

Nick NRG801



The Lighting Company

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 YOU CAN PLACE THE UNIT ON NORMALLY FLAMMABLE SURFACES



THIS SYMBOL INDICATES THE MINIMUM DISTANCE BETWEEN THE UNIT AND THE ILLUMINATED OBJECTS



THIS SYMBOL INDICATES THE EUROPEAN COMMUNITY DIRECTIVE 2002/96/EC ON WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

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

NICK NRG 801 is an high-efficiency compact LED moving head wash light which delivers a massive luminosity combined with an extremely light weight (only 9 Kg). NICK NRG 801 is equipped with 14 high-power FULL RGBW or FULL WHITE LEDs coupled with a new generation optical group.

NICK NRG 801 features 8° - 50° motorized zoom (from concentrated beams to large wall washes) and ultra-fast silent Pan/Tilt.

NICK NRG 801 is a truly “green” fixture; in fact, it features a remarkable balance between performance and power consumption, a mere 200W.

NICK NRG 801 is also available with the “FPR” system (patent pending), which enables limitless pan rotation in both directions, with no need for inversion.

NICK NRG 801 is suitable for a range of top professional applications, such as television, concerts, events, etc.

D.T.S. Product Codes:

03.LDR012.F	NICK NRG 801 FC BLACK
03.LDR012.FFP	NICK NRG 801 FC FPR BLACK
03.LDR012.FWS	NICK NRG 801 FC WIRELESS BLACK
03.LDR012.FFPWS	NICK NRG 801 FC FPR WIRELESS BLACK
03.LDR012.FW	NICK NRG 801 CT BLACK
03.LDR012.FWFP	NICK NRG 801 CT FPR BLACK
03.LDR012.FWWS	NICK NRG 801 CT WIRELESS BLACK
03.LDR012.FWFPWS	NICK NRG 801 CT FPR WIRELESS BLACK

LED Technology

- * NICK NRG 801 FC: 14 x FULL RGBW LEDs
- * NICK NRG 801 CT: 14 x FULL WHITE LEDs

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
- * RDM
- * Wireless 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 801 FPR

* 'FPR': limitless pan rotation, in either direction, never having to reverse motion

Tilt 270° (1,2 sec.)

NICK NRG 801

* 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 90-260V , 50/60 Hz

* Power consumption: 200W

Connectors

* DMX: 4 XLR connectors (3-pole In and Out; 5-pole In and Out) by Neutrik;

* Power supply: POWERCON In/Out (re-launch) connectors by Neutrik.

Operating ambient temperature

-10° / 40°

Weight

9 Kg

International certifications

Certification CE; LED Class: Class 2 LED product

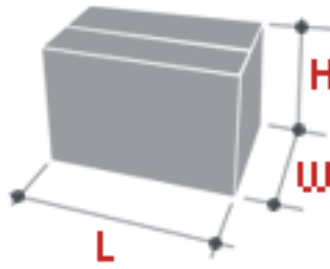
5- TECHNICAL SPECIFICATIONS

Dimensions

Packaging Dimensions (LxWxH)

470 x 370 x 510 mm

Weight: 11 Kg



Unit Dimensions (LxWxH)

369x220x401 mm

Weight: 9 Kg



6- ACCESSORIES

As standard

- 1 x POWERCON 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 6 units; compartment for accessories, swivel wheels, cover with hinges with-stay, dishes on cover for piling, 8 handles (2 eachside) (cod. 0521C062.1)

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 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:



- It is possible to place the unit on normally flammable surfaces. Suitable for mounting on normally flammable materials surfaces greater than 200°C with some combustion time lag.
- Minimum distance from the closest illuminable surface: 0,5 m. LED 0,5 m
- Replace any blown or damaged fuses only with those of identical value (3,5AT). Refer to the wiring diagrams 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 801 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.

7.5 Waste Electrical and Electronic Equipment (WEEE) directive:



The machine, accessories and packaging should be sorted for environmentally-friendly recycling.

For EC countries: according to the European Directive 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national right, luminaires that are no longer usable must be collected separately and disposed of in an environmentally correct manner.

8- VOLTAGE AND FREQUENCY

NICK NRG 801 can operates at 90-260V , 50 or 60 Hz.

9- INSTALLATION

NICK NRG 801 may be either floor or ceiling mounted.

For floor mounting installations, the NICK NRG 801 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 hung it. The structure should also be sufficiently rigid so as not to move or shake whilst the NICK NRG 801 is moving.

Four 1/4 turn Fast Locks connections placed in the base of the unit allow to hang the NICK NRG 801 by using the Fast Lock "C" clamps provided in the box.



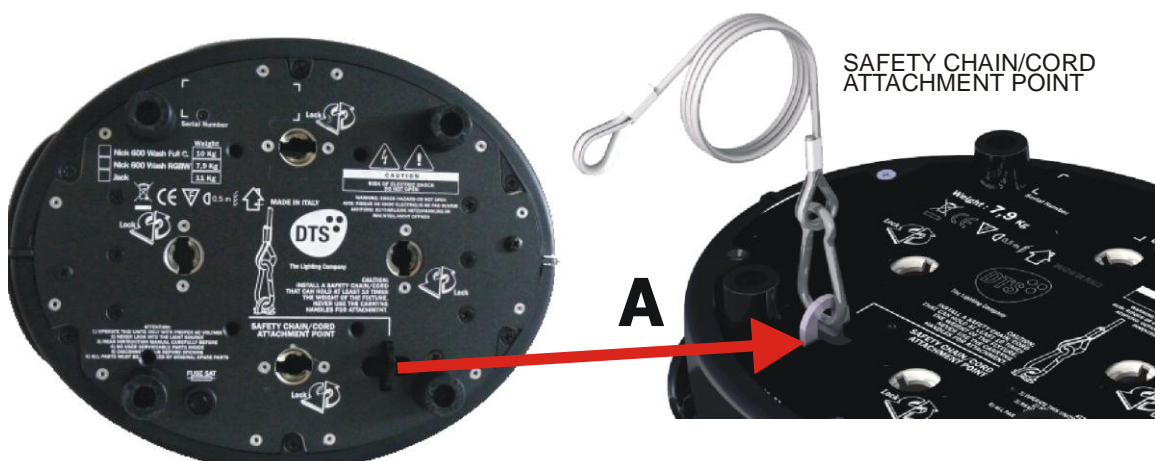
9.1- Safety cable



We recommend the use of a safety cable or chain connected to the NICK NRG 801 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 801 FPR

Unlimited Pan rotation; Tilt 270° (1,2 sec.)

NICK NRG 801

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')



No 'FPR'

9.4- Risk of fire



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

Minimum distance from the object being illuminated is 0,5 m. LED 0,5 m

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 801 operate at 90-260V , 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 90V.

Strict adherence to regulatory norms is strongly recommended.

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

MAX 12 NICK NRG 801 UNITS @ 230V

MAX 6 NICK NRG 801 UNITS @ 120V



MAINS AC INPUT 90 – 260 V 50 / 60 Hz

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



FUSE 3,5AT

10.1- Protection



The use of a thermal magnetic circuit breaker is recommended for each NICK NRG 801.

11- DMX SIGNAL CONNECTION

The unit operates using the digital DMX 512 signal.

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

Ensure that the conductors do not touch each other.

Do not connect the cable ground to the XLR 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:

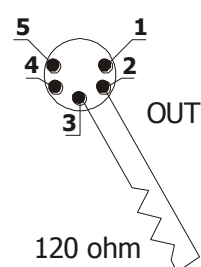
- DMX signal not present
- DMX address not valid
- DMX reception problem



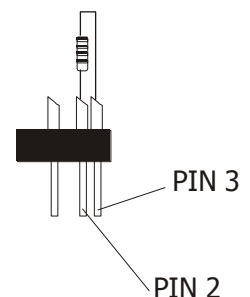
For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

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 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 801 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

To update the software version of the NICK NRG 801 you need:

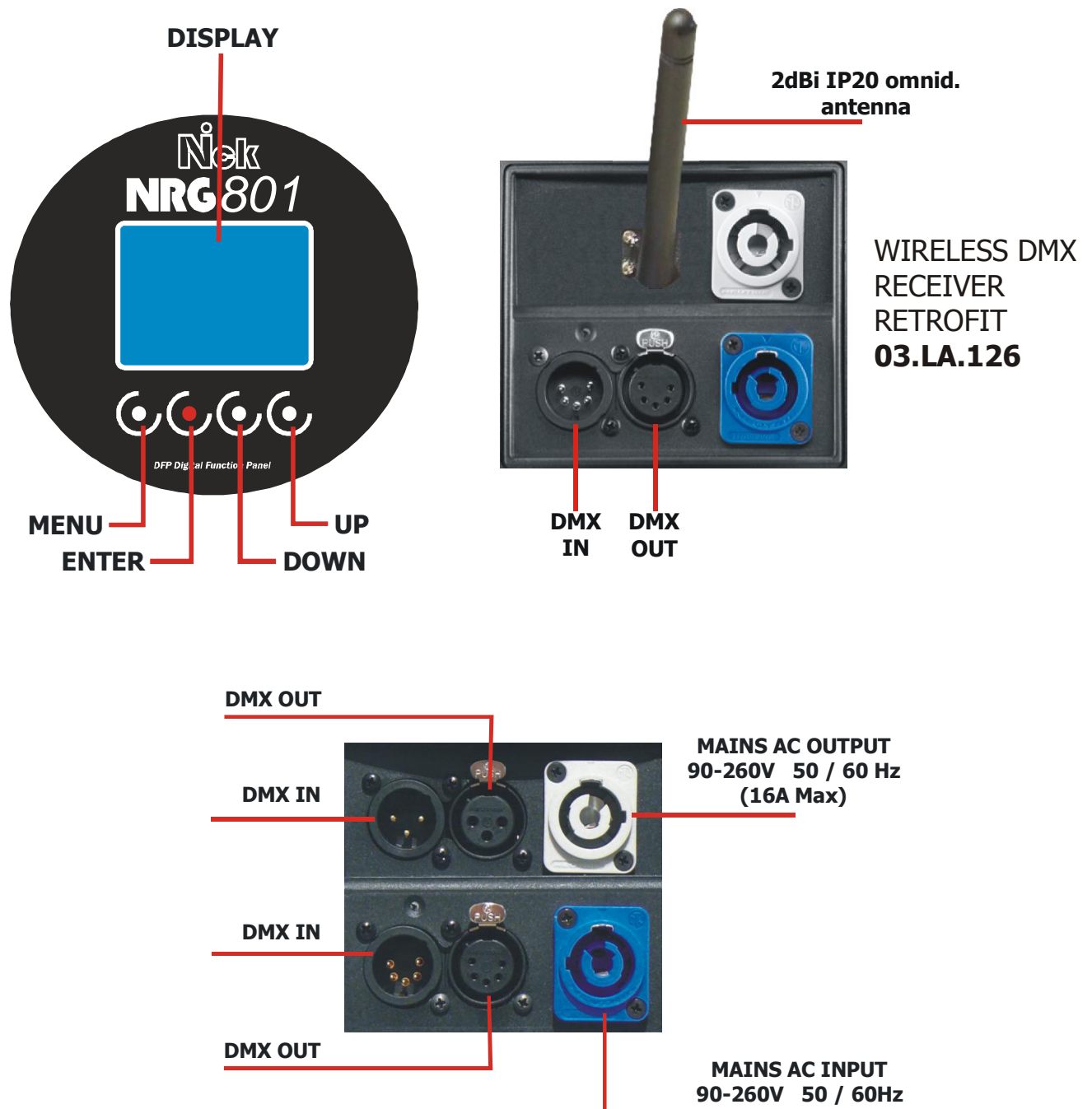
- D.T.S. RED BOX interface (D.T.S. Code: 03.LA.008)
- USB-DMX Driver for the D.T.S. RED BOX interface
- "D.T.S. Firmware upgrade utility" program installed on PC
- Latest software release available for NICK NRG 801 unit

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 NRG 801 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 release 2.01



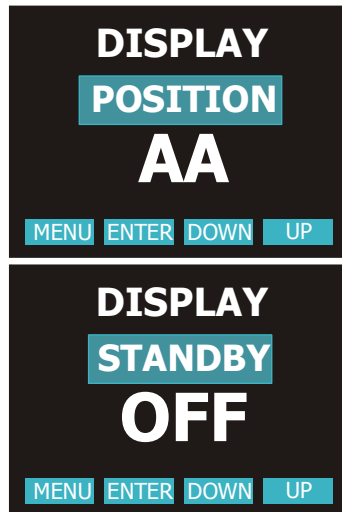
Display



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 30 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 30 seconds

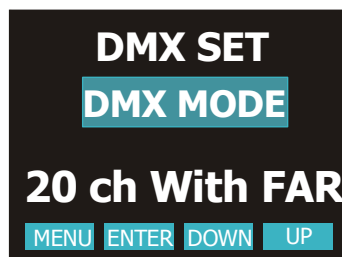


DMX Set



DMX MODE / MACRO / DIMMER DELAY

DMX Mode
20 channels



DMX Mode
20 channels

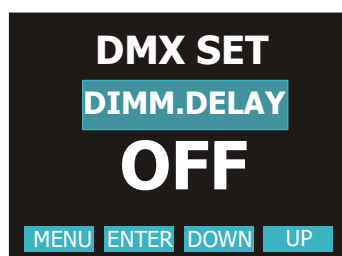


MACRO
Macro Mode:
STD = Standard (Default)
EXT = Extended; enable rainbow effects on Macro channel (DMX ch 16)



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

DIMMER DELAY
Dimmer channel reaction Delay to DMX.
Range: OFF – 2 Seconds



DIMMER DELAY
Range: OFF - 2 seconds.
Default = OFF = No Delay

13- DISPLAY FUNCTIONS



LED



RGBW MINIMUM VALUES

This menu allows to select the minimum levels for Red, Green, Blue and White

RGBW MAXIMUM VALUES

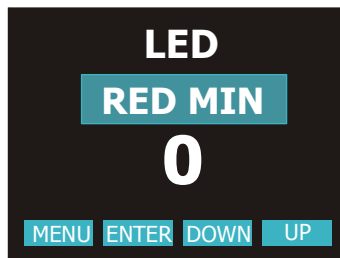
This menu allows to select the maximum levels for Red, Green, Blue and White
These settings have priority on Master Dimmer (DMX channel 9)

SMOOTH VALUE

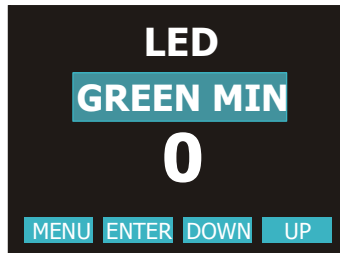
This menu allows to select the value of the delay (in milliseconds) for RGBW and Dimmer channels reaction to DMX or Program variation.

4 = 25 ms delay (Fast response)

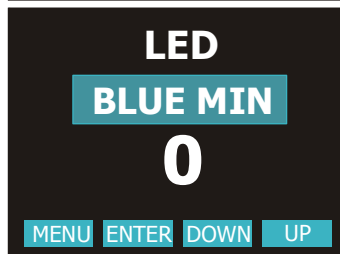
20 = 250 ms delay (Slow response)



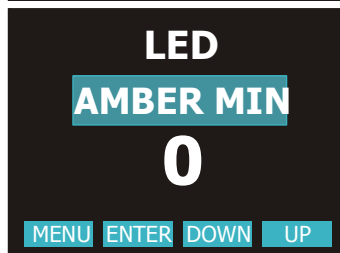
RED Min default = 0
RED Max default = 100



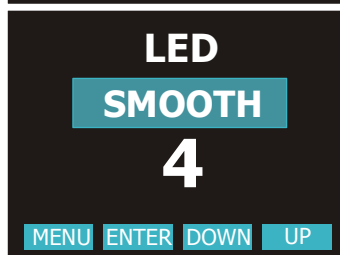
GREEN Min default = 0
GREEN Max default = 100



BLUE Min default = 0
BLUE Max default = 100



WHITE Min default = 0
WHITE Max default = 100

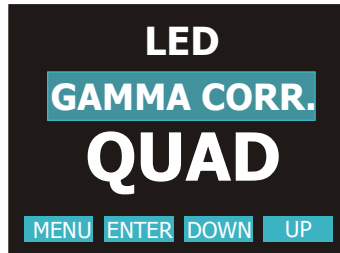


SMOOTH
Range = Off – 20
Default = OFF

13- DISPLAY FUNCTIONS

GAMMA CORRECTION

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



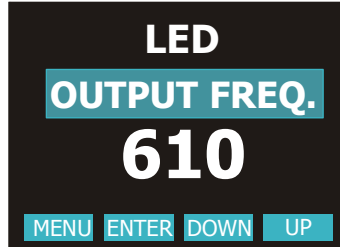
GAMMA CORRECTION

Linear = Linear current output
Quadratic = Linear light output (default)



OUTPUT FREQUENCY

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

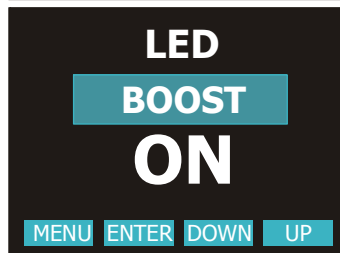


OUTPUT FREQUENCY

Range = 610 Hz – 10 KHz
Default = 610 Hz

BOOST DRIVING

This menu allows to increase the LED's current from 670 mA to 1000 mA



BOOST

With BOOST active, the LED's current is set to 1000 mA (30% more gain)
Default = Enabled



AUTO



AUTOMATIC MODE

Automatic demo game without DMX controller



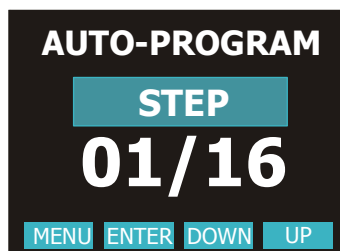
STEP 01/16

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

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.

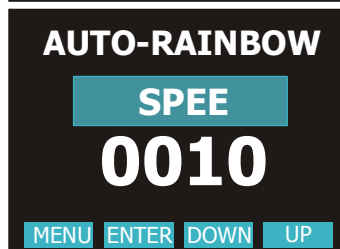
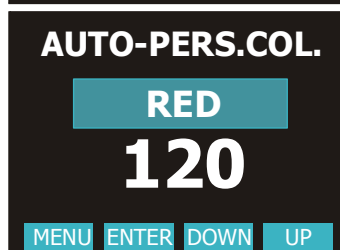
PERSONAL COLOURS

RGBW, 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.



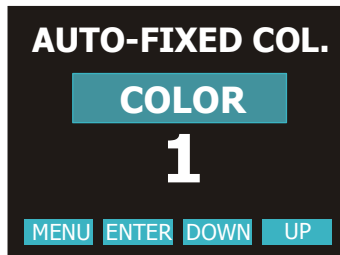
13- DISPLAY FUNCTIONS

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



By setting all the units connected to the MASTER to DMX address 1, they 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

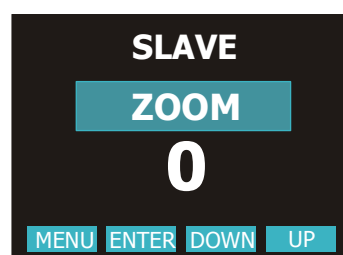
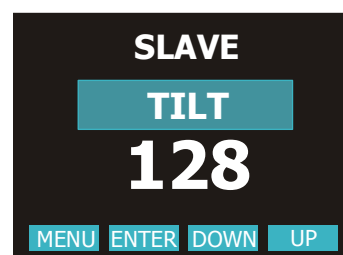
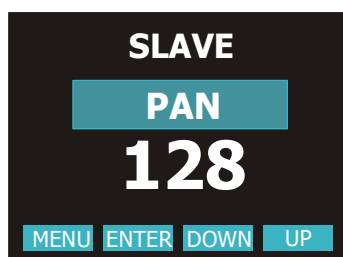


SLAVE MODE SETTING

This menu allows to set the NICK NRG 801 as slave unit.
DMX signal must be present from MASTER unit (set in AUTO MODE) in order to run the units in SLAVE mode.
By setting all the SLAVE units connected to the MASTER, to DMX address 1, they 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, they 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 801 via D.T.S. ANTENNA Wireless DMX Transmitter (cod. 03.E1271 – 03.E1296 – 03.E12101).

Wireless DMX Receiver Kit (Cod. 03.LA.126) on NICK NRG 801 is available on request.



WIRELESS DMX SYSTEM
DISABLED (Default)



WIRELESS DMX SYSTEM
ENABLED



UNLINK = LOG OUT



Logging on NICK NRG 801 (WIRELESS DMX must be enabled on the unit).

To log on the NICK NRG 801 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 801 units. When a NICK NRG 801 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 801 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 801.
2. No DMX signal connected, the Antenna transmitter will flash red/green; display blinking on NICK NRG 801.

To log off NICK NRG 801 from a transmitter simply select UNLINK function under WIRELESS DMX MENU and press ENTER.

When NICK NRG 801 is logged off the display is blinking, meaning its available for log in on a new transmitter.

Logging out a NICK NRG 801.

Select UNLINK function under WIRELESS DMX MENU and press ENTER.

When NICK NRG 801 is logged off the display is blinking, meaning its available for log in on a new transmitter.

Logging out all NICK NRG 801 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 801, 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 801 unit, not logged in to any other transmitter, will be logged on)

NICK NRG 801 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 run 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



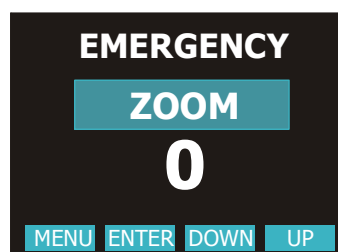
DIMMER
Default = 255



PAN
Default = 128



TILT
Default = 128



ZOOM
Default = 0

13- DISPLAY FUNCTIONS



DEFAULT SETTINGS
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 shows the total unit life time and the RGBW 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



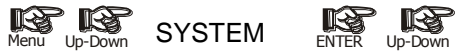
TIME

AMBER

0 Hr - 08 min

MENU ENTER DOWN UP

13- DISPLAY FUNCTIONS



PAN INVERSION / TILT INVERSION /
PAN SPEED / TILT SPEED /
STUDIO MODE / RESET BY DMX

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

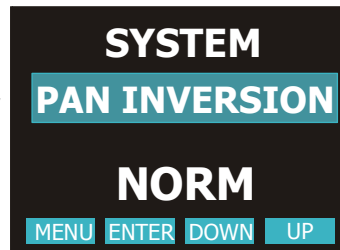
TILT INVERSION
This menu allows to set the Tilt
movement. Normal or Reversed.

PAN SPEED
Pan Speed control (1-5)

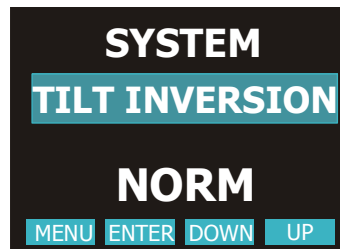
TILT SPEED
Tilt Speed control (1-5)

STUDIO MODE
This menu allows to set the
Zoom speed.
OFF = fast (Default)
ON = slow = lower noise

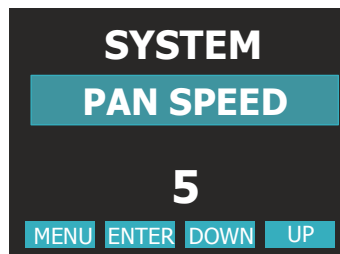
RESET BY DMX
This menu allows to enable /
disable the Motors reset control
(Pan&Tilt and Zoom) via DMX.



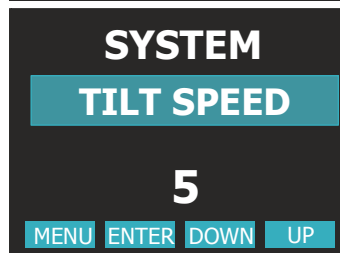
PAN INVERSION
Default = NORM



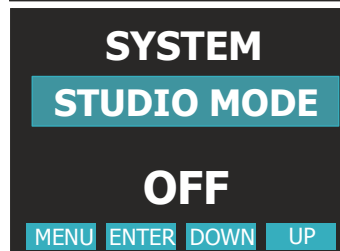
TILT INVERSION
Default = NORM



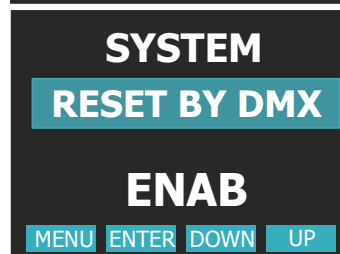
PAN SPEED CONTROL
Default = 5



TILT SPEED CONTROL
Default = 5



STUDIO MODE
Default = OFF



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

13- DISPLAY FUNCTIONS



SOFTWARE



SOFTWARE

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

SOFTWARE

LED

N501LED v102

MENU ENTER DOWN UP

LEDs CIRCUIT BOARD
SOFTWARE

SOFTWARE

Motors

0D1B0011
V1.18 Dec 5 2013

MENU ENTER DOWN UP

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 801. Using a multimeter, test the condition of the fuse, replacing it with one of equivalent type (3,5AT) 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 system on board)**
- 7 NO FUNCTION**
- 8 SHUTTER**
- 9 DIMMER**
- 10 RED**
- 11 GREEN**
- 12 BLUE**
- 13 WHITE**
- 14 WHITE PRE-PROGRAMMED**
- 15 CTC**
- 16 MACRO**
- 17 FUNCTION (Recall, Create and Store the Custom white)**
- 18 ZOOM**
- 19 ZOOM SPEED**
- 20 RESET**

DMX CHANNEL	1	Parameter: PAN msb
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DMX CHANNEL	2	Parameter: PAN lsb
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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
000-127					Speed from max to min
128-247					Maximum speed
248-255					Medium speed

DMX CHANNEL	6	Parameter: PAN FPR (Active only on units with FPR system on board)
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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, White channels active)
205-229					Full independent Random Strobe (Dimmer, Red, Green, Blue, White 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
000-255					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 PRE-PROGRAMMED = WHITE CTC (DMX range value 206 – 255)					
000-255					Linear control temperature correction. 0 = 2700°K / 255 = 8000°K.

DMX CHANNEL	16	Parameter: COLOUR MACROS			
IF:  Menu  Up-Down DMX SET  ENTER  Up-Down MACRO  ENTER  Up-Down STD  ENTER (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 PRE-PROGRAMMED = 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: ZOOM SPEED
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DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-128					Zoom speed from max to min
129-247					Zoom maximum speed
248-255					Zoom medium speed

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

ISO 9001:2008

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