK RISK



THIS SYMBOL INDICATES GENERAL RISK



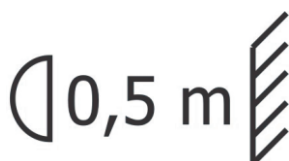
THIS SYMBOL MEANS “SUITABLE FOR  
MOUNTING ON NORMALLY FLAMMABLE  
SURFACES”



THIS SYMBOL MEANS “SUITABLE FOR  
INDOOR USE ONLY”

$t_a$  40°C

THIS SYMBOL INDICATES THE MAXIMUM  
OPERATING AMBIENT TEMPERATURE



THIS SYMBOL INDICATES THE MINIMUM  
DISTANCE FROM THE OBJECTS AND THE  
PEOPLE LIT BY THE LIGHT BEAM



THIS SYMBOL MEANS “DO NOT STARE  
AT THE OPERATING LIGHT SOURCE”



THIS SYMBOL INDICATES  
PHOTOBIOLOGICAL SAFETY

Risk Group 2



**THIS SYMBOL INDICATES THE EUROPEAN COMMUNITY DIRECTIVE 2012/19/EU ON WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)**



**THIS SYMBOL MEANS “DISPOSE THE INTERNAL BATTERY AT THE END OF ITS LIFE ACCORDING TO THE REGULATION IN FORCE”**

## **2- GENERAL WARNING**

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

The unit is not for household use and must be installed by a qualified electrician or experienced person.

The device must always be equipped with an efficient ground connection.



**WARNING!**  
**NEVER EXPOSE THE FRONT LENS TO SUNLIGHT FROM ANY ANGLE TO AVOID DAMAGE OF HEAD INTERNAL PARTS.**

Front lens could become powerful magnifying glass if exposed towards the sun or any strong artificial light source; this can cause damage of head internal parts, even for few seconds and even when the unit is off.

The last command before switch off: point the front lens down towards the ground.

## **3- GENERAL WARRANTY CONDITIONS**

The unit is guaranteed for 36 months from the date of purchase against manufacturing material defects.

## **4- TECHNICAL FEATURES**

### **DTS Product Code:**

03.MP001 SYNERGY 5 PROFILE

### **OUTPUT**

- 420 W pure white LED source (7000 K 16.500 Lumens output)
- Double CRI (DMX-selectable): CRI >90 or CRI >75
- Average LED life: 50,000 hours (70% lumen output)

### **OPTICAL GROUP**

- 49.900 Lux (4.6°@ 5 m)
- 4.6° - 43° linear zoom with autofocus
- Linear soft frost filter (Medium and Heavy frost available on demand)
- Electronic dimmer / shutter / strobe (0.3 to 33.3 flash/sec)

### **COLOR GENERATION**

- Linear CMY
- Linear CTO (3000 K – 7000 K)
- Gel filter emulation
- 6-color wheel
- Two-color generation

### **DYNAMIC EFFECTS**

- Dynamove FX Engine
- Virtual Animation Wheel
- Customizable rotating 6-gobo wheel
- Circular 24-facet rotating prism
- Linear 6-facet rotating prism

### **ROTATING FRAMING SYSTEM**

- 4-blade rotating framing system
- Real 'curtain' effect for each blade
- 60° rotation for each blade (+/- 30°)
- 90° full system rotation (+/- 45°)

### **CONTROL**

- LCD graphic display + 4 soft keys; Auto-flip
- Art-Net 4, sACN, RDM/DMX 512 protocols
- Internal operating system updatable via DTS dongle firmware uploader
- Li-Fe backup battery for controlling the display settings even when the unit is not powered

### **DMX**

- 44 DMX channels (Default) or 53 DMX channels

**PAN & TILT**

- Pan: 540°: 2.7 sec.
- Tilt: 240°: 1.6 sec.
- Tri-phase stepper motor technology
- 16-bit resolution
- Selectable speed ranges
- Pan / Tilt lock

**POWER SUPPLY**

- Full-range 100-240Vac 50-60 Hz
- Power consumption: 600W max

**CONNECTIONS**

- DMX: XLR 3-pole and 5-pole In / Out panel connectors
- Power supply: powerCON TRUE1 In / Out panel connectors
- Art-Net / sACN: etherCON RJ45 panel connector

**INTERNAL SAFETY DEVICES**

Overvoltage and overtemperature circuits protection

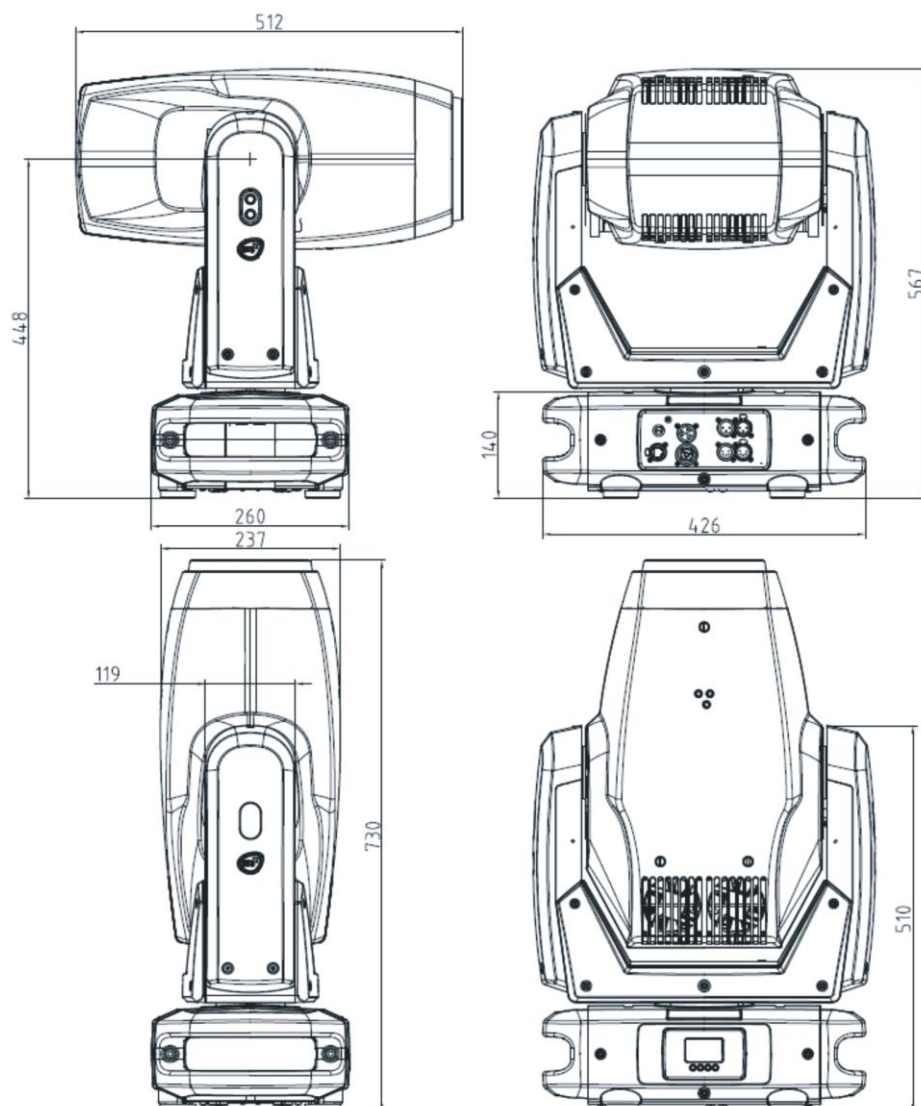
**OPERATING TEMPERATURE**

-10° / 40°C

**PHYSICAL**

- IP20
  - Weight: 32 Kg (70.4 lbs)
- Finishing: Black

## Dimensions



## 5- ACCESSORIES

### As standard

- 1 x PowerCON TRUE1 female cable connector (Code 0520P066)
- 1 x XLR 5 pins female cable connector (Code 0508B147)
- 1 x XLR 5 pins female cable connector (Code 0508B148)
- 2 x Omega clamp with “Fast Lock” connection 1/4 turn (Code 02K00549)
- 1 x User’s manual

### Optional (on request)

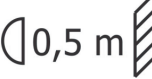
- Flightcase for 2 units (Code 0521C073)
- Synergy Protective Packaging Foam – 560x495x650mm – 2 pcs needed in each flightcase (Code 0512K146.1)
- Soft Frost filter kit (Code 02SK0410)
- Medium Frost filter kit (Code 02SK0428)
- Heavy Frost filter kit (Code 02SK0430)
- Aliscap clamp for tube diameter 48-51 mm (Max load 200 Kg) (code 0521A033) (indicated for any kind of loads vertical / horizontal)
- Professional Quick trigger clamp (Max load 100 Kg) (code 0521A037) (not indicated for horizontal load)
- DTS Dongle firmware uploader (code 03.LA.206)

## **6- IMPORTANT SAFETY INFORMATION**

### **6.1 Fire prevention:**

-It is permissible to place the unit on normally flammable surfaces.  
Suitable for mounting on normally flammable materials surfaces greater than 200°C with some combustion time lag.



-Minimum distance from the objects and the people lit by the light beam: 0,5 m. 

-Replace any blown or damaged fuses only with those of identical value (T 8A 250V).  
Refer to the wiring diagrams if there is any doubt.

-Connect the projector to mains power via a thermal magnetic circuit breaker.

### **6.2 Prevention of electric shock:**



-High voltage is present inside the unit.

Unplug the unit prior to performing any function which involves touching the inside of the moving head.

-The level of technology inherent in the SYNERGY 5 PROFILE requires the assistance of specialised personnel for all servicing. Please refer to an authorised DTS service centre.

-A good earth connection is essential for proper functioning of the projector.

-Never connect the unit without proper earth connection.

-The fixture should be located in places with a good air ventilation.

### **6.3 Safety:**



-Risk Group 2 product according to EN 62471.



CAUTION. Do not look directly into the light output and do not view the light beam with optical instruments or any device that may concentrate the beam.  
May be harmful to the eyes and skin.



-Do not stare at the operating light source.

-The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

-The unit is not for household use and must be installed by a qualified electrician or experienced person.

-The projector should always be installed with bolts, clamps and other tools that are capable of supporting the weight of the unit.

-Always use a safety cable to sustain the weight of the unit in case of the failure of the main fixing point.

-The external surface of the unit, at various points, may exceed 50°C. Never handle the unit until at least 5 minutes have elapsed since the unit was turned off.

-Never install the fixture in an enclosed area lacking sufficient air flow.



The ambient temperature should not exceed 40°C.  $t_a$  40°C

**6.4 Level of protection against the penetration of solid and liquid objects:**

-The projector is classified as an ordinary appliance and its protection level against the penetration of solid and liquid objects is IP20.

Suitable for indoor use only.

**6.5 Waste Electrical and Electronic Equipment (WEEE) directive:**

- The projector, accessories and packaging should be sorted for environmental-friendly recycling.

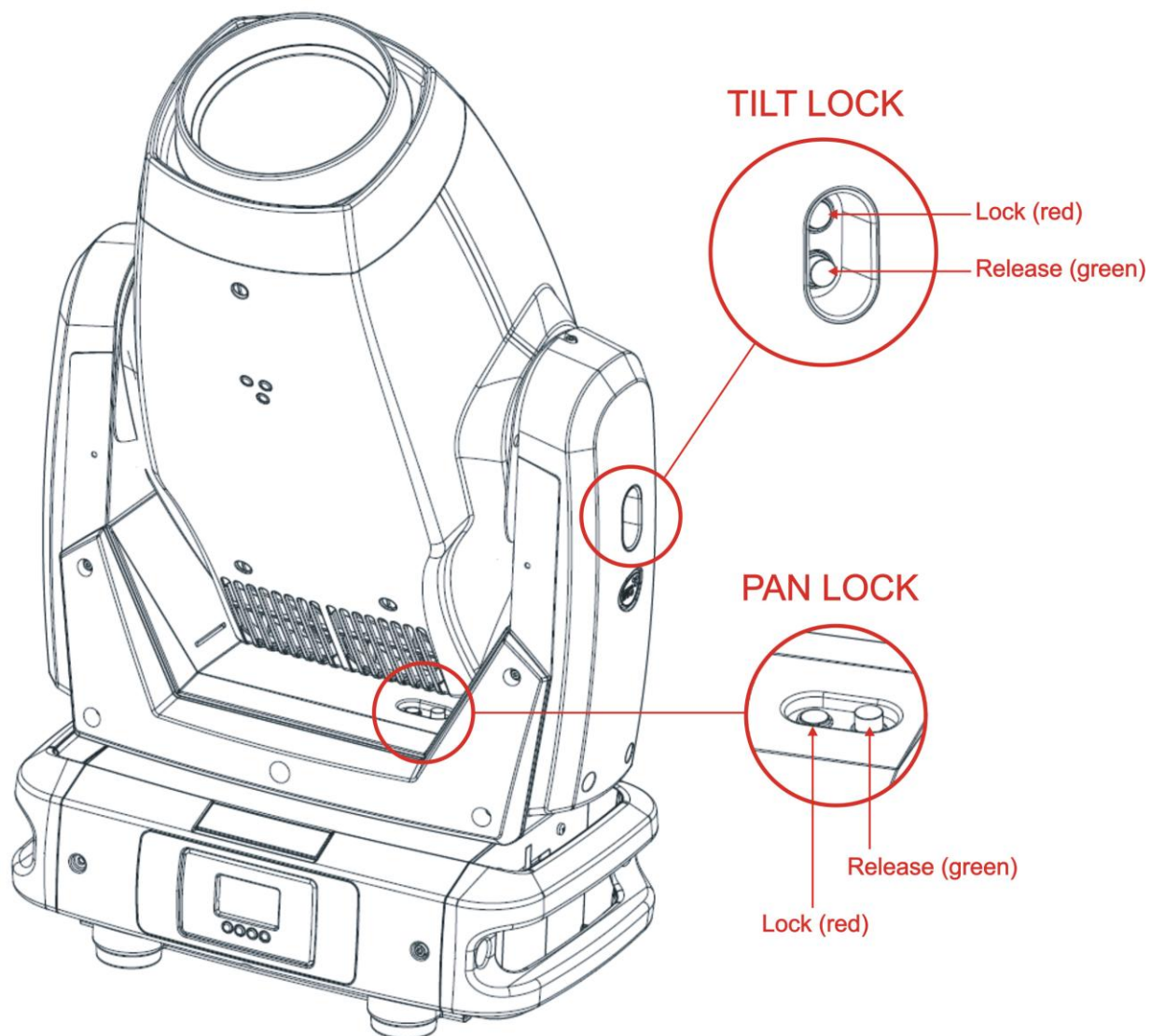
For EC countries: according to the European Directive 2012/19/EU for Waste Electrical and Electronic Equipment and its implementation into national right, luminaires that are no longer usable must be collected separately and disposed of in an environmentally correct manner.

**6.6 Long-life auto-charging buffer battery:**

-The projector contains a rechargeable lead-acid or lithium iron tetraphosphate battery. To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.

## **7- PAN / TILT LOCK**

When moving or servicing the unit you can apply the Pan and Tilt lock.  
To lock or release the Pan and Tilt refer to the picture below.



## **8- VOLTAGE AND FREQUENCY**

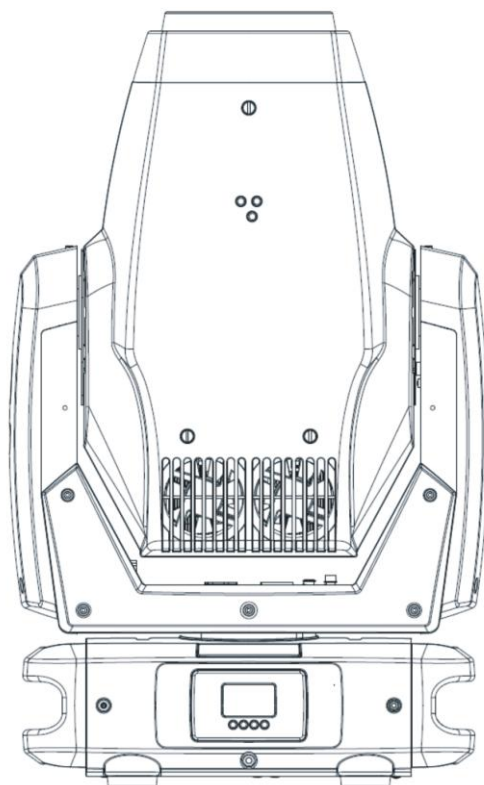
SYNERGY 5 PROFILE operates at 100-240Vac 50-60 Hz.

## **9- INSTALLATION**

The unit is suitable for dry locations only.

SYNERGY 5 PROFILE may be either floor or ceiling mounted.

For floor mounting installations, SYNERGY 5 PROFILE is supplied with four rubber mounting feet on the base.



For ceiling mounted installations, we recommend the use of appropriate clamps to fix the unit to the mounting surface.

The supporting structure from which the unit is hung should be capable of bearing the weight of the unit, as should any clamps used to hang it.

The structure should also be sufficiently rigid so as not to move or shake whilst the SYNERGY 5 PROFILE is moving.

Four 1/4 turn Fast Locks connections placed in the base of the unit allow to hang the SYNERGY 5 PROFILE by using two Omega brackets (provided in the box) in conjunction with Aliscaf clamp (available on demand).

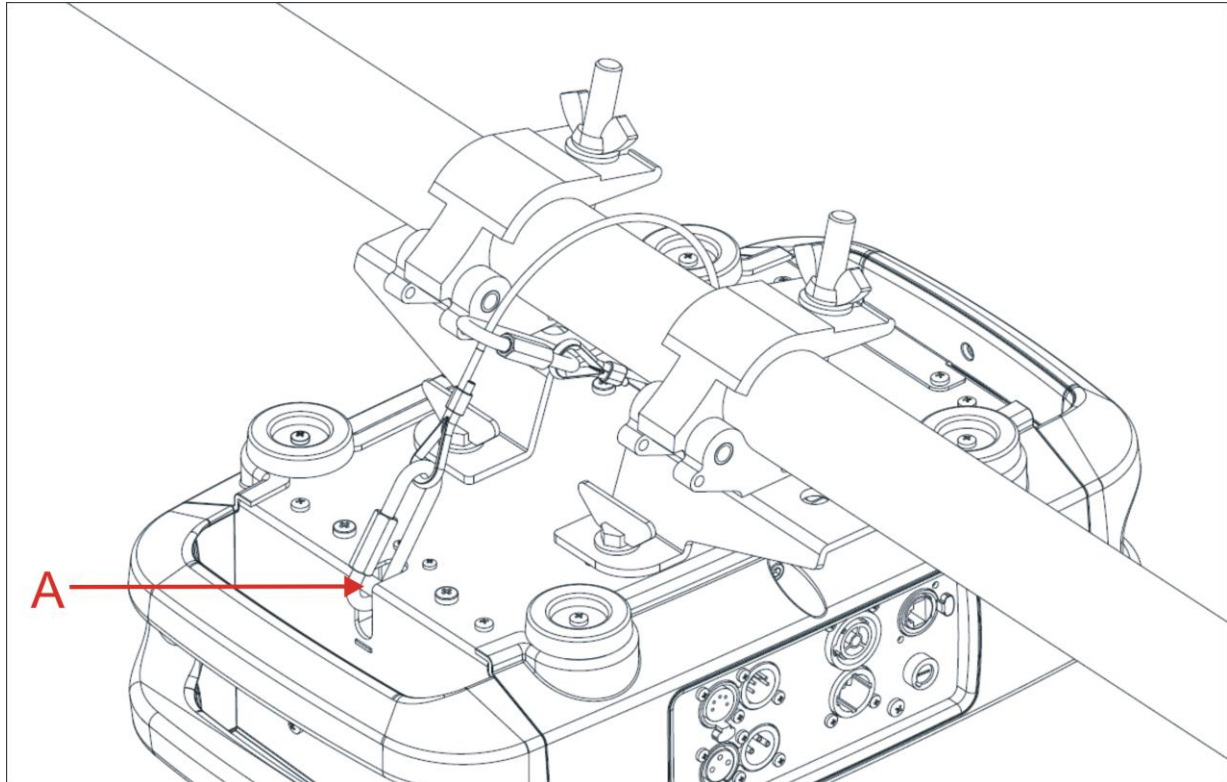
### **9.1- Safety cable**

A safety cable must be securely fixed to the SYNERGY 5 PROFILE and to the suspension truss in order to avoid the fixture accidentally falling should the main fixing point fail.

Make sure that the safety cable or chain can bear the weight of the entire unit.

A suitable safety cable is available on demand.

You may attach the safety cable to the attachment point (A) located on the base of the fixture, as shown in the picture below.



## **9.2 Protection against liquids**

The projector contains electric and electronic components which should under no circumstances come into contact with oil, water or any other liquid.

The proper unit functioning would be compromised should this occur.

## **9.3- Movement**

Pan: 540° rotation ; Tilt: 240° rotation.

Do not place any object in the path of the projector's movement.



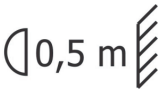
## **9.4- Risk of fire**

Each fixture produces heat and must be installed in a well-ventilated place.



It is permissible to place the unit on normally flammable surfaces.

Suitable for mounting on normally flammable materials surfaces greater than 200°C with some combustion time lag.

Minimum distance from the objects and the people lit by the light beam: 0,5 m. 

## **9.5- Forced ventilation**

You will note, on inspection, that the unit features various air inlets and cooling fans located on both the base and head of the fixture.

These should, under no circumstances, be blocked or obstructed whilst the projector is in operation. Doing so could cause the fixture to seriously overheat thereby compromising its proper operation.

## **9.6- Ambient temperature**

The projector should never be installed in places that lack a constant air flow.

The ambient temperature should not exceed 40°C.  $t_a$  40°C

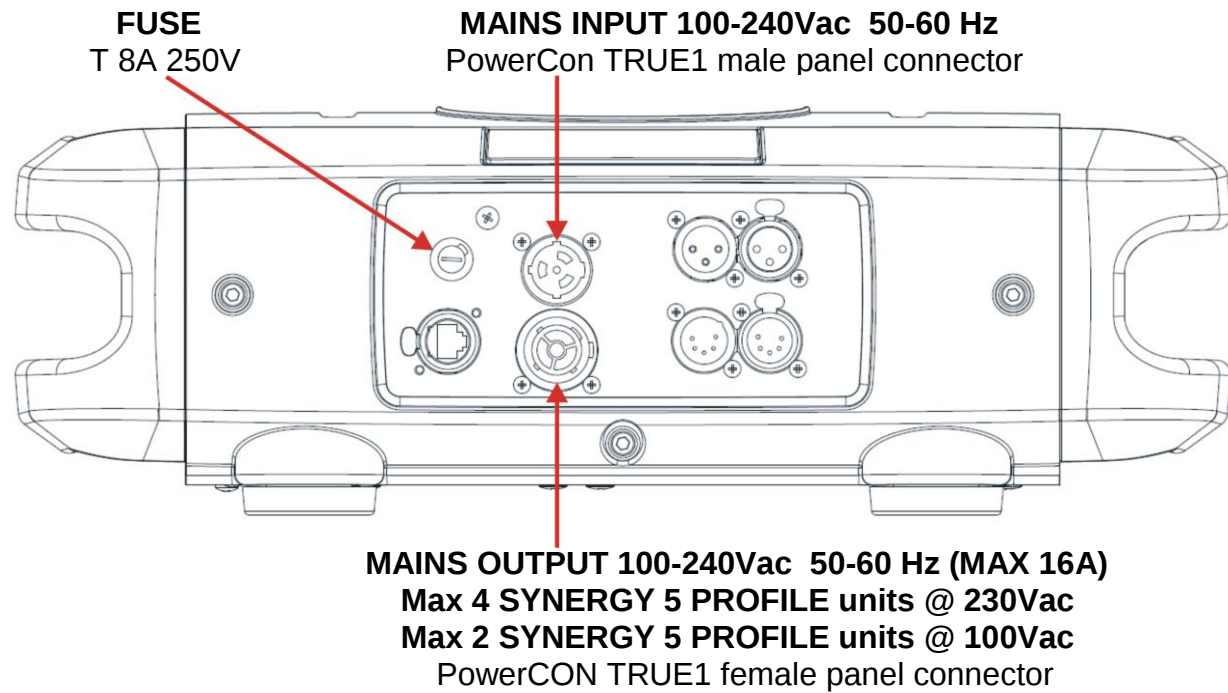
## **10- MAINS CONNECTION**

SYNERGY 5 PROFILE operates at 100-240Vac 50-60 Hz.

Prior to connecting the unit to your mains supply, ensure that the model in your possession correctly matches the mains supply available.

For connection purposes, ensure that your plug is capable of supporting 3 amps at 230Vac or 6,5 amps at 100Vac each unit connected.

Strict adherence to regulatory norms is strongly recommended.



### **10.1- Protection**



The use of a thermal magnetic circuit breaker is recommended for each SYNERGY 5 PROFILE.

A good earth connection is essential for the correct operation of the projector.

## **11- DMX SIGNAL CONNECTION**

The unit operates using the digital DMX 512 signal.

Connection between the mixer and the projector or between projectors must be carried out using a two pair screened  $\varnothing$  0.5 mm cable and a XLR 5 or 3 pins connector.

Ensure that the conductors do not touch each other.

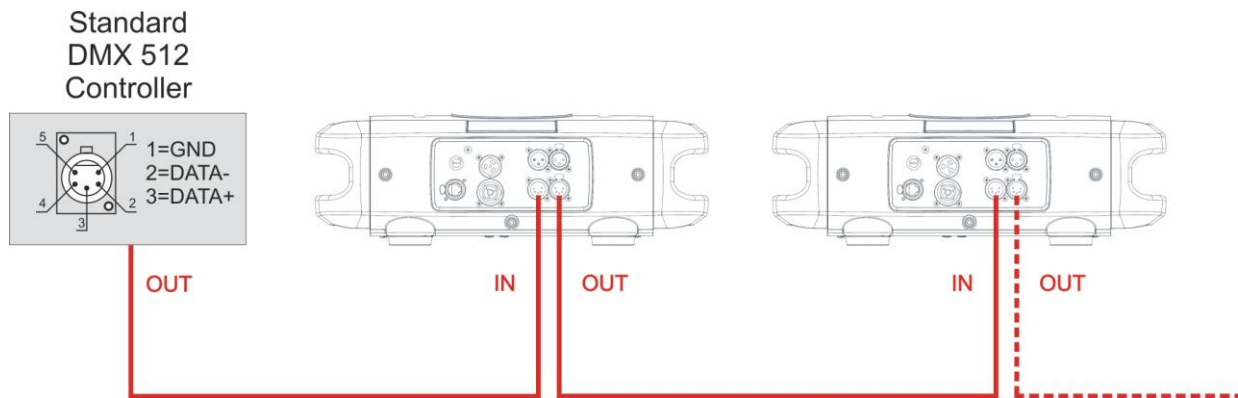
Do not connect the cable ground to the XLR chassy.

The plug housing must be isolated. Connect the mixer signal to the DMX IN projector plug and connect it to the next projector by connecting the DMX OUT plug on the first projector to the DMX IN plug of the second one.

This way, all the projectors are cascade connected.

**NB. If the display showing the DMX address flashes, then one of the following errors has occurred:**

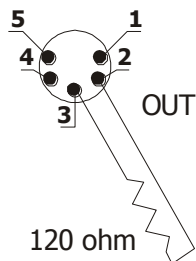
- DMX signal not present
- DMX address not valid
- DMX reception problem



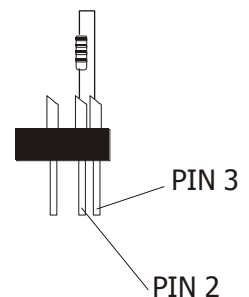
For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

The DMX terminator is a male XLR 3-5 pins connector with a 120 ohm resistor between pin 2 and 3.

The DMX terminator must be plugged into the last unit (DMX out panel connector) of the DMX line.



PLACE A 120 OHM RESISTOR BETWEEN PIN 2 AND 3 OF A MALE XLR CONNECTOR AND PLUG IT INTO THE DMX OUT PANEL CONNECTOR OF THE LAST UNIT CONNECTED TO THE DMX LINE



### **11.1-DMX Addresses**

SYNERGY 5 PROFILE can be controlled with 44 DMX channels (Default) or 53 DMX channels.

In order to use the unit in 44 DMX channels mode (Default), set the following addresses on the mixer:

|             |       |                                                         |
|-------------|-------|---------------------------------------------------------|
| Projector 1 | A001  |                                                         |
| Projector 2 | A045  | If you want to select the next projector, just add "44" |
| Projector 3 | A089  |                                                         |
| .....       | A.... |                                                         |
| projector 6 | A221  |                                                         |

### **11.2-Selecting the DMX address**

1) Press the UP-DOWN key until you reach the required DMX channel. The numbers on the display will start to flash (but the new DMX address hasn't yet been set).

2) Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now setted to the new DMX address.

TRICKS:

If you keep pushed the UP or DOWN keys, the channels are calculated more quickly and you get a faster selection.

## 12- Art-Net / sACN SIGNAL CONNECTION

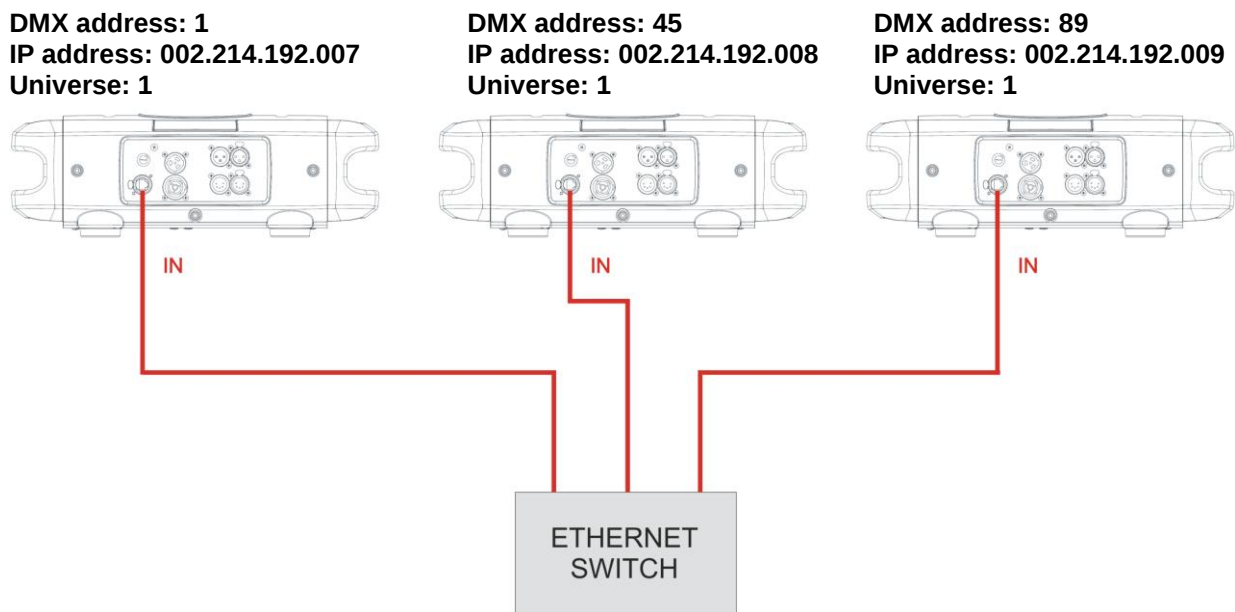
The unit operates using the Art-Net / sACN signal (**sACN not yet implemented**). Connection between the mixer and the projector must be carried out using a category 5 network cable and a standard RJ45 connector.

### 12.1-Direct Ethernet operation

For direct Ethernet operation connect the mixer Art-Net / sACN signal via Ethernet switch to each unit etherCON RJ45 input connector.

For each unit scroll till NETWORK menu (refer to DISPLAY FUNCTIONS for details):

- Select under INPUT menu “Art-Net” or “sACN” as input control signal.
- Select under IP ADDRESS MODE menu “Default”, “Static” or “DHCP” mode.
- Select ETH TO DMX menu to OFF.
- Set the IP address and Net Mask. **IP address must be different for each unit on a network.**
- Set the Art-Net or sACN Universe.



## 12.2-Ethernet to DMX operation (not yet implemented)

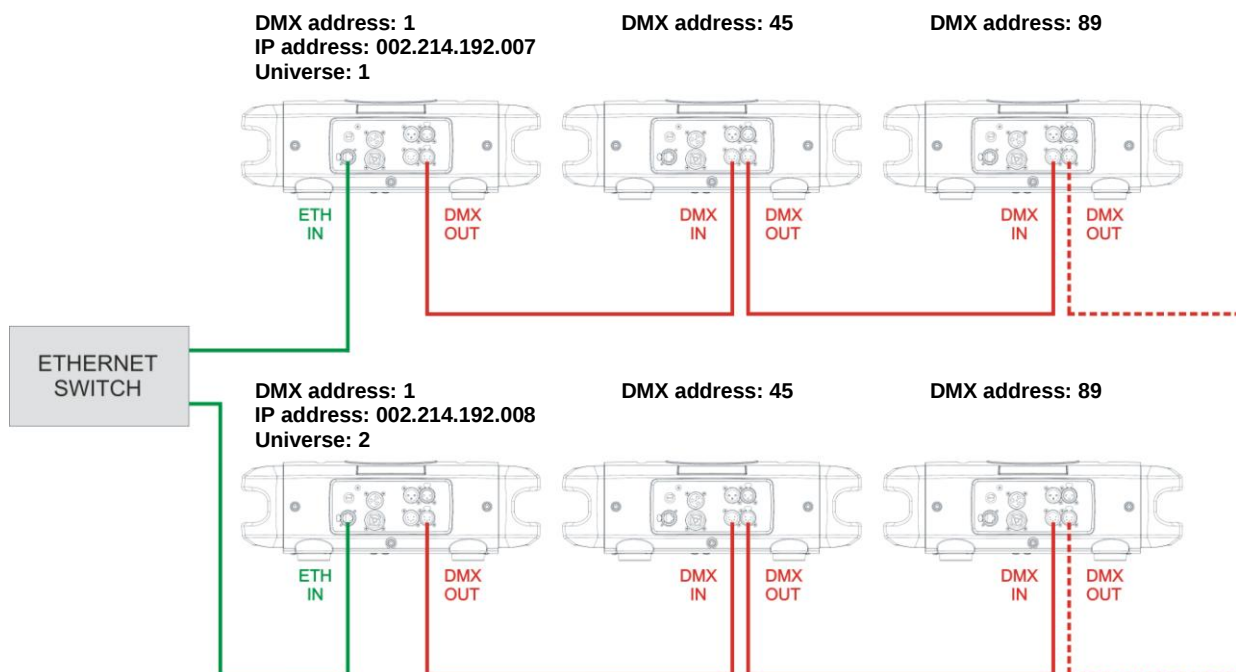
For Ethernet to DMX operation connect the mixer Art-Net / sACN signal via Ethernet switch to the etherCON RJ45 input connector of the first unit only (sACN not yet implemented).

In this configuration the first unit works as an Ethernet to DMX converter and sends DMX signal to its DMX output connector.

All the other units must be connected as a DMX chain with standard DMX settings.

Only for the first unit scroll till NETWORK menu (refer to DISPLAY FUNCTIONS for details):

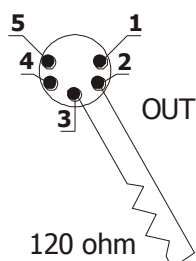
- Select under INPUT menu “Art-Net” or “sACN” as input control signal.
- Select under IP ADDRESS MODE menu “Default”, “Static” or “DHCP” mode.
- Select ETH TO DMX menu to ON.
- Set the IP address and Net Mask. **IP address must be different for each unit on a network.**
- Set the Art-Net or sACN Universe.



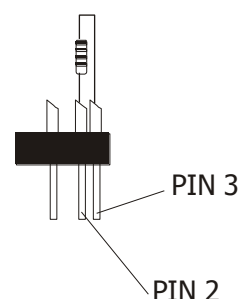
For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

The DMX terminator is a male XLR 3-5 pins connector with a 120 ohm resistor between pin 2 and 3.

The DMX terminator must be plugged into the last unit (DMX out panel connector) of the DMX line.



PLACE A 120 OHM RESISTOR BETWEEN PIN 2 AND 3 OF A MALE XRL CONNECTOR AND PLUG IT INTO THE DMX OUT PANEL CONNECTOR OF THE LAST UNIT CONNECTED TO THE DMX LINE



### **13- FIRMWARE UPDATING**

To update the firmware release of the SYNERGY 5 PROFILE you need:

- DTS Dongle Firmware Uploader (code 03.LA.206).
- “DTS Firmware Upgrade Utility v.2.02” program installed on PC.
- Latest firmware release available for SYNERGY 5 PROFILE unit.

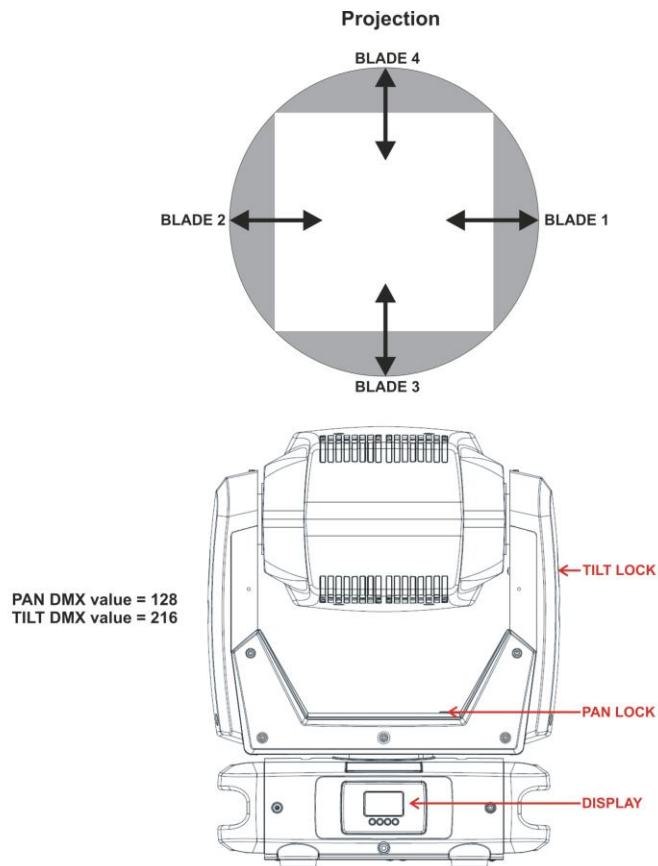
#### **Updating the firmware release.**

Please follow the procedure below to perform the update:

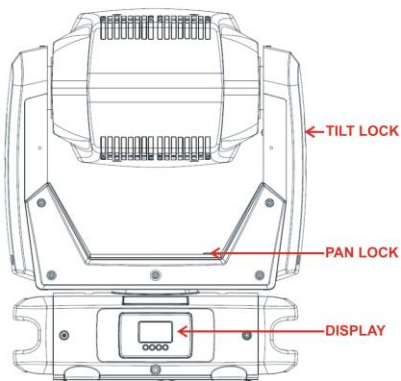
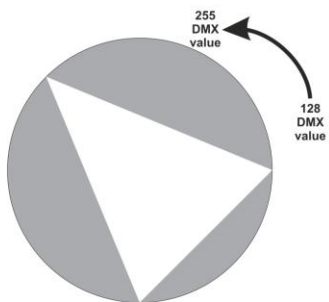
1. Connect the DTS Dongle Firmware Uploader to a spare USB port on the PC.
2. Connect the unit DMX input to the DTS Dongle Firmware Uploader DMX output with a standard DMX cable and turn ON the unit.
3. Send the new firmware release into the unit by using “DTS Firmware Upgrade Utility v.2.02” program. At the end of the procedure, the unit will reset.

For more information please refer to an authorised DTS service centre.

## 14- ROTATING FRAMING SYSTEM

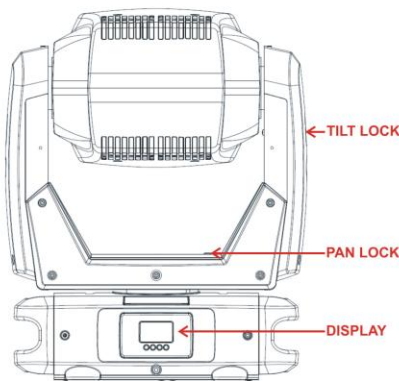
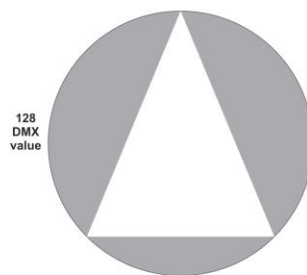


**-45° Full system rotation**



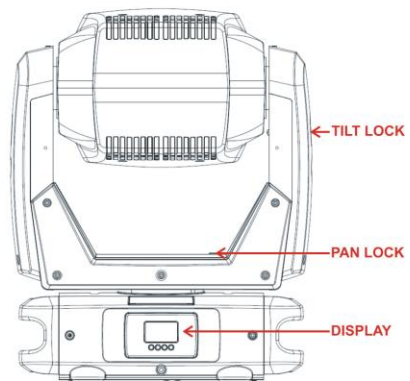
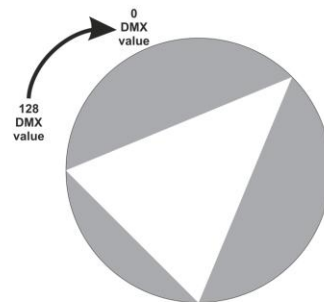
PAN DMX value = 128  
TILT DMX value = 216

**0° Full system rotation**



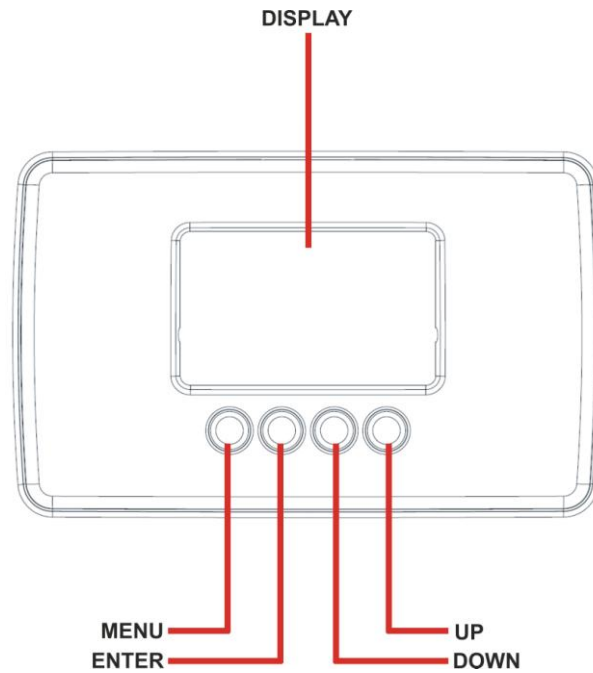
PAN DMX value = 128  
TILT DMX value = 216

**+45° Full system rotation**



PAN DMX value = 128  
TILT DMX value = 216

## 15- DISPLAY FUNCTIONS



The SYNERGY 5 PROFILE display panel shows all the available functions. Using these functions, it is possible to change some of the parameters and add some functions. Changing the DTS setting can vary the functions of the unit so that it does not respond to the DMX 512 used to control it. Carefully follow the instructions below before carrying out any variations or selections.

NOTE: the symbol  shows which key has to be pushed to obtain the desired function.

|                                |                                                        |
|--------------------------------|--------------------------------------------------------|
| <b>MOTORS FIRMWARE RELEASE</b> | <b>12</b>                                              |
| <b>RDM Device Model ID</b>     | <b>0x0012</b>                                          |
| <b>DMX Personality IDs</b>     | <b>0x01 “44 CHANNELS”</b><br><b>0x02 “53 CHANNELS”</b> |

## 15- DISPLAY FUNCTIONS



Network



### NETWORK

#### INPUT

This menu allows to select the input control signal protocol.

DMX 512 (Default), Art-Net or sACN protocol.

(sACN not yet implemented)

#### IP ADDRESS MODE

This menu allows to select the mode to set the IP address and the Net Mask.

STATIC = Manual setting of IP address and Net Mask.

DEFAULT = Fixed IP address with manual setting of first byte only and fixed Net Mask (Default).

DHCP = Automatic setting of IP address and Net Mask.

#### PRIORITY

This menu allows to set the priority between input control signals when the unit is connected via DMX and via ETHERNET at the same time.

DMX 512 = DMX signal has the priority on the Art-Net / sACN signal (Default).

ETHERNET = Art-Net / sACN signal has the priority on the DMX signal.

#### ETHERNET TO DMX

This menu allows to enable ETHERNET to DMX operation.

ON = In this configuration the first unit works as an Ethernet to DMX converter and sends DMX signal to its DMX output connector.

OFF = Default.

(NOT YET IMPLEMENTED)

#### STATIC IP

This menu allows to manually set all Bytes of IP address and Net Mask.

**IP address must be different for each unit on a network.**

#### DEFAULT IP

Fixed IP address and Net Mask.

It is possible to set only first byte of the IP address.

**IP address must be different for each unit on a network.**

|                                                                                                                                |  |
|--------------------------------------------------------------------------------------------------------------------------------|--|
| <div>NETWORK</div> <div>MENU ENTER DOWN UP</div>                                                                               |  |
| <div>NETWORK</div> <div>INPUT</div> <div>DMX512 - ARTNET - SACN</div> <div>DMX512</div> <div>MENU ENTER DOWN UP</div>          |  |
| <div>NETWORK</div> <div>IP ADDR MODE</div> <div>DEFAULT - STATIC - DHCP</div> <div>DEFAULT</div> <div>MENU ENTER DOWN UP</div> |  |
| <div>NETWORK</div> <div>PRIORITY</div> <div>DMX512 - ETHERNET</div> <div>DMX512</div> <div>MENU ENTER DOWN UP</div>            |  |
| <div>NETWORK</div> <div>ETH TO DMX</div> <div>OFF</div> <div>MENU ENTER DOWN UP</div>                                          |  |
| <div>NETWORK</div> <div>STATIC IP</div> <div>IP 192.168. 0. 8</div> <div>MASK 255. 0. 0. 0</div> <div>MENU ENTER DOWN UP</div> |  |
| <div>NETWORK</div> <div>DEFAULT IP</div> <div>IP 2.214.192. 7</div> <div>MASK 255. 0. 0. 0</div> <div>MENU ENTER DOWN UP</div> |  |



## 15- DISPLAY FUNCTIONS



Network



### NETWORK

#### ARTNET UNIVERSE

This menu allows to set the Art-Net Universe (range 0 ÷ 32767).

#### SACN UNIVERSE

This menu allows to set the sACN Universe (range 1 ÷ 63999).

(sACN not yet implemented)

NETWORK

ARTNET UNIV.

00000 TO 32767

00000

MENU ENTER DOWN UP

NETWORK

SACN UNIVERSE

00001 TO 63999

00001

MENU ENTER DOWN UP



Pan Direction



### PAN DIRECTION

This menu allows to set the Pan movement Normal or Reverse

PAN DIRECTION

NORMAL

MENU ENTER DOWN UP

Pan movement  
Normal or Reverse  
Default = Normal



Tilt Direction



### TILT DIRECTION

This menu allows to set the Tilt movement Normal or Reverse

TILT DIRECTION

NORMAL

MENU ENTER DOWN UP

Tilt movement  
Normal or Reverse  
Default = Normal



## 15- DISPLAY FUNCTIONS



Speed



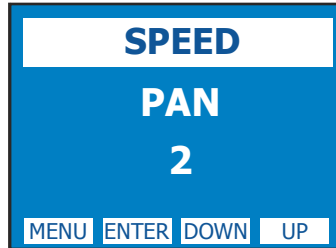
PAN SPEED  
Pan Speed control (1-4)

TILT SPEED  
Tilt Speed control (1-4)

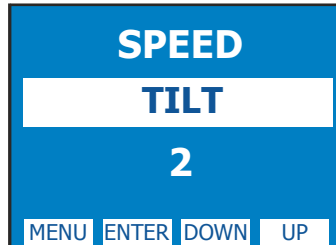
ZOOM SPEED  
Zoom Speed control (1-4)

BLADE SPEED  
Blades Speed control (1-4)  
**WARNING! Speed value must not be set while blades are moving during programming.**

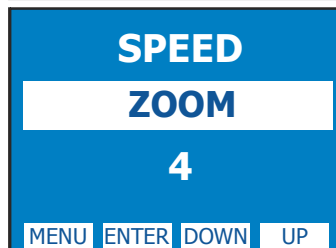
CMY SPEED  
CMY Speed control (1-4)  
**WARNING! Speed value must not be set while CMY filters are moving during programming.**



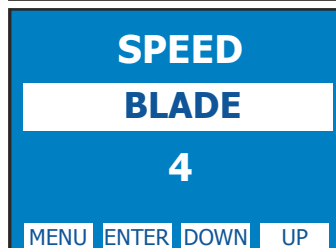
Pan Speed control (1-4)  
Default = 2



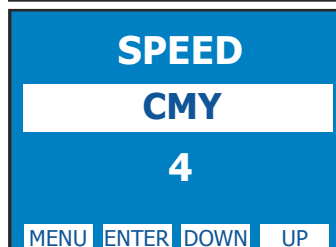
Tilt Speed control (1-4)  
Default = 2



Zoom Speed control (1-4)  
Default = 4



Blades Speed control (1-4)  
Default = 4



CMY Speed control (1-4)  
Default = 1



## 15- DISPLAY FUNCTIONS



Display

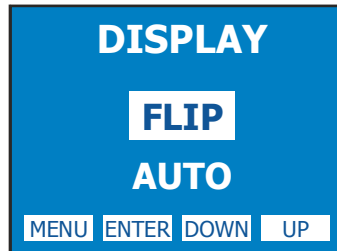


DISPLAY FLIP / STAND BY / CONTRAST

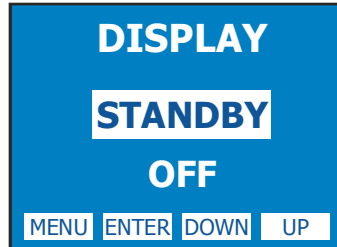
**Display Flip:**  
Reverses display's reading depending on the mounting position (Automatic, on the ground or suspended).

**Display Standby:**  
To turn off the display (after 5 seconds) or leave it always on.

**Display Contrast:**  
Display contrast regulation (20-40)



Display Flip  
AUTO (Default)  
ON THE GROUND  
SUSPENDED



Display Standby  
OFF = Display Standby  
disabled (Default)  
ON = Display goes OFF  
after 5 seconds



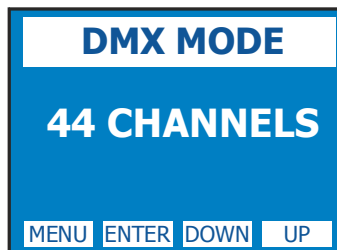
Display Contrast  
20-40 (Default = 25)



DMX Mode



**DMX MODE**  
To select DMX mode:  
44 channels (Default) or  
53 channels



DMX Mode  
44 channels (Default)  
53 channels



## 15- DISPLAY FUNCTIONS

Menu Up-Down No DMX Action ENTER Up-Down

### NO DMX ACTION

This menu allows to set the desired unit's behavior in case DMX signal is missing or not available.

### KEEP LAST DMX

Keep last valid DMX signal.

### PROGRAM

126 pre-programmed steps.  
Speed time values (range 0.2x - 2x)  
selectable by user (default 1x).

### SINGLE CUE

Fixed cue with values selectable by user.

### BLACK OUT

Black-out

**NO DMX ACTION**

**KEEP LAST DMX**

MENU ENTER DOWN UP

**NO DMX ACTION**

**PROGRAM 1-126**

MENU ENTER DOWN UP

**NO DMX ACTION**

**SINGLE CUE**

MENU ENTER DOWN UP

**NO DMX ACTION**

**BLACK OUT**

MENU ENTER DOWN UP

ENTER

ENTER

ENTER

ENTER

Menu Up-Down Reset ENTER Up-Down

### RESET

Reset via DMX ENABLED / DISABLED  
and unit motors reset

**RESET**

BY DMX

**ENABLED**

MENU ENTER DOWN UP

ENABLED = Reset via  
DMX enabled (Default)  
DISABLED = Reset via  
DMX disabled  
NOW = Instant unit motors  
reset

ENTER

Menu Up-Down Fans ENTER Up-Down

### FANS SETTING

SILENT (Default), STANDARD or  
AUTOMATIC mode

**FANS SETTING**

**SILENT**

MENU ENTER DOWN UP

SILENT mode = Low fans speed  
for a very low noise operation.  
The LED may be dimmed in  
particular working conditions  
(Default).  
STANDARD mode = High fans  
speed: The LED always works at  
maximum power.  
AUTOMATIC mode = Automatic  
fans speed related to LED  
working conditions.

ENTER

## 15- DISPLAY FUNCTIONS

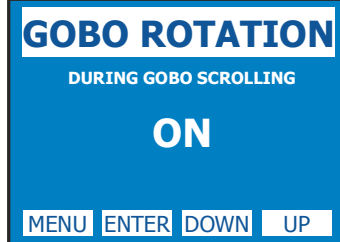


### Gobo Rotation



#### GOBO ROTATION

Gobo rotation during gobo scrolling for rotating gobo wheel



ON = Default  
OFF



### Focus



#### FOCUS EXCURSION

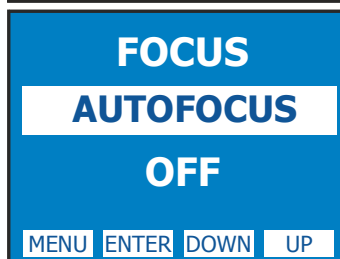
This menu allows to select the standard or extended range for Focus excursion.

#### AUTOFOCUS

This menu allows to enable the Automatic focus during Zoom excursion.  
(NOT YET IMPLEMENTED)



FOCUS EXCURSION  
STANDARD = standard Focus range (Default).  
EXTENDED = extended Focus range.



AUTOFOCUS  
OFF = Default.  
ON = to have the best resolution it is suggested the first time you focus to set Zoom at DMX value 100 (DMX range 0-255) or 39%.



### LED



#### LED

#### SMOOTH

This menu allows to select the value of delay (in milliseconds) for DIMMER channel reaction to DMX dimming command.

0 = Instant response

4 = 100 ms smooth response (Default)

20 = 500 ms smooth response

#### GAMMA CORRECTION

This menu allows to select between Linear current output or Quadratic current output for LED.

LINEAR = Linear current output

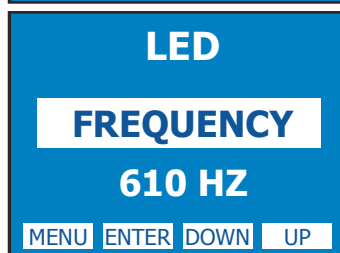
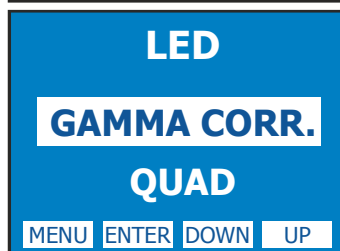
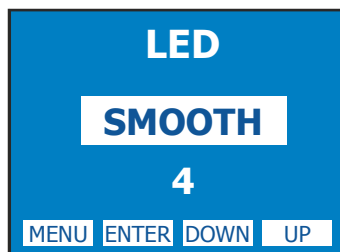
QUADRATIC = Linear light output (Default)

#### OUTPUT FREQUENCY

This menu allows to adjust the PWM Frequency value (Hz) in order to reduce flickering in the process of your camera recordings.

Range = 610 Hz – 20 KHz

Default = 610 Hz



## 15- DISPLAY FUNCTIONS



System Info



### SYSTEM INFO

#### SOFTWARE

Unit model; Software release date;  
Motors boards and LED Driver board  
software version.

#### TEMPERATURES

LED temperature monitoring.  
DRV-1 = White1 and White 2 outputs of  
LED Driver board temperature monitoring.  
DRV-2 = White 3 and White 4 outputs of  
LED Driver board temperature monitoring.  
MICRO = Micro controller temperature  
monitoring.

#### TIME COUNTERS

Unit, LED module and LED Driver board  
life time.

#### ADDRESSES

RDM and MAC IDs.

SYSTEM INFO  
**SOFTWARE**  
SYNERGY 5 PROFILE  
26 JUN 2018  
MOTOR: V.12  
LED: V.1.00  
MENU ENTER DOWN UP

SYSTEM INFO  
**TEMPERATURES**  
LED: 045°C  
DRV-1: 042°C  
DRV-2: 040°C  
MICRO: 039°C  
MENU ENTER DOWN UP

SYSTEM INFO  
**TIME COUNTERS**  
UNIT LIFE: 0535 HOURS  
LED LIFE: 0446 HOURS  
DRV LIFE: 0538 HOURS  
MENU ENTER DOWN UP

SYSTEM INFO  
**ADDRESSES**  
RDM: 0710:00010D68  
MAC: 70:B3:D5:D7:C0:EC  
MENU ENTER DOWN UP



## 15- DISPLAY FUNCTIONS



Reserved



RESERVED  
(Enter code = 100)

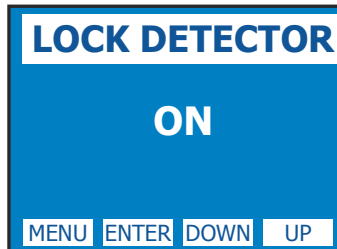
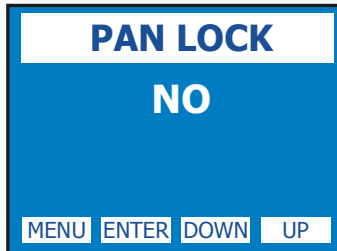
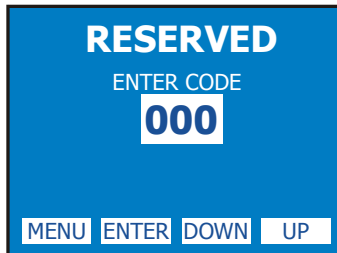
Pan lock-Tilt lock

Pan free-Tilt free

Lock Detector

Reboot

Exit To Main



Pan Lock = Lock the Pan  
to the desired value

Tilt Lock = Lock the Tilt  
to the desired value

Pan Free = Remove power  
to Pan motor

Tilt Free = Remove power  
to Tilt motor

Lock Detector OFF  
Lock Detector ON (Default):  
This function lets the user to  
activate the Lock detector on  
Pan and Tilt.

When Lock detector is set to  
ON, the unit start the Pan&Tilt  
motors reset normally, but if for  
any reason there is something  
blocking the movement for  
Pan&Tilt motors during the  
initial reset (example unit into  
the flight case and power  
connected), it automatically will  
stop to reset Pan&Tilt motors  
after 5 seconds from the startup  
and a warning message (Pan  
locked-Tilt locked) will appear  
on unit display .

Reboot = Unit Reboot without  
needing of turning OFF the unit

Exit To Main = Exit from  
Reserved menu



## 15- DISPLAY FUNCTIONS

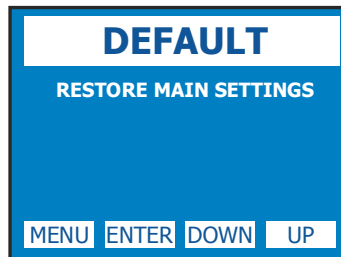


Default



### DEFAULT

To restore factory settings



Manual control



### MANUAL CONTROL

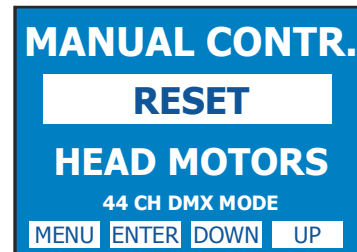
Manual mode with functions value selectable by user

### RESET

To reset head motors only, Pan and Tilt or all motors

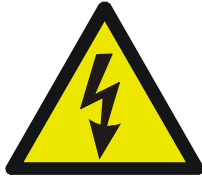
### RESTORE DEFAULT

To restore parameters default settings



## **16- OPENING THE PROJECTOR HOUSING**

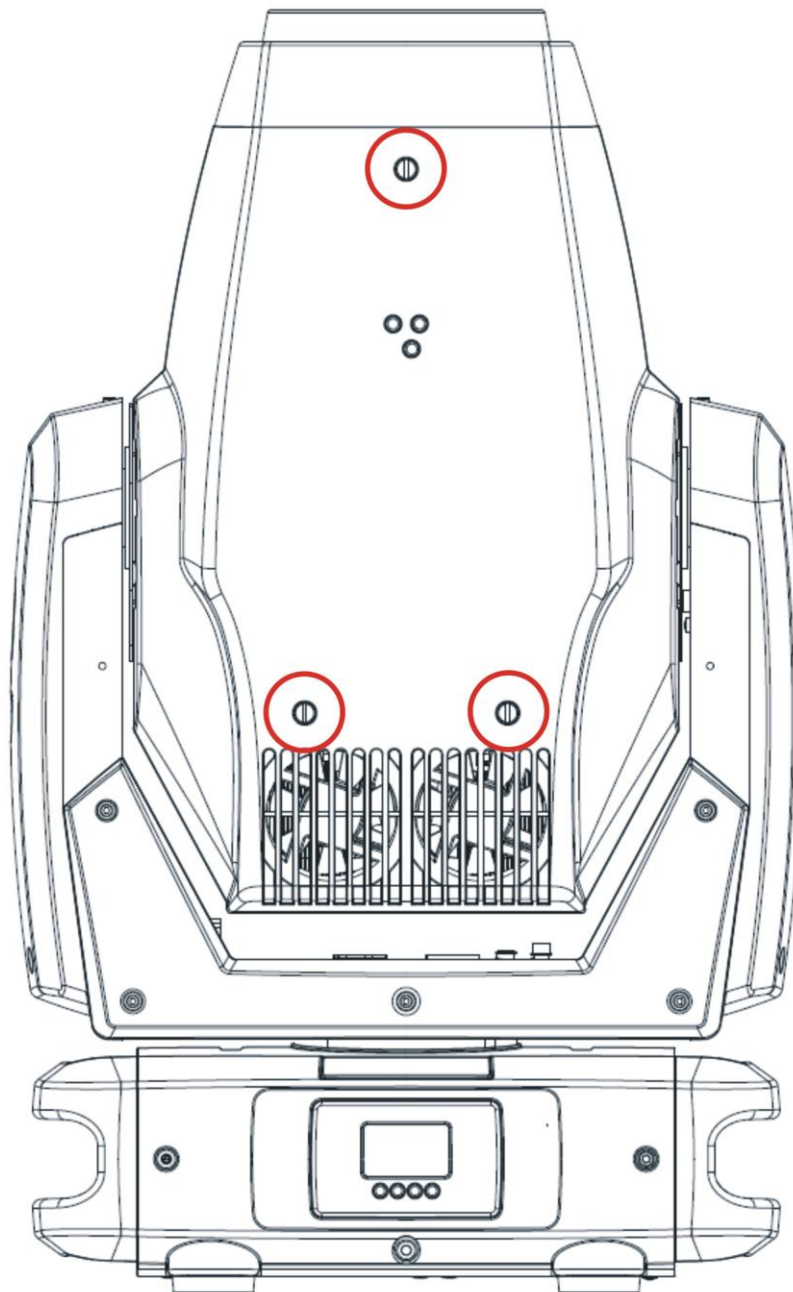
It is possible to inspect the inside of the projector by removing the cover as indicated below.



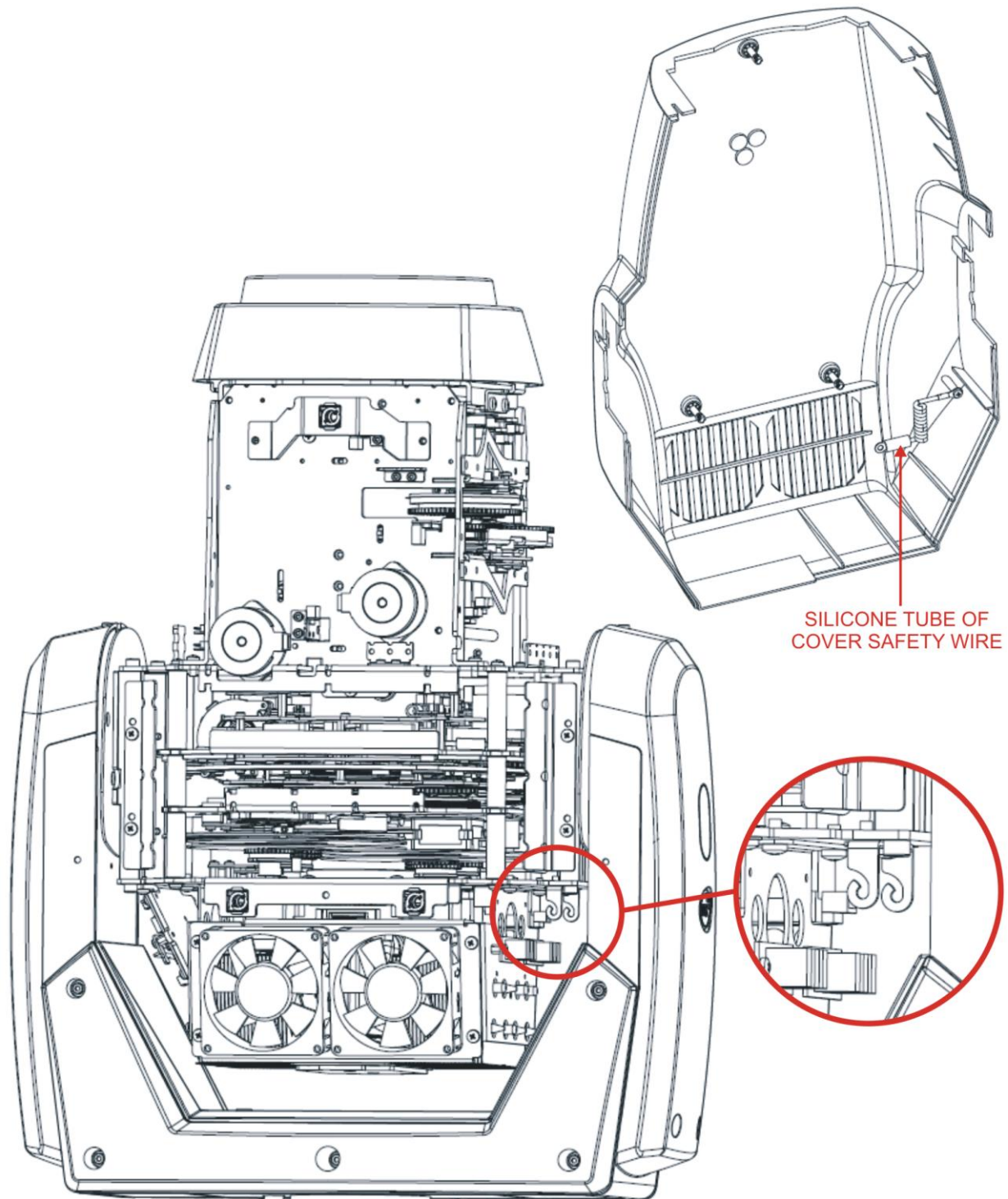
### **ATTENTION**

**REMOVE MAINS POWER PRIOR TO ACCESSING THE PROJECTOR'S INTERNAL COMPONENTS.**

1) Using a flat bladed screwdriver loose the 3 “¼ turn” screws which fix the head covers on both sides.



2) Lift each cover, slide the silicone tube down and unhook the safety wire to access the internal head components.

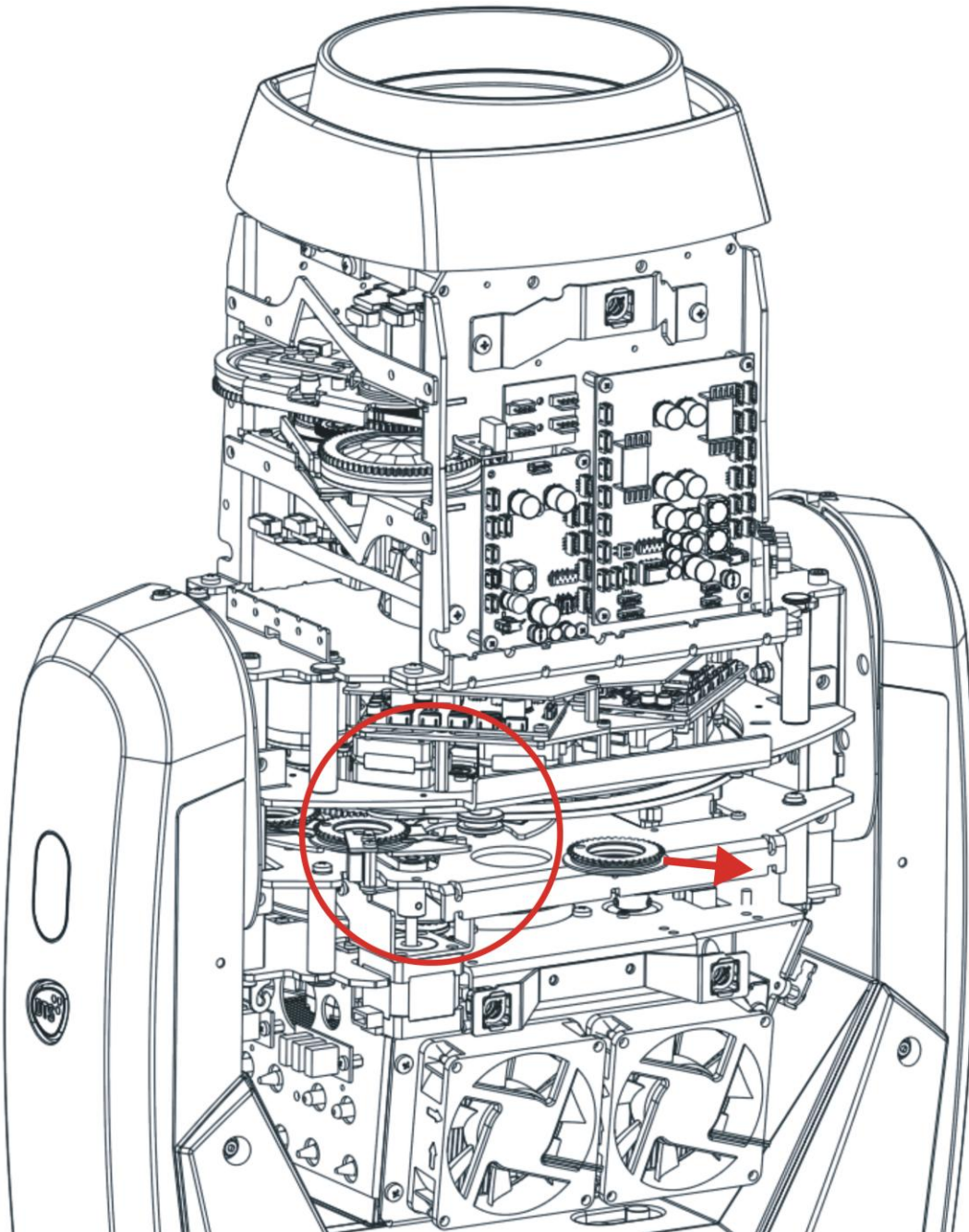


## **17- REMOVING / REPLACING THE ROTATING GOBOS**

SYNERGY 5 PROFILE uses a mechanical system which allows the fixture's gobos to be removed without the use of special tools.

When replacing gobos, ensure that the projector is switched off.

Open the projector housing as described on page 31 and pull out the gobo holder from the rotating gobo wheel as shown in the picture below.



## REPLACEMENT GOBOS

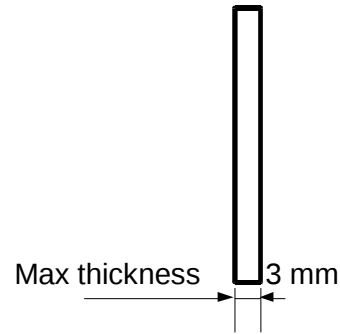
Gobo dimensions are as follows:

### Rotating gobos

$\varnothing$  external (ED) = 27.9 mm + 0 / - 0,1 mm

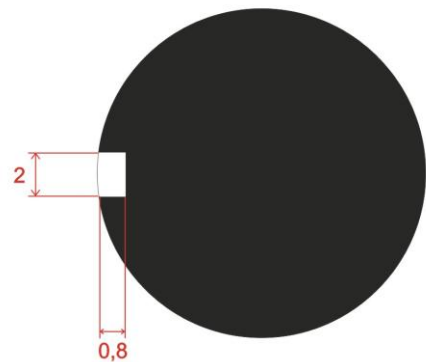
$\varnothing$  of image (ID) = 21.0 mm

thickness = from 0.2 to 3 mm (see catalogue)



$\varnothing$  external (ED) = 27.9 mm  
 $\varnothing$  of image (ID) = 21.0 mm

### REFERENCE FOR GOBOS INDEX (Ablation process as per image)



### Coated side

When an object is held up the coated side of the glass gobo there is no space between the object and its reflection.



**Coated side**

### Uncoated side

When an object is held up the uncoated side of the glass gobo there is a space between the object and its reflection.



**Uncoated side**

**Load with coated surface toward the light source.**

## **18- PERIODIC CLEANING**

### **18.1- Lenses and reflectors**

Even a fine layer of dust can reduce the luminous output substantially.

Regularly clean all lenses and the reflector using a soft cotton cloth, dampened with a specialist lens cleaning solution.

### **18.2- Fans and air passages**

The fans and air passages must be cleaned approximately every 6 weeks.

This periodic cleaning will depend of course, on the conditions in which the projector is operating.

Suitable instruments for performing this type of maintenance are a brush and a common vacuum cleaner or an air compressor.

If necessary, clean the fans and air passages more frequently.

## **19- PERIODIC CONTROLS**

### **Attention**



Disconnect mains power prior to opening the projector housing.

### **Mechanical parts**

Periodically check all mechanical parts, gears, guides, belts, etc. for wear and tear, replacing them if necessary.

Periodically check the lubrication of all components, particularly the parts subject to high temperatures.

If necessary, lubricate with suitable lubricant, available from your DTS distributor.

Check the tension of the belts and adjust it if necessary.

### **Electrical components**



Check all electrical components for correct earthing and proper connection of all connectors, refastening if necessary.

### **Fuse replacement**

Locate the fuse, which protects the lamp and electronics, in the base of SYNERGY 5 PROFILE.

Using a multimeter, test the condition of the fuse, replacing it with one of equivalent type (T 8A 250V) if necessary.

**20- DMX PROTOCOL**

|                                |                                                  |
|--------------------------------|--------------------------------------------------|
| <b>MOTORS FIRMWARE RELEASE</b> | <b>12</b>                                        |
| <b>RDM Device Model ID</b>     | <b>0x0012</b>                                    |
| <b>DMX Personality IDs</b>     | <b>0x01 “44 CHANNELS”<br/>0x02 “53 CHANNELS”</b> |

**44 CHANNELS MODE (DEFAULT)**

- 1 PAN msb
- 2 PAN lsb
- 3 TILT msb
- 4 TILT lsb
- 5 SPEED MOVEMENT
- 6 *reserved*
- 7 DIMMER msb
- 8 DIMMER lsb
- 9 SHUTTER
- 10 COLOUR WHEEL
- 11 COLOUR MODE
- 12 CYAN
- 13 MAGENTA
- 14 YELLOW
- 15 CTO
- 16 GEL FILTERS EMULATION
- 17 GOBO
- 18 GOBO ROTATION/INDEX msb
- 19 GOBO ROTATION/INDEX lsb
- 20 GOBO SHAKE
- 21 BLADES SYSTEM ROTATION
- 22 BLADE 1 INSERTION
- 23 BLADE 1 ROTATION
- 24 BLADE 2 INSERTION
- 25 BLADE 2 ROTATION
- 26 BLADE 3 INSERTION
- 27 BLADE 3 ROTATION
- 28 BLADE 4 INSERTION
- 29 BLADE 4 ROTATION
- 30 BLADE EFFECTS
- 31 DYNAMOVES MACROS
- 32 BLADES EFFECTS SPEED / DYNAMOVE MACROS SPEED
- 33 PRISM MODE
- 34 PRISM 1 POSITION
- 35 PRISM 1 ROTATION/INDEX
- 36 PRISM 2 POSITION
- 37 PRISM 2 ROTATION/INDEX
- 38 SOFTEN FILTER
- 39 FROST
- 40 FOCUS msb
- 41 FOCUS lsb
- 42 ZOOM
- 43 FIXTURE CONTROL
- 44 RESET

|             |   |                           |
|-------------|---|---------------------------|
| DMX CHANNEL | 1 | Parameter: <b>PAN msb</b> |
| DMX CHANNEL | 2 | Parameter: <b>PAN lsb</b> |

|             |   |                            |
|-------------|---|----------------------------|
| DMX CHANNEL | 3 | Parameter: <b>TILT msb</b> |
| DMX CHANNEL | 4 | Parameter: <b>TILT lsb</b> |

|                  |                                                     |                                  |
|------------------|-----------------------------------------------------|----------------------------------|
| DMX CHANNEL      | 5                                                   | Parameter: <b>SPEED MOVEMENT</b> |
| <b>DMX value</b> | <b>Function</b>                                     |                                  |
| 000-009          | Fast movement                                       |                                  |
| 010-025          | Standard movement                                   |                                  |
| 026-127          | Vector mode from fast to slow                       |                                  |
| 128-247          | Variable time reaction to dmx signal (fast to slow) |                                  |
| 248-255          | Silent movement                                     |                                  |

|             |   |                              |
|-------------|---|------------------------------|
| DMX CHANNEL | 7 | Parameter: <b>DIMMER msb</b> |
| DMX CHANNEL | 8 | Parameter: <b>DIMMER lsb</b> |

|                  |                                                        |                           |
|------------------|--------------------------------------------------------|---------------------------|
| DMX CHANNEL      | 9                                                      | Parameter: <b>SHUTTER</b> |
| <b>DMX value</b> | <b>Function</b>                                        |                           |
| 000-009          | Black Out                                              |                           |
| 010-019          | Open                                                   |                           |
| 020-029          | Black Out                                              |                           |
| 030-119          | Strobe (from 3,27s to 30ms)                            |                           |
| 120-149          | Pulse up (from 42,6s to 120ms)                         |                           |
| 150-179          | Pulse down (from 42,6s to 120ms)                       |                           |
| 180-189          | Random strobe                                          |                           |
| 190-199          | reserved                                               |                           |
| 200-209          | Gobo/Colour wheel in Black Out                         |                           |
| 210-219          | Pan/Tilt in Black Out                                  |                           |
| 220-222          | Blades in Black Out                                    |                           |
| 223-224          | Frost/Prism in Black Out                               |                           |
| 225-226          | Zoom in Black Out                                      |                           |
| 227-229          | Gobo/Colour wheel/Blades/Frost/Prism/Zoom in Black Out |                           |
| 230-255          | Open                                                   |                           |

|                                                                             |                                    |                         |
|-----------------------------------------------------------------------------|------------------------------------|-------------------------|
| DMX CHANNEL                                                                 | 10                                 | Parameter: COLOUR WHEEL |
| FULL COLOUR (if channel 11 "COLOUR MODE" = DMX range value 0-63)            |                                    |                         |
| DMX value                                                                   | Function                           |                         |
| 000-009                                                                     | Open                               |                         |
| 010-049                                                                     | Colour 1                           |                         |
| 050-089                                                                     | Colour 2                           |                         |
| 090-129                                                                     | Colour 3                           |                         |
| 130-169                                                                     | Colour 4                           |                         |
| 170-209                                                                     | Colour 5                           |                         |
| 210-255                                                                     | Colour 6                           |                         |
| HALF COLOUR (if channel 11 "COLOUR MODE" = DMX range value 64-127)          |                                    |                         |
| DMX value                                                                   | Function                           |                         |
| 000-009                                                                     | Open                               |                         |
| 010-044                                                                     | Colour 0-1                         |                         |
| 045-079                                                                     | Colour 1-2                         |                         |
| 080-114                                                                     | Colour 2-3                         |                         |
| 115-149                                                                     | Colour 3-4                         |                         |
| 150-184                                                                     | Colour 4-5                         |                         |
| 185-219                                                                     | Colour 5-6                         |                         |
| 220-255                                                                     | Colour 6-0                         |                         |
| PROPORTIONAL COLOUR (if channel 11 "COLOUR MODE" = DMX range value 128-191) |                                    |                         |
| DMX value                                                                   | Function                           |                         |
| 000-009                                                                     | Open                               |                         |
| 010-255                                                                     | Proportional colour                |                         |
| RAINBOW (if channel 11 "COLOUR MODE" = DMX range value 192-255)             |                                    |                         |
| DMX value                                                                   | Function                           |                         |
| 000-009                                                                     | Open                               |                         |
| 010-127                                                                     | CW rotation speed from max to min  |                         |
| 128-137                                                                     | Stop                               |                         |
| 138-255                                                                     | CCW rotation speed from min to max |                         |

|             |                     |                        |
|-------------|---------------------|------------------------|
| DMX CHANNEL | 11                  | Parameter: COLOUR MODE |
| DMX value   | Function            |                        |
| 000-063     | Full colour         |                        |
| 064-127     | Half colour         |                        |
| 128-191     | Proportional colour |                        |
| 192-255     | Rainbow             |                        |

|             |                     |                 |
|-------------|---------------------|-----------------|
| DMX CHANNEL | 12                  | Parameter: CYAN |
| DMX value   | Function            |                 |
| 000-255     | Proportional colour |                 |

|             |                     |                    |
|-------------|---------------------|--------------------|
| DMX CHANNEL | 13                  | Parameter: MAGENTA |
| DMX value   | Function            |                    |
| 000-255     | Proportional colour |                    |

|             |                     |                   |
|-------------|---------------------|-------------------|
| DMX CHANNEL | 14                  | Parameter: YELLOW |
| DMX value   | Function            |                   |
| 000-255     | Proportional colour |                   |

|             |                            |                |
|-------------|----------------------------|----------------|
| DMX CHANNEL | 15                         | Parameter: CTO |
| DMX value   | Function                   |                |
| 000-255     | Linear CTO from min to max |                |

|                  |                    |                                         |
|------------------|--------------------|-----------------------------------------|
| DMX CHANNEL      | 16                 | Parameter: <b>GEL FILTERS EMULATION</b> |
| <b>DMX value</b> | <b>Function</b>    |                                         |
| 000-009          | No function        |                                         |
| 010-020          | 19 FIRE            |                                         |
| 021-025          | 20 MEDIUM AMBER    |                                         |
| 026-030          | 25 SUNSET RED      |                                         |
| 031-035          | 68 SKY BLUE        |                                         |
| 036-040          | 101 YELLOW         |                                         |
| 041-045          | 104 DEEP AMBER     |                                         |
| 046-050          | 105 ORANGE         |                                         |
| 051-055          | 106 PRIMARY RED    |                                         |
| 056-060          | 111 DARK PINK      |                                         |
| 061-065          | 113 MAGENTA        |                                         |
| 066-070          | 117 STEEL BLUE     |                                         |
| 071-075          | 118 LIGHT BLUE     |                                         |
| 076-080          | 122 FERN GREEN     |                                         |
| 081-085          | 126 MAUVE          |                                         |
| 086-090          | 132 MEDIUM BLUE    |                                         |
| 091-095          | 136 PALE LAVENDER  |                                         |
| 096-100          | 137 LAVENDER       |                                         |
| 101-105          | 138 PALE GREEN     |                                         |
| 106-110          | 139 PRIMARY GREEN  |                                         |
| 111-115          | 147 APRICOT        |                                         |
| 116-120          | 151 GOLD TINT      |                                         |
| 121-125          | 154 PALE ROSE      |                                         |
| 126-130          | 156 CHOCOLATE      |                                         |
| 131-135          | 181 CONGO BLUE     |                                         |
| 136-140          | 200 DOUBLE CT BLUE |                                         |
| 141-145          | 201 FULL CT BLUE   |                                         |
| 146-150          | 204 FULL CT ORANGE |                                         |
| 151-155          | 341 PLUM           |                                         |
| 156-255          | reserved           |                                         |

|                  |                      |                        |
|------------------|----------------------|------------------------|
| DMX CHANNEL      | 17                   | Parameter: <b>GOBO</b> |
| <b>DMX value</b> | <b>Function</b>      |                        |
| 000-009          | Open                 |                        |
| 010-042          | Gobo 1               |                        |
| 043-075          | Gobo 2               |                        |
| 076-108          | Gobo 3               |                        |
| 109-141          | Gobo 4               |                        |
| 142-174          | Gobo 5               |                        |
| 175-207          | Gobo 6               |                        |
| 208-213          | Speed rotation 1 min |                        |
| 214-219          | Speed rotation 2     |                        |
| 220-225          | Speed rotation 3     |                        |
| 226-231          | Speed rotation 4     |                        |
| 232-237          | Speed rotation 5     |                        |
| 238-243          | Speed rotation 6     |                        |
| 244-249          | Speed rotation 7     |                        |
| 250-255          | Speed rotation 8 max |                        |

|                                    |                                |                                           |
|------------------------------------|--------------------------------|-------------------------------------------|
| DMX CHANNEL                        | 18                             | Parameter: <b>GOBO ROTATION/INDEX msb</b> |
| DMX CHANNEL                        | 19                             | Parameter: <b>GOBO ROTATION/INDEX lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>                |                                           |
| MSB.LSB-<br>MSB.LSB<br>INT16-INT16 |                                |                                           |
| 000.000-<br>127.255<br>00000-32767 | Proportional index 0°-360°     |                                           |
| 128.000-<br>180.255<br>32768-46335 | CCW gobo rotation (max to min) |                                           |
| 181.000-<br>202.255<br>46336-51967 | Stop                           |                                           |
| 203.000-<br>255.255<br>51968-65535 | CW gobo rotation (min to max)  |                                           |

|                  |                         |                              |
|------------------|-------------------------|------------------------------|
| DMX CHANNEL      | 20                      | Parameter: <b>GOBO SHAKE</b> |
| <b>DMX value</b> | <b>Function</b>         |                              |
| 000-009          | Stop                    |                              |
| 010-019          | Gobo shake R-L speed 1  |                              |
| 020-029          | Gobo shake R-L speed 2  |                              |
| 030-039          | Gobo shake R-L speed 3  |                              |
| 040-049          | Gobo shake R-L speed 4  |                              |
| 050-059          | Gobo shake R-L speed 5  |                              |
| 060-069          | Gobo shake R-L speed 6  |                              |
| 070-079          | Gobo shake R-L speed 7  |                              |
| 080-089          | Gobo shake R-L speed 8  |                              |
| 090-099          | Gobo shake R-L speed 9  |                              |
| 100-109          | Gobo shake R-L speed 10 |                              |
| 110-126          | Gobo shake R-L speed 11 |                              |
| 127-138          | Stop                    |                              |
| 139-148          | Gobo shake L-R speed 1  |                              |
| 149-158          | Gobo shake L-R speed 2  |                              |
| 159-168          | Gobo shake L-R speed 3  |                              |
| 169-178          | Gobo shake L-R speed 4  |                              |
| 179-188          | Gobo shake L-R speed 5  |                              |
| 189-198          | Gobo shake L-R speed 6  |                              |
| 199-208          | Gobo shake L-R speed 7  |                              |
| 209-218          | Gobo shake L-R speed 8  |                              |
| 219-228          | Gobo shake L-R speed 9  |                              |
| 229-238          | Gobo shake L-R speed 10 |                              |
| 239-255          | Gobo shake L-R speed 11 |                              |

|                  |                          |                                          |
|------------------|--------------------------|------------------------------------------|
| DMX CHANNEL      | 21                       | Parameter: <b>BLADES SYSTEM ROTATION</b> |
| <b>DMX value</b> | <b>Function</b>          |                                          |
| 000-126          | Position from -45° to 0° |                                          |
| 127-128          | 0° position              |                                          |
| 129-255          | Position from 0° to 45°  |                                          |

|                  |                        |                                     |
|------------------|------------------------|-------------------------------------|
| DMX CHANNEL      | 22                     | Parameter: <b>BLADE 1 INSERTION</b> |
| <b>DMX value</b> | <b>Function</b>        |                                     |
| 000-255          | Open to fully inserted |                                     |

|                  |                          |                                    |
|------------------|--------------------------|------------------------------------|
| DMX CHANNEL      | 23                       | Parameter: <b>BLADE 1 ROTATION</b> |
| <b>DMX value</b> | <b>Function</b>          |                                    |
| 000-127          | Position from -30° to 0° |                                    |
| 128              | 0° position              |                                    |
| 129-255          | Position from 0° to 30°  |                                    |

|                  |                        |                                     |
|------------------|------------------------|-------------------------------------|
| DMX CHANNEL      | 24                     | Parameter: <b>BLADE 2 INSERTION</b> |
| <b>DMX value</b> | <b>Function</b>        |                                     |
| 000-255          | Open to fully inserted |                                     |

|                  |                          |                                    |
|------------------|--------------------------|------------------------------------|
| DMX CHANNEL      | 25                       | Parameter: <b>BLADE 2 ROTATION</b> |
| <b>DMX value</b> | <b>Function</b>          |                                    |
| 000-127          | Position from -30° to 0° |                                    |
| 128              | 0° position              |                                    |
| 129-255          | Position from 0° to 30°  |                                    |

|                  |                        |                                     |
|------------------|------------------------|-------------------------------------|
| DMX CHANNEL      | 26                     | Parameter: <b>BLADE 3 INSERTION</b> |
| <b>DMX value</b> | <b>Function</b>        |                                     |
| 000-255          | Open to fully inserted |                                     |

|                  |                          |                                    |
|------------------|--------------------------|------------------------------------|
| DMX CHANNEL      | 27                       | Parameter: <b>BLADE 3 ROTATION</b> |
| <b>DMX value</b> | <b>Function</b>          |                                    |
| 000-127          | Position from -30° to 0° |                                    |
| 128              | 0° position              |                                    |
| 129-255          | Position from 0° to 30°  |                                    |

|                  |                        |                                     |
|------------------|------------------------|-------------------------------------|
| DMX CHANNEL      | 28                     | Parameter: <b>BLADE 4 INSERTION</b> |
| <b>DMX value</b> | <b>Function</b>        |                                     |
| 000-255          | Open to fully inserted |                                     |

|                  |                          |                                    |
|------------------|--------------------------|------------------------------------|
| DMX CHANNEL      | 29                       | Parameter: <b>BLADE 4 ROTATION</b> |
| <b>DMX value</b> | <b>Function</b>          |                                    |
| 000-127          | Position from -30° to 0° |                                    |
| 128              | 0° position              |                                    |
| 129-255          | Position from 0° to 30°  |                                    |

| DMX CHANNEL | 30          | Parameter: <b>BLADES EFFECTS</b> |          |
|-------------|-------------|----------------------------------|----------|
| DMX value   | Function    | DMX value                        | Function |
| 000-009     | No function | 110-111                          | Macro 51 |
| 010-011     | Macro 1     | 112-113                          | Macro 52 |
| 012-013     | Macro 2     | 114-115                          | Macro 53 |
| 014-015     | Macro 3     | 116-117                          | Macro 54 |
| 016-017     | Macro 4     | 118-119                          | Macro 55 |
| 018-019     | Macro 5     | 120-121                          | Macro 56 |
| 020-021     | Macro 6     | 122-123                          | Macro 57 |
| 022-023     | Macro 7     | 124-125                          | Macro 58 |
| 024-025     | Macro 8     | 126-127                          | Macro 59 |
| 026-027     | Macro 9     | 128-129                          | Macro 60 |
| 028-029     | Macro 10    | 130-131                          | Macro 61 |
| 030-031     | Macro 11    | 132-133                          | Macro 62 |
| 032-033     | Macro 12    | 134-135                          | Macro 63 |
| 034-035     | Macro 13    | 136-137                          | Macro 64 |
| 036-037     | Macro 14    | 138-139                          | Macro 65 |
| 038-039     | Macro 15    | 140-141                          | Macro 66 |
| 040-041     | Macro 16    | 142-143                          | Macro 67 |
| 042-043     | Macro 17    | 144-145                          | Macro 68 |
| 044-045     | Macro 18    | 146-147                          | Macro 69 |
| 046-047     | Macro 19    | 148-149                          | Macro 70 |
| 048-049     | Macro 20    | 150-151                          | Macro 71 |
| 050-051     | Macro 21    | 152-153                          | Macro 72 |
| 052-053     | Macro 22    | 154-155                          | Macro 73 |
| 054-055     | Macro 23    | 156-157                          | Macro 74 |
| 056-057     | Macro 24    | 158-159                          | Macro 75 |
| 058-059     | Macro 25    | 160-161                          | Macro 76 |
| 060-061     | Macro 26    | 162-163                          | Macro 77 |
| 062-063     | Macro 27    | 164-165                          | Macro 78 |
| 064-065     | Macro 28    | 166-167                          | Macro 79 |
| 066-067     | Macro 29    | 168-169                          | Macro 80 |
| 068-069     | Macro 30    | 170-171                          | Macro 81 |
| 070-071     | Macro 31    | 172-173                          | Macro 82 |
| 072-073     | Macro 32    | 174-175                          | Macro 83 |
| 074-075     | Macro 33    | 176-177                          | Macro 84 |
| 076-077     | Macro 34    | 178-179                          | Macro 85 |
| 078-079     | Macro 35    | 180-181                          | Macro 86 |
| 080-081     | Macro 36    | 182-183                          | Macro 87 |
| 082-083     | Macro 37    | 184-185                          | Macro 88 |
| 084-085     | Macro 38    | 186-187                          | Macro 89 |
| 086-087     | Macro 39    | 188-255                          | reserved |
| 088-089     | Macro 40    |                                  |          |
| 090-091     | Macro 41    |                                  |          |
| 092-093     | Macro 42    |                                  |          |
| 094-095     | Macro 43    |                                  |          |
| 096-097     | Macro 44    |                                  |          |
| 098-099     | Macro 45    |                                  |          |
| 100-101     | Macro 46    |                                  |          |
| 102-103     | Macro 47    |                                  |          |
| 104-105     | Macro 48    |                                  |          |
| 106-107     | Macro 49    |                                  |          |
| 108-109     | Macro 50    |                                  |          |

| DMX CHANNEL | 31          | Parameter: DYNAMOVES MACROS |          |
|-------------|-------------|-----------------------------|----------|
| DMX value   | Function    | DMX value                   | Function |
| 000-009     | No function | 110-111                     | Macro 51 |
| 010-011     | Macro 1     | 112-113                     | Macro 52 |
| 012-013     | Macro 2     | 114-115                     | Macro 53 |
| 014-015     | Macro 3     | 116-117                     | Macro 54 |
| 016-017     | Macro 4     | 118-119                     | Macro 55 |
| 018-019     | Macro 5     | 120-121                     | Macro 56 |
| 020-021     | Macro 6     | 122-123                     | Macro 57 |
| 022-023     | Macro 7     | 124-125                     | Macro 58 |
| 024-025     | Macro 8     | 126-127                     | Macro 59 |
| 026-027     | Macro 9     | 128-129                     | Macro 60 |
| 028-029     | Macro 10    | 130-131                     | Macro 61 |
| 030-031     | Macro 11    | 132-133                     | Macro 62 |
| 032-033     | Macro 12    | 134-135                     | Macro 63 |
| 034-035     | Macro 13    | 136-255                     | reserved |
| 036-037     | Macro 14    |                             |          |
| 038-039     | Macro 15    |                             |          |
| 040-041     | Macro 16    |                             |          |
| 042-043     | Macro 17    |                             |          |
| 044-045     | Macro 18    |                             |          |
| 046-047     | Macro 19    |                             |          |
| 048-049     | Macro 20    |                             |          |
| 050-051     | Macro 21    |                             |          |
| 052-053     | Macro 22    |                             |          |
| 054-055     | Macro 23    |                             |          |
| 056-057     | Macro 24    |                             |          |
| 058-059     | Macro 25    |                             |          |
| 060-061     | Macro 26    |                             |          |
| 062-063     | Macro 27    |                             |          |
| 064-065     | Macro 28    |                             |          |
| 066-067     | Macro 29    |                             |          |
| 068-069     | Macro 30    |                             |          |
| 070-071     | Macro 31    |                             |          |
| 072-073     | Macro 32    |                             |          |
| 074-075     | Macro 33    |                             |          |
| 076-077     | Macro 34    |                             |          |
| 078-079     | Macro 35    |                             |          |
| 080-081     | Macro 36    |                             |          |
| 082-083     | Macro 37    |                             |          |
| 084-085     | Macro 38    |                             |          |
| 086-087     | Macro 39    |                             |          |
| 088-089     | Macro 40    |                             |          |
| 090-091     | Macro 41    |                             |          |
| 092-093     | Macro 42    |                             |          |
| 094-095     | Macro 43    |                             |          |
| 096-097     | Macro 44    |                             |          |
| 098-099     | Macro 45    |                             |          |
| 100-101     | Macro 46    |                             |          |
| 102-103     | Macro 47    |                             |          |
| 104-105     | Macro 48    |                             |          |
| 106-107     | Macro 49    |                             |          |
| 108-109     | Macro 50    |                             |          |

|             |    |                                                                    |
|-------------|----|--------------------------------------------------------------------|
| DMX CHANNEL | 32 | Parameter: <b>BLADES EFFECTS SPEED / DYNAMOVE<br/>MACROS SPEED</b> |
|-------------|----|--------------------------------------------------------------------|

| DMX value | Function               |
|-----------|------------------------|
| 000-010   | 1X                     |
| 011-050   | 1.1X to 5X (step 0.1X) |
| 051-090   | 4.9X to 1X (step 0.1X) |
| 091-159   | 1X                     |
| 160-169   | 0.9X                   |
| 170-179   | 0.8X                   |
| 180-189   | 0.7X                   |
| 190-199   | 0.6X                   |
| 200-209   | 0.5X                   |
| 210-219   | 0.4X                   |
| 220-229   | 0.3X                   |
| 230-239   | 0.2X                   |
| 240-255   | 0.1X                   |

|             |    |                              |
|-------------|----|------------------------------|
| DMX CHANNEL | 33 | Parameter: <b>PRISM MODE</b> |
|-------------|----|------------------------------|

| DMX value | Function                                         |
|-----------|--------------------------------------------------|
| 000-009   | No function                                      |
| 010-049   | Prism 1 inserted after zoom lens                 |
| 050-089   | Prism 2 inserted after zoom lens                 |
| 090-129   | Prism 1+2 inserted after zoom lens               |
| 130-169   | Prism 1 inserted between focus and zoom lenses   |
| 170-209   | Prism 2 inserted between focus and zoom lenses   |
| 210-255   | Prism 1+2 inserted between focus and zoom lenses |

|             |    |                                    |
|-------------|----|------------------------------------|
| DMX CHANNEL | 34 | Parameter: <b>PRISM 1 POSITION</b> |
|-------------|----|------------------------------------|

| DMX value | Function                |
|-----------|-------------------------|
| 000-009   | Centre                  |
| 010-127   | Outward left to centre  |
| 128-137   | Centre                  |
| 138-255   | Outward right to centre |

|             |    |                                          |
|-------------|----|------------------------------------------|
| DMX CHANNEL | 35 | Parameter: <b>PRISM 1 ROTATION/INDEX</b> |
|-------------|----|------------------------------------------|

| DMX value | Function                       |
|-----------|--------------------------------|
| 000-127   | Proportional index 0°-360°     |
| 128-180   | CW rotation from fast to slow  |
| 181-202   | Stop                           |
| 203-255   | CCW rotation from slow to fast |

|             |    |                                    |
|-------------|----|------------------------------------|
| DMX CHANNEL | 36 | Parameter: <b>PRISM 2 POSITION</b> |
|-------------|----|------------------------------------|

| DMX value | Function                |
|-----------|-------------------------|
| 000-009   | Centre                  |
| 010-127   | Outward left to centre  |
| 128-137   | Centre                  |
| 138-255   | Outward right to centre |

|             |    |                                          |
|-------------|----|------------------------------------------|
| DMX CHANNEL | 37 | Parameter: <b>PRISM 2 ROTATION/INDEX</b> |
|-------------|----|------------------------------------------|

| DMX value | Function                       |
|-----------|--------------------------------|
| 000-127   | Proportional index 0°-360°     |
| 128-180   | CW rotation from fast to slow  |
| 181-202   | Stop                           |
| 203-255   | CCW rotation from slow to fast |

|             |    |                                 |
|-------------|----|---------------------------------|
| DMX CHANNEL | 38 | Parameter: <b>SOFTEN FILTER</b> |
|-------------|----|---------------------------------|

| DMX value | Function      |
|-----------|---------------|
| 000-009   | No function   |
| 010-255   | Soften filter |

|                  |                                     |                         |
|------------------|-------------------------------------|-------------------------|
| DMX CHANNEL      | 39                                  | Parameter: <b>FROST</b> |
| <b>DMX value</b> | <b>Function</b>                     |                         |
| 000-009          | No function                         |                         |
| 010-255          | Frost Filter linear from min to max |                         |

|                  |                 |                             |
|------------------|-----------------|-----------------------------|
| DMX CHANNEL      | 40              | Parameter: <b>FOCUS msb</b> |
| DMX CHANNEL      | 41              | Parameter: <b>FOCUS lsb</b> |
| <b>DMX value</b> | <b>Function</b> |                             |
| 000-255          | Linear focus    |                             |

|                  |                 |                        |
|------------------|-----------------|------------------------|
| DMX CHANNEL      | 42              | Parameter: <b>ZOOM</b> |
| <b>DMX value</b> | <b>Function</b> |                        |
| 000-255          | Linear zoom     |                        |

|                  |                                           |                                   |
|------------------|-------------------------------------------|-----------------------------------|
| DMX CHANNEL      | 43                                        | Parameter: <b>FIXTURE CONTROL</b> |
| <b>DMX value</b> | <b>Function</b>                           |                                   |
| 000-009          | 0 - No effect                             |                                   |
| 010-024          | 1 - SMOOTH DIMMING OFF                    |                                   |
| 025-026          | 2 - SMOOTH DIMMING 1                      |                                   |
| 027-028          | 3 - SMOOTH DIMMING 2                      |                                   |
| 029-030          | 4 - SMOOTH DIMMING 3                      |                                   |
| 031-032          | 5 - SMOOTH DIMMING 4 (DEFAULT)            |                                   |
| 033-034          | 6 - SMOOTH DIMMING 5                      |                                   |
| 035-036          | 7 - SMOOTH DIMMING 6                      |                                   |
| 037-038          | 8 - SMOOTH DIMMING 7                      |                                   |
| 039-040          | 9 - SMOOTH DIMMING 8                      |                                   |
| 041-042          | 10 - SMOOTH DIMMING 9                     |                                   |
| 043-044          | 11 - SMOOTH DIMMING 10                    |                                   |
| 045-046          | 12 - SMOOTH DIMMING 11                    |                                   |
| 047-048          | 13 - SMOOTH DIMMING 12                    |                                   |
| 049-050          | 14 - SMOOTH DIMMING 13                    |                                   |
| 051-052          | 15 - SMOOTH DIMMING 14                    |                                   |
| 053-054          | 16 - SMOOTH DIMMING 15                    |                                   |
| 055-056          | 17 - SMOOTH DIMMING 16                    |                                   |
| 057-058          | 18 - SMOOTH DIMMING 17                    |                                   |
| 059-060          | 19 - SMOOTH DIMMING 18                    |                                   |
| 061-062          | 20 - SMOOTH DIMMING 19                    |                                   |
| 063-064          | 21 - SMOOTH DIMMING 20                    |                                   |
| 065-074          | 22 - GAMMA CORRECTION QUADRATIC (DEFAULT) |                                   |
| 075-084          | 23 - GAMMA CORRECTION LINEAR              |                                   |
| 085-104          | 24 - OUTPUT FREQUENCY 610 Hz (DEFAULT)    |                                   |
| 105              | 25 - OUTPUT FREQUENCY 800 Hz              |                                   |
| 106              | 26 - OUTPUT FREQUENCY 1000 Hz             |                                   |
| 107              | 27 - OUTPUT FREQUENCY 1500 Hz             |                                   |
| 108              | 28 - OUTPUT FREQUENCY 2000 Hz             |                                   |
| 109              | 29 - OUTPUT FREQUENCY 2500 Hz             |                                   |
| 110              | 30 - OUTPUT FREQUENCY 3000 Hz             |                                   |
| 111              | 31 - OUTPUT FREQUENCY 3500 Hz             |                                   |
| 112              | 32 - OUTPUT FREQUENCY 4000 Hz             |                                   |
| 113              | 33 - OUTPUT FREQUENCY 4500 Hz             |                                   |
| 114              | 34 - OUTPUT FREQUENCY 5000 Hz             |                                   |
| 115              | 35 - OUTPUT FREQUENCY 5500 Hz             |                                   |
| 116              | 36 - OUTPUT FREQUENCY 6000 Hz             |                                   |
| 117              | 37 - OUTPUT FREQUENCY 6500 Hz             |                                   |
| 118              | 38 - OUTPUT FREQUENCY 7000 Hz             |                                   |
| 119              | 39 - OUTPUT FREQUENCY 7500 Hz             |                                   |
| 120              | 40 - OUTPUT FREQUENCY 8000 Hz             |                                   |

|                  |                                                                                                                                                                                                                                                                                                          |                                   |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| DMX CHANNEL      | 43                                                                                                                                                                                                                                                                                                       | Parameter: <b>FIXTURE CONTROL</b> |
| <b>DMX value</b> | <b>Function</b>                                                                                                                                                                                                                                                                                          |                                   |
| 121              | 41 - OUTPUT FREQUENCY 8500 Hz                                                                                                                                                                                                                                                                            |                                   |
| 122              | 42 - OUTPUT FREQUENCY 9000 Hz                                                                                                                                                                                                                                                                            |                                   |
| 123              | 43 - OUTPUT FREQUENCY 9500 Hz                                                                                                                                                                                                                                                                            |                                   |
| 124              | 44 - OUTPUT FREQUENCY 10000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 125              | 45 - OUTPUT FREQUENCY 11000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 126              | 46 - OUTPUT FREQUENCY 12000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 127              | 47 - OUTPUT FREQUENCY 13000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 128              | 48 - OUTPUT FREQUENCY 14000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 129              | 49 - OUTPUT FREQUENCY 15000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 130              | 50 - OUTPUT FREQUENCY 16000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 131              | 51 - OUTPUT FREQUENCY 17000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 132              | 52 - OUTPUT FREQUENCY 18000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 133              | 53 - OUTPUT FREQUENCY 19000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 134              | 54 - OUTPUT FREQUENCY 20000 Hz                                                                                                                                                                                                                                                                           |                                   |
| 135-136          | 55 - CMY / CTO SPEED 1 (Speed value must not be set while CMY filters are moving during programming)                                                                                                                                                                                                     |                                   |
| 137-138          | 56 - CMY / CTO SPEED 2 (Speed value must not be set while CMY filters are moving during programming)                                                                                                                                                                                                     |                                   |
| 139-140          | 57 - CMY / CTO SPEED 3 (Speed value must not be set while CMY filters are moving during programming)                                                                                                                                                                                                     |                                   |
| 141-142          | 58 - CMY / CTO SPEED 4 (DEFAULT) (Speed value must not be set while CMY filters are moving during programming)                                                                                                                                                                                           |                                   |
| 143-144          | 59 - BLADES SPEED 1 (Speed value must not be set while blades are moving during programming)                                                                                                                                                                                                             |                                   |
| 145-146          | 60 - BLADES SPEED 2 (Speed value must not be set while blades are moving during programming)                                                                                                                                                                                                             |                                   |
| 147-148          | 61 - BLADES SPEED 3 (Speed value must not be set while blades are moving during programming)                                                                                                                                                                                                             |                                   |
| 149-150          | 62 - BLADES SPEED 4 (DEFAULT) (Speed value must not be set while blades are moving during programming)                                                                                                                                                                                                   |                                   |
| 151-152          | 63 - FOCUS EXCURTION EXTENDED                                                                                                                                                                                                                                                                            |                                   |
| 153-154          | 64 - FOCUS EXCURTION STANDARD (DEFAULT)                                                                                                                                                                                                                                                                  |                                   |
| 155-164          | 65 - DISPLAY STANDBY DISABLE (DEFAULT)                                                                                                                                                                                                                                                                   |                                   |
| 165-174          | 66 - DISPLAY STANDBY ENABLE                                                                                                                                                                                                                                                                              |                                   |
| 175-176          | 67 - NO DMX ACTION - KEEP LAST DMX (DEFAULT)                                                                                                                                                                                                                                                             |                                   |
| 177-178          | 68 - NO DMX ACTION - BLACK OUT                                                                                                                                                                                                                                                                           |                                   |
| 179-180          | 69 - RESERVED                                                                                                                                                                                                                                                                                            |                                   |
| 181-182          | 70 - NO DMX ACTION - DEMO PROGRAM (STEPS 01..48)                                                                                                                                                                                                                                                         |                                   |
| 183-184          | 71 - NO DMX ACTION - SINGLE CUE                                                                                                                                                                                                                                                                          |                                   |
| 185-194          | 72 - PAN NORMAL (DEFAULT)                                                                                                                                                                                                                                                                                |                                   |
| 195-204          | 73 - PAN REVERSE                                                                                                                                                                                                                                                                                         |                                   |
| 205-214          | 74 - TILT NORMAL (DEFAULT)                                                                                                                                                                                                                                                                               |                                   |
| 215-224          | 75 - TILT REVERSE                                                                                                                                                                                                                                                                                        |                                   |
| 225-227          | 76 - AUTOFOCUS ON (To have the best resolution it is suggested the first time you focus to set Zoom at DMX value 100(range0-255)or 39%)                                                                                                                                                                  |                                   |
| 228-230          | 77 - RESERVED                                                                                                                                                                                                                                                                                            |                                   |
| 231-234          | 78 - AUTOFOCUS OFF (DEFAULT)                                                                                                                                                                                                                                                                             |                                   |
| 235-237          | 79 - FAN MODE STANDARD                                                                                                                                                                                                                                                                                   |                                   |
| 238-240          | 80 - FAN MODE AUTO                                                                                                                                                                                                                                                                                       |                                   |
| 241-244          | 81 - FAN MODE SILENT (DEFAULT)                                                                                                                                                                                                                                                                           |                                   |
| 245-246          | 82 - ZOOM SPEED 1                                                                                                                                                                                                                                                                                        |                                   |
| 247-248          | 83 - ZOOM SPEED 2                                                                                                                                                                                                                                                                                        |                                   |
| 249-250          | 84 - ZOOM SPEED 3                                                                                                                                                                                                                                                                                        |                                   |
| 251-252          | 85 - ZOOM SPEED 4 (DEFAULT)                                                                                                                                                                                                                                                                              |                                   |
| 253-255          | 86 - SET FUNCTION TO DEFAULT:<br>-SMOOTH DIMMING = 4<br>-GAMMA = QUADRATIC<br>-FREQUENCY = 610 Hz<br>-CMY/CTO SPEED = 4<br>-BLADES SPEED = 4<br>-DISPLAY STANDBY = DISABLE<br>-NO DMX ACTION = KEEP LAST DMX<br>-FAN = SILENT MODE<br>-ZOOM SPEED = 4<br>-AUTOFOCUS = OFF<br>-FOCUS EXCURTION = STANDARD |                                   |

|                  |                                           |                         |
|------------------|-------------------------------------------|-------------------------|
| DMX CHANNEL      | 44                                        | Parameter: <b>RESET</b> |
| <b>DMX value</b> | <b>Function</b>                           |                         |
| 000-009          | No effect                                 |                         |
| 010-075          | PAN TILT reset                            |                         |
| 076-095          | HEAD MOTORS reset                         |                         |
| 096-115          | Gobo wheel reset                          |                         |
| 116-135          | Colour wheel reset                        |                         |
| 136-155          | CMY/CTO reset                             |                         |
| 156-175          | Blades reset                              |                         |
| 176-195          | Prism reset                               |                         |
| 196-215          | Frost - Smooth reset                      |                         |
| 216-239          | Focus/Zoom reset                          |                         |
| 240-255          | Total unit reset (PAN TILT + HEAD MOTORS) |                         |

**53 CHANNELS MODE**

|           |                                                     |
|-----------|-----------------------------------------------------|
| <b>1</b>  | <b>PAN msb</b>                                      |
| <b>2</b>  | <b>PAN lsb</b>                                      |
| <b>3</b>  | <b>TILT msb</b>                                     |
| <b>4</b>  | <b>TILT lsb</b>                                     |
| <b>5</b>  | <b>SPEED MOVEMENT</b>                               |
| <b>6</b>  | <i>reserved</i>                                     |
| <b>7</b>  | <b>DIMMER msb</b>                                   |
| <b>8</b>  | <b>DIMMER lsb</b>                                   |
| <b>9</b>  | <b>SHUTTER</b>                                      |
| <b>10</b> | <b>COLOUR WHEEL</b>                                 |
| <b>11</b> | <b>COLOUR MODE</b>                                  |
| <b>12</b> | <b>CYAN</b>                                         |
| <b>13</b> | <b>MAGENTA</b>                                      |
| <b>14</b> | <b>YELLOW</b>                                       |
| <b>15</b> | <b>CTO</b>                                          |
| <b>16</b> | <b>GEL FILTERS EMULATION</b>                        |
| <b>17</b> | <b>GOBO</b>                                         |
| <b>18</b> | <b>GOBO ROTATION/INDEX msb</b>                      |
| <b>19</b> | <b>GOBO ROTATION/INDEX lsb</b>                      |
| <b>20</b> | <b>GOBO SHAKE</b>                                   |
| <b>21</b> | <b>BLADES SYSTEM ROTATION msb</b>                   |
| <b>22</b> | <b>BLADES SYSTEM ROTATION lsb</b>                   |
| <b>23</b> | <b>BLADE 1 INSERTION msb</b>                        |
| <b>24</b> | <b>BLADE 1 INSERTION lsb</b>                        |
| <b>25</b> | <b>BLADE 1 ROTATION msb</b>                         |
| <b>26</b> | <b>BLADE 1 ROTATION lsb</b>                         |
| <b>27</b> | <b>BLADE 2 INSERTION msb</b>                        |
| <b>28</b> | <b>BLADE 2 INSERTION lsb</b>                        |
| <b>29</b> | <b>BLADE 2 ROTATION msb</b>                         |
| <b>30</b> | <b>BLADE 2 ROTATION lsb</b>                         |
| <b>31</b> | <b>BLADE 3 INSERTION msb</b>                        |
| <b>32</b> | <b>BLADE 3 INSERTION lsb</b>                        |
| <b>33</b> | <b>BLADE 3 ROTATION msb</b>                         |
| <b>34</b> | <b>BLADE 3 ROTATION lsb</b>                         |
| <b>35</b> | <b>BLADE 4 INSERTION msb</b>                        |
| <b>36</b> | <b>BLADE 4 INSERTION lsb</b>                        |
| <b>37</b> | <b>BLADE 4 ROTATION msb</b>                         |
| <b>38</b> | <b>BLADE 4 ROTATION lsb</b>                         |
| <b>39</b> | <b>BLADE EFFECTS</b>                                |
| <b>40</b> | <b>DYNAMOVES MACROS</b>                             |
| <b>41</b> | <b>BLADES EFFECTS SPEED / DYNAMOVE MACROS SPEED</b> |
| <b>42</b> | <b>PRISM MODE</b>                                   |
| <b>43</b> | <b>PRISM 1 POSITION</b>                             |
| <b>44</b> | <b>PRISM 1 ROTATION/INDEX</b>                       |
| <b>45</b> | <b>PRISM 2 POSITION</b>                             |
| <b>46</b> | <b>PRISM 2 ROTATION/INDEX</b>                       |
| <b>47</b> | <b>SOFTEN FILTER</b>                                |
| <b>48</b> | <b>FROST</b>                                        |
| <b>49</b> | <b>FOCUS msb</b>                                    |
| <b>50</b> | <b>FOCUS lsb</b>                                    |
| <b>51</b> | <b>ZOOM</b>                                         |
| <b>52</b> | <b>FIXTURE CONTROL</b>                              |
| <b>53</b> | <b>RESET</b>                                        |

|             |   |                           |
|-------------|---|---------------------------|
| DMX CHANNEL | 1 | Parameter: <b>PAN msb</b> |
| DMX CHANNEL | 2 | Parameter: <b>PAN lsb</b> |

|             |   |                            |
|-------------|---|----------------------------|
| DMX CHANNEL | 3 | Parameter: <b>TILT msb</b> |
| DMX CHANNEL | 4 | Parameter: <b>TILT lsb</b> |

|                  |                                                     |                                  |
|------------------|-----------------------------------------------------|----------------------------------|
| DMX CHANNEL      | 5                                                   | Parameter: <b>SPEED MOVEMENT</b> |
| <b>DMX value</b> | <b>Function</b>                                     |                                  |
| 000-009          | Fast movement                                       |                                  |
| 010-025          | Standard movement                                   |                                  |
| 026-127          | Vector mode from fast to slow                       |                                  |
| 128-247          | Variable time reaction to dmx signal (fast to slow) |                                  |
| 248-255          | Silent movement                                     |                                  |

|             |   |                              |
|-------------|---|------------------------------|
| DMX CHANNEL | 7 | Parameter: <b>DIMMER msb</b> |
| DMX CHANNEL | 8 | Parameter: <b>DIMMER lsb</b> |

|                  |                                                        |                           |
|------------------|--------------------------------------------------------|---------------------------|
| DMX CHANNEL      | 9                                                      | Parameter: <b>SHUTTER</b> |
| <b>DMX value</b> | <b>Function</b>                                        |                           |
| 000-009          | Black Out                                              |                           |
| 010-019          | Open                                                   |                           |
| 020-029          | Black Out                                              |                           |
| 030-119          | Strobe (from 3,27s to 30ms)                            |                           |
| 120-149          | Pulse up (from 42,6s to 120ms)                         |                           |
| 150-179          | Pulse down (from 42,6s to 120ms)                       |                           |
| 180-189          | Random strobe                                          |                           |
| 190-199          | reserved                                               |                           |
| 200-209          | Gobo/Colour wheel in Black Out                         |                           |
| 210-219          | Pan/Tilt in Black Out                                  |                           |
| 220-222          | Blades in Black Out                                    |                           |
| 223-224          | Frost/Prism in Black Out                               |                           |
| 225-226          | Zoom in Black Out                                      |                           |
| 227-229          | Gobo/Colour wheel/Blades/Frost/Prism/Zoom in Black Out |                           |
| 230-255          | Open                                                   |                           |

|                                                                             |                                    |                         |
|-----------------------------------------------------------------------------|------------------------------------|-------------------------|
| DMX CHANNEL                                                                 | 10                                 | Parameter: COLOUR WHEEL |
| FULL COLOUR (if channel 11 "COLOUR MODE" = DMX range value 0-63)            |                                    |                         |
| DMX value                                                                   | Function                           |                         |
| 000-009                                                                     | Open                               |                         |
| 010-049                                                                     | Colour 1                           |                         |
| 050-089                                                                     | Colour 2                           |                         |
| 090-129                                                                     | Colour 3                           |                         |
| 130-169                                                                     | Colour 4                           |                         |
| 170-209                                                                     | Colour 5                           |                         |
| 210-255                                                                     | Colour 6                           |                         |
| HALF COLOUR (if channel 11 "COLOUR MODE" = DMX range value 64-127)          |                                    |                         |
| DMX value                                                                   | Function                           |                         |
| 000-009                                                                     | Open                               |                         |
| 010-044                                                                     | Colour 0-1                         |                         |
| 045-079                                                                     | Colour 1-2                         |                         |
| 080-114                                                                     | Colour 2-3                         |                         |
| 115-149                                                                     | Colour 3-4                         |                         |
| 150-184                                                                     | Colour 4-5                         |                         |
| 185-219                                                                     | Colour 5-6                         |                         |
| 220-255                                                                     | Colour 6-0                         |                         |
| PROPORTIONAL COLOUR (if channel 11 "COLOUR MODE" = DMX range value 128-191) |                                    |                         |
| DMX value                                                                   | Function                           |                         |
| 000-009                                                                     | Open                               |                         |
| 010-255                                                                     | Proportional colour                |                         |
| RAINBOW (if channel 11 "COLOUR MODE" = DMX range value 192-255)             |                                    |                         |
| DMX value                                                                   | Function                           |                         |
| 000-009                                                                     | Open                               |                         |
| 010-127                                                                     | CW rotation speed from max to min  |                         |
| 128-137                                                                     | Stop                               |                         |
| 138-255                                                                     | CCW rotation speed from min to max |                         |

|             |                     |                        |
|-------------|---------------------|------------------------|
| DMX CHANNEL | 11                  | Parameter: COLOUR MODE |
| DMX value   | Function            |                        |
| 000-063     | Full colour         |                        |
| 064-127     | Half colour         |                        |
| 128-191     | Proportional colour |                        |
| 192-255     | Rainbow             |                        |

|             |                     |                 |
|-------------|---------------------|-----------------|
| DMX CHANNEL | 12                  | Parameter: CYAN |
| DMX value   | Function            |                 |
| 000-255     | Proportional colour |                 |

|             |                     |                    |
|-------------|---------------------|--------------------|
| DMX CHANNEL | 13                  | Parameter: MAGENTA |
| DMX value   | Function            |                    |
| 000-255     | Proportional colour |                    |

|             |                     |                   |
|-------------|---------------------|-------------------|
| DMX CHANNEL | 14                  | Parameter: YELLOW |
| DMX value   | Function            |                   |
| 000-255     | Proportional colour |                   |

|             |                            |                |
|-------------|----------------------------|----------------|
| DMX CHANNEL | 15                         | Parameter: CTO |
| DMX value   | Function                   |                |
| 000-255     | Linear CTO from min to max |                |

|                  |                    |                                         |
|------------------|--------------------|-----------------------------------------|
| DMX CHANNEL      | 16                 | Parameter: <b>GEL FILTERS EMULATION</b> |
| <b>DMX value</b> | <b>Function</b>    |                                         |
| 000-009          | No function        |                                         |
| 010-020          | 19 FIRE            |                                         |
| 021-025          | 20 MEDIUM AMBER    |                                         |
| 026-030          | 25 SUNSET RED      |                                         |
| 031-035          | 68 SKY BLUE        |                                         |
| 036-040          | 101 YELLOW         |                                         |
| 041-045          | 104 DEEP AMBER     |                                         |
| 046-050          | 105 ORANGE         |                                         |
| 051-055          | 106 PRIMARY RED    |                                         |
| 056-060          | 111 DARK PINK      |                                         |
| 061-065          | 113 MAGENTA        |                                         |
| 066-070          | 117 STEEL BLUE     |                                         |
| 071-075          | 118 LIGHT BLUE     |                                         |
| 076-080          | 122 FERN GREEN     |                                         |
| 081-085          | 126 MAUVE          |                                         |
| 086-090          | 132 MEDIUM BLUE    |                                         |
| 091-095          | 136 PALE LAVENDER  |                                         |
| 096-100          | 137 LAVENDER       |                                         |
| 101-105          | 138 PALE GREEN     |                                         |
| 106-110          | 139 PRIMARY GREEN  |                                         |
| 111-115          | 147 APRICOT        |                                         |
| 116-120          | 151 GOLD TINT      |                                         |
| 121-125          | 154 PALE ROSE      |                                         |
| 126-130          | 156 CHOCOLATE      |                                         |
| 131-135          | 181 CONGO BLUE     |                                         |
| 136-140          | 200 DOUBLE CT BLUE |                                         |
| 141-145          | 201 FULL CT BLUE   |                                         |
| 146-150          | 204 FULL CT ORANGE |                                         |
| 151-155          | 341 PLUM           |                                         |
| 156-255          | reserved           |                                         |

|                  |                      |                        |
|------------------|----------------------|------------------------|
| DMX CHANNEL      | 17                   | Parameter: <b>GOBO</b> |
| <b>DMX value</b> | <b>Function</b>      |                        |
| 000-009          | Open                 |                        |
| 010-042          | Gobo 1               |                        |
| 043-075          | Gobo 2               |                        |
| 076-108          | Gobo 3               |                        |
| 109-141          | Gobo 4               |                        |
| 142-174          | Gobo 5               |                        |
| 175-207          | Gobo 6               |                        |
| 208-213          | Speed rotation 1 min |                        |
| 214-219          | Speed rotation 2     |                        |
| 220-225          | Speed rotation 3     |                        |
| 226-231          | Speed rotation 4     |                        |
| 232-237          | Speed rotation 5     |                        |
| 238-243          | Speed rotation 6     |                        |
| 244-249          | Speed rotation 7     |                        |
| 250-255          | Speed rotation 8 max |                        |

|                                    |                                |                                           |
|------------------------------------|--------------------------------|-------------------------------------------|
| DMX CHANNEL                        | 18                             | Parameter: <b>GOBO ROTATION/INDEX msb</b> |
| DMX CHANNEL                        | 19                             | Parameter: <b>GOBO ROTATION/INDEX lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>                |                                           |
| MSB.LSB-<br>MSB.LSB<br>INT16-INT16 |                                |                                           |
| 000.000-<br>127.255<br>00000-32767 | Proportional index 0°-360°     |                                           |
| 128.000-<br>180.255<br>32768-46335 | CCW gobo rotation (max to min) |                                           |
| 181.000-<br>202.255<br>46336-51967 | Stop                           |                                           |
| 203.000-<br>255.255<br>51968-65535 | CW gobo rotation (min to max)  |                                           |

|                  |                         |                              |
|------------------|-------------------------|------------------------------|
| DMX CHANNEL      | 20                      | Parameter: <b>GOBO SHAKE</b> |
| <b>DMX value</b> | <b>Function</b>         |                              |
| 000-009          | Stop                    |                              |
| 010-019          | Gobo shake R-L speed 1  |                              |
| 020-029          | Gobo shake R-L speed 2  |                              |
| 030-039          | Gobo shake R-L speed 3  |                              |
| 040-049          | Gobo shake R-L speed 4  |                              |
| 050-059          | Gobo shake R-L speed 5  |                              |
| 060-069          | Gobo shake R-L speed 6  |                              |
| 070-079          | Gobo shake R-L speed 7  |                              |
| 080-089          | Gobo shake R-L speed 8  |                              |
| 090-099          | Gobo shake R-L speed 9  |                              |
| 100-109          | Gobo shake R-L speed 10 |                              |
| 110-126          | Gobo shake R-L speed 11 |                              |
| 127-138          | Stop                    |                              |
| 139-148          | Gobo shake L-R speed 1  |                              |
| 149-158          | Gobo shake L-R speed 2  |                              |
| 159-168          | Gobo shake L-R speed 3  |                              |
| 169-178          | Gobo shake L-R speed 4  |                              |
| 179-188          | Gobo shake L-R speed 5  |                              |
| 189-198          | Gobo shake L-R speed 6  |                              |
| 199-208          | Gobo shake L-R speed 7  |                              |
| 209-218          | Gobo shake L-R speed 8  |                              |
| 219-228          | Gobo shake L-R speed 9  |                              |
| 229-238          | Gobo shake L-R speed 10 |                              |
| 239-255          | Gobo shake L-R speed 11 |                              |

|                                    |                          |                                              |
|------------------------------------|--------------------------|----------------------------------------------|
| DMX CHANNEL                        | 21                       | Parameter: <b>BLADES SYSTEM ROTATION msb</b> |
| DMX CHANNEL                        | 22                       | Parameter: <b>BLADES SYSTEM ROTATION lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>          |                                              |
| 000/000-<br>126/255<br>00000-32511 | Position from -45° to 0° |                                              |
| 127/000-<br>128/255<br>32512-33023 | 0° position              |                                              |
| 129/000-<br>255/255<br>33024-65535 | Position from 0° to 45°  |                                              |

|                                    |                        |                                         |
|------------------------------------|------------------------|-----------------------------------------|
| DMX CHANNEL                        | 23                     | Parameter: <b>BLADE 1 INSERTION msb</b> |
| DMX CHANNEL                        | 24                     | Parameter: <b>BLADE 1 INSERTION lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>        |                                         |
| 000/000-<br>255/255<br>00000-65535 | Open to fully inserted |                                         |

|                                    |                          |                                        |
|------------------------------------|--------------------------|----------------------------------------|
| DMX CHANNEL                        | 25                       | Parameter: <b>BLADE 1 ROTATION msb</b> |
| DMX CHANNEL                        | 26                       | Parameter: <b>BLADE 1 ROTATION lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>          |                                        |
| 000/000-<br>127/255<br>00000-32767 | Position from -30° to 0° |                                        |
| 128/000<br>32768                   | 0° position              |                                        |
| 128/001-<br>255/255<br>32769-65535 | Position from 0° to 30°  |                                        |

|                                    |                        |                                         |
|------------------------------------|------------------------|-----------------------------------------|
| DMX CHANNEL                        | 27                     | Parameter: <b>BLADE 2 INSERTION msb</b> |
| DMX CHANNEL                        | 28                     | Parameter: <b>BLADE 2 INSERTION lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>        |                                         |
| 000/000-<br>255/255<br>00000-65535 | Open to fully inserted |                                         |

|                                    |                          |                                        |
|------------------------------------|--------------------------|----------------------------------------|
| DMX CHANNEL                        | 29                       | Parameter: <b>BLADE 2 ROTATION msb</b> |
| DMX CHANNEL                        | 30                       | Parameter: <b>BLADE 2 ROTATION lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>          |                                        |
| 000/000-<br>127/255<br>00000-32767 | Position from -30° to 0° |                                        |
| 128/000<br>32768                   | 0° position              |                                        |
| 128/001-<br>255/255<br>32769-65535 | Position from 0° to 30°  |                                        |

|                                    |                        |                                         |
|------------------------------------|------------------------|-----------------------------------------|
| DMX CHANNEL                        | 31                     | Parameter: <b>BLADE 3 INSERTION msb</b> |
| DMX CHANNEL                        | 32                     | Parameter: <b>BLADE 3 INSERTION lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>        |                                         |
| 000/000-<br>255/255<br>00000-65535 | Open to fully inserted |                                         |

|                                    |                          |                                        |
|------------------------------------|--------------------------|----------------------------------------|
| DMX CHANNEL                        | 33                       | Parameter: <b>BLADE 3 ROTATION msb</b> |
| DMX CHANNEL                        | 34                       | Parameter: <b>BLADE 3 ROTATION lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>          |                                        |
| 000/000-<br>127/255<br>00000-32767 | Position from -30° to 0° |                                        |
| 128/000<br>32768                   | 0° position              |                                        |
| 128/001-<br>255/255<br>32769-65535 | Position from 0° to 30°  |                                        |

|                                    |                        |                                         |
|------------------------------------|------------------------|-----------------------------------------|
| DMX CHANNEL                        | 35                     | Parameter: <b>BLADE 4 INSERTION msb</b> |
| DMX CHANNEL                        | 36                     | Parameter: <b>BLADE 4 INSERTION lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>        |                                         |
| 000/000-<br>255/255<br>00000-65535 | Open to fully inserted |                                         |

|                                    |                          |                                        |
|------------------------------------|--------------------------|----------------------------------------|
| DMX CHANNEL                        | 37                       | Parameter: <b>BLADE 4 ROTATION msb</b> |
| DMX CHANNEL                        | 38                       | Parameter: <b>BLADE 4 ROTATION lsb</b> |
| <b>DMX value</b>                   | <b>Function</b>          |                                        |
| 000/000-<br>127/255<br>00000-32767 | Position from -30° to 0° |                                        |
| 128/000<br>32768                   | 0° position              |                                        |
| 128/001-<br>255/255<br>32769-65535 | Position from 0° to 30°  |                                        |

| DMX CHANNEL | 39          | Parameter: <b>BLADES EFFECTS</b> |          |
|-------------|-------------|----------------------------------|----------|
| DMX value   | Function    | DMX value                        | Function |
| 000-009     | No function | 110-111                          | Macro 51 |
| 010-011     | Macro 1     | 112-113                          | Macro 52 |
| 012-013     | Macro 2     | 114-115                          | Macro 53 |
| 014-015     | Macro 3     | 116-117                          | Macro 54 |
| 016-017     | Macro 4     | 118-119                          | Macro 55 |
| 018-019     | Macro 5     | 120-121                          | Macro 56 |
| 020-021     | Macro 6     | 122-123                          | Macro 57 |
| 022-023     | Macro 7     | 124-125                          | Macro 58 |
| 024-025     | Macro 8     | 126-127                          | Macro 59 |
| 026-027     | Macro 9     | 128-129                          | Macro 60 |
| 028-029     | Macro 10    | 130-131                          | Macro 61 |
| 030-031     | Macro 11    | 132-133                          | Macro 62 |
| 032-033     | Macro 12    | 134-135                          | Macro 63 |
| 034-035     | Macro 13    | 136-137                          | Macro 64 |
| 036-037     | Macro 14    | 138-139                          | Macro 65 |
| 038-039     | Macro 15    | 140-141                          | Macro 66 |
| 040-041     | Macro 16    | 142-143                          | Macro 67 |
| 042-043     | Macro 17    | 144-145                          | Macro 68 |
| 044-045     | Macro 18    | 146-147                          | Macro 69 |
| 046-047     | Macro 19    | 148-149                          | Macro 70 |
| 048-049     | Macro 20    | 150-151                          | Macro 71 |
| 050-051     | Macro 21    | 152-153                          | Macro 72 |
| 052-053     | Macro 22    | 154-155                          | Macro 73 |
| 054-055     | Macro 23    | 156-157                          | Macro 74 |
| 056-057     | Macro 24    | 158-159                          | Macro 75 |
| 058-059     | Macro 25    | 160-161                          | Macro 76 |
| 060-061     | Macro 26    | 162-163                          | Macro 77 |
| 062-063     | Macro 27    | 164-165                          | Macro 78 |
| 064-065     | Macro 28    | 166-167                          | Macro 79 |
| 066-067     | Macro 29    | 168-169                          | Macro 80 |
| 068-069     | Macro 30    | 170-171                          | Macro 81 |
| 070-071     | Macro 31    | 172-173                          | Macro 82 |
| 072-073     | Macro 32    | 174-175                          | Macro 83 |
| 074-075     | Macro 33    | 176-177                          | Macro 84 |
| 076-077     | Macro 34    | 178-179                          | Macro 85 |
| 078-079     | Macro 35    | 180-181                          | Macro 86 |
| 080-081     | Macro 36    | 182-183                          | Macro 87 |
| 082-083     | Macro 37    | 184-185                          | Macro 88 |
| 084-085     | Macro 38    | 186-187                          | Macro 89 |
| 086-087     | Macro 39    | 188-255                          | reserved |
| 088-089     | Macro 40    |                                  |          |
| 090-091     | Macro 41    |                                  |          |
| 092-093     | Macro 42    |                                  |          |
| 094-095     | Macro 43    |                                  |          |
| 096-097     | Macro 44    |                                  |          |
| 098-099     | Macro 45    |                                  |          |
| 100-101     | Macro 46    |                                  |          |
| 102-103     | Macro 47    |                                  |          |
| 104-105     | Macro 48    |                                  |          |
| 106-107     | Macro 49    |                                  |          |
| 108-109     | Macro 50    |                                  |          |

| DMX CHANNEL | 40          | Parameter: DYNAMOVES MACROS |          |
|-------------|-------------|-----------------------------|----------|
| DMX value   | Function    | DMX value                   | Function |
| 000-009     | No function | 110-111                     | Macro 51 |
| 010-011     | Macro 1     | 112-113                     | Macro 52 |
| 012-013     | Macro 2     | 114-115                     | Macro 53 |
| 014-015     | Macro 3     | 116-117                     | Macro 54 |
| 016-017     | Macro 4     | 118-119                     | Macro 55 |
| 018-019     | Macro 5     | 120-121                     | Macro 56 |
| 020-021     | Macro 6     | 122-123                     | Macro 57 |
| 022-023     | Macro 7     | 124-125                     | Macro 58 |
| 024-025     | Macro 8     | 126-127                     | Macro 59 |
| 026-027     | Macro 9     | 128-129                     | Macro 60 |
| 028-029     | Macro 10    | 130-131                     | Macro 61 |
| 030-031     | Macro 11    | 132-133                     | Macro 62 |
| 032-033     | Macro 12    | 134-135                     | Macro 63 |
| 034-035     | Macro 13    | 136-255                     | reserved |
| 036-037     | Macro 14    |                             |          |
| 038-039     | Macro 15    |                             |          |
| 040-041     | Macro 16    |                             |          |
| 042-043     | Macro 17    |                             |          |
| 044-045     | Macro 18    |                             |          |
| 046-047     | Macro 19    |                             |          |
| 048-049     | Macro 20    |                             |          |
| 050-051     | Macro 21    |                             |          |
| 052-053     | Macro 22    |                             |          |
| 054-055     | Macro 23    |                             |          |
| 056-057     | Macro 24    |                             |          |
| 058-059     | Macro 25    |                             |          |
| 060-061     | Macro 26    |                             |          |
| 062-063     | Macro 27    |                             |          |
| 064-065     | Macro 28    |                             |          |
| 066-067     | Macro 29    |                             |          |
| 068-069     | Macro 30    |                             |          |
| 070-071     | Macro 31    |                             |          |
| 072-073     | Macro 32    |                             |          |
| 074-075     | Macro 33    |                             |          |
| 076-077     | Macro 34    |                             |          |
| 078-079     | Macro 35    |                             |          |
| 080-081     | Macro 36    |                             |          |
| 082-083     | Macro 37    |                             |          |
| 084-085     | Macro 38    |                             |          |
| 086-087     | Macro 39    |                             |          |
| 088-089     | Macro 40    |                             |          |
| 090-091     | Macro 41    |                             |          |
| 092-093     | Macro 42    |                             |          |
| 094-095     | Macro 43    |                             |          |
| 096-097     | Macro 44    |                             |          |
| 098-099     | Macro 45    |                             |          |
| 100-101     | Macro 46    |                             |          |
| 102-103     | Macro 47    |                             |          |
| 104-105     | Macro 48    |                             |          |
| 106-107     | Macro 49    |                             |          |
| 108-109     | Macro 50    |                             |          |

|             |    |                                                                    |
|-------------|----|--------------------------------------------------------------------|
| DMX CHANNEL | 41 | Parameter: <b>BLADES EFFECTS SPEED / DYNAMOVE<br/>MACROS SPEED</b> |
|-------------|----|--------------------------------------------------------------------|

| DMX value | Function               |
|-----------|------------------------|
| 000-010   | 1X                     |
| 011-050   | 1.1X to 5X (step 0.1X) |
| 051-090   | 4.9X to 1X (step 0.1X) |
| 091-159   | 1X                     |
| 160-169   | 0.9X                   |
| 170-179   | 0.8X                   |
| 180-189   | 0.7X                   |
| 190-199   | 0.6X                   |
| 200-209   | 0.5X                   |
| 210-219   | 0.4X                   |
| 220-229   | 0.3X                   |
| 230-239   | 0.2X                   |
| 240-255   | 0.1X                   |

|             |    |                              |
|-------------|----|------------------------------|
| DMX CHANNEL | 42 | Parameter: <b>PRISM MODE</b> |
|-------------|----|------------------------------|

| DMX value | Function                                         |
|-----------|--------------------------------------------------|
| 000-009   | No function                                      |
| 010-049   | Prism 1 inserted after zoom lens                 |
| 050-089   | Prism 2 inserted after zoom lens                 |
| 090-129   | Prism 1+2 inserted after zoom lens               |
| 130-169   | Prism 1 inserted between focus and zoom lenses   |
| 170-209   | Prism 2 inserted between focus and zoom lenses   |
| 210-255   | Prism 1+2 inserted between focus and zoom lenses |

|             |    |                                    |
|-------------|----|------------------------------------|
| DMX CHANNEL | 43 | Parameter: <b>PRISM 1 POSITION</b> |
|-------------|----|------------------------------------|

| DMX value | Function                |
|-----------|-------------------------|
| 000-009   | Centre                  |
| 010-127   | Outward left to centre  |
| 128-137   | Centre                  |
| 138-255   | Outward right to centre |

|             |    |                                          |
|-------------|----|------------------------------------------|
| DMX CHANNEL | 44 | Parameter: <b>PRISM 1 ROTATION/INDEX</b> |
|-------------|----|------------------------------------------|

| DMX value | Function                       |
|-----------|--------------------------------|
| 000-127   | Proportional index 0°-360°     |
| 128-180   | CW rotation from fast to slow  |
| 181-202   | Stop                           |
| 203-255   | CCW rotation from slow to fast |

|             |    |                                    |
|-------------|----|------------------------------------|
| DMX CHANNEL | 45 | Parameter: <b>PRISM 2 POSITION</b> |
|-------------|----|------------------------------------|

| DMX value | Function                |
|-----------|-------------------------|
| 000-009   | Centre                  |
| 010-127   | Outward left to centre  |
| 128-137   | Centre                  |
| 138-255   | Outward right to centre |

|             |    |                                          |
|-------------|----|------------------------------------------|
| DMX CHANNEL | 46 | Parameter: <b>PRISM 2 ROTATION/INDEX</b> |
|-------------|----|------------------------------------------|

| DMX value | Function                       |
|-----------|--------------------------------|
| 000-127   | Proportional index 0°-360°     |
| 128-180   | CW rotation from fast to slow  |
| 181-202   | Stop                           |
| 203-255   | CCW rotation from slow to fast |

|             |    |                                 |
|-------------|----|---------------------------------|
| DMX CHANNEL | 47 | Parameter: <b>SOFTEN FILTER</b> |
|-------------|----|---------------------------------|

| DMX value | Function      |
|-----------|---------------|
| 000-009   | No function   |
| 010-255   | Soften filter |

|                  |                                     |                         |
|------------------|-------------------------------------|-------------------------|
| DMX CHANNEL      | 48                                  | Parameter: <b>FROST</b> |
| <b>DMX value</b> | <b>Function</b>                     |                         |
| 000-009          | No function                         |                         |
| 010-255          | Frost Filter linear from min to max |                         |

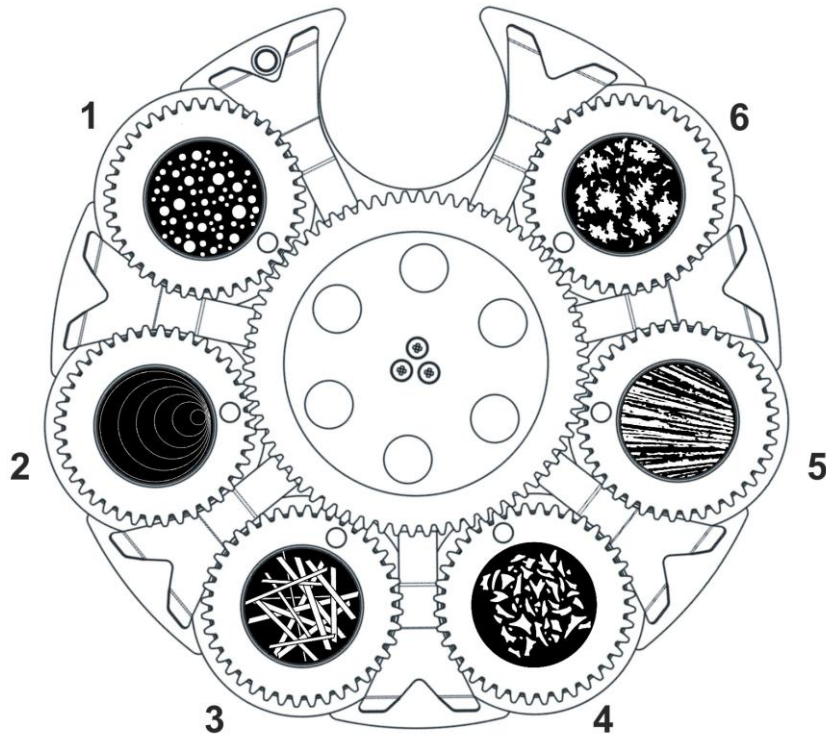
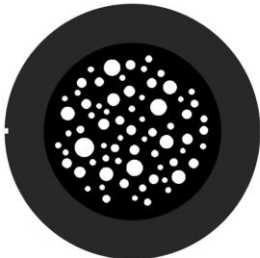
|                  |                 |                             |
|------------------|-----------------|-----------------------------|
| DMX CHANNEL      | 49              | Parameter: <b>FOCUS msb</b> |
| DMX CHANNEL      | 50              | Parameter: <b>FOCUS lsb</b> |
| <b>DMX value</b> | <b>Function</b> |                             |
| 000-255          | Linear focus    |                             |

|                  |                 |                        |
|------------------|-----------------|------------------------|
| DMX CHANNEL      | 51              | Parameter: <b>ZOOM</b> |
| <b>DMX value</b> | <b>Function</b> |                        |
| 000-255          | Linear zoom     |                        |

|                  |                                           |                                   |
|------------------|-------------------------------------------|-----------------------------------|
| DMX CHANNEL      | 52                                        | Parameter: <b>FIXTURE CONTROL</b> |
| <b>DMX value</b> | <b>Function</b>                           |                                   |
| 000-009          | 0 - No effect                             |                                   |
| 010-024          | 1 - SMOOTH DIMMING OFF                    |                                   |
| 025-026          | 2 - SMOOTH DIMMING 1                      |                                   |
| 027-028          | 3 - SMOOTH DIMMING 2                      |                                   |
| 029-030          | 4 - SMOOTH DIMMING 3                      |                                   |
| 031-032          | 5 - SMOOTH DIMMING 4 (DEFAULT)            |                                   |
| 033-034          | 6 - SMOOTH DIMMING 5                      |                                   |
| 035-036          | 7 - SMOOTH DIMMING 6                      |                                   |
| 037-038          | 8 - SMOOTH DIMMING 7                      |                                   |
| 039-040          | 9 - SMOOTH DIMMING 8                      |                                   |
| 041-042          | 10 - SMOOTH DIMMING 9                     |                                   |
| 043-044          | 11 - SMOOTH DIMMING 10                    |                                   |
| 045-046          | 12 - SMOOTH DIMMING 11                    |                                   |
| 047-048          | 13 - SMOOTH DIMMING 12                    |                                   |
| 049-050          | 14 - SMOOTH DIMMING 13                    |                                   |
| 051-052          | 15 - SMOOTH DIMMING 14                    |                                   |
| 053-054          | 16 - SMOOTH DIMMING 15                    |                                   |
| 055-056          | 17 - SMOOTH DIMMING 16                    |                                   |
| 057-058          | 18 - SMOOTH DIMMING 17                    |                                   |
| 059-060          | 19 - SMOOTH DIMMING 18                    |                                   |
| 061-062          | 20 - SMOOTH DIMMING 19                    |                                   |
| 063-064          | 21 - SMOOTH DIMMING 20                    |                                   |
| 065-074          | 22 - GAMMA CORRECTION QUADRATIC (DEFAULT) |                                   |
| 075-084          | 23 - GAMMA CORRECTION LINEAR              |                                   |
| 085-104          | 24 - OUTPUT FREQUENCY 610 Hz (DEFAULT)    |                                   |
| 105              | 25 - OUTPUT FREQUENCY 800 Hz              |                                   |
| 106              | 26 - OUTPUT FREQUENCY 1000 Hz             |                                   |
| 107              | 27 - OUTPUT FREQUENCY 1500 Hz             |                                   |
| 108              | 28 - OUTPUT FREQUENCY 2000 Hz             |                                   |
| 109              | 29 - OUTPUT FREQUENCY 2500 Hz             |                                   |
| 110              | 30 - OUTPUT FREQUENCY 3000 Hz             |                                   |
| 111              | 31 - OUTPUT FREQUENCY 3500 Hz             |                                   |
| 112              | 32 - OUTPUT FREQUENCY 4000 Hz             |                                   |
| 113              | 33 - OUTPUT FREQUENCY 4500 Hz             |                                   |
| 114              | 34 - OUTPUT FREQUENCY 5000 Hz             |                                   |
| 115              | 35 - OUTPUT FREQUENCY 5500 Hz             |                                   |
| 116              | 36 - OUTPUT FREQUENCY 6000 Hz             |                                   |
| 117              | 37 - OUTPUT FREQUENCY 6500 Hz             |                                   |
| 118              | 38 - OUTPUT FREQUENCY 7000 Hz             |                                   |
| 119              | 39 - OUTPUT FREQUENCY 7500 Hz             |                                   |
| 120              | 40 - OUTPUT FREQUENCY 8000 Hz             |                                   |

| DMX CHANNEL | 52                                 | Parameter: <b>FIXTURE CONTROL</b>                                                                                                                                                                                                                                       |
|-------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DMX value   | Function                           |                                                                                                                                                                                                                                                                         |
| 121         | 41 - OUTPUT FREQUENCY              | 8500 Hz                                                                                                                                                                                                                                                                 |
| 122         | 42 - OUTPUT FREQUENCY              | 9000 Hz                                                                                                                                                                                                                                                                 |
| 123         | 43 - OUTPUT FREQUENCY              | 9500 Hz                                                                                                                                                                                                                                                                 |
| 124         | 44 - OUTPUT FREQUENCY              | 10000 Hz                                                                                                                                                                                                                                                                |
| 125         | 45 - OUTPUT FREQUENCY              | 11000 Hz                                                                                                                                                                                                                                                                |
| 126         | 46 - OUTPUT FREQUENCY              | 12000 Hz                                                                                                                                                                                                                                                                |
| 127         | 47 - OUTPUT FREQUENCY              | 13000 Hz                                                                                                                                                                                                                                                                |
| 128         | 48 - OUTPUT FREQUENCY              | 14000 Hz                                                                                                                                                                                                                                                                |
| 129         | 49 - OUTPUT FREQUENCY              | 15000 Hz                                                                                                                                                                                                                                                                |
| 130         | 50 - OUTPUT FREQUENCY              | 16000 Hz                                                                                                                                                                                                                                                                |
| 131         | 51 - OUTPUT FREQUENCY              | 17000 Hz                                                                                                                                                                                                                                                                |
| 132         | 52 - OUTPUT FREQUENCY              | 18000 Hz                                                                                                                                                                                                                                                                |
| 133         | 53 - OUTPUT FREQUENCY              | 19000 Hz                                                                                                                                                                                                                                                                |
| 134         | 54 - OUTPUT FREQUENCY              | 20000 Hz                                                                                                                                                                                                                                                                |
| 135-136     | 55 - CMY / CTO SPEED 1             | (Speed value must not be set while CMY filters are moving during programming)                                                                                                                                                                                           |
| 137-138     | 56 - CMY / CTO SPEED 2             | (Speed value must not be set while CMY filters are moving during programming)                                                                                                                                                                                           |
| 139-140     | 57 - CMY / CTO SPEED 3             | (Speed value must not be set while CMY filters are moving during programming)                                                                                                                                                                                           |
| 141-142     | 58 - CMY / CTO SPEED 4 (DEFAULT)   | (Speed value must not be set while CMY filters are moving during programming)                                                                                                                                                                                           |
| 143-144     | 59 - BLADES SPEED 1                | (Speed value must not be set while blades are moving during programming)                                                                                                                                                                                                |
| 145-146     | 60 - BLADES SPEED 2                | (Speed value must not be set while blades are moving during programming)                                                                                                                                                                                                |
| 147-148     | 61 - BLADES SPEED 3                | (Speed value must not be set while blades are moving during programming)                                                                                                                                                                                                |
| 149-150     | 62 - BLADES SPEED 4 (DEFAULT)      | (Speed value must not be set while blades are moving during programming)                                                                                                                                                                                                |
| 151-152     | 63 - FOCUS EXCURTION               | EXTENDED                                                                                                                                                                                                                                                                |
| 153-154     | 64 - FOCUS EXCURTION               | STANDARD (DEFAULT)                                                                                                                                                                                                                                                      |
| 155-164     | 65 - DISPLAY STANDBY               | DISABLE (DEFAULT)                                                                                                                                                                                                                                                       |
| 165-174     | 66 - DISPLAY STANDBY               | ENABLE                                                                                                                                                                                                                                                                  |
| 175-176     | 67 - NO DMX ACTION - KEEP LAST DMX | (DEFAULT)                                                                                                                                                                                                                                                               |
| 177-178     | 68 - NO DMX ACTION - BLACK OUT     |                                                                                                                                                                                                                                                                         |
| 179-180     | 69 - RESERVED                      |                                                                                                                                                                                                                                                                         |
| 181-182     | 70 - NO DMX ACTION - DEMO PROGRAM  | (STEPS 01..48)                                                                                                                                                                                                                                                          |
| 183-184     | 71 - NO DMX ACTION - SINGLE CUE    |                                                                                                                                                                                                                                                                         |
| 185-194     | 72 - PAN                           | NORMAL (DEFAULT)                                                                                                                                                                                                                                                        |
| 195-204     | 73 - PAN                           | REVERSE                                                                                                                                                                                                                                                                 |
| 205-214     | 74 - TILT                          | NORMAL (DEFAULT)                                                                                                                                                                                                                                                        |
| 215-224     | 75 - TILT                          | REVERSE                                                                                                                                                                                                                                                                 |
| 225-227     | 76 - AUTOFOCUS ON                  | (To have the best resolution it is suggested the first time you focus to set Zoom at DMX value 100(range0-255)or 39%)                                                                                                                                                   |
| 228-230     | 77 - RESERVED                      |                                                                                                                                                                                                                                                                         |
| 231-234     | 78 - AUTOFOCUS OFF                 | (DEFAULT)                                                                                                                                                                                                                                                               |
| 235-237     | 79 - FAN MODE                      | STANDARD                                                                                                                                                                                                                                                                |
| 238-240     | 80 - FAN MODE                      | AUTO                                                                                                                                                                                                                                                                    |
| 241-244     | 81 - FAN MODE                      | SILENT (DEFAULT)                                                                                                                                                                                                                                                        |
| 245-246     | 82 - ZOOM SPEED                    | 1                                                                                                                                                                                                                                                                       |
| 247-248     | 83 - ZOOM SPEED                    | 2                                                                                                                                                                                                                                                                       |
| 249-250     | 84 - ZOOM SPEED                    | 3                                                                                                                                                                                                                                                                       |
| 251-252     | 85 - ZOOM SPEED                    | 4 (DEFAULT)                                                                                                                                                                                                                                                             |
| 253-255     | 86 - SET FUNCTION TO DEFAULT:      | -SMOOTH DIMMING = 4<br>-GAMMA = QUADRATIC<br>-FREQUENCY = 610 Hz<br>-CMY/CTO SPEED = 4<br>-BLADES SPEED = 4<br>-DISPLAY STANDBY = DISABLE<br>-NO DMX ACTION = KEEP LAST DMX<br>-FAN = SILENT MODE<br>-ZOOM SPEED = 4<br>-AUTOFOCUS = OFF<br>-FOCUS EXCURTION = STANDARD |

|                  |                                           |                         |
|------------------|-------------------------------------------|-------------------------|
| DMX CHANNEL      | 53                                        | Parameter: <b>RESET</b> |
| <b>DMX value</b> | <b>Function</b>                           |                         |
| 000-009          | No effect                                 |                         |
| 010-075          | PAN TILT reset                            |                         |
| 076-095          | HEAD MOTORS reset                         |                         |
| 096-115          | Gobo wheel reset                          |                         |
| 116-135          | Colour wheel reset                        |                         |
| 136-155          | CMY/CTO reset                             |                         |
| 156-175          | Blades reset                              |                         |
| 176-195          | Prism reset                               |                         |
| 196-215          | Frost - Smooth reset                      |                         |
| 216-239          | Focus/Zoom reset                          |                         |
| 240-255          | Total unit reset (PAN TILT + HEAD MOTORS) |                         |

**21- ROTATING GOBO WHEEL****GOBO 1 DICRO**

0516G136

**GOBO 2 DICRO**

0516G137

**GOBO 3 DICRO**

0516G138

**GOBO 4 DICRO**

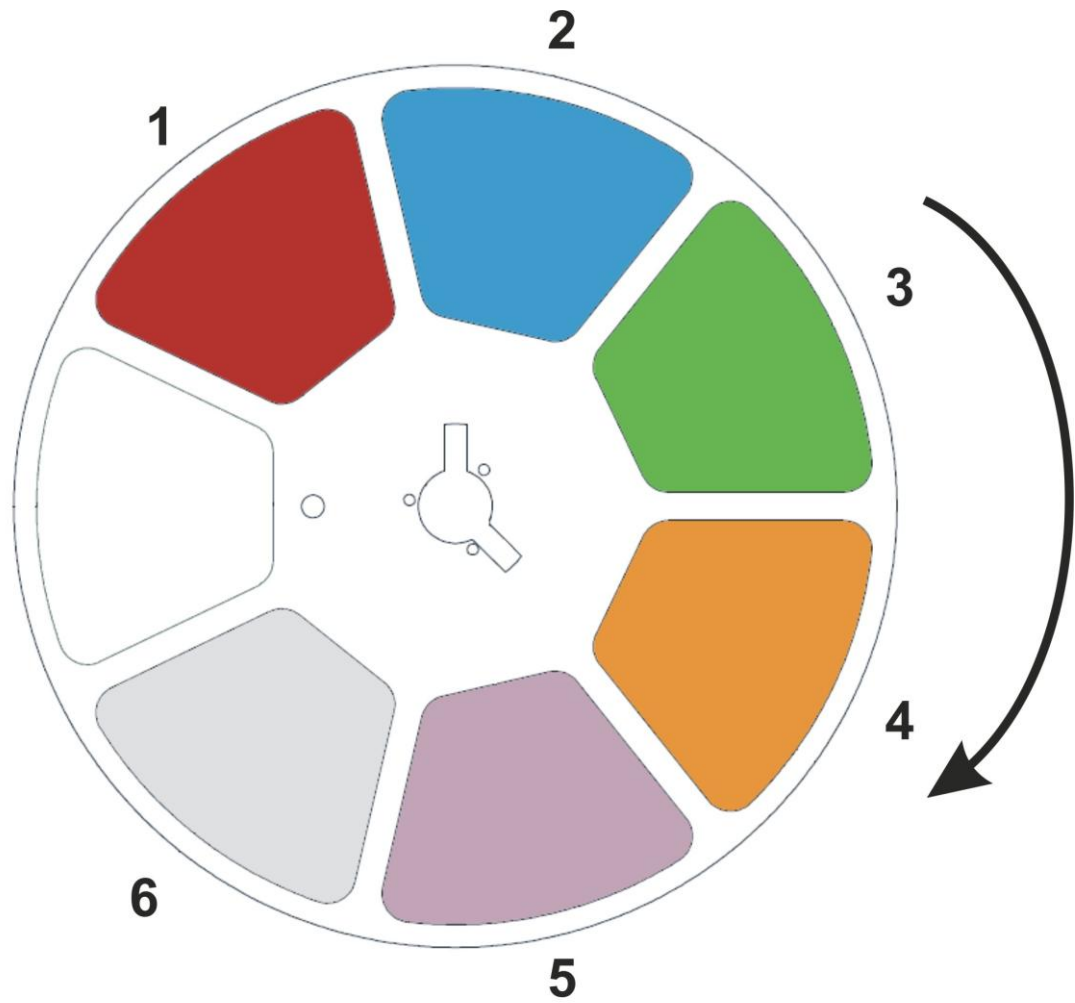
0516G139

**GOBO 5 DICRO**

0516G140

**GOBO 6 DICRO**

0516G141

**22- COLOUR WHEEL**

COLOUR 1  
DARK RED  
  
0507C059.D23

COLOUR 2  
NAVY BLUE  
  
0507C077.D23

COLOUR 3  
DARK GREEN  
  
0507C067.D23

COLOUR 4  
AMBER  
  
0507C066.D23

COLOUR 5  
PURPLE  
  
0507C078.D23

COLOUR 6  
HIGHER CRI  
  
0507K010.D23

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**05171339**