# Nek NRG1201

User's Manual Rel 1.0 GB

DTS
The Lighting Company

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Made in Italy

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

## 3- GENERAL WARRANTY CONDITIONS

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

## 4- TECHNICAL FEATURES

### Overview

NICK NRG 1201 is the most efficient LED moving head wash light ever produced and, thanks to its specifically developed optical group, fears no competition.
The exceptional brightness/consumption ratio makes NICK NRG 1201 a truly “green” fixture.
NICK NRG’s new-generation optical group is an exclusive D.T.S. feature.
NICK NRG 1201 is equipped with 30 high-power full-colour LEDs (RGBW).
NICK NRG 1201 features 8°- 50° motorized zoom with a high efficiency optical system enabling it to be used as a PC Beam or a very wide Wash and ultra-fast silent Pan/Tilt.
NICK NRG 1201 (Cod. 03.LDR006.FFP; Cod. 03.LDR006.FWFP), is also equipped with the “FPR” system (patent pending), which enables limitless pan rotation in both directions, with no need for inversion.

### Applications

NICK NRG 1201 is suitable for top professional applications, such as tours and special events.
NICK NRG 1201 is also available as NICK NRG 1201 CT (30 Full White LEDs, 2700°K-6500°K).

### Product codes

| | |
|---|---|
| 03.LDR006.F | NICK NRG 1201 FULLCOLOR BLACK ZOOM |
| 03.LDR006.FFP | NICK NRG 1201 FULLCOLOR FPR BLACK ZOOM |
| 03.LDR006.FW | NICK NRG 1201 CT FULLWHITE BLACK ZOOM |
| 03.LDR006.FWFP | NICK NRG 1201 CT FULLWHITE FPR BLACK ZOOM |

### LED Technology

***** 30 Full Colour LEDs (RGBW)

### Optical group

* 8°- 50° linear motorized zoom with high-efficiency optical system
* Uniform projection on surfaces, from very wide Wash to PC Beam

### Colour generation

* 16 million colours
* Wide palette of pure uniform whites with variable linear colour temperature (2700°K – 8000°K)

### Interface / Control / Programming

***** Multi-function OLED graphic colour display + 4 soft keys:
control / management / monitoring of the main parameters
* Controlled via DMX 512 and RDM standard digital communication protocols
* Wireless ready
* Ethernet ready
* Internal operating system updatable via D.T.S. RED BOX interface via “D.T.S. firmware upgrade utility” program on windows based PC

**DMX**
20 DMX channels

**Pan & Tilt**
NICK NRG 1201 FPR (Cod. 03.LDR006.FFP; Cod. 03.LDR006.FWFP)
* 'FPR': limitless pan rotation, in either direction, never having to reverse motion
Tilt 270° (1,2 sec.)

NICK NRG 1201 (Cod. 03.LDR006.F; Cod. 03.LDR006.FW)
* Ultra-fast movement: Pan 540° (2 sec.); Tilt 270° (1,2 sec.)

* 16-bit movement resolution
* 4 Selectable speed ranges

**Power supply**
***** Electronic full-range AC 90-260 V  50 / 60 Hz
* Power consumption: 90 V – 3,7 A – 340 W ; 120 V – 2,83 A – 340 W ;
230 V – 1,47 A - 340 W ; 260 V – 1,3 A – 340 W

**Connectors**
* DMX: 4 XLR connectors (3-pole In and Out; 5-pole In and Out) by Neutrik;
* Power supply: POWERCONN In/Out connectors by Neutrik.

**Operating ambient temperature**
-10° / 40°

**Weight**
10,5 Kg

**International certifications**
Certification CE; LED Class: Class 2 LED product

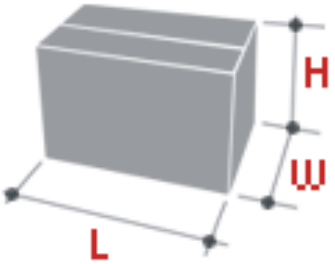
## 5- TECHNICAL SPECIFICATIONS

### Dimensions

Packaging Dimensions (LxWxH)

530 x 430 x 414 mm

Weight: 13 Kg




Unit Dimensions (LxWxH)

369x218x497 mm

Weight: 10,5 Kg


## 6- ACCESSORIES

### As standard

- 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)
- “C” Clamp GQUICK with “Fast Lock” connection 1/4 turn (cod. 0521A014)
- User’s manual

### Optional (on request)

**Flight case**

- 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. 0521C051.1)

**Wireless DMX receiver retrofit**

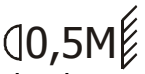
- Wireless DMX Receiver Card with INDOOR IP20 omni. 2dBi antenna included (cod.03.LA.126)

**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 NRG 1201 requires the assistance of specialised personnel for all servicing.
Please refer to an authorised D.T.S. 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

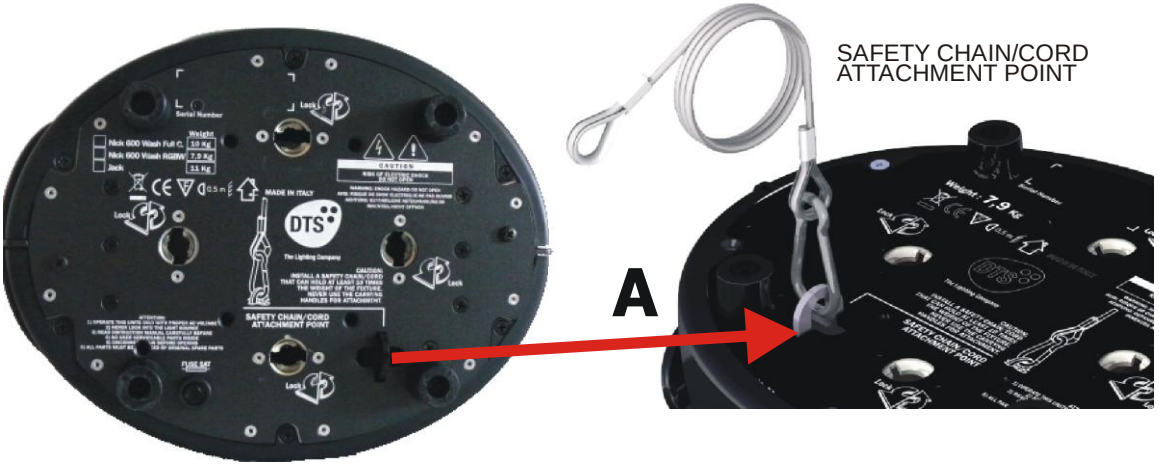
The NICK NRG 1201 can operate at 90-260 VOLT  50 or 60 Hz.

## 9- INSTALLATION

NICK NRG 1201 may be either floor or ceiling mounted.
For floor mounting installations, the NICK NRG 1201 is supplied with four rubber mounting feet  on the base.
For ceiling mounted installations, we reccomend 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 hung it. The structure should also be sufficiently rigid so as not to move or shake whilst the NICK NRG 1201 is moving.
Four 1/4 turn Fast Locks connections placed in the base of the unit allow to hang the NICK NRG 1201 by using the Fast Lock “C” clamps provided in the box.

### 9.1- Safety cable

We recommend the use of a safety cable or chain connected to the NICK NRG 1201 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

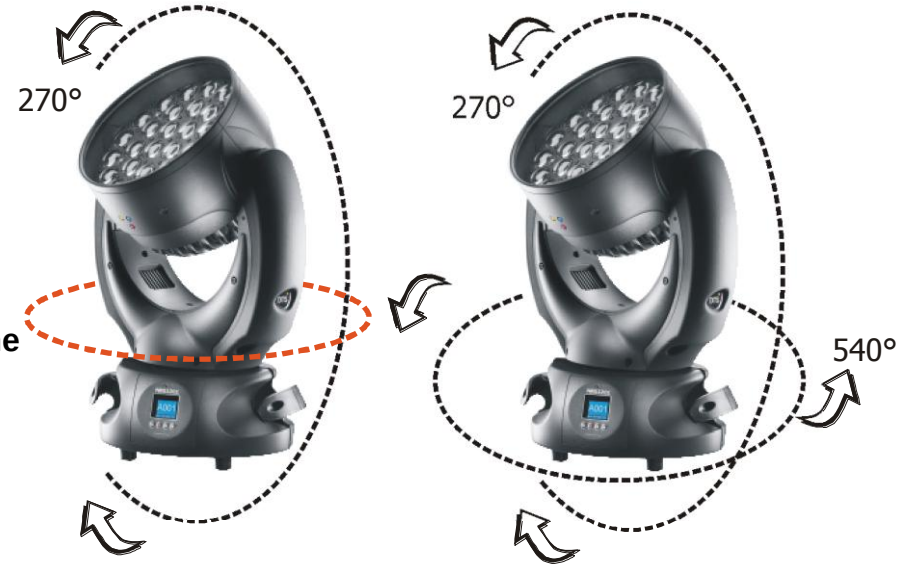
The projector contains electric and electronic components which should under no circumstances come into contact with oil, water or any other liquid.
The proper unit functioning would be compromised should this occur.

## 9.3- Movement

NICK NRG 1201 FPR (Cod. 03.LDR006.FFP; Cod. 03.LDR006.FWFP)
Unlimited Pan rotation; Tilt 270° (1,2 sec.)
NICK NRG 1201 (Cod. 03.LDR006.F; Cod. 03.LDR006.FW)
Ultra-fast movement: Pan 540° (2,0 sec.); Tilt 270° (1,2 sec.)
DO NOT place any obstructions in the path of the projector's movement.

**WARNING**

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




**Free Pan Rotation ('FPR')**
**(Cod. 03.LDR006.FFP)**
**(Cod. 03.LDR006.FWFP)**

**No 'FPR'**
**(Cod. 03.LDR006.F)**
**(Cod. 03.LDR006.FW)**

## 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.

## 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.

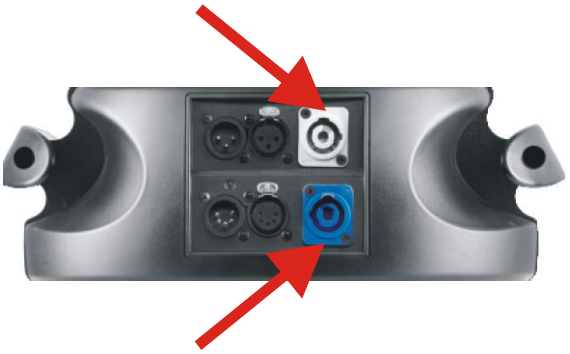
## 9.6- Ambient temperature

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 NRG 1201 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.

**MAINS AC OUTPUT 90 – 260 V 50 / 60 Hz (16A Max)**
MAX 10 NICK NRG 1201 UNITS @ 230V
MAX 5 NICK NRG 1201 UNITS @ 120V



**MAINS AC INPUT 90 – 260 V 50 / 60 Hz**

**Cod. 03.LDR006.F**
**Cod. 03.LDR006.FW**

**Cod. 03.LDR006.FFP**
**Cod. 03.LDR006.FWFP**

**Wireless DMX Receiver Retrofit (Cod. 03.LA.126)**


**FUSE 5A T 5X20**

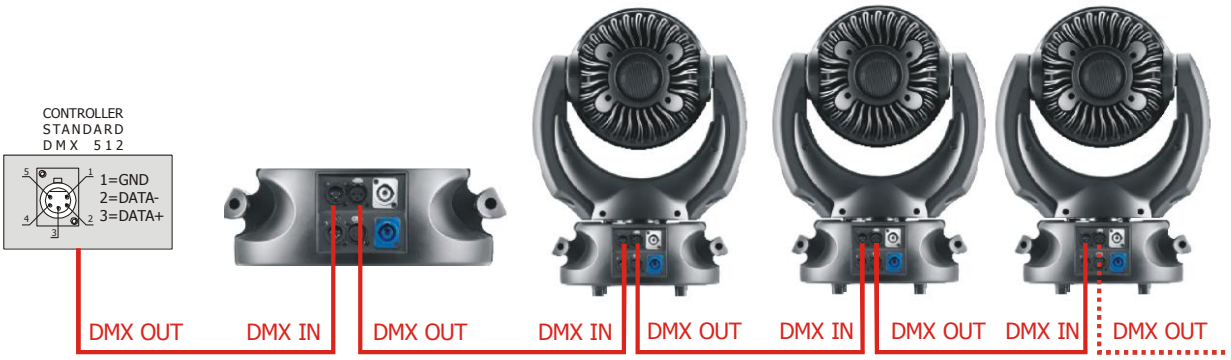
### 10.1- Protection

The use of a thermal magnetic circuit breaker is recommended for each NICK NRG 1201.

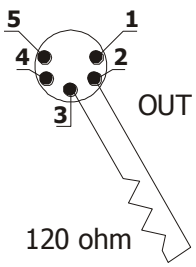
## 11- DMX SIGNAL CONNECTION

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 ø 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:

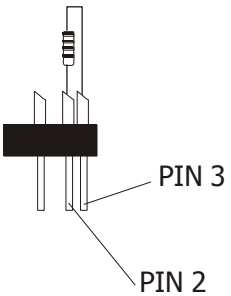
- DMX signal not present
- DMX address not valid
- DMX reception problem




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 XRL CONNECTOR AND PLUG IT INTO THE DMX OUT PANEL CONNECTOR OF THE LAST UNIT CONNECTED TO THE DMX LINE



## 11.1-DMX Addresses

NICK NRG 1201 can be controlled with 20 DMX channels.
In order to use the unit in 20 channels, set the following addresses on the mixer:

| | | |
|---|---|---|
| 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

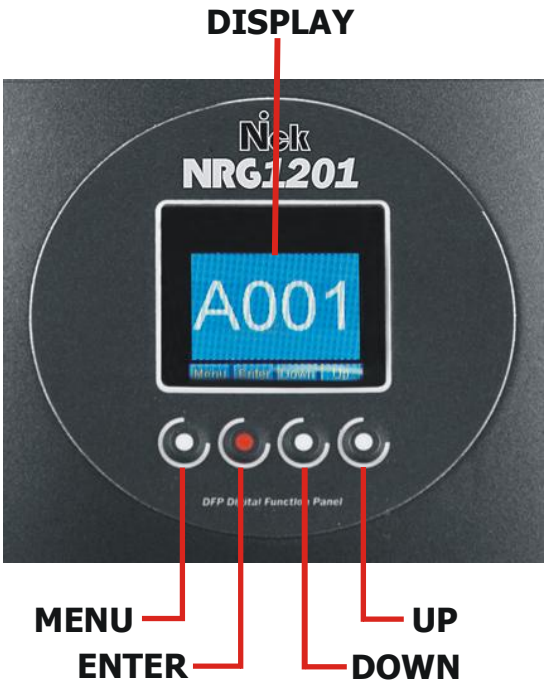
**Warning:**
This procedure require a base knowledge of computer applications and Windows Hyperterminal program. **Please refer to an authorised D.T.S. service centre.**

To update the software version of the NICK NRG 1201 you 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)

**Updating the software version.**
Please follow the procedure below to perform the update:

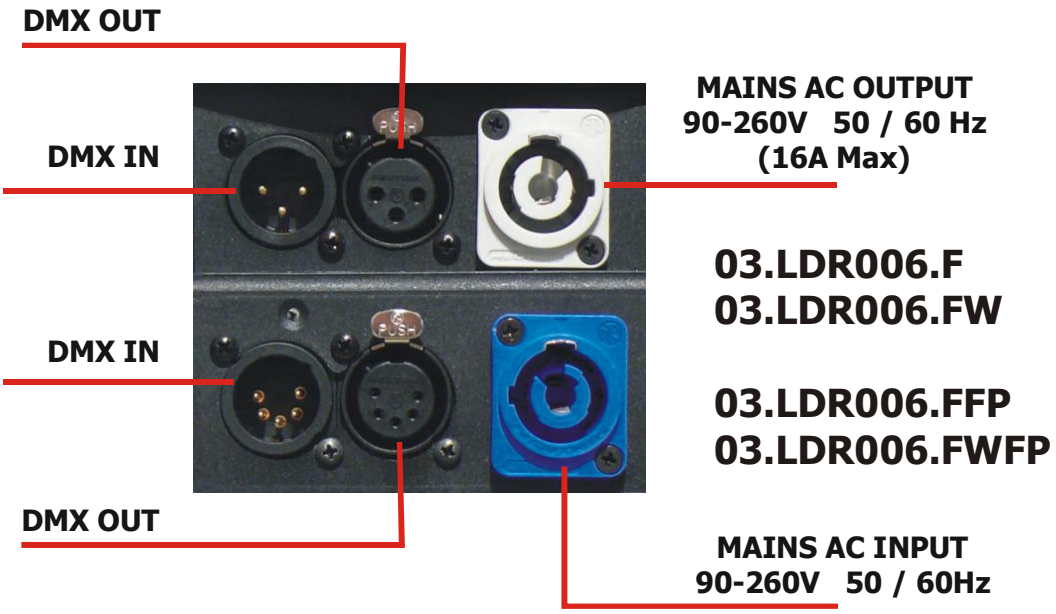
1. Install the D.T.S. RED BOX USB-DMX driver on the PC you will use to update the unit software.
2. Connect the D.T.S. RED BOX interface to the PC by using a USB cable.
3. Connect the D.T.S. RED BOX interface to the fixture by using a DMX cable.
4. Download the new software version into the unit by using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

## 13- DISPLAY FUNCTIONS





WIRELESS DMX
RECEIVER
RETROFIT
**03.LA.126**




**03.LDR006.F**
**03.LDR006.FW**

**03.LDR006.FFP**
**03.LDR006.FWFP**

## DISPLAY FUNCTIONS

The NICK NRG 1201 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 D.T.S. 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.

## 13- DISPLAY FUNCTIONS

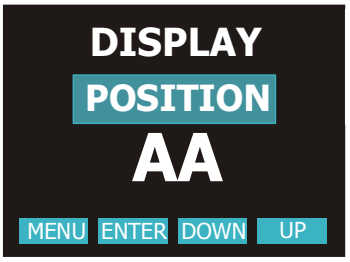
## Software version 1.04

Menu Up-Down Display ENTER Up-Down

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.




ENTER

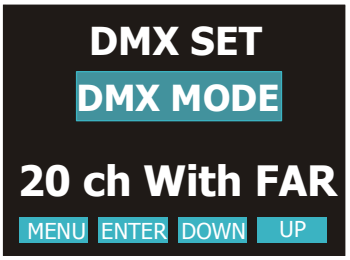
Display Position
ON THE GROUND (Default)
SUSPENDED


ENTER

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

Menu Up-Down DMX Set ENTER Up-Down

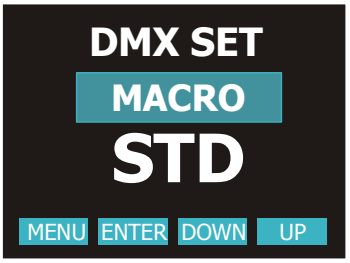
DMX MODE / MACRO
DMX Mode
20 channels




ENTER

DMX Mode
20 channels

MACRO
Macro Mode:
STD = Standard (Default)
EXT = Extended; enable rainbow effects on Macro channel (DMX ch 16)




MACRO
STD = Standard mode enabled (Default)
EXT = Extended; enable rainbow effects on Macro channel (DMX ch 16)

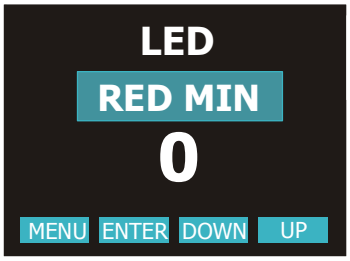
## 13- DISPLAY FUNCTIONS

Menu Up-Down LED ENTER Up-Down

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

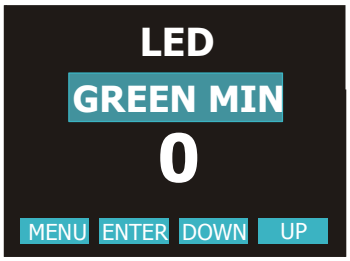
RGBA MAXIMUM VALUES
This menu allow to select the maximum levels for Red, Green, Blue and Amber/White
These settings have priority on Master Dimmer (DMX channel 9)

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)

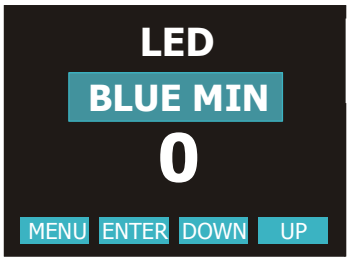



RED Min default = 0
RED Max default = 100

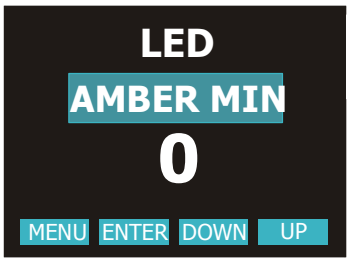
ENTER



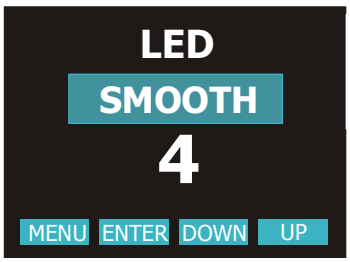

BLUE Min default = 0
BLUE Max default = 100




GREEN Min default = 0
GREEN Max default = 100



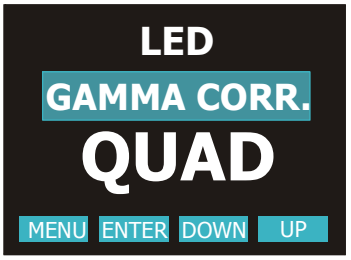

AMBER Min default = 0
AMBER Max default = 100




SMOOTH
Range = Off – 20
Default = 4

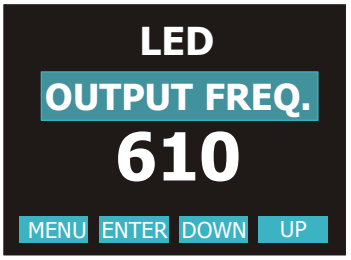
## 13- DISPLAY FUNCTIONS

Menu Up-Down LED ENTER Up-Down



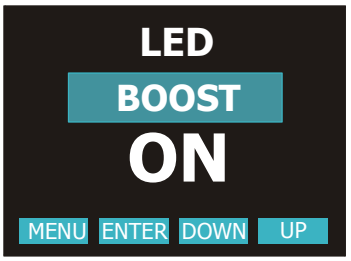

GAMMA CORRECTION
This menu allow to select between Linear current output or Quadratic current output for LEDs
Default = Quadratic

GAMMA CORRECTION ENTER
Linear = Linear current output
Quadratic = Linear light output (default)




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

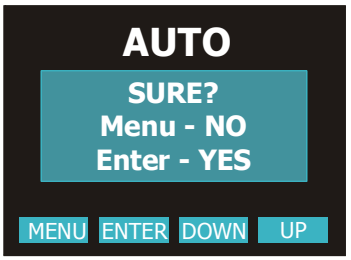
OUTPUT FREQUENCY
Range = 610 Hz – 10 KHz
Default = 610 Hz




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

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

Menu Up-Down AUTO ENTER Up-Down

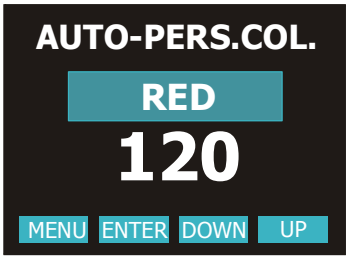



ENTER

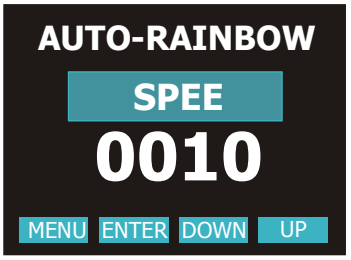
By setting all the units connected to the MASTER, to DMX address 1, them will be synchronized with the Master unit following the chase selected on it, including TIME, WAIT, Pan&Tilt and Zoom position of the MASTER unit.

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.

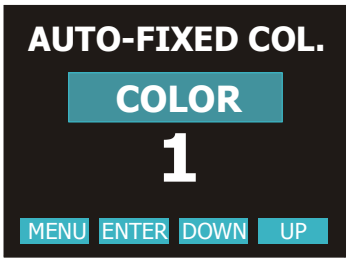



RAINBOW
Rainbow colours effect.
Speed time, Dimmer, Shutter, Pan, Tilt and Zoom values selectable by user.

## 13- DISPLAY FUNCTIONS

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 2700 ° K to 8000 ° K for NICK NRG 1201; from 2700 ° K to 6500 ° K for NICK NRG 1201 CT).
Dimmer, Shutter, Pan, Tilt and Zoom values selectable by user.



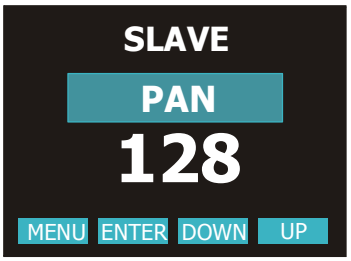


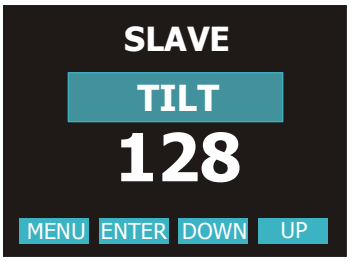
ENTER

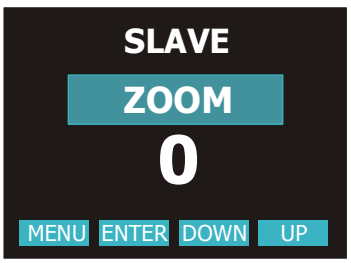
By setting all the units connected to the MASTER, to DMX address 1, them will be synchronized with the Master unit following the chase selected on it, including TIME, WAIT, Pan&Tilt and Zoom position of the MASTER unit.

Menu Up-Down SLAVE ENTER Up-Down

SLAVE MODE SETTING
This menu allow to set the NICK NRG 1201 as slave unit.
<u>DMX signal must be present from MASTER unit (set in AUTO MODE) in order to ran the units in SLAVE mode</u>.
By setting all the SLAVE units connected to the MASTER, to DMX addess 1, them will be synchronized with the Master unit following the chase selected on it, but running their own Pan&Tilt and Zoom position.


ENTER

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

Menu Up-Down WIRELESS ENTER Up-Down


WIRELESS DMX SYSTEM DISABLED (Default) ENTER

WIRELESS DMX
Wieless DMX enabled / disabled.
By activating WDMX MODE, it will be possible to control NICK NRG 1201 via D.T.S. ANTENNA Wireless DMX Transmitter (cod. 03.E1271).

**Wireless DMX Receiver Kit (Cod. 03.LA.126) on NICK NRG 1201 is available on request.**


WIRELESS DMX SYSTEM ENABLED ENTER


UNLINK = LOG OUT ENTER

Logging on NICK NRG 1201 (WIRELESS DMX must be enabled on the unit).

To log on the NICK NRG 1201 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 NRG 1201 units. When a NICK NRG 1201 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 NRG 1201 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 NRG 1201.
2. No DMX signal connected, the Antenna transmitter will flash red/green; display blinking on NICK NRG 1201.

To log off NICK NRG 1201 from a transmitter simply select UNLINK function under WIRELESS DMX MENU and press ENTER.
When NICK NRG 1201 is logged off the display is blinking, meaning its available for log in on a new transmitter.

Logging out a NICK NRG 1201.
Select UNLINK function under WIRELESS DMX MENU and press ENTER.
When NICK NRG 1201 is logged off the display is blinking, meaning its available for log in on a new transmitter.

Logging out all NICK NRG 1201 linked to a transmitter.
Press and hold the function button of the transmitter for about 3 seconds. When the display is blinking on NICK NRG 1201, 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 NRG 1201 unit, not logged in to any other transmitter, will be logged on)

NICK NRG 1201 Status.
Display blinking, not logged on to a transmitter (free).
Solid display, logged on to a transmitter and receiving dmx data.

## 13- DISPLAY FUNCTIONS

Menu Up-Down EMERGENCY ENTER Up-Down

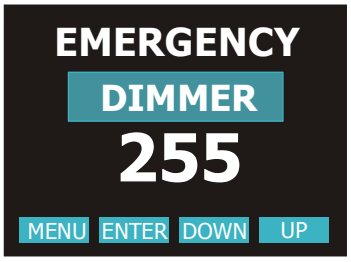
EMERGENCY
Emergency operating mode.
By setting Emergency mode, it will be possible to select one of the 16 preprogrammed WHITE cues that will then ran if DMX signal is missing or not available.
Useful for Emergency EXIT illumination on public areas.
Dimmer level, Pan&Tilt and Zoom values selectable by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


EMERGENCY
Disabled = Default

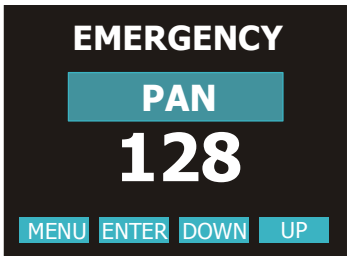
ENTER


EMERGENCY
Enabled

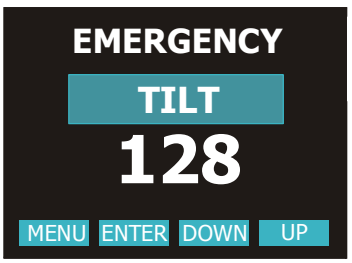

WHITE (1-16)
Default = WHITE 1



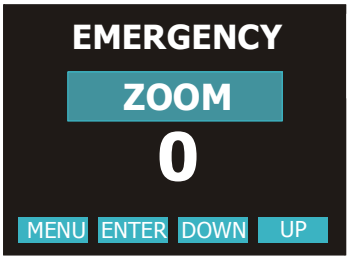

DIMMER
Default = 255




PAN
Default = 128




TILT
Default = 128

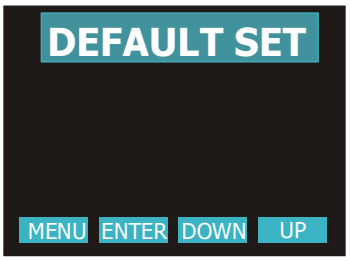



ZOOM
Default = 0

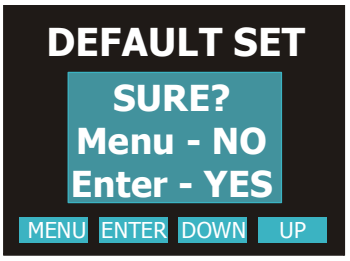
## 13- DISPLAY FUNCTIONS

Menu Up-Down DEFAULT SET ENTER Up-Down

DEFAULT SETTINGS
To restore default settings

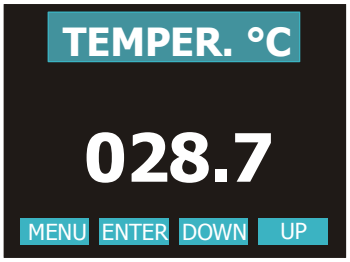



ENTER



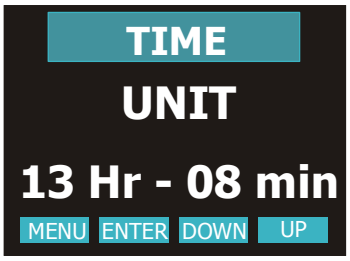

Menu Up-Down TEMPER. °C ENTER

TEMPERATURE
Unit temperature

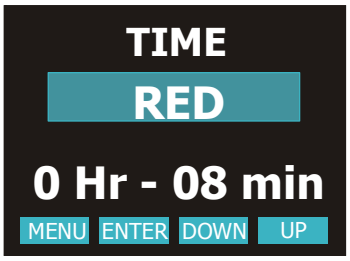


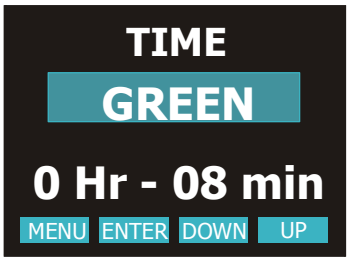

Menu Up-Down TIME ENTER Up-Down

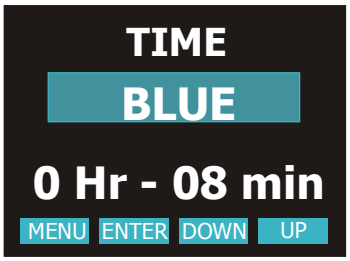
LIFE TIME
This menu show the total UNIT life time and the RGBA life time




ENTER




## 13- DISPLAY FUNCTIONS

Menu Up-Down SYSTEM ENTER Up-Down

PAN INVERSION / TILT INVERSION / PAN SPEED / TILT SPEED / ZOOM 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 Tilt movement. Normal or Reversed.

PAN SPEED
Pan Speed control (1-8)

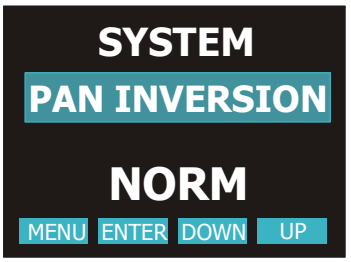
TILT SPEED
Tilt Speed control (1-8)

ZOOM SPEED
Zoom Speed control (1-4)

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

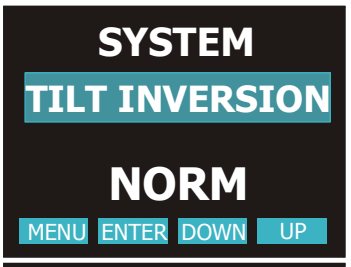
RESET BY DMX
This menu' allow to enable / disable the Motors reset control (Pan&Tilt and Zoom) via DMX.

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

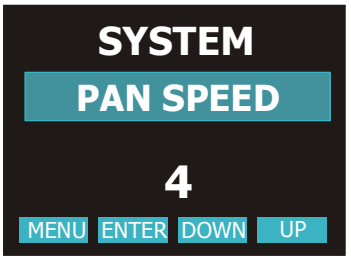



PAN INVERSION
Default = NORM

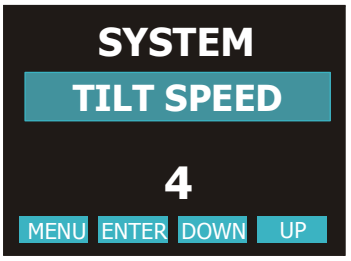
ENTER



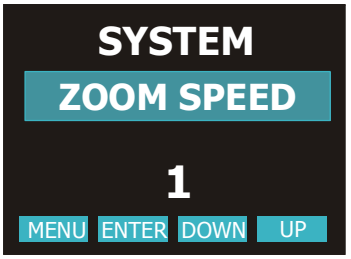

TILT INVERSION
Default = NORM



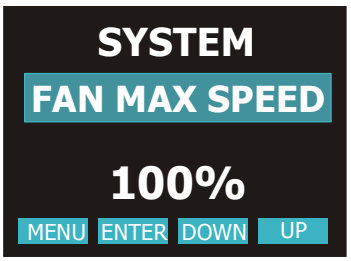

PAN SPEED CONTROL
Default = 4



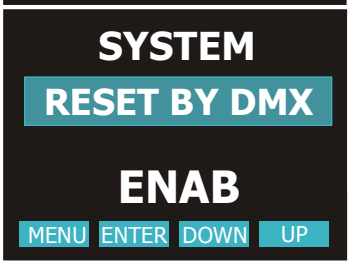

TILT SPEED CONTROL
Default = 4



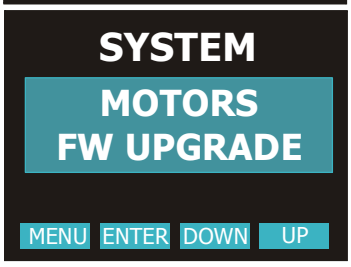

ZOOM SPEED CONTROL
Default = 1




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.



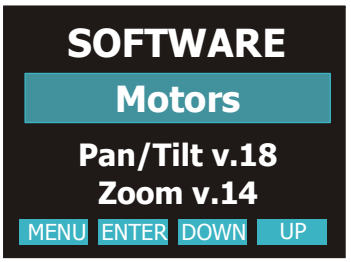

MOTORS FIRMWARE UPGRADE
Zoom and Pan&Tilt circuit boards firmware upgrade.

## 13- DISPLAY FUNCTIONS

Menu Up-Down SOFTWARE ENTER Up-Down

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


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.

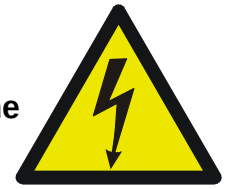
**Fans and air passages**
The fans and air passages must be cleaned approximately every 6 weeks.
This periodic cleaning will depend of course, on the conditions in which the projector is operating.
Suitable instruments for performing this type of maintenance are a brush and a common vacuum cleaner or 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.

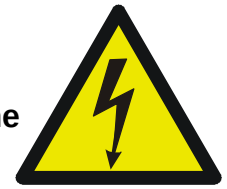
**Electrical components**
Check all electrical components for correct earthing and proper attachment of all connectors, refastening if necessary.

**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 NRG 1201. 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

### 20 CHANNELS MODE

**1 PAN msb 540°**
**2 PAN lsb**
**3 TILT msb 270°**
**4 TILT lsb**
**5 SPEED MOVEMENT**
**6 PAN FPR (Active only on units with FPR: 03.LDR006.FFP; 03.LDR006.FWFP)**
**7 NO FUNCTION**
**8 SHUTTER**
**9 DIMMER**
**10 RED**
**11 GREEN**
**12 BLUE**
**13 WHITE**
**14 WHITE PREPROGRAMMED**
**15 CTC**
**16 MACRO**
**17 FUNCTION (Recall, Create and Store the Custom white)**
**18 ZOOM**
**19 NO FUNCTION**
**20 RESET**

| | | |
|---|---|---|
| DMX CHANNEL | 1 | Parameter: **PAN msb** |

| | | |
|---|---|---|
| DMX CHANNEL | 2 | Parameter: **PAN lsb** |

| | | |
|---|---|---|
| DMX CHANNEL | 3 | Parameter: **TILT msb** |

| | | |
|---|---|---|
| DMX CHANNEL | 4 | Parameter: **TILT lsb** |

| | | |
|---|---|---|
| DMX CHANNEL | 5 | Parameter: **SPEED MOVEMENT** |

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-010** | | | | | **Standard** |
| **011-025** | | | | | **Fast movement** |
| **026-127** | | | | | **Vector mode from fast to slow** |
| **128-247** | | | | | **Variable time reaction to DMX signal (fast to slow)** |
| **248-255** | | | | | **Slow reaction time to DMX signal** |

| DMX CHANNEL | 6 | Parameter: **PAN FPR (Active only on units with FPR: 03.LDR006.FFP; 03.LDR006.FWFP)** |
|---|---|---|

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

| DMX CHANNEL | 7 | Parameter: **NO FUNCTION** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **NO FUNCTION** |

| DMX CHANNEL | 8 | Parameter: **SHUTTER** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-009** | | | | | **Black-out** |
| **010-019** | | | | | **Open** |
| **020-029** | | | | | **Black-out** |
| **030-119** | | | | | **Strobe (from 3.27 s to 30 ms)** |
| **120-149** | | | | | **Pulse up (from 42.6 s to 120 ms)** |
| **150-179** | | | | | **Pulse down (from 42.6 s to 120 ms)** |
| **180-204** | | | | | **Random strobe (Dimmer, Red, Green, Blue, Amber channels active)** |
| **205-229** | | | | | **Full independent Random Strobe (Dimmer, Red, Green, Blue, Amber channels disabled)** |
| **230-255** | | | | | **Open** |

| DMX CHANNEL | 9 | Parameter: **DIMMER** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-007** | | | | | **Black-out** |
| **008-255** | | | | | **Proportional dimmer** |

| DMX CHANNEL | 10 | Parameter: **RED** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **Proportional colour** |

| DMX CHANNEL | 11 | Parameter: **GREEN** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **Proportional colour** |

| DMX CHANNEL | 12 | Parameter: **BLUE** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **Proportional colour** |

| DMX CHANNEL | 13 | Parameter: **WHITE** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **Proportional colour** |

| DMX CHANNEL | 14 | Parameter: **WHITE (Pre-programmed White at diff. colour temperature)** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-055** | **23** | | | | **No Function** |
| **056-105** | **80** | | | | **Full (Red-Green-Blue at Full)** |
| **106-155** | **130** | | | | **White DTS** |
| **156-205** | **180** | | | | **Custom White Create (RGB levels selectable by DMX)** |
| **206-255** | **230** | | | | **White CTC (Channel 15 CTC enabled)** |

| DMX CHANNEL | 15 | Parameter: **CTC (Colour Temperature Correction)** |
|---|---|---|

| 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)** | | | | | |
| **000-255** | | | | | **Linear control temperature correction. NICK NRG 1201: 0 = 2700°K / 255 = 8000°K. NICK NRG 1201 CT: 0 = 2700°K / 255 = 6500°K** |

| DMX CHANNEL | 16 | Parameter: **COLOUR MACROS** |
|---|---|---|

**IF:**  **DMX SET**  **MACRO**  **STD**  **(Please refer to page 15 for details)**

| | | | | | |
|---|---|---|---|---|---|
| **000-014** | | | | | **No Function** |
| **015-029** | | | | | **Macro 1** |
| **030-044** | | | | | **Macro 2** |
| **045-059** | | | | | **Macro 3** |
| **060-074** | | | | | **Macro 4** |
| **075-089** | | | | | **Macro 5** |
| **090-104** | | | | | **Macro 6** |
| **105-119** | | | | | **Macro 7** |
| **120-134** | | | | | **Macro 8** |
| **135-149** | | | | | **Macro 9** |
| **150-164** | | | | | **Macro 10** |
| **165-179** | | | | | **Macro 11** |
| **180-194** | | | | | **Macro 12** |
| **195-209** | | | | | **Macro 13** |
| **210-225** | | | | | **Macro 14** |
| **226-239** | | | | | **Macro 15** |
| **240-255** | | | | | **Macro 16** |

| DMX CHANNEL | 16 | Parameter: **COLOUR MACROS** |
|---|---|---|

**IF:**  **DMX SET**  **MACRO**  **EXT**  **(Please refer to page 15 for details)**

| | | | | | |
|---|---|---|---|---|---|
| **000-014** | | | | | **No Function** |
| **015-024** | | | | | **Macro 1** |
| **025-034** | | | | | **Macro 2** |
| **035-044** | | | | | **Macro 3** |
| **045-054** | | | | | **Macro 4** |
| **055-064** | | | | | **Macro 5** |
| **065-074** | | | | | **Macro 6** |
| **075-084** | | | | | **Macro 7** |
| **085-094** | | | | | **Macro 8** |
| **095-104** | | | | | **Macro 9** |
| **105-114** | | | | | **Macro 10** |
| **115-124** | | | | | **Macro 11** |
| **125-134** | | | | | **Macro 12** |
| **135-144** | | | | | **Macro 13** |
| **145-154** | | | | | **Macro 14** |
| **155-164** | | | | | **Macro 15** |
| **165-174** | | | | | **Macro 16** |
| **175-184** | | | | | **Rainbow Speed 1 (6 Sec.)** |
| **185-194** | | | | | **Rainbow Speed 2 (15 Sec.)** |
| **195-204** | | | | | **Rainbow Speed 3 (30 Sec.)** |
| **205-214** | | | | | **Rainbow Speed 4 (45 Sec.)** |
| **215-224** | | | | | **Rainbow Speed 5 (60 Sec.)** |
| **225-234** | | | | | **Rainbow Speed 6 (120 Sec.)** |
| **235-244** | | | | | **Rainbow Speed 7 (150 Sec.)** |
| **245-255** | | | | | **Rainbow Speed 8 (180 Sec.)** |

| DMX CHANNEL | 17 | Parameter: **FUNCTIONS (Recall, Create and Store the Custom white)** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **IF CHANNEL 14 WHITE PREPROGRAMMED = DMX range value 156 – 205)** | | | | | |
| **000-079** | | | | | **Custom White Recall** |
| **080-160** | | | | | **Custom White Create (Enable Custom White Creation)** |
| **161-255** | | | | | **Custom White Store (Store the Custom White created)** |

| DMX CHANNEL | 18 | Parameter: **ZOOM** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **Linear ZOOM from Narrow to Wide (8° - 50°)** |

| DMX CHANNEL | 19 | Parameter: **NO FUNCTION** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **NO FUNCTION** |

| DMX CHANNEL | 20 | Parameter: **RESET** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-015** | | | | | **No Effect** |
| **016-255** | | | | | **Total Reset (activation after 3 sec.)** |

**NOTES**

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**ISO 9001:2008**

D.T.S. quality system
is certified to the
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