

User's Manual Rel 1.2 GB

# NickWash 600



The Lighting Company  
Made in Italy

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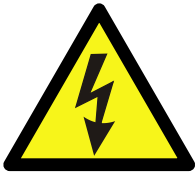
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## 1- SYMBOLS

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 "DO NOT PLACE THE UNIT ON INFLAMMABLE SURFACES"



THIS SYMBOL INDICATES THE MINIMUM DISTANCE TO BE KEPT BETWEEN THE DEVICE AND THE LIT OBJECT

## 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 device is not for domestic use and must be installed by a qualified electrician or experienced person.

Always disconnect the device from the mains before replacing the lamp.

The lamp must be replaced if it has been damaged or deformed by prolonged use or overheating.

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

## 3- GENERAL WARRANTY CONDITIONS

The unit is guaranteed for 24 months from the date of purchase against manufacturing material defects.

## 4- TECHNICAL FEATURES

### Overview

NICK WASH 600 is a self-contained compact high-output LED moving head projector with 13,5° - 40° motorized zoom.

NICK WASH 600 is one of the brightest compact LED projectors on the market: luminosity at 5 m is no less than 3.100 Lux (13,5°).

### Applications

NICK WASH 600 is ideal in various applications, such as: lighting shopping malls, libraries, museums, exhibitions, clubs, restaurants, buildings, monuments, as well as special events, fashion displays, etc. The unit is easily installable even in the most refined settings, thanks to its attractive appearance.

### LED technology

NICK WASH 600 light source is composed of 120 LEDs (30 Red, 30 Green, 30 Blue, 30 White) with 9.750 total lumens.

The LEDs even distribution pattern featuring the same quantity of red, green, blue and white LEDs guarantees high colour mixing quality and a uniform projection on surfaces, no matter what colour is used.

NICK WASH 600 offers 2 different colour mixing modes (RGBW / CMY) and can generate 16 million colours; colour temperature can be varied over a linear range from 2800°K to 6500°K.

Also, users can memorize a personalized white either from the menu or via DMX. The white is recalled with the dedicated DMX "White" channel.

NICK WASH 600 is also available with 90 White +30 Amber LEDs, or in an RGBA version (on request).

### Zoom . Pan/Tilt . Full-range power supply

NICK WASH 600 features a motorized linear Zoom (13,5°- 40°) with a high efficiency optics system; zoom movement is smooth and uniform.

NICK WASH 600 features a motorized movement on horizontal (540° pan) and vertical (270° tilt) axes; the unit can operate in vertical, horizontal or inverted positions, and can be positioned on the floor or ground, or fitted to trusses; it is complete with a practical accessory for anchorage to the ground.

The NICK WASH 600 FAR features also a Free Axis Rotation ("FAR") system.

The FAR allows limitless pan and tilt rotation: the NICK head rotates freely on its axes, horizontally or vertically, without interruption, in either direction, never having to reverse motion.

NICK WASH 600 has a full-range AC 90-260 V, 50-60 Hz power supply, therefore ensures reliable operation even in the case of voltage drops. Also, the unit can be used all over the world with no specific adaptations, as the right voltage is always supplied.

### NICK WASH 600

03.LDR005.T Electr. Power Supply, Motorized Zoom, Black colour

03.LDR005.TF Electr. Power Supply, Motorized Zoom, F.A.R. system, Black colour

03.LDR005.TWS Electr. Power Supply, Motorized Zoom, Wireless DMX ready, Black colour

## 5- TECHNICAL SPECIFICATIONS

### LED technology

120 LEDs (30 Red, 30 Green, 30 Blue, 30 White); total luminous flux 9.750 Lumens

RGBW colour generation (16 million colours); 3 different colour mixing modes: RGBW, CMY, HSV

Colour temperature variable on a linear range (2.800°K÷6.500°K); no infrared / no ultraviolet emissions

LEDs average lifespan: 100.000 hours

### Zoom

Motorized Zoom 13,5°- 40°

### User interface

OLED colour display + 4 buttons

## 5- TECHNICAL SPECIFICATIONS

### Independent operation

Fully programmable via built-in user interface

Master or Slave capability (chains of up to 32 interconnected units)

### Remote control

Remotely controlled by cable or wireless;

USITT DMX 512 serial digital protocol (reception / transmission)

### DMX

17-20 DMX channels

### Protection

IP20 protection rate

### Movements (horizontal/pan – vertical/tilt axes)

Motorized movement 540° Pan (2.0 sec) / 270° Tilt (1.2 sec)

Free Axis Rotation ("FAR") system;

### Power supply / consumption

Full range AC 90-260V, 50-60Hz

Power consumption:

\* 90 V – 2,65 A – 240 W \* 120 V – 2 A – 240 W \* 230 V – 1 A – 240 W \* 260 V – 0,9 A – 240 W

### Thermal

Operating ambient temperature - 10° / + 40°

### Finishes

Black or white finish

### Certification and Safety

Certification CE;

### LED Class

Class 2 LED product

### Weight

7,9 Kg

### Dimensions

Unit Dimensions (LxWxH)    Packaging Dimensions (LxWxH)

360x217x440mm

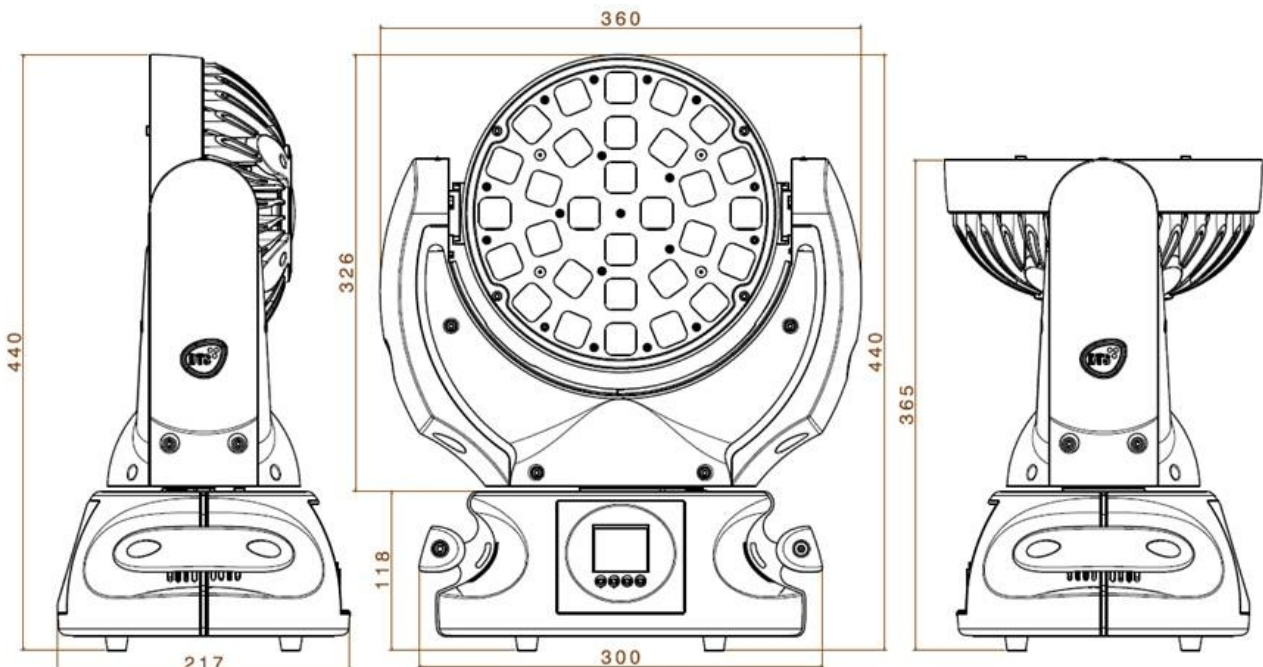
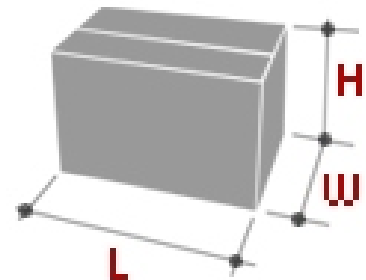
430 x 515 x 290 mm

Weight:

Weight:

7,9 Kg

10 Kg



## 6- ACCESSORIES

### As standard

#### **03.LDR005.T Electr. Power Supply, Motorized Zoom, Black colour**

#### **03.LDR005.TF Electr. Power Supply, Motorized Zoom, F.A.R. system, Black colour**

- 1 x POWERCONN male cable connector (cod. 0520P014)
- 1 x XLR 5 Pins male cable connector (cod. 0508B028)
- 1 x XLR 5 Pins female cable connector (cod. 0508B027)
- 1 x "C" Clamp GQUICK with "Fast Lock" connection 1/4 turn (max. load. 80Kg) (cod. 0521A014)
- User's manual

#### **03.LDR005.TWS Nick Wash 600 Electr. Power Supply, Motorized Zoom, Wireless DMX ready, Black colour**

- 1 x INDOOR IP20 omnidirectional 2dBi antenna cod. 0508A033
- 1 x POWERCONN male cable connector (cod. 0520P014)
- 1 x XLR 5 Pins male cable connector (cod. 0508B028)
- 1 x XLR 5 Pins female cable connector (cod. 0508B027)
- 1 x "C" Clamp GQUICK with "Fast Lock" connection 1/4 turn (max. load. 80Kg) (cod. 0521A014)
- User's manual

### Optional (on request)

#### **Flight cases**

- Professional Flight case for 4 units; compartment for accessories, swivel wheels, cover with hinges with-stay, dishes on cover for piling, 8 handles (2 eachside) (cod. 0521C046.1)

#### **Wireless DMX receivers retrofits (for 03.LDR005.T)**



- Wireless DMX Receiver Card with INDOOR IP20 omni. 2dBi antenna included (cod.03.LA.117)

#### **Clamps / safety wires**

- "C" Clamp G60 black (max. load 50Kg) (cod. 0521A004)
- "C" Clamp G60 chrome (max. load. 50Kg) (cod. 0521A004.20)
- "C" Clamp GQUICK with "Fast Lock" connection 1/4 turn (max. load. 80Kg) (cod. 0521A014)
- "C" Clamp G100 black / professional (max. load. 200Kg) (cod. 0521A015)
- Omega clamp with "Fast Lock" connection 1/4 turn 1 couple (2 pieces) (Cod. 02K00467)
- Safety wire (3mm x 60 cm), ring spring catch, max. capacity load 60Kg (cod. 0521A010)

## 7- IMPORTANT SAFETY INFORMATION

### 7.1 Fire prevention:

- Never locate the fixture on any flammable surface.
- Minimum distance from flammable materials: 1 MT.
- Minimum distance from the closest illuminable surface: 0,5 MT.  
- Replace any blown or damaged fuses only with those of identical value. Refer to the wiring diagram if there is any doubt.
- Connect the projector to mains power via a thermal magnetic circuit breaker.


### 7.2 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 NICK WASH 600 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.

### 7.3 Safety:



- 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 second 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 70°C. Never handle the unit until at least 10 minutes have elapsed since the projector was turned off. 
- Never install the fixture in an enclosed area lacking sufficient air flow. The ambient temperature should not exceed 40°C.

### 7.4 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 IP 20.

## 8- VOLTAGE AND FREQUENCY

The NICK WASH 600 can operate at 90-260 VOLT 50 or 60 Hz.

## 9- INSTALLATION

NICK WASH 600 may be either floor or ceiling mounted.

For floor mounting installations, the NICK WASH 600 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 NICK WASH 600 is moving.

Two 1/4 turn Fast Locks connections placed in the base of the units allow to hang the NICK WASH 600 by using the Fast Lock 'C' clamps provided in the box.

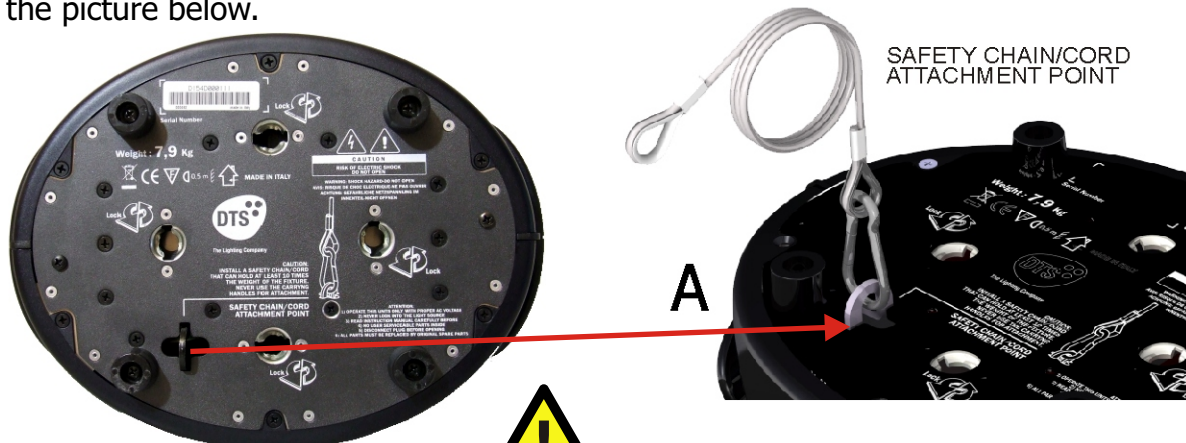


### 9.1- Safety cable



We recommend the use of a safety chain/cord connected to the NICK WASH 600 and to the suspension truss in order to avoid the fixture accidentally falling should the main fixing point fail. Make sure that the iron cable or chain can bear the weight of the entire unit.

You may attach the safety chain/cord 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

Unlimited Pan rotation; unlimited Tilt rotation (NICK WASH 600 ZOOM F.A.R.)  
Pan 540° (2,0 sec.), Tilt 270° (1,2 sec.) (NICK WASH 600 ZOOM)

### Free Axis Rotation ("F.A.R.")



#### WARNING

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



### No Free Axis Rotation ("F.A.R.")

## 9.4- Risk of fire

Each fixture produces heat and must be installed in a well-ventilated place. The minimum recommended distance from flammable material is 1 MT.



Minimum distance from the object being illuminated is 0,5 MT.  $\varnothing 0,5M$

## 9.5- Forced ventilation

You will note, on inspection, that the unit features various air inlets and cooling fans located on the 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.

## 10- MAINS CONNECTION

NICK WASH 600 operate at 90-260 VOLT 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 1,5 amps at 230V, Or 3 amps at 90 V

Strict adherence to regulatory norms is strongly recommended.

**03.LDR005.T**  
**03.LDR005.TF**



Mains  
90-260V AC 50 / 60Hz

**03.LDR005.TWS**



Mains  
90-260V AC 50 / 60Hz



## 10.1- Protection

The use of a thermal magnetic circuit breaker is recommended for each NICK WASH 600.

## 11- DMX SIGNAL CONNECTION

The unit operates using the digital DMX 512 (1990) 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 chassis

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

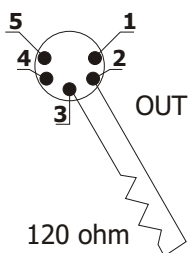


For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

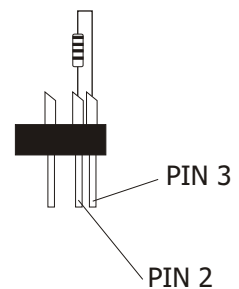
The DMX terminator is a male XLR 3-5 pins connector with a 120 ohm resistor

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

NICK WASH 600 can be used in 2 different DMX modes: 17 DMX control channels (default for NO FAR models) , 20 DMX control channels (default for FAR model).

Here below is described the DMX channels addressing for the controller when NICK WASH 600 is set to 17 and 20 DMX control channels :

17 channels mode (default for NO FAR models)

Projector 1 A001  
 Projector 2 A018 If you want to select the next projector, just add "17"  
 Projector 3 A035  
 ..... A....  
 projector 6 A086

20 channels mode (default for FAR model)

Projector 1 A001  
 Projector 2 A021 If you want to select the next projector, just add "20"  
 Projector 3 A041  
 ..... A....  
 projector 6 A101



## 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 FIRMWARE UPDATING

### Warning:

This procedure require a base knowlge of computer applications and Windows Hyperterminal program. **Please refer to an authorised D.T.S. service centre.**

To update the software version of the NICK WASH 600 you will need:

D.T.S. RED BOX interface (D.T.S. Code: 03.LA.008).

USB-DMX Driver for the D.T.S. RED BOX interface .

D.T.S. Firmware upgrade utility program.

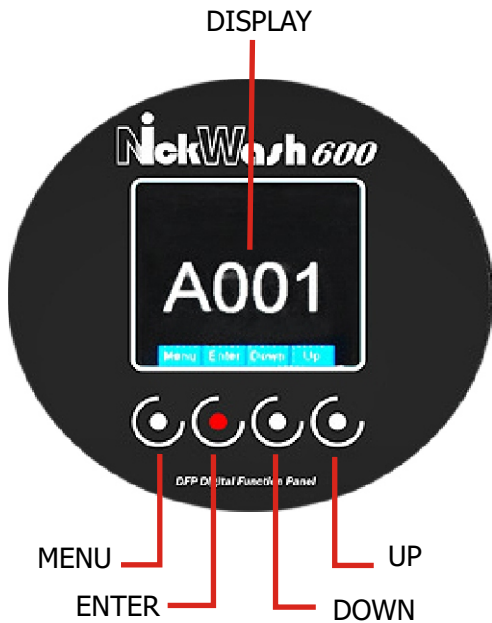
(The driver and the installation procedure are available in our web site [www.dts-lighting.it](http://www.dts-lighting.it))

### Updating the software version.

Please follow the procedure below to perform the update:

1. Install the D.T.S. RED BOX USB-DMX driver on the PC you will use to update the unit software.
2. Connect the D.T.S. RED BOX interface to the PC by using a USB cable.
3. Connect the D.T.S. RED BOX interface to the fixture by using a DMX cable.
4. Download the new software version into the unit by using D.T.S. Firmware upgrade utility program.

# 13- DISPLAY FUNCTIONS



## DISPLAY FUNCTIONS

The NICK WASH 600 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.

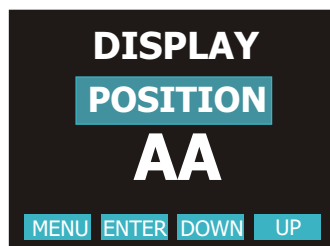
### Software version 1.19

Display

DISPLAY POSITION / STAND BY

Display Position:  
Reverses display's reading depending on the mounting position  
(On the ground or suspended).

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



Display Position  
ON THE GROUND (Default)  
SUSPENDED

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

# 13- DISPLAY FUNCTIONS

  DMX Set

DMX MODE / MACRO  
DMX Mode  
To select DMX mode : 17 ch (default for NO FAR models) or 20 DMX channels (default for FAR model).

Macro  
Macro Function, enable channel mapping macro rainbow effects STD (default)

**DMX SET**

**DMX MODE**

**17 ch not FAR**

MENU ENTER DOWN UP

---

**DMX SET**

**DMX MODE**

**20 ch With FAR**

MENU ENTER DOWN UP

---

**DMX SET**

**MACRO**

**STD**

MENU ENTER DOWN UP

DMX mode  
17 channels (Default for NO FAR MODELS)  
20 channels (Default for FAR model)



  LED

RGBA MINIMUM VALUES  
This menu allow to select the minimum levels for Red, Green, Blue and Amber/White

RGBA MAXIMUM VALUES  
This menu allow to select the maximum levels for Red, Green, Blue and Amber/White

These settings have priority on Master Dimmer (DMX channel 7)

SMOOTH VALUE  
This menu allow to select the value of the delay ( in milliseconds) for RGBA and Dimmer channels reaction to DMX or Program variation.

4 = 25 ms delay (Fast response)  
20 = 250 ms delay (Slow response)

GAMMA CORRECTION  
This menu allow to select between Linear current output or Quadratic current output for LEDs.  
Default = Linear

OUTPUT FREQUENCY  
This menu allow to adjust the PWM frequency value (Hz) in order to reduce flickering in the process of your camera recordings

BOOST DRIVING  
This menu allow to increase the LED's current from 350mA to 500 mA

**LED**

**RED MIN**

**0**

MENU ENTER DOWN UP

---

**LED**

**GREEN MIN**

**0**

MENU ENTER DOWN UP

---

**LED**

**BLUE MIN**

**0**

MENU ENTER DOWN UP

---

**LED**

**AMBER MIN**

**0**

MENU ENTER DOWN UP

---

**LED**

**SMOOTH**

**4**

MENU ENTER DOWN UP

RED Min default =0  
RED Max default = 255

BLUE Min default =0  
BLUE Max default = 255

GREEN Min default =0  
GREEN Max default = 255

AMBER Min default =0  
AMBER Max default = 255

SMOOTH  
Range = Off - 20  
Default = 4



## 13- DISPLAY FUNCTIONS

### LED

#### GAMMA CORRECTION

This menu allow to select between Linear current output or Quadratic current output for LEDs  
Default = Linear

#### OUTPUT FREQUENCY

This menu allow to adjust the PWM frequency value (Hz) in order to reduce flickering in the process of your camera recordings

#### BOOST DRIVING

This menu allow to increase the LED's current from 350mA to 500 mA

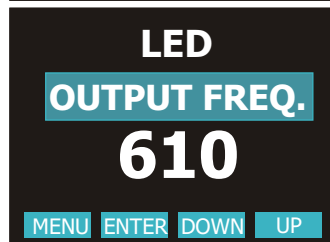
### 



#### GAMMA CORRECTION

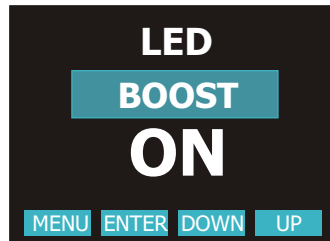
Linear = Linear current output  
Quadratic = Linear light output

### 



#### OUTPUT FREQUENCY

Range = 610 Hz -10 KHz  
Default = 610 Hz



#### BOOST

Whit BOOST active, the LED's current is set to 500mA (30% more gain).  
Default = Enabled

### AUTO

#### AUTOMATIC MODE

Automatic demo game without DMX controller.

#### STEP 01/16

Chase with 16 steps previously created in REC MODE  
Speed time, Wait time, Dimmer, Pan, Tilt and Zoom values selectable by user.

#### PERSONAL COLOURS

RGBA, Dimmer, Shutter, Pan, Tilt and Zoom values selectable by user.

#### RAINBOW

Rainbow colours effect.  
Speed time, Dimmer, Shutter, Pan, Tilt and Zoom values selectable by user.

#### FIXED COLOURS

Sixteen Colour Macros as on "MACRO" channel.  
Dimmer, Shutter, Pan, Tilt and Zoom values selectable by user.

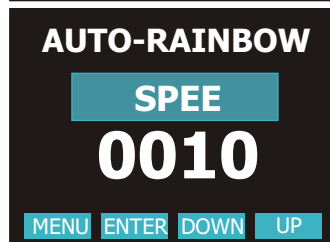
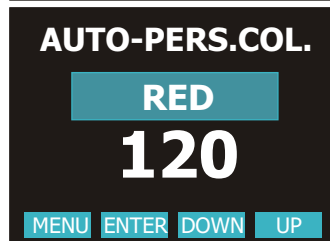
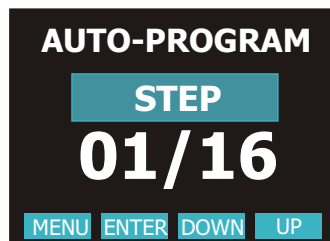
#### WHITE MACROS

Sixteen macros for White color from 2800 to 6500 ° K.  
Dimmer, Shutter, Pan, Tilt and Zoom values selectable by user.

### 



### 



## 13- DISPLAY FUNCTIONS

### AUTO

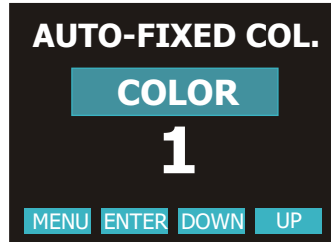
**AUTOMATIC MODE**  
Automatic demo game without DMX controller

**FIXED COLOURS**  
Sixteen Colour Macros as on "MACRO" channel.

Dimmer, Shutter, Pan, Tilt and Zoom values selectable by user.

**WHITE MACROS**  
Sixteen macros for White color from 2800 to 6500 ° K.  
Dimmer, Shutter, Pan, Tilt and Zoom values selectable by user.

### 



### 

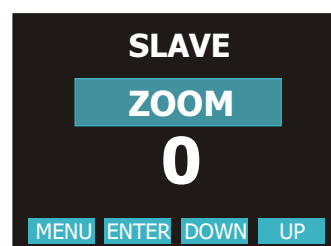
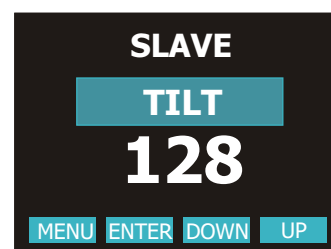
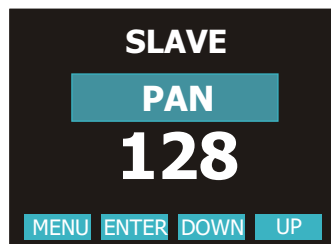
By setting all the units connected to the MASTER, to DMX address 1, them will be synchronized with the Master unit following the chase selected on it, including TIME, WAIT, Pan&Tilt and Zoom position of the MASTER unit.

### SLAVE

**SLAVE MODE SETTING**  
This menu allow to set the Nick Wash 600 as slave unit.  
DMX signal must be present from MASTER unit (set in AUTO MODE) in order to ran the units in SLAVE mode.

By setting all the SLAVE units connected to the MASTER, to DMX address 1, them will be synchronized with the Master unit following the chase selected on it, but running their own Pan&Tilt and Zoom position.

### 



### 

The SLAVE unit receive DMX signal from the MASTER unit.  
By setting all the SLAVE units connected to the MASTER, to DMX address 1, them will be synchronized with the Master unit following the chase selected on it, but running their own Pan&Tilt and Zoom position.

## 13- DISPLAY FUNCTIONS

### WIRELESS

#### WIRELESS DMX

Wireless DMX enabled / disabled.  
By activating WDMX MODE, it will be possible to control Nick Wash 600 via D.T.S. ANTENNA Wireless DMX Transmitter (cod. 03.E1271).

**WIRELESS DMX system is already installed on Nick Wash 600 with code 03.LDR005.TWS**  
**WIRELESS DMX system on Nick Wash 600 with code 03.LDR005.T and 03.LDR005.TF is available on request.**

### 



WIRELESS DMX SYSTEM  
DISABLED



WIRELESS DMX SYSTEM  
ENABLED



UNLINK = LOG OUT



Logging on Nick Wash 600 (WIRELESS DMX must be enabled on the unit)

To log on the NICK WASH 600 in the WIRELESS system simply press and quickly release the function button on the transmitter . The transmitter will start flashing rapidly red/green scanning for new free receivers / NICK WASH 600 units. When a NICK WASH 600 logs on to the transmitter the LINK green light on transmitter starts to flash rapidly.

After approximately 10 seconds the transmitter will jump back to normal mode and continue transmitting data. The NICK WASH 600 now try to synchronize to the transmitter.

When synchronized to the transmitter, 2 different modes are possible:

1. Antenna transmitter has detected and transmits a DMX signal, in this mode a solid green light is seen on the transmitter and solid display is seen on NICK WASH 600.
2. No DMX signal connected, the Antenna transmitter will flash red/green; display blinking on NICK WASH 600

To log off NICK WASH 600 from a transmitter simply select UNLINK function under WIRELESS DMX MENU and press ENTER.

When NICK WASH 600 is logged off the display is blinking, meaning its available for log in on a new transmitter.

Logging out a NICK WASH 600

Select UNLINK function under WIRELESS DMX MENU and press ENTER.

When Nick Wash 600 is logged off the display is blinking, meaning its available for log in on a new transmitter.

Logging out all NICK WASH 600 linked to a transmitter

Press and hold the function button of the transmitter for about 3 seconds. When the display is blinking on Nick Wash 600, it mean that the units are logged out.

Transmitter, Status LED

Flashing red/green, no dmx connected.

Solid green, dmx signal detected and transmitted.

Fast flashing red/green, log in mode (every free Nick Wash 600 unit, not logged in to any other transmitter, will be logged on)

NICK WASH 600 Status

Display blinking, not logged on to a transmitter (free).

Solid display, logged on to a transmitter and receiving dmx data.

## 13- DISPLAY FUNCTIONS

### EMERGENCY

EMERGENCY  
Emergency operating mode.  
By setting Emergency mode, it  
will be possible to select one of  
the 16 preprogrammed WHITE  
cues that will then ran if DMX  
signal is missing or not available.  
Usefull for Emergency EXIT  
ilumination on public areas.  
Dimmer level, Pan&Tilt and  
Zoom values selectable by user.

### 



EMERGENCY  
Disabled = Default

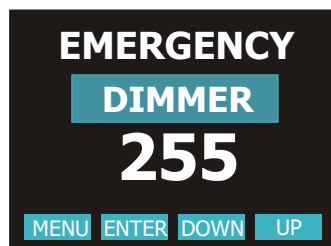
### 



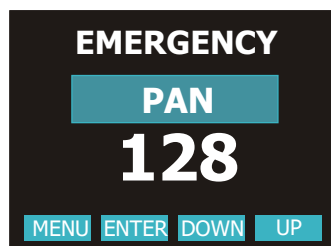
EMERGENCY  
Enabled



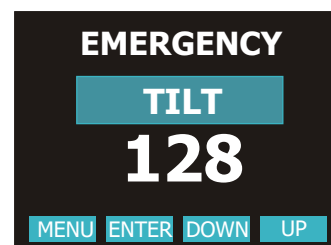
WHITE 1-16  
Default = WHITE 1



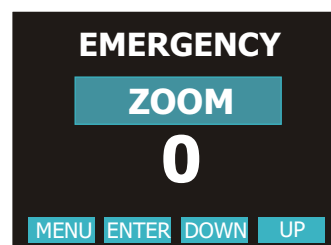
DIMMER  
Default = 255



PAN  
Default = 128



TILT  
Default = 128



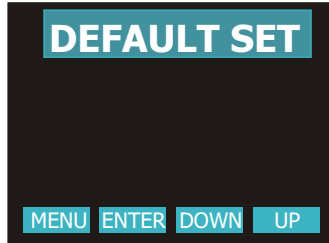
ZOOM  
Default = 0

# 13- DISPLAY FUNCTIONS

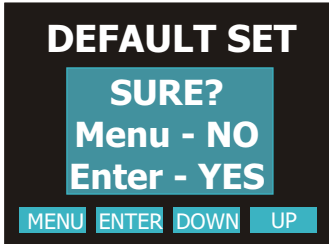
  **DEFAULT SET**

DEFAULT SETTINGS  
To restore default settings



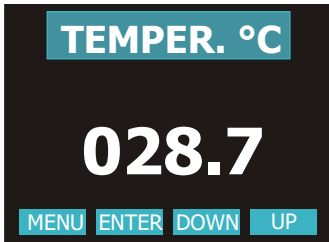




  **TEMPER. °C**



TEMPERATURE  
Unit temperature

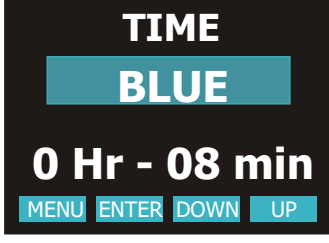
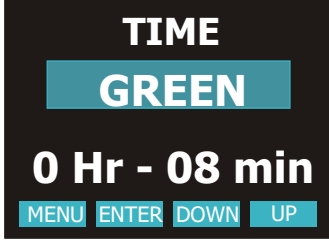
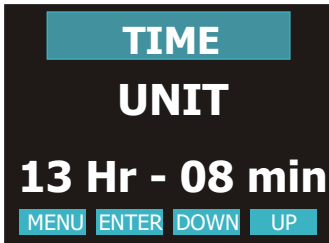


  **TIME**

LIFE TIME  
This menu show the total UNIT life time  
and the RGBA life time





## 13- DISPLAY FUNCTIONS

  SYSTEM

PAN INVERTION / TILT INVERTION /  
PAN-TILT SPEED / FAN MAX SPEED /  
RESET BY DMX / MOTORS FIRMWARE  
UPGRADE.

**PAN INVERSION**  
This menu allows to set the Pan  
movement.  
Normal or Reversed.

**TILT INVERTION**  
This menu allows to set the Pan  
movement.  
Normal or Reversed.

**PAN TILT SPEED**  
Pan Tilt Speed control (1-4)

**FAN MAX SPEED**  
This menu allow to select the  
internal fans speed.

**RESET BY DMX**  
This menu allow to enable / disable  
the Motors reset control (Pan&Tilt  
and Zoom) via DMX.

**MOTORS FIRMWARE UPGRADE**  
This menu allow to upgrade the  
firmware for ZOOM and Pan&Tilt  
circuit boards.

**SYTEM**  
**PAN INVERSION**  
**NORM**  
MENU ENTER DOWN UP


**SYTEM**  
**TILT INVERSION**  
**NORM**  
MENU ENTER DOWN UP

**SYTEM**  
**PAN-TILT SPEED**  
**4**  
MENU ENTER DOWN UP

**SYTEM**  
**FAN MAX SPEED**  
**100%**  
MENU ENTER DOWN UP

**SYTEM**  
**RESET BY DMX**  
**ENAB**  
MENU ENTER DOWN UP

**SYTEM**  
**MOTORS  
FW UPGRADE**  
MENU ENTER DOWN UP

 PAN INVERTION  
Default = NORM

TILT INVERTION  
Default = NORM

PAN TILT SPEED CONTROL  
Default = 4

FAN MAX SPEED  
50% - 100%  
Default = 100%

RESET BY DMX  
Enable: Motors reset enabled via  
DMX (Default).  
Disabled: Motors reset disabled via  
DMX.  
Now: Instant motors reset.

MOTORS FIRMWARE UPGRADE  
Zoom and Pan&Tilt circuit boards  
firmware upgrade.

## 13- DISPLAY FUNCTIONS

  SOFTWARE

SOFTWARE  
LEDs circuit board software, MOTORS  
circuit boards software (Pan&Tilt - Zoom)

SOFTWARE

LED

Id 0D0E001D  
v1.19 Mar 30 2011

MENU
ENTER
DOWN
UP

---

SOFTWARE

Motors

Pan/Tilt v.1.7  
Zoom v.1.8

MENU
ENTER
DOWN
UP

LEDs CIRCUIT BOARD SOFTWARE

 ENTER

MOTORS CIRCUIT BOARDS  
SOFTWARE  
PAN&TILT - ZOOM

## 14- PERIODIC CLEANING

### Front lenses Glass

The dust can reduce the luminous output substantially. Regularly clean the front lenses glass using a soft cotton cloth, dampened with a specialist glasses cleaning solution.

### 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.

## 15- PERIODIC CONTROLS

### Mechanical parts

Periodically check all mechanical parts and the gaskets, replacing them if necessary.

### Electrical components

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

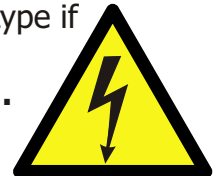
**Attention: Disconnect mains power prior to removing the projector housing.**

### Fuse replacement

Locate the fuse, which protect the electronics, in the base of the NICK WASH 600.

Using a multimeter, test the condition of the fuse, replacing it with one of equivalent type if necessary.

**Attention: Disconnect mains power prior to removing the projector housing.**



## 16- DMX PROTOCOL

### 17 CHANNELS MODE (DEFAULT FOR NO FAR MODELS)

- 1 PAN msb 540°
- 2 PAN lsb
- 3 TILT msb 270°
- 4 TILT lsb
- 5 SPEED MOVEMENT
- 6 SHUTTER
- 7 DIMMER
- 8 RED
- 9 GREEN
- 10 BLUE
- 11 AMBER \ WHITE
- 12 WHITE PREPROGRAMMED
- 13 CTC
- 14 MACRO
- 15 FUNCTION
- 16 ZOOM
- 17 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> |
|-------------|---|----------------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function  |
|-----------------|---------------------|----------------------|------|--------|---|
| 0-10            |                     |                      |      |        | <b>Standard</b>   |
| 11-25           |                     |                      |      |        | <b>Fast movement</b>  |
| 26-127          |                     |                      |      |        | <b>Vector mode from fast to slow</b>                        |
| 128-247         |                     |                      |      |        | <b>Variable time reaction to DMX signal ( fast to slow)</b> |
| 248-255         |                     |                      |      |        | <b>Slow reaction time to dmx signal</b>                     |

|             |          |                           |
|-------------|----------|---------------------------|
| DMX CHANNEL | <b>6</b> | Parameter: <b>SHUTTER</b> |
|-------------|----------|---------------------------|

| DMX range Value | Mid point DMX value   | Move range (degrees) | Mode | Option | Function                              |
|-----------------|---|----------------------|------|--------|---------------------------------------|
| <b>0-9</b>      |   |                      |      |        | <b>Black - out</b>                    |
| <b>10-19</b>    |   |                      |      |        | <b>Open</b>                           |
| <b>20-29</b>    |   |                      |      |        | <b>Black-out</b>                      |
| <b>30-119</b>   |   |                      |      |        | <b>Strobe( from 3.27 s to 30 ms)</b>  |
| <b>120-149</b>  |   |                      |      |        | <b>Pulse up (from 42.6s to120ms)</b>  |
| <b>150-179</b>  |   |                      |      |        | <b>Pulse down(from 42.6s to120ms)</b> |
| <b>180-204</b>  | <b>Random strobe (Dimmer, Red, Green, Blue, Amber channels active)</b>                    |                      |      |        |                                       |
| <b>205-229</b>  | <b>Full independent Random Strobe (Dimmer, Red, Green, Blue, Amber channels disabled)</b> |                      |      |        |                                       |
| <b>230-255</b>  |   |                      |      |        | <b>Open</b>                           |

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

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                   |
|-----------------|---------------------|----------------------|------|--------|----------------------------|
| <b>0-7</b>      |                     |                      |      |        | <b>Black-out</b>           |
| <b>8-255</b>    |                     |                      |      |        | <b>Proportional dimmer</b> |

|             |          |                       |
|-------------|----------|-----------------------|
| DMX CHANNEL | <b>8</b> | Parameter: <b>RED</b> |
|-------------|----------|-----------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                   |
|-----------------|---------------------|----------------------|------|--------|----------------------------|
| <b>0-255</b>    |                     |                      |      |        | <b>Proportional colour</b> |

|             |          |                         |
|-------------|----------|-------------------------|
| DMX CHANNEL | <b>9</b> | Parameter: <b>GREEN</b> |
|-------------|----------|-------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                   |
|-----------------|---------------------|----------------------|------|--------|----------------------------|
| <b>0-255</b>    |                     |                      |      |        | <b>Proportional colour</b> |

|             |           |                        |
|-------------|-----------|------------------------|
| DMX CHANNEL | <b>10</b> | Parameter: <b>BLUE</b> |
|-------------|-----------|------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                   |
|-----------------|---------------------|----------------------|------|--------|----------------------------|
| <b>0-255</b>    |                     |                      |      |        | <b>Proportional colour</b> |

|             |           |                                 |
|-------------|-----------|---------------------------------|
| DMX CHANNEL | <b>11</b> | Parameter: <b>AMBER \ WHITE</b> |
|-------------|-----------|---------------------------------|

| DMX range Value | Mid point DMX value | Move Range (degrees) | Mode | Option | Function                   |
|-----------------|---------------------|----------------------|------|--------|----------------------------|
| <b>0-255</b>    |                     |                      |      |        | <b>Proportional colour</b> |

|             |           |   |
|-------------|-----------|---|
| DMX CHANNEL | <b>12</b> | Parameter: <b>WHITE (Pre-programmed White at diff. color temperature)</b> |
|-------------|-----------|---|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function  |
|-----------------|---------------------|----------------------|------|--------|---|
| <b>0-55</b>     | <b>23</b>           |                      |      |        | <b>No Function</b>  |
| <b>56-105</b>   | <b>80</b>           |                      |      |        | <b>Full (Red-Green-Blue at Full)</b>                      |
| <b>106-155</b>  | <b>130</b>          |                      |      |        | <b>White DTS</b>  |
| <b>156-205</b>  | <b>180</b>          |                      |      |        | <b>Custom White Create (RGB levels selectable by DMX)</b> |
| <b>206-255</b>  | <b>230</b>          |                      |      |        | <b>White CTC (Channel 13 CTC enabled)</b>                 |

|             |           |  |
|-------------|-----------|--|
| DMX CHANNEL | <b>13</b> | Parameter: <b>CTC (Color temperature correction)</b> |
|-------------|-----------|--|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function |
|-----------------|---------------------|----------------------|------|--------|----------|
|                 |                     |                      |      |        |          |

**IF CHANNEL 12 WHITE PREPROGRAMMED = WHITE CTC (Dmx range value 206 - 255)**

|              |   |  |  |  |  |
|--------------|---|--|--|--|--|
| <b>0-255</b> | <b>Linear control temperature correction: 0 = 2800°K / 255 = 6800°K</b> |  |  |  |  |
|--------------|---|--|--|--|--|

|             |    |                                 |
|-------------|----|---------------------------------|
| DMX CHANNEL | 14 | Parameter: <b>COLOUR MACROS</b> |
|-------------|----|---------------------------------|

IF:  **DMX SET**  **MACRO**  **STD** 

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function           |
|-----------------|---------------------|----------------------|------|--------|--------------------|
| 0-14            |                     |                      |      |        | <b>No Function</b> |
| 15-29           |                     |                      |      |        | <b>Macro 1</b>     |
| 30-44           |                     |                      |      |        | <b>Macro 2</b>     |
| 45-59           |                     |                      |      |        | <b>Macro 3</b>     |
| 60-74           |                     |                      |      |        | <b>Macro 4</b>     |
| 75-89           |                     |                      |      |        | <b>Macro 5</b>     |
| 90-104          |                     |                      |      |        | <b>Macro 6</b>     |
| 105-119         |                     |                      |      |        | <b>Macro 7</b>     |
| 120-134         |                     |                      |      |        | <b>Macro 8</b>     |
| 135-149         |                     |                      |      |        | <b>Macro 9</b>     |
| 150-164         |                     |                      |      |        | <b>Macro 10</b>    |
| 165-179         |                     |                      |      |        | <b>Macro 11</b>    |
| 180-194         |                     |                      |      |        | <b>Macro 12</b>    |
| 195-209         |                     |                      |      |        | <b>Macro 13</b>    |
| 210-225         |                     |                      |      |        | <b>Macro 14</b>    |
| 226-239         |                     |                      |      |        | <b>Macro 15</b>    |
| 240-255         |                     |                      |      |        | <b>Macro 16</b>    |

|             |    |                                 |
|-------------|----|---------------------------------|
| DMX CHANNEL | 14 | Parameter: <b>COLOUR MACROS</b> |
|-------------|----|---------------------------------|

IF:  **DMX SET**  **MACRO**  **EXT** 

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function           |
|-----------------|---------------------|----------------------|------|--------|--------------------|
| 0-14            |                     |                      |      |        | <b>No Function</b> |
| 15-24           |                     |                      |      |        | <b>Macro 1</b>     |
| 25-34           |                     |                      |      |        | <b>Macro 2</b>     |
| 35-44           |                     |                      |      |        | <b>Macro 3</b>     |
| 45-54           |                     |                      |      |        | <b>Macro 4</b>     |
| 55-64           |                     |                      |      |        | <b>Macro 5</b>     |
| 65-74           |                     |                      |      |        | <b>Macro 6</b>     |
| 75-84           |                     |                      |      |        | <b>Macro 7</b>     |
| 85-94           |                     |                      |      |        | <b>Macro 8</b>     |
| 95-104          |                     |                      |      |        | <b>Macro 9</b>     |
| 105-114         |                     |                      |      |        | <b>Macro 10</b>    |
| 115-124         |                     |                      |      |        | <b>Macro 11</b>    |
| 125-134         |                     |                      |      |        | <b>Macro 12</b>    |
| 135-144         |                     |                      |      |        | <b>Macro 13</b>    |
| 145-154         |                     |                      |      |        | <b>Macro 14</b>    |
| 155-164         |                     |                      |      |        | <b>Macro 15</b>    |
| 165-174         |                     |                      |      |        | <b>Macro 16</b>    |

|             |    |                                 |
|-------------|----|---------------------------------|
| DMX CHANNEL | 14 | Parameter: <b>COLOUR MACROS</b> |
|-------------|----|---------------------------------|

IF:   **DMX SET**   **MACRO**  **EXT** 

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                          |
|-----------------|---------------------|----------------------|------|--------|-----------------------------------|
| 175-184         |                     |                      |      |        | <b>Rainbow Speed 1 (6 Sec.)</b>   |
| 185-194         |                     |                      |      |        | <b>Rainbow Speed 2 (15 Sec.)</b>  |
| 195-204         |                     |                      |      |        | <b>Rainbow Speed 3 (30 Sec.)</b>  |
| 205-214         |                     |                      |      |        | <b>Rainbow Speed 4 (45 Sec.)</b>  |
| 215-224         |                     |                      |      |        | <b>Rainbow Speed 5 (60 Sec.)</b>  |
| 225-234         |                     |                      |      |        | <b>Rainbow Speed 6 (120 Sec.)</b> |
| 235-244         |                     |                      |      |        | <b>Rainbow Speed 7 (150 Sec.)</b> |
| 245-255         |                     |                      |      |        | <b>Rainbow Speed 8 (180 Sec.)</b> |

|             |    |  |
|-------------|----|--|
| DMX CHANNEL | 15 | Parameter: <b>FUNCTIONS (Recall,Create and Store the Custom white)</b> |
|-------------|----|--|

**IF CHANNEL 12 WHITE PREPROGRAMMED = Dmx range value 156 - 205**

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function  |
|-----------------|---------------------|----------------------|------|--------|---|
| 0-79            |                     |                      |      |        | <b>Custom White Recall</b>  |
| 80-160          |                     |                      |      |        | <b>Custom White Create (Enable CH 18/19/20 for Custom white Creation)</b> |
| 161-255         |                     |                      |      |        | <b>Custom White Store (Store the Custom White created )</b>               |

|             |    |                        |
|-------------|----|------------------------|
| DMX CHANNEL | 16 | Parameter: <b>ZOOM</b> |
|-------------|----|------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function   |
|-----------------|---------------------|----------------------|------|--------|--|
| 0-255           |                     |                      |      |        | <b>Linear ZOOM from Narrow to Wide (13,5°-40°)</b> |

|             |    |                         |
|-------------|----|-------------------------|
| DMX CHANNEL | 17 | Parameter: <b>RESET</b> |
|-------------|----|-------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                                     |
|-----------------|---------------------|----------------------|------|--------|--|
| 0-15            |                     |                      |      |        | <b>No Effect</b>                             |
| 16-255          |                     |                      |      |        | <b>Total Reset (activation after 3 sec.)</b> |

## 16- DMX PROTOCOL

### 20 CHANNELS MODE (DEFAULT FOR FAR MODELS)

- 1 PAN msb 540°
- 2 PAN lsb
- 3 TILT msb 270°
- 4 TILT lsb
- 5 SPEED MOVEMENT
- 6 PAN FAR
- 7 TILT FAR
- 8 SHUTTER
- 9 DIMMER
- 10 RED
- 11 GREEN
- 12 BLUE
- 13 AMBER \ WHITE
- 14 WHITE PREPROGRAMMED
- 15 CTC
- 16 MACRO
- 17 FUNCTION
- 18 ZOOM
- 19 NO FUNCTION
- 20 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> |
|-------------|---|----------------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function  |
|-----------------|---------------------|----------------------|------|--------|---|
| 0-10            |                     |                      |      |        | <b>Standard</b>   |
| 11-25           |                     |                      |      |        | <b>Fast movement</b>  |
| 26-127          |                     |                      |      |        | <b>Vector mode from fast to slow</b>                        |
| 128-247         |                     |                      |      |        | <b>Variable time reaction to DMX signal ( fast to slow)</b> |
| 248-255         |                     |                      |      |        | <b>Slow reaction time to dmx signal</b>                     |

|             |          |                           |
|-------------|----------|---------------------------|
| DMX CHANNEL | <b>6</b> | Parameter: <b>PAN FAR</b> |
|-------------|----------|---------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function   |
|-----------------|---------------------|----------------------|------|--------|--|
| <b>000-010</b>  |                     |                      |      |        | <b>Position mode 540° (standard path)</b>          |
| <b>011-020</b>  |                     |                      |      |        | <b>Position mode 360° ( 1 turn)</b>                |
| <b>021-030</b>  |                     |                      |      |        | <b>Position mode 720° ( 2 turns)</b>               |
| <b>031-040</b>  |                     |                      |      |        | <b>Position mode 1080° ( 3 turns)</b>              |
| <b>041-050</b>  |                     |                      |      |        | <b>Position mode 1440° ( 4 turns)</b>              |
| <b>051-060</b>  |                     |                      |      |        | <b>Position mode 1800° ( 5 turns)</b>              |
| <b>061-070</b>  |                     |                      |      |        | <b>Position mode 2160° ( 6 turns)</b>              |
| <b>071-080</b>  |                     |                      |      |        | <b>Position mode 2520° ( 7 turns)</b>              |
| <b>081-090</b>  |                     |                      |      |        | <b>Position mode 2880° ( 8 turns)</b>              |
| <b>091-100</b>  |                     |                      |      |        | <b>Position mode 3240° ( 9 turns)</b>              |
| <b>101-110</b>  |                     |                      |      |        | <b>Position mode 3600° (10 turns)</b>              |
| <b>111-120</b>  |                     |                      |      |        | <b>Position mode 360° smart path</b>               |
| <b>121-182</b>  |                     |                      |      |        | <b>Forward spin rotation speed from max to min</b> |
| <b>183-193</b>  |                     |                      |      |        | <b>Stop</b>  |
| <b>194-255</b>  |                     |                      |      |        | <b>Reverse spin rotation speed from min to max</b> |

|             |          |                            |
|-------------|----------|----------------------------|
| DMX CHANNEL | <b>7</b> | Parameter: <b>TILT FAR</b> |
|-------------|----------|----------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function   |
|-----------------|---------------------|----------------------|------|--------|--|
| <b>000-010</b>  |                     |                      |      |        | <b>Position mode 270° (standard path)</b>          |
| <b>011-020</b>  |                     |                      |      |        | <b>Position mode 360° ( 1 turn)</b>                |
| <b>021-030</b>  |                     |                      |      |        | <b>Position mode 720° ( 2 turns)</b>               |
| <b>031-040</b>  |                     |                      |      |        | <b>Position mode 1080° ( 3 turns)</b>              |
| <b>041-050</b>  |                     |                      |      |        | <b>Position mode 1440° ( 4 turns)</b>              |
| <b>051-060</b>  |                     |                      |      |        | <b>Position mode 1800° ( 5 turns)</b>              |
| <b>061-070</b>  |                     |                      |      |        | <b>Position mode 2160° ( 6 turns)</b>              |
| <b>071-080</b>  |                     |                      |      |        | <b>Position mode 2520° ( 7 turns)</b>              |
| <b>081-090</b>  |                     |                      |      |        | <b>Position mode 2880° ( 8 turns)</b>              |
| <b>091-100</b>  |                     |                      |      |        | <b>Position mode 3240° ( 9 turns)</b>              |
| <b>101-110</b>  |                     |                      |      |        | <b>Position mode 3600° (10 turns)</b>              |
| <b>111-120</b>  |                     |                      |      |        | <b>Position mode 360° smart path</b>               |
| <b>121-182</b>  |                     |                      |      |        | <b>Forward spin rotation speed from max to min</b> |
| <b>183-193</b>  |                     |                      |      |        | <b>Stop</b>  |
| <b>194-255</b>  |                     |                      |      |        | <b>Reverse spin rotation speed from min to max</b> |

|             |          |                           |
|-------------|----------|---------------------------|
| DMX CHANNEL | <b>8</b> | Parameter: <b>SHUTTER</b> |
|-------------|----------|---------------------------|

| DMX range Value | Mid point DMX value   | Move range (degrees) | Mode | Option | Function                              |
|-----------------|---|----------------------|------|--------|---------------------------------------|
| <b>0-9</b>      |   |                      |      |        | <b>Black - out</b>                    |
| <b>10-19</b>    |   |                      |      |        | <b>Open</b>                           |
| <b>20-29</b>    |   |                      |      |        | <b>Black-out</b>                      |
| <b>30-119</b>   |   |                      |      |        | <b>Strobe( from 3.27 s to 30 ms)</b>  |
| <b>120-149</b>  |   |                      |      |        | <b>Pulse up (from 42.6s to120ms)</b>  |
| <b>150-179</b>  |   |                      |      |        | <b>Pulse down(from 42.6s to120ms)</b> |
| <b>180-204</b>  | <b>Random strobe (Dimmer, Red, Green, Blue, Amber channels active)</b>                    |                      |      |        |                                       |
| <b>205-229</b>  | <b>Full independent Random Strobe (Dimmer, Red, Green, Blue, Amber channels disabled)</b> |                      |      |        |                                       |
| <b>230-255</b>  |   |                      |      |        | <b>Open</b>                           |

|             |          |                          |
|-------------|----------|--------------------------|
| DMX CHANNEL | <b>9</b> | Parameter: <b>DIMMER</b> |
|-------------|----------|--------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                   |
|-----------------|---------------------|----------------------|------|--------|----------------------------|
| <b>0-7</b>      |                     |                      |      |        | <b>Black-out</b>           |
| <b>8-255</b>    |                     |                      |      |        | <b>Proportional dimmer</b> |

|             |           |                       |
|-------------|-----------|-----------------------|
| DMX CHANNEL | <b>10</b> | Parameter: <b>RED</b> |
|-------------|-----------|-----------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                   |
|-----------------|---------------------|----------------------|------|--------|----------------------------|
| <b>0-255</b>    |                     |                      |      |        | <b>Proportional colour</b> |

|             |           |                         |
|-------------|-----------|-------------------------|
| DMX CHANNEL | <b>11</b> | Parameter: <b>GREEN</b> |
|-------------|-----------|-------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                   |
|-----------------|---------------------|----------------------|------|--------|----------------------------|
| <b>0-255</b>    |                     |                      |      |        | <b>Proportional colour</b> |

|             |           |                        |
|-------------|-----------|------------------------|
| DMX CHANNEL | <b>12</b> | Parameter: <b>BLUE</b> |
|-------------|-----------|------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                   |
|-----------------|---------------------|----------------------|------|--------|----------------------------|
| <b>0-255</b>    |                     |                      |      |        | <b>Proportional colour</b> |

|             |           |                                 |
|-------------|-----------|---------------------------------|
| DMX CHANNEL | <b>13</b> | Parameter: <b>AMBER \ WHITE</b> |
|-------------|-----------|---------------------------------|

| DMX range Value | Mid point DMX value | Move Range (degrees) | Mode | Option | Function                   |
|-----------------|---------------------|----------------------|------|--------|----------------------------|
| <b>0-255</b>    |                     |                      |      |        | <b>Proportional colour</b> |

|             |           |   |
|-------------|-----------|---|
| DMX CHANNEL | <b>14</b> | Parameter: <b>WHITE (Pre-programmed White at diff. color temperature)</b> |
|-------------|-----------|---|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function  |
|-----------------|---------------------|----------------------|------|--------|---|
| <b>0-55</b>     | <b>23</b>           |                      |      |        | <b>No Function</b>  |
| <b>56-105</b>   | <b>80</b>           |                      |      |        | <b>Full (Red-Green-Blue at Full)</b>                      |
| <b>106-155</b>  | <b>130</b>          |                      |      |        | <b>White DTS</b>  |
| <b>156-205</b>  | <b>180</b>          |                      |      |        | <b>Custom White Create (RGB levels selectable by DMX)</b> |
| <b>206-255</b>  | <b>230</b>          |                      |      |        | <b>White CTC (Channel 15 CTC enabled)</b>                 |

|             |           |  |
|-------------|-----------|--|
| DMX CHANNEL | <b>15</b> | Parameter: <b>CTC (Color temperature correction)</b> |
|-------------|-----------|--|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function |
|-----------------|---------------------|----------------------|------|--------|----------|
|                 |                     |                      |      |        |          |

**IF CHANNEL 14 WHITE PREPROGRAMMED = WHITE CTC (Dmx range value 206 - 255)**

|              |   |  |  |  |  |
|--------------|---|--|--|--|--|
| <b>0-255</b> | <b>Linear control temperature correction: 0 = 2800°K / 255 = 6800°K</b> |  |  |  |  |
|--------------|---|--|--|--|--|

|             |    |                                 |
|-------------|----|---------------------------------|
| DMX CHANNEL | 16 | Parameter: <b>COLOUR MACROS</b> |
|-------------|----|---------------------------------|

IF:  **DMX SET**  **MACRO**  **STD** 

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function           |
|-----------------|---------------------|----------------------|------|--------|--------------------|
| 0-14            |                     |                      |      |        | <b>No Function</b> |
| 15-29           |                     |                      |      |        | <b>Macro 1</b>     |
| 30-44           |                     |                      |      |        | <b>Macro 2</b>     |
| 45-59           |                     |                      |      |        | <b>Macro 3</b>     |
| 60-74           |                     |                      |      |        | <b>Macro 4</b>     |
| 75-89           |                     |                      |      |        | <b>Macro 5</b>     |
| 90-104          |                     |                      |      |        | <b>Macro 6</b>     |
| 105-119         |                     |                      |      |        | <b>Macro 7</b>     |
| 120-134         |                     |                      |      |        | <b>Macro 8</b>     |
| 135-149         |                     |                      |      |        | <b>Macro 9</b>     |
| 150-164         |                     |                      |      |        | <b>Macro 10</b>    |
| 165-179         |                     |                      |      |        | <b>Macro 11</b>    |
| 180-194         |                     |                      |      |        | <b>Macro 12</b>    |
| 195-209         |                     |                      |      |        | <b>Macro 13</b>    |
| 210-225         |                     |                      |      |        | <b>Macro 14</b>    |
| 226-239         |                     |                      |      |        | <b>Macro 15</b>    |
| 240-255         |                     |                      |      |        | <b>Macro 16</b>    |

|             |    |                                 |
|-------------|----|---------------------------------|
| DMX CHANNEL | 16 | Parameter: <b>COLOUR MACROS</b> |
|-------------|----|---------------------------------|

IF:  **DMX SET**  **MACRO**  **EXT** 

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function           |
|-----------------|---------------------|----------------------|------|--------|--------------------|
| 0-14            |                     |                      |      |        | <b>No Function</b> |
| 15-24           |                     |                      |      |        | <b>Macro 1</b>     |
| 25-34           |                     |                      |      |        | <b>Macro 2</b>     |
| 35-44           |                     |                      |      |        | <b>Macro 3</b>     |
| 45-54           |                     |                      |      |        | <b>Macro 4</b>     |
| 55-64           |                     |                      |      |        | <b>Macro 5</b>     |
| 65-74           |                     |                      |      |        | <b>Macro 6</b>     |
| 75-84           |                     |                      |      |        | <b>Macro 7</b>     |
| 85-94           |                     |                      |      |        | <b>Macro 8</b>     |
| 95-104          |                     |                      |      |        | <b>Macro 9</b>     |
| 105-114         |                     |                      |      |        | <b>Macro 10</b>    |
| 115-124         |                     |                      |      |        | <b>Macro 11</b>    |
| 125-134         |                     |                      |      |        | <b>Macro 12</b>    |
| 135-144         |                     |                      |      |        | <b>Macro 13</b>    |
| 145-154         |                     |                      |      |        | <b>Macro 14</b>    |
| 155-164         |                     |                      |      |        | <b>Macro 15</b>    |
| 165-174         |                     |                      |      |        | <b>Macro 16</b>    |

|             |           |                                 |
|-------------|-----------|---------------------------------|
| DMX CHANNEL | <b>16</b> | Parameter: <b>COLOUR MACROS</b> |
|-------------|-----------|---------------------------------|

IF:   **DMX SET**   **MACRO**  **EXT** 

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                          |
|-----------------|---------------------|----------------------|------|--------|-----------------------------------|
| <b>175-184</b>  |                     |                      |      |        | <b>Rainbow Speed 1 (6 Sec.)</b>   |
| <b>185-194</b>  |                     |                      |      |        | <b>Rainbow Speed 2 (15 Sec.)</b>  |
| <b>195-204</b>  |                     |                      |      |        | <b>Rainbow Speed 3 (30 Sec.)</b>  |
| <b>205-214</b>  |                     |                      |      |        | <b>Rainbow Speed 4 (45 Sec.)</b>  |
| <b>215-224</b>  |                     |                      |      |        | <b>Rainbow Speed 5 (60 Sec.)</b>  |
| <b>225-234</b>  |                     |                      |      |        | <b>Rainbow Speed 6 (120 Sec.)</b> |
| <b>235-244</b>  |                     |                      |      |        | <b>Rainbow Speed 7 (150 Sec.)</b> |
| <b>245-255</b>  |                     |                      |      |        | <b>Rainbow Speed 8 (180 Sec.)</b> |

|             |           |   |
|-------------|-----------|---|
| DMX CHANNEL | <b>17</b> | Parameter: <b>FUNCTIONS (Recall, Create and Store the Custom white)</b> |
|-------------|-----------|---|

**IF CHANNEL 14 WHITE PREPROGRAMMED = Dmx range value 156 - 205**

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function   |
|-----------------|---------------------|----------------------|------|--------|--|
| <b>0-79</b>     |                     |                      |      |        | <b>Custom White Recall</b>                                 |
| <b>80-160</b>   |                     |                      |      |        | <b>Custom White Create (Enable Custom white Creation)</b>  |
| <b>161-255</b>  |                     |                      |      |        | <b>Custom White Store (Store the Custom White created)</b> |

|             |           |                        |
|-------------|-----------|------------------------|
| DMX CHANNEL | <b>18</b> | Parameter: <b>ZOOM</b> |
|-------------|-----------|------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function   |
|-----------------|---------------------|----------------------|------|--------|--|
| <b>0-255</b>    |                     |                      |      |        | <b>Linear ZOOM from Narrow to Wide (13,5°-40°)</b> |

|             |           |                               |
|-------------|-----------|-------------------------------|
| DMX CHANNEL | <b>19</b> | Parameter: <b>NO FUNCTION</b> |
|-------------|-----------|-------------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function           |
|-----------------|---------------------|----------------------|------|--------|--------------------|
| <b>0-255</b>    |                     |                      |      |        | <b>NO FUNCTION</b> |

|             |           |                         |
|-------------|-----------|-------------------------|
| DMX CHANNEL | <b>20</b> | Parameter: <b>RESET</b> |
|-------------|-----------|-------------------------|

| DMX range Value | Mid point DMX value | Move range (degrees) | Mode | Option | Function                                     |
|-----------------|---------------------|----------------------|------|--------|--|
| <b>0-15</b>     |                     |                      |      |        | <b>No Effect</b>                             |
| <b>16-255</b>   |                     |                      |      |        | <b>Total Reset (activation after 3 sec.)</b> |

## NOTES

## NOTES

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