

User's Manual Rel 1.1 GB

Nek **NRG1201**



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

* 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

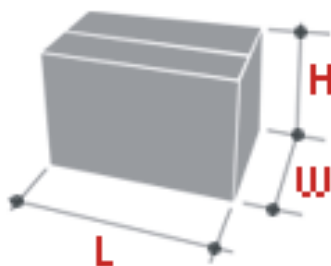
5- TECHNICAL SPECIFICATIONS

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


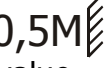
- Wireless DMX Receiver Card with INDOOR IP20 omni. 2dBi antenna included (cod.03.LA.126)

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. (0,5M) 
- 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 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 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.



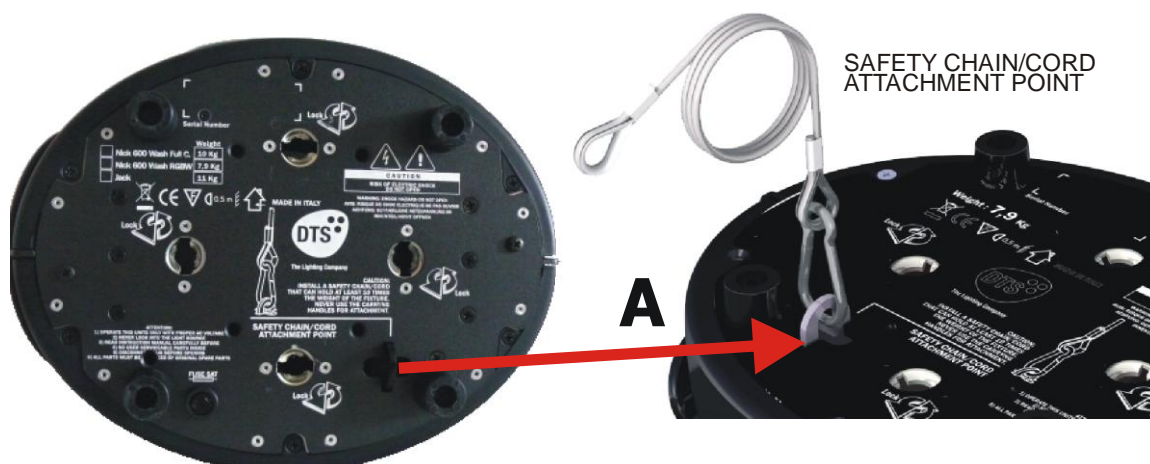
9.1- Safety cable



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

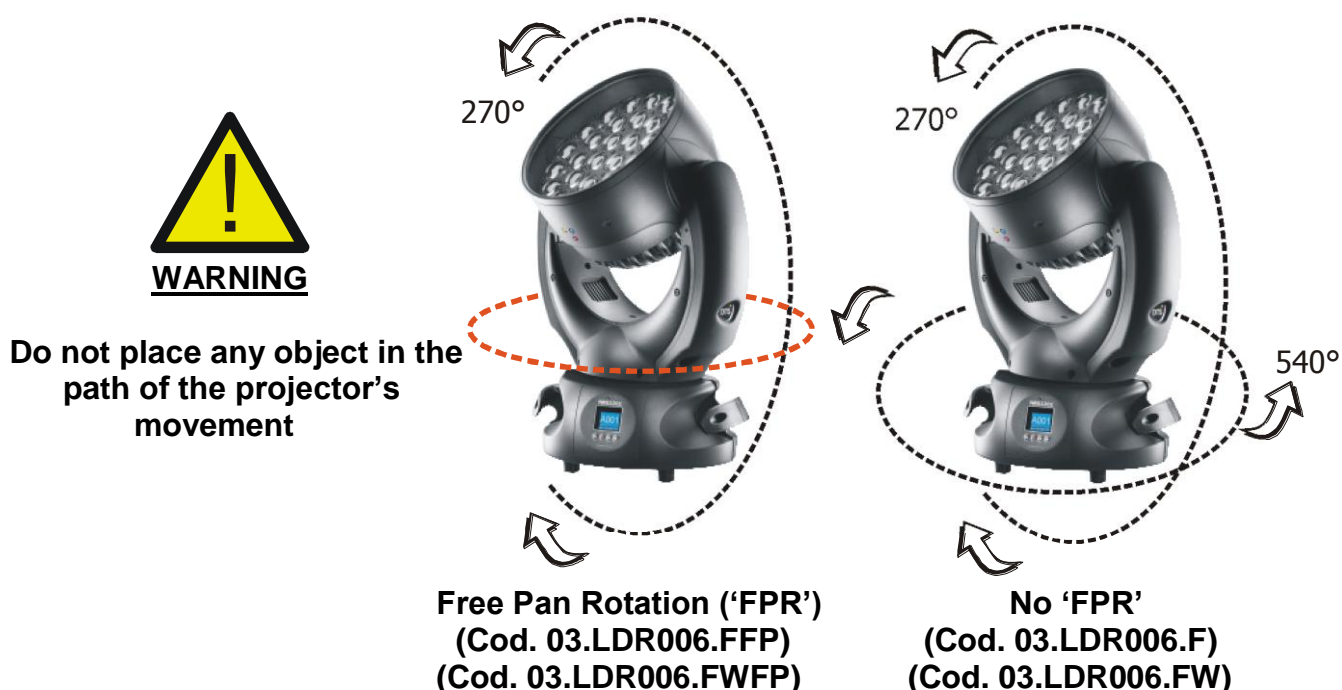
NICK NRG 1201 FPR (Cod. 03.LDR006.FFP; Cod. 03.LDR006.FWFP)

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.



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. 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.

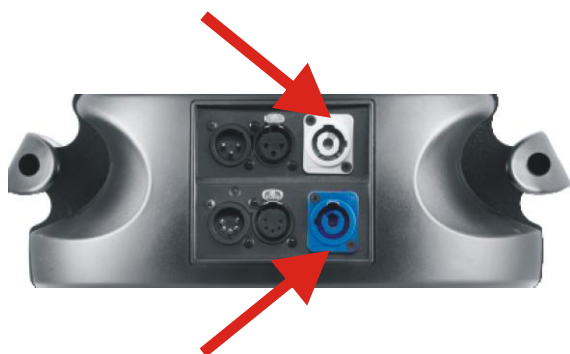
For connection purposes, ensure that your plug is capable of supporting 2 amps at 230V, or 5 amps at 90 V.

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



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

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

MAINS AC INPUT 90 – 260 V 50 / 60 Hz

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 \varnothing 0.5 mm cable and a XLR 5 or 3 pins connector.

Ensure that the conductors do not touch each other.

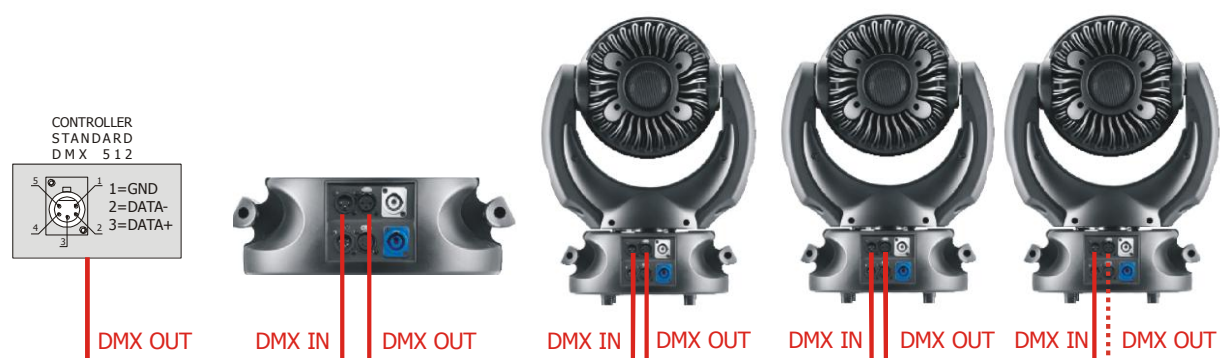
Do not connect the cable ground to the XLR chassis.

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:

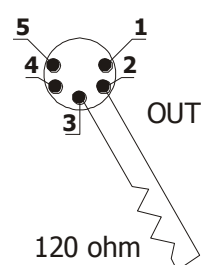
- DMX signal not present
- DMX address not valid
- DMX reception problem



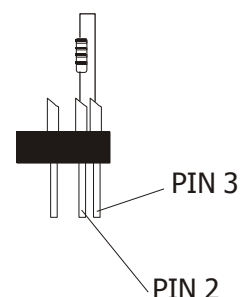
For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

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 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.

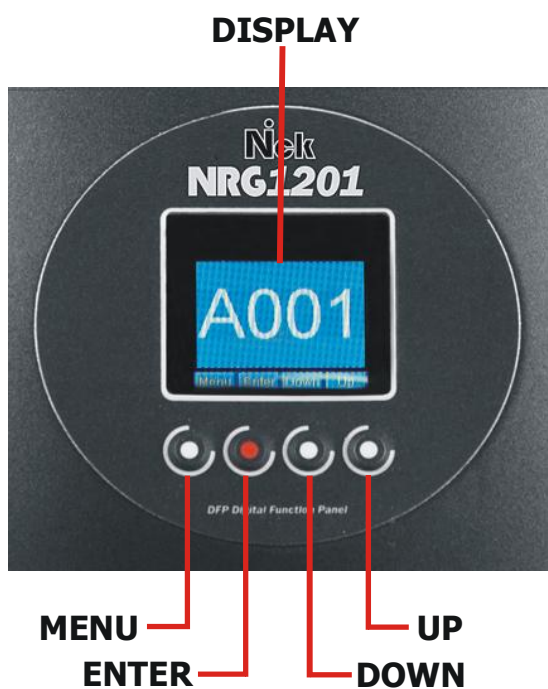
(The driver and the installation procedure are available in our web site www.dts-lighting.it)

Updating the software version.

Please follow the procedure below to perform the update:

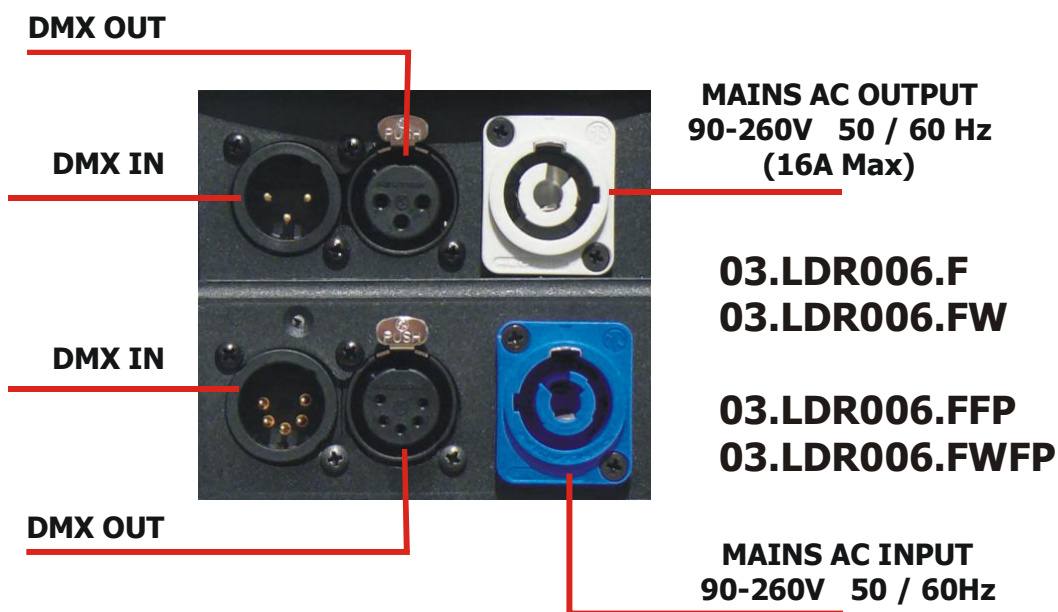
1. Install the D.T.S. RED BOX USB-DMX driver on the PC you will use to update the unit software.
2. Connect the D.T.S. RED BOX interface to the PC by using a USB cable.
3. Connect the D.T.S. RED BOX interface to the fixture by using a DMX cable.
4. Download the new software version into the unit by using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

13- DISPLAY FUNCTIONS



2dBi IP20 omnid. antenna

WIRELESS DMX RECEIVER RETROFIT
03.LA.126



MAINS AC OUTPUT
90-260V 50 / 60 Hz
(16A Max)


03.LDR006.F
03.LDR006.FW

03.LDR006.FFP
03.LDR006.FWFP

MAINS AC INPUT
90-260V 50 / 60Hz

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



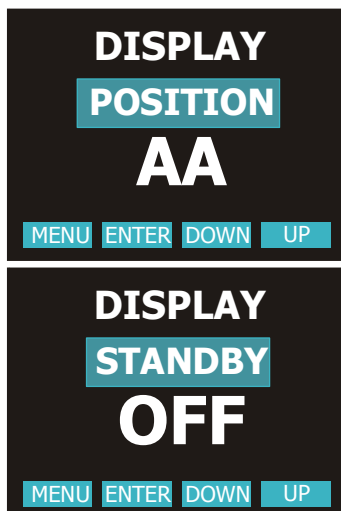
Display



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



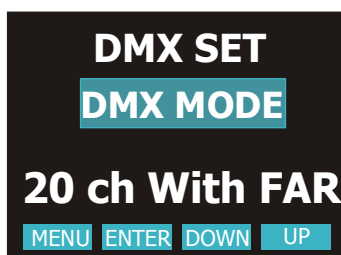
Display Standby
OFF = Display Standby disabled (Default)
ON = Display goes OFF after 5 seconds



DMX Set



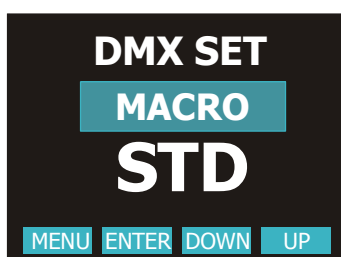
DMX MODE / MACRO
DMX Mode
20 channels



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



LED



RGBA MINIMUM VALUES

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

RGBA MAXIMUM VALUES

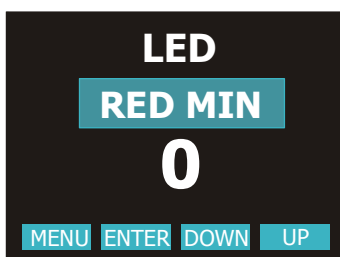
This menu allow to select the maximum levels for Red, Green, Blue and Amber/White
These settings have priority on Master Dimmer (DMX channel 9)

SMOOTH VALUE

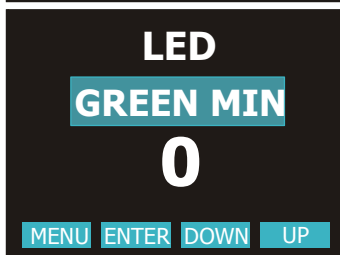
This menu allow to select the value of the delay (in milliseconds) for RGBA and Dimmer channels reaction to DMX or Program variation.

4 = 25 ms delay (Fast response)

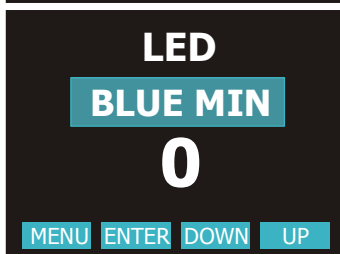
20 = 250 ms delay (Slow response)



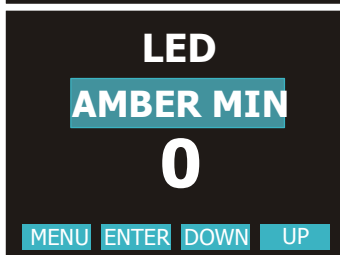
RED Min default = 0
RED Max default = 100



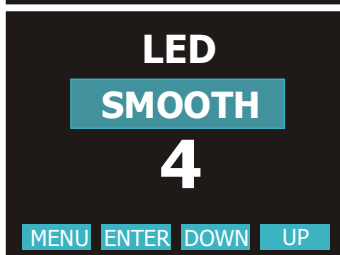
BLUE Min default = 0
BLUE Max default = 100



GREEN Min default = 0
GREEN Max default = 100



AMBER Min default = 0
AMBER Max default = 100

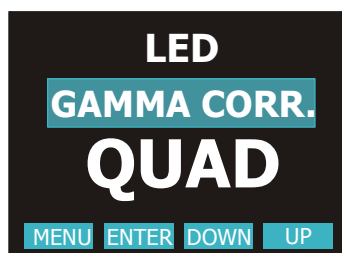


SMOOTH
Range = Off – 20
Default = 4

13- DISPLAY FUNCTIONS

GAMMA CORRECTION

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



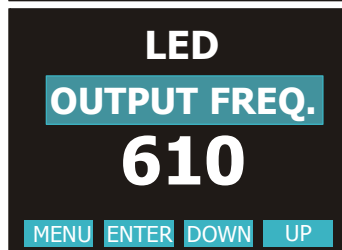
GAMMA CORRECTION

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



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

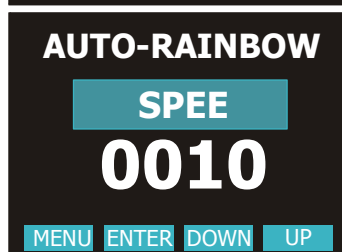
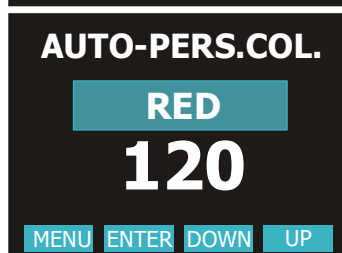
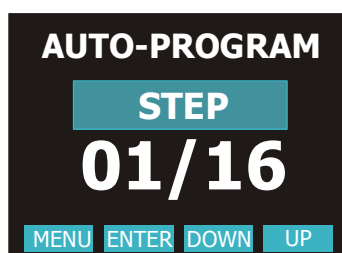
RGBA, Dimmer, Shutter, Pan, Tilt and Zoom values selectable by user.

RAINBOW

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



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.



13- DISPLAY FUNCTIONS

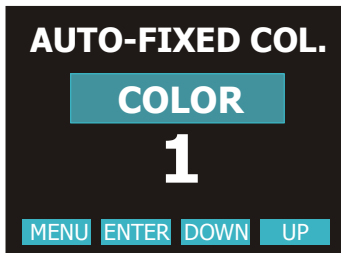
FIXED COLOURS

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.



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

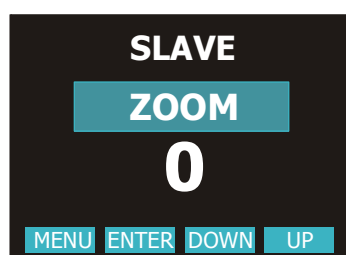
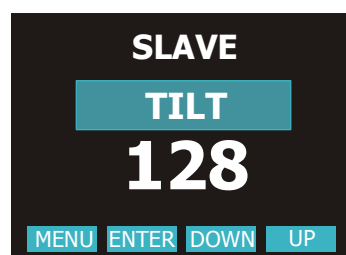
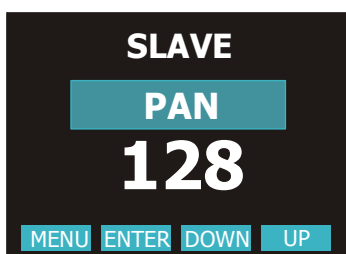
This menu allow to set the NICK NRG 1201 as slave unit.

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 DMX

Wireless 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
DISABLED (Default)



WIRELESS DMX SYSTEM
ENABLED



UNLINK = LOG OUT



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



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



EMERGENCY
Enabled



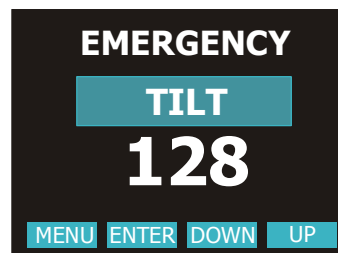
WHITE (1-16)
Default = WHITE 1



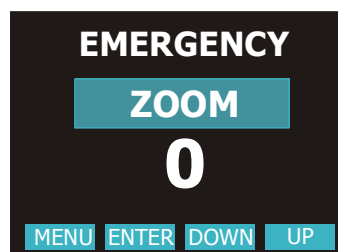
DIMMER
Default = 255



PAN
Default = 128



TILT
Default = 128



ZOOM
Default = 0

13- DISPLAY FUNCTIONS



DEFAULT SET
To restore default settings

DEFAULT SET

MENU ENTER DOWN UP



DEFAULT SET

SURE?
Menu - NO
Enter - YES

MENU ENTER DOWN UP



TEMPER. °C
TEMPERATURE
Unit temperature

TEMPER. °C

028.7

MENU ENTER DOWN UP



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

TIME

UNIT

13 Hr - 08 min

MENU ENTER DOWN UP



TIME

RED

0 Hr - 08 min

MENU ENTER DOWN UP

TIME

GREEN

0 Hr - 08 min

MENU ENTER DOWN UP

TIME

BLUE

0 Hr - 08 min

MENU ENTER DOWN UP

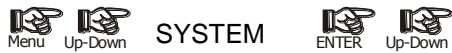
TIME

AMBER

0 Hr - 08 min

MENU ENTER DOWN UP

13- DISPLAY FUNCTIONS



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

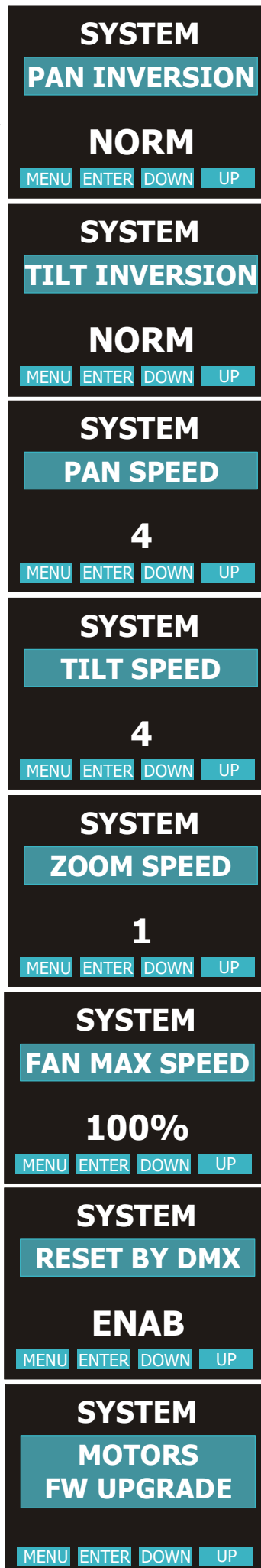
This menu' allow to select the internal fans speed.

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



TILT INVERSION
Default = NORM

PAN SPEED CONTROL
Default = 4

TILT SPEED CONTROL
Default = 4

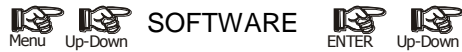
ZOOM SPEED CONTROL
Default = 1

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



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



LEDs CIRCUIT BOARD
SOFTWARE



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 Isb
- 3 TILT msb 270°
- 4 TILT Isb
- 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
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DMX CHANNEL	2	Parameter: PAN Isb
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DMX CHANNEL	3	Parameter: TILT msb
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DMX CHANNEL	4	Parameter: TILT Isb
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DMX CHANNEL	5	Parameter: SPEED MOVEMENT
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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)
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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
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DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					NO FUNCTION

DMX CHANNEL	8	Parameter: SHUTTER
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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
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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
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DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					Proportional colour

DMX CHANNEL	11	Parameter: GREEN
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DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					Proportional colour

DMX CHANNEL	12	Parameter: BLUE
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DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					Proportional colour

DMX CHANNEL	13	Parameter: WHITE
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DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					Proportional colour








DMX CHANNEL	14	Parameter: WHITE PREPROGRAMMED (White at diff. colour temperature)
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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)
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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)
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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
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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
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DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					NO FUNCTION

DMX CHANNEL	20	Parameter: RESET
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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

NOTES

NOTES

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The Lighting Company

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