EUPHONY 3

USER'S MANUAL rel. 1.0 **GB**

CE

INDEX:

1- SYMBOLS

Graphic symbols used on this manual:

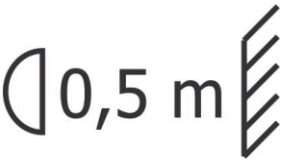
THIS SYMBOL INDICATES A HOT SURFACE

THIS SYMBOL INDICATES ELECTRIC SHOCK RISK

THIS SYMBOL INDICATES GENERAL RISK

THIS SYMBOL MEANS "SUITABLE FOR INDOOR USE ONLY"

THIS SYMBOL INDICATES THE MAXIMUM OPERATING AMBIENT TEMPERATURE



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

THIS SYMBOL MEANS "DO NOT STARE AT THE OPERATING LIGHT SOURCE"

THIS SYMBOL INDICATES PHOTOBIOLOGICAL SAFETY

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

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

2- GENERAL WARNING

Read the instruction contained in this user manual carefully, as they give important information regarding safety during installation, use and maintenance.
The unit is not for household use and must be installed by a qualified electrician or experienced person.
The device must always be equipped with an efficient ground connection.

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

Front lens could become powerful magnifying glass if exposed towards the sun or any strong artificial light source; this can cause damage of head internal parts, even for few seconds and even when the unit is off.
The last command before switch off: point the front lens down towards the ground.

3- GENERAL WARRANTY CONDITIONS

The unit is guaranteed for 36 months from the date of purchase against manufacturing material defects.
The warranty covers defects in materials and workmanship. The warranty is not appliable where a defect is caused by misuse or unauthorised repair of the product.
Any functional or/and physical modification of the product is not allowed.

4- TECHNICAL FEATURES

DTS Product Code:
03.LDR020.F EUPHONY 3

OUTPUT
• 7 x 60W Full Color (RGBW) LEDs
• 7500 Lumen output
• LEDs lifespan: 50.000 hours (70% lumen output)

OPTICAL GROUP
• 5.6° - 69° linear motorized zoom with high efficiency optical system
• Soft frost filter included
• Uniform projection on surfaces, from very wide Wash to PC Beam

4- TECHNICAL FEATURES

COLOR GENERATION
• 16 million colors
• Wide palette of pure uniform whites with variable linear color temperature (2700K – 8000K)
• 16 gel filters emulations by ‘Standard’ DMX mode

DIMMER
• Hi-Q Dimming technology

CONTROL
• LCD graphic display + 4 soft keys; Auto-flip; Key-lock function
• RDM/DMX 512 protocols
• Wireless DMX available on request
• ‘Standard’ and ‘Silent’ operation modes
• Internal operating system updatable via DTS dongle firmware uploader
• Li-Fe backup battery for controlling the display settings even when the unit is not powered

DMX
• 2 DMX modes:
- 1. Standard 18 ch (default)
- 2. Compatibility 20 ch

PAN & TILT
• Pan 540° (1.8 sec.)
• Tilt 215° (1 sec.)
• 16-bit resolution

POWER SUPPLY
• Full-range 100-240Vac 50-60 Hz
• Power consumption: 420W max
• Power Factor: PF >0.94

CONNECTIONS
• Power supply: powerCON TRUE1 In/Out panel connectors
• DMX: XLR 3-pole and 5-pole In/Out panel connectors

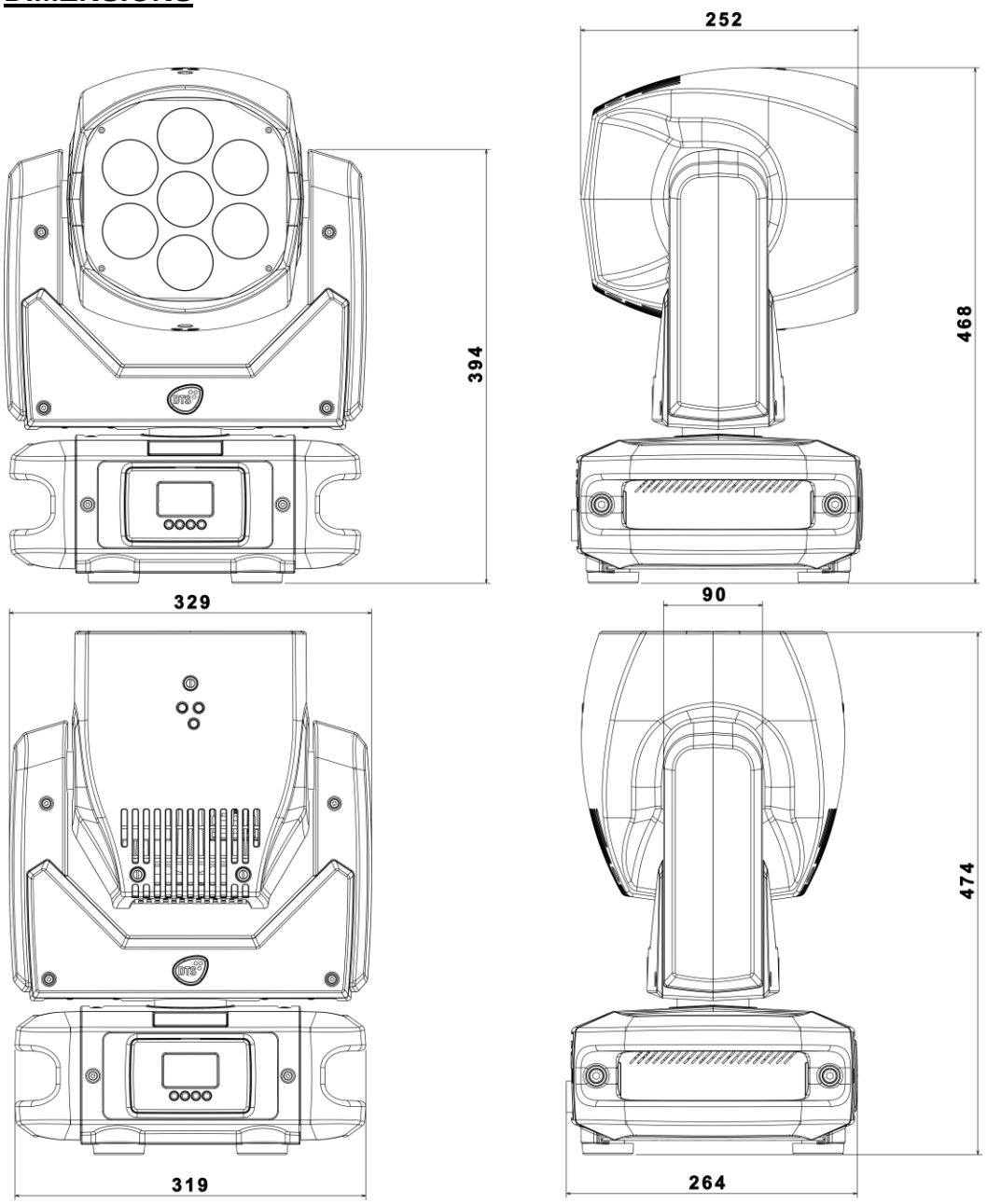
INTERNAL SAFETY DEVICES
Overvoltage and overtemperature circuits protection

OPERATING TEMPERATURE
-10° / 40°C

PHYSICAL
• IP20
• Weight: 14 Kg
• Finishing: Black

CERTIFICATIONS
CE

DIMENSIONS



5- ACCESSORIES

As standard

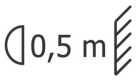
1 x Cable with PowerCON TRUE1 female connector (Code 02K0012267.0015)
1 x Omega bracket with “Fast Lock” connection 1/4 turn (Code 02K00467)
1 x Soft frost filter (code 02SK0472)
1 x User’s manual

Optional (on request)

• Lumen Radio Wireless DMX TX-RX interface kit (Code 03.LA.241)
• Aliscaf clamp for tube diameter 48-51 mm (Max load 200 Kg) (code 0521A033) (indicated for any kind of loads vertical / horizontal)
• Professional Quick trigger clamp (Max load 100 Kg) (code 0521A037) (not indicated for horizontal load)
• Safety cable 3 x 600 mm (Max load 30 Kg) (code 0521A010)
• DTS Dongle firmware uploader (code 03.LA.206

6- IMPORTANT SAFETY INFORMATION

6.1 Fire prevention:



-Minimum distance from the objects and the people lit by the light beam: 0,5 m.
-Replace any blown or damaged fuses only with those of identical value (T 5A 250V). Refer to the wiring diagrams if there is any doubt.
-Connect the projector to mains power via a thermal magnetic circuit breaker.

6.2 Prevention of electric shock:

-High voltage is present inside the unit.
Unplug the unit prior to performing any function which involves touching the inside of the moving head.
-The level of technology inherent in the EUPHONY 3 requires the assistance of specialised personnel for all servicing. Please refer to an authorised DTS service centre.
-A good earth connection is essential for proper functioning of the projector.
-Never connect the unit without proper earth connection.
-The fixture should be located in places with a good air ventilation.

6.3 Safety:

-Risk Group 2 product according to IEC 62471.

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

-Do not stare at the operating light source.

-The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.
-The unit is not for household use and must be installed by a qualified electrician or experienced person.
-The projector should always be installed with bolts, clamps and other tools that are capable of supporting the weight of the unit.
-Always use a safety cable to sustain the weight of the unit in case of the failure of the main fixing point.
-The external surface of the unit, at various points, may exceed 50°C. Never handle the unit until at least 5 minutes have elapsed since the unit was turned off.

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

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

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

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

Suitable for indoor use only.

6.5 Waste Electrical and Electronic Equipment (WEEE) directive:

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

6.6 Long-life auto-charging buffer battery:

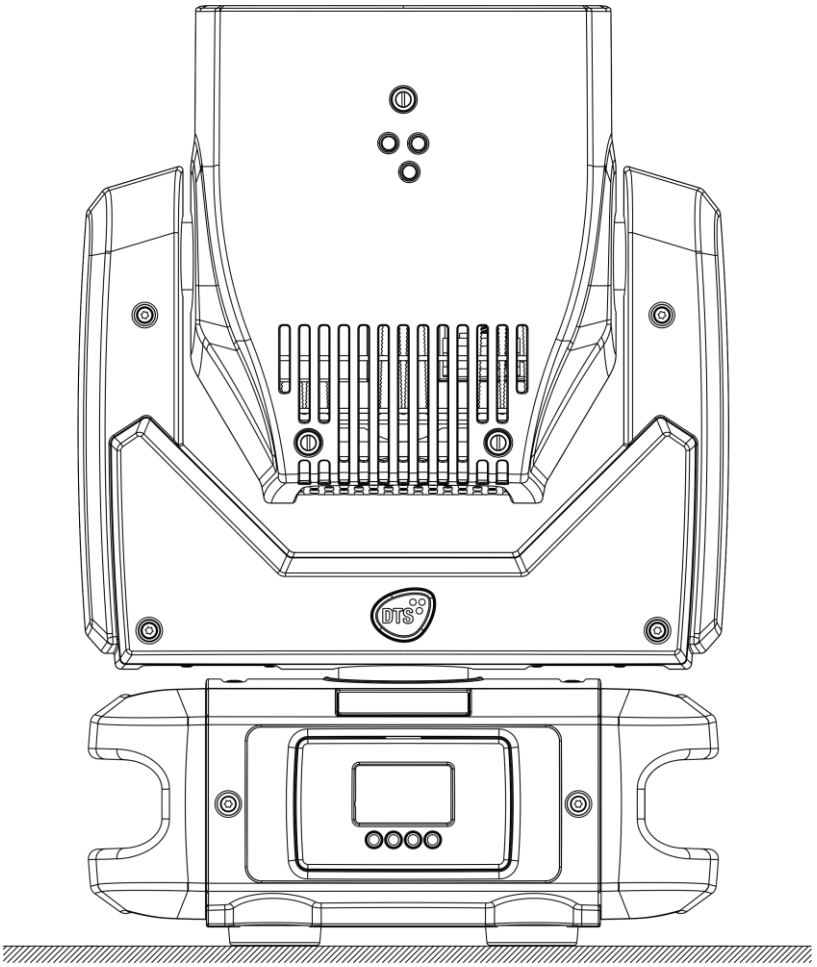
-The projector contains a rechargeable lead-acid or lithium iron tetraphosphate battery.
To preserve the environment, please dispose the battery at the end of its life according to the regulation in force.

7- INSTALLATION

The unit is suitable for dry locations only.

EUPHONY 3 may be either floor or ceiling mounted.

For floor mounting installations, EUPHONY 3 is supplied with four rubber mounting feet on the base.



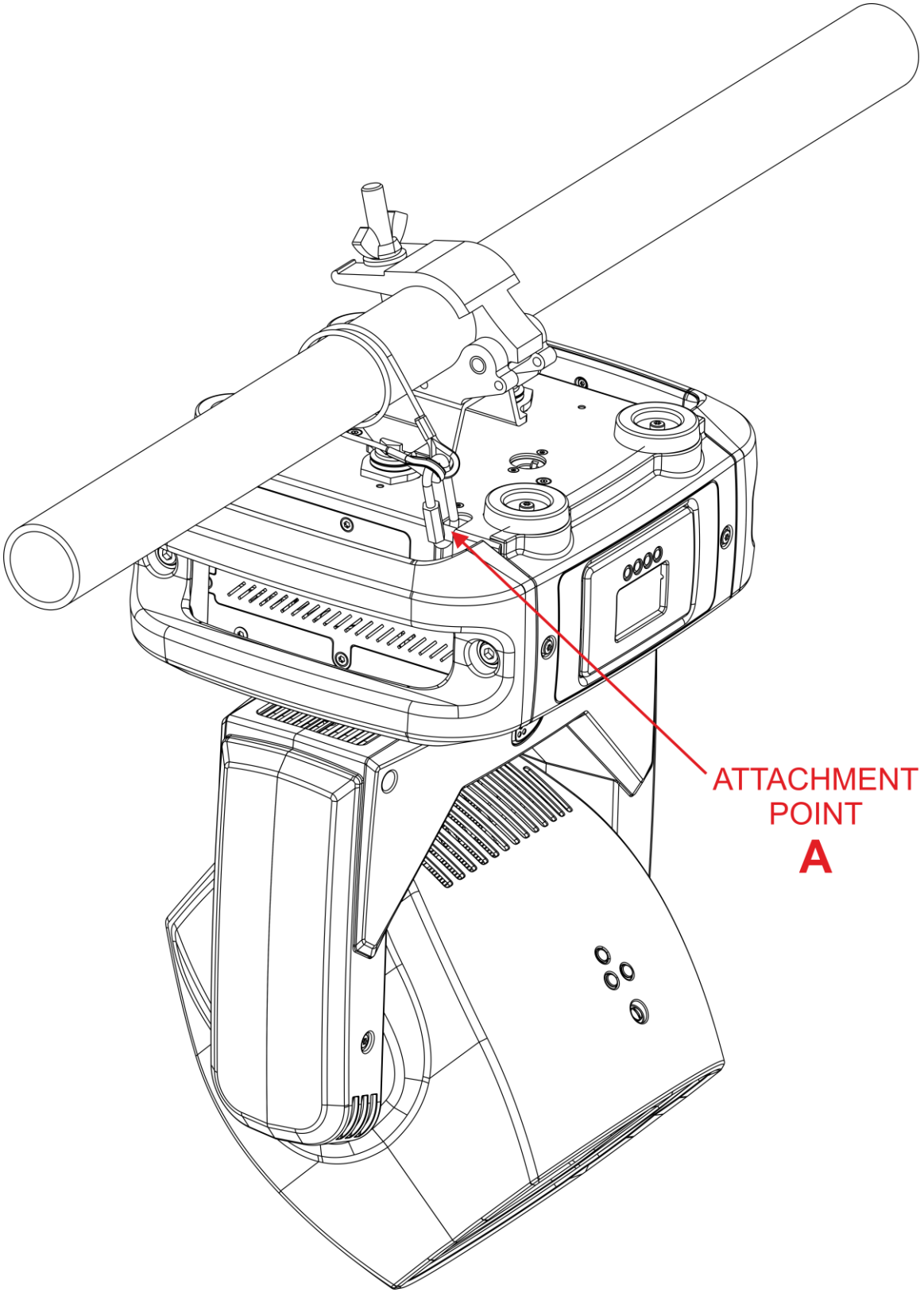
For ceiling mounted installations, we recommend the use of appropriate clamps to fix the unit to the mounting surface.

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 EUPHONY 3 is moving.

Four 1/4 turn Fast Locks connections placed in the base of the unit allow to hang the EUPHONY 3 by using a Omega bracket (provided in the box) in conjunction with Aliscaf clamp (available on demand).

7.1- Safety cable

A safety cable must be securely fixed to the EUPHONY 3 and to the suspension truss in order to avoid the fixture accidentally falling should the main fixing point fail.
Make sure that the safety cable or chain can bear the weight of the entire unit.
A suitable safety cable (code 0521A010) is available on demand.
You may attach the safety cable to the attachment point (A) located on the base of the fixture, as shown in the picture below.



7.2 Protection against liquids

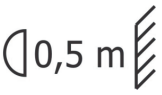
The projector contains electric and electronic components which should under no circumstances come into contact with oil, water or any other liquid.
The proper unit functioning would be compromised should this occur.

7.3- Movement

Pan: 540° rotation (1.8 sec.) ; Tilt: 215° rotation (1 sec.).
Do not place any object in the path of the projector's movement.

7.4- Risk of fire

Each fixture produces heat and must be installed in a well-ventilated place.
Minimum distance from the objects and the people lit by the light beam: 0,5 m.



7.5- Forced ventilation

You will note, on inspection, that the unit features various air inlets and cooling fans located on both the base and head of the fixture.
These should, under no circumstances, be blocked or obstructed whilst the projector is in operation. Doing so could cause the fixture to seriously overheat thereby compromising its proper operation.

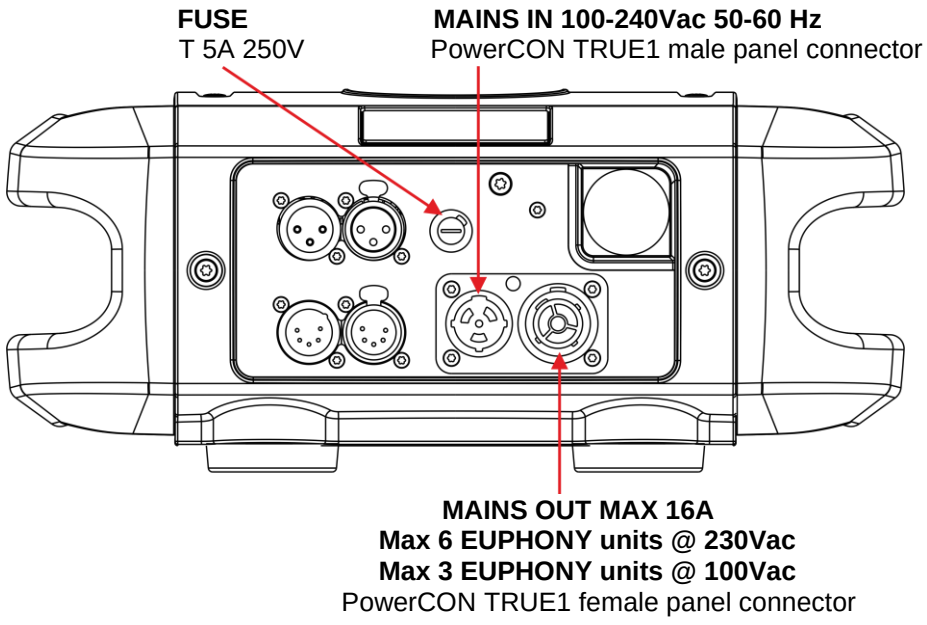
7.6- Ambient temperature

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

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

8- MAINS CONNECTION

EUPHONY 3 operates at 100-240Vac 50-60 Hz.
Prior to connecting the unit to your mains supply, ensure that the model in your possession correctly matches the mains supply available.
For connection purposes, ensure that your plug is capable of supporting 2,5 amps at 230Vac or 5 amps at 100Vac each unit connected.
Strict adherence to regulatory norms is strongly recommended.



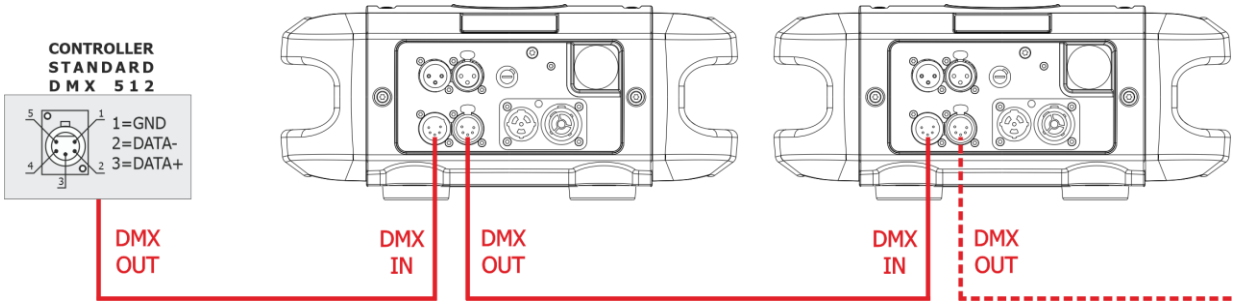
8.1- Protection

The use of a thermal magnetic circuit breaker is recommended for each EUPHONY 3.
A good earth connection is essential for the correct operation of the projector.

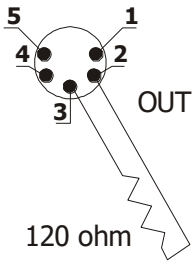
9- DMX SIGNAL CONNECTION

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 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:

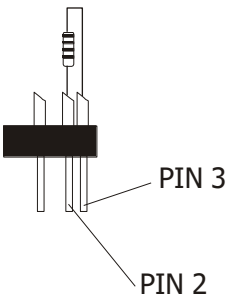
- DMX signal not present
- DMX reception problem



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



9.1-DMX Addresses

EUPHONY 3 can be used in “Standard 18 ch” or “Compatibility 20 ch” DMX mode.
In order to use the unit in “Standard 18 ch” mode (Default), set the following addresses on the mixer:

Projector 1	A001
Projector 2	A019
Projector 3	A037
…..	A….
projector 6	A091

If you want to select the next projector, just add “18”

9.2-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.

10- RDM FUNCTIONS

By using a RDM controller it is possible to read / set DMX address, DMX mode and other parameters. EUPHONY 3 accepts the following RDM commands:

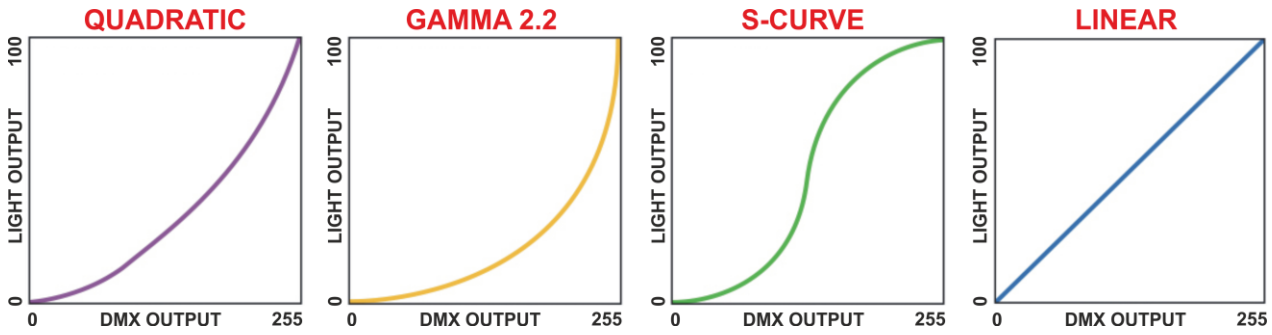
RDM Device Model ID: 0x0017

RDM PID DESCRIPTION	RDM PID VALUE	GET	SET
Category – Network Management			
DISC_UNIQUE_BRANCH	0x0001		
DISC_MUTE	0x0002		
DISC_UN_MUTE	0x0003		
Category – Status Collection			
STATUS_MESSAGES	0x0030	X	
STATUS_ID_DESCRIPTION	0x0031	X	
Category - RDM Information			
SUPPORTED_PARAMETERS	0x0050	X	
PARAMETERS_DESCRIPTION	0x0051	X	
Category – Product Information			
DEVICE_INFO	0x0060	X	
DEVICE_MODEL_DESCRIPTION	0x0080	X	
MANUFACTURER_LABEL	0x0081	X	
DEVICE_LABEL	0x0082	X	X
SOFTWARE_VERSION_LABEL	0x00C0	X	
Category - DMX512 Setup			
DMX_PERSONALITY	0x00E0	X	X
DMX_PERSONALITY_DESCRIPTION	0x00E1	X	
DMX_START_ADDRESS	0x00F0	X	X
Category – Sensors			
SENSOR_DEFINITION	0x0200	X	
SENSOR_VALUE	0x0201	X	X
Category – Power/Lamp Settings			
DEVICE_HOURS	0x0400	X	
LAMP_HOURS	0x0401	X	
Category – Display Settings			
DISPLAY_INVERT	0x0500	X	X
Category – Configuration			
PAN_INVERT	0x0600	X	X
TILT_INVERT	0x0601	X	X
Category – Control			
IDENTIFY_DEVICE	0x1000	X	X
Category – Dimmer Settings			
CURVE	0x0343	X	X
CURVE_DESCRIPTION	0x0344	X	
OUTPUT_RESPONSE_TIME	0x0345	X	X
OUTPUT_RESPONSE_TIME_DESCRIPTION	0x0346	X	
MODULATION_FREQUENCY	0x0347	X	X
MODULATION_FREQUENCY_DESCRIPTION	0x0348	X	
Category – Custom PID			
DISPLAY_STANDBY	0x8002	X	X

15- RDM FUNCTIONS

RDM ADDITIONAL MESSAGEs:

CURVE	CURVE DESCRIPTION
1	LINEAR
2	QUADRATIC (default)
3	GAMMA 2.2
4	S-CURVE



OUTPUT RESPONSE TIME	OUTPUT_RESPONSE_TIME_DESCRIPTION
1	SMOOTH OFF
2	SMOOTH 1 (25 ms)
3	SMOOTH 2 (50 ms)
4	SMOOTH 3 (75 ms)
5	SMOOTH 4 (100 ms) (default)
6	SMOOTH 5 (125 ms)
7	SMOOTH 6 (150 ms)
8	SMOOTH 7 (175 ms)
9	SMOOTH 8 (200 ms)
10	SMOOTH 9 (225 ms)
11	SMOOTH 10 (250 ms)
12	SMOOTH 11 (275 ms)
13	SMOOTH 12 (300 ms)
14	SMOOTH 13 (325 ms)
15	SMOOTH 14 (350 ms)
16	SMOOTH 15 (375 ms)
17	SMOOTH 16 (400 ms)
18	SMOOTH 17 (425 ms)
19	SMOOTH 18 (450 ms)
20	SMOOTH 19 (475 ms)
21	SMOOTH 20 (500 ms)

15- RDM FUNCTIONS

RDM ADDITIONAL MESSAGEs:

MODULATION FREQUENCY	MODULATION FREQUENCY DESCRIPTION
1	610 Hz
2	800 Hz
3	1.000 Hz (default)
4	1.500 Hz
5	2.000 Hz
6	2.500 Hz
7	3.000 Hz
8	3.500 Hz
9	4.000 Hz
10	4.500 Hz
11	5.000 Hz

RDM MANUFACTURER'S SPECIFIC PIDs:

RDM CUSTOM PID	DESCRIPTION
0x8002_DISPLAY_STANDBY	Set parameter DISPLAY – STANDBY 0 = DISABLED (default) 1 = ENABLED 2 = FORCED ENABLED

15- RDM FUNCTIONS

RDM STATUS MESSAGE IDs:

Status Message ID	Data Value 1	Data Value 2	Status ID Description
0x8000			ERROR PAN MOTOR/ENCODER
0x8001			ERROR PAN LOCKED
0x8002			ERROR PAN ZERO SENSOR
0x8003			ERROR TILT MOTOR/ENCODER
0x8004			ERROR TILT LOCKED
0x8005			ERROR TILT ZERO SENSOR
0x8006			ERROR DMX ADDRESS
0x8007			ERROR PARAMETERS MEMORY
0x8008			ERROR SUPPLY VOLTS TOO LOW
0x8009			ERROR SUPPLY VOLTS TOO HIGH
0x800B			ERROR BUS LED DRIVER CARD
0x800C	card number		ERROR BUS MOTORS CARD %d
0x801F			ERROR TEMPERATURE LED MODULE
0x8020	sensor number		ERROR TEMPERATURE LED DRIVER %d
0x8021			ERROR TEMPERATURE MICRO
0x8027	sensor number		ERROR TEMPERATURE SENSOR %d
0x8028	1=data not present 2=read error 3=incomplete data		ERROR COLOUR DATA INTEGRITY CODE %d*

In case of LED Driver PCB replacement will be shown these RDM Status Message IDs.

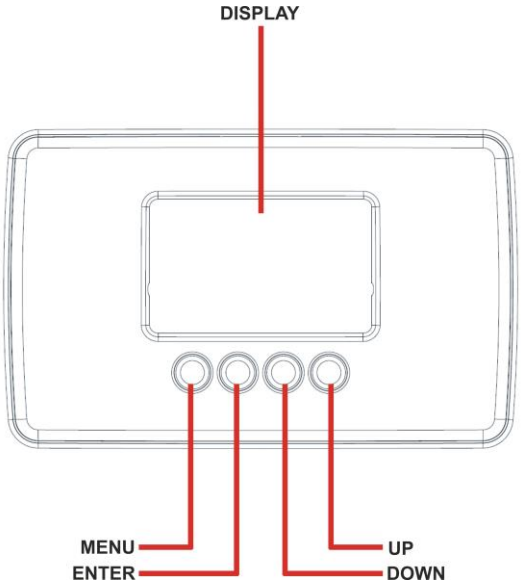
11- FIRMWARE UPDATING

To update the firmware release of the EUPHONY 3 you need:
- DTS Dongle Firmware Uploader (code 03.LA.206).
- “DTS Firmware Upgrade Utility v.2.02” program installed on PC.
- Latest firmware release available for EUPHONY 3 unit.

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

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

12- DISPLAY FUNCTIONS



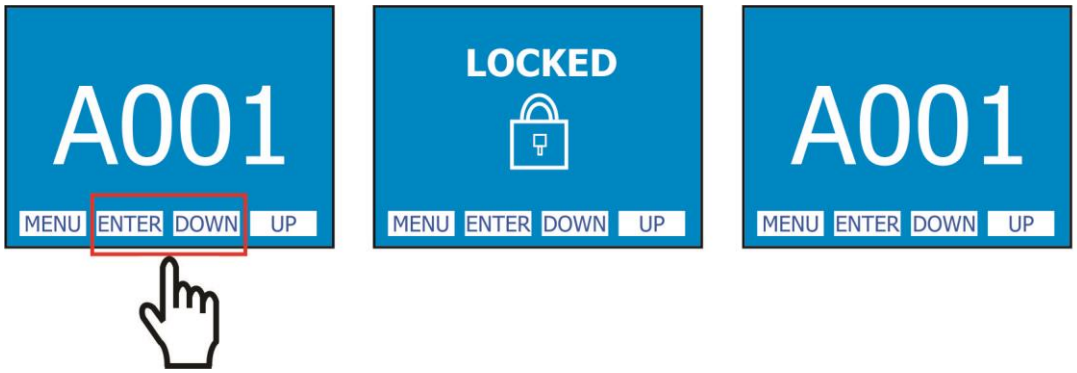
The EUPHONY 3 display panel shows all the available control menus.
Using these options, it is possible to change the fixture's setting.
Changing the DTS settings can vary the functions of the unit so that it does not respond to the DMX 512 used to control it. Carefully follow the instructions below before carrying out any variations or selections.

MENU	• To access the control menus in the display panel. • To return to the previous level in the menu structure without making a change. • To exit the menus.
ENTER	• To select any required menu. • To confirm any changes.
UP / DOWN	• To navigate the menus structure. • To change any value.

MOTORS FIRMWARE RELEASE **LED FIRMWARE RELEASE**	**12** **1.00**
RDM Device Model ID	**0x0017**
DMX Personality IDs	**0x01 "STANDARD 18CH"** **0x02 "COMPATIBILITY 20CH"**

DISPLAY KEY-LOCK FUNCTION

Display key-lock function can be enabled/disabled by pressing ENTER + DOWN keys at the same time for 3 seconds.

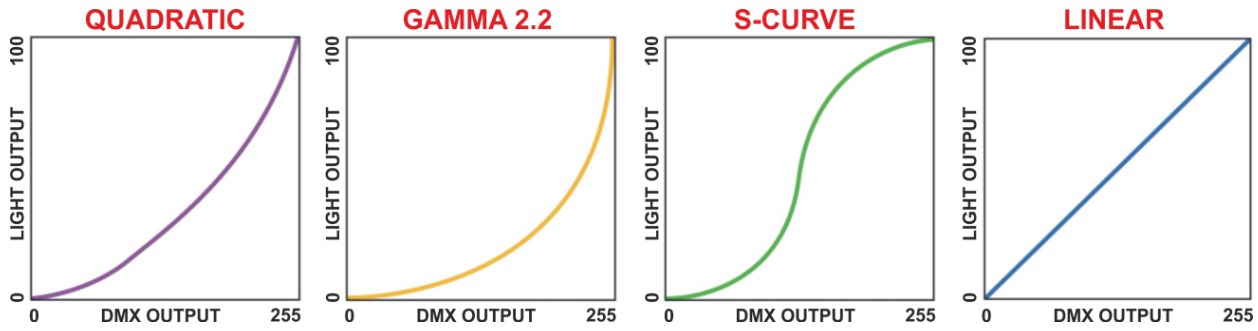


MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
PAN DIRECTION	NORMAL			Allows to set the Pan movement. Normal or Reverse. **Normal (Default).**
	REVERSE			
TILT DIRECTION	NORMAL			Allows to set the Tilt movement. Normal or Reverse. **Normal (Default).**
	REVERSE			
ZOOM DIRECTION	NORMAL			Allows to set the Zoom movement. Normal or Reverse. **Normal (Default).**
	REVERSE			
OPERATING MODE	STANDARD			**Pan-Tilt-Zoom-Fans standard speed (Default).**
	SILENT			Reduced Pan-Tilt-Zoom-Fans speed for low noise operation.
FAN MODE **(FAN MODE will work relatively to OPERATING MODE)**	CONSTANT			**Same fans speed in any working condition in SILENT or STANDARD operating mode (Default).**
	AUTOMATIC			Automatic fans speed. If LED temperature <40°C: fans OFF. If LED temperature >40°C: If OPERATING MODE = SILENT, fans speed is increased within the values range set in SILENT mode. If OPERATING MODE = STANDARD, fans speed is increased within the values range set in STANDARD mode.
DISPLAY	FLIP	AUTO		Reverses display's reading depending on the mounting position. Automatic, on the ground or suspended. **Automatic (Default).**
		ON THE GROUND		
		SUSPENDED		
	STANDBY	DISABLED		**Display stand-by disabled (Default).**
		ENABLED		Display goes OFF after 5 seconds.
		FORCED ENABLED		Display forced OFF even if control signal is missing or error messages are shown.
	CONTRAST	20 - 35		Display contrast regulation. Range 20-35. **Default = 25.**
DMX MODE Personality	STANDARD 18 channels			**Allows to select STANDARD mode (18 DMX channels). Default.**
	COMPATIBILITY 20 channels			Allows to select COMPATIBILITY mode (20 DMX channels).

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
NO DMX ACTION	KEEP LAST DMX			Allows to set the desired unit's behavior in case DMX signal is missing or not available. **Keep last valid DMX signal (Default).**
	PROGRAM 1-48	1 - 48		48 pre-programmed steps. Speed time values (range 0.5x – 3x) selectable by user (default 1x).
	SINGLE CUE	RED	0 - 255	Fixed cue with values selectable by user. **Default = 255**
		GREEN	0 - 255	**Default = 255**
		BLUE	0 - 255	**Default = 255**
		WHITE	0 - 255	**Default = 255**
		SHUTTER	0 - 255	**Default = 15**
		DIMMER MSB	0 - 255	**Default = 255**
		DIMMER LSB	0 - 255	**Default = 255**
		CCT	0 - 255	**Default = 0**
		MACRO COLOR	0 - 255	**Default = 0**
		PAN MSB	0 - 255	**Default = 128**
		PAN LSB	0 - 255	**Default = 128**
		TILT MSB	0 - 255	**Default = 128**
		TILT LSB	0 - 255	**Default = 128**
		SPEED MOVEMENT	0 - 255	**Default = 0**
		ZOOM	0 - 255	**Default = 128**
	BLACKOUT			Black-out.
RESET BY DMX	ENABLED			**Reset via DMX enabled (Default).**
	DISABLED			Reset via DMX disabled.
	NOW			Instant unit motors reset.
LED	SMOOTH	OFF - 20		Allows to select the value of delay (in ms) for DIMMER channel reaction to DMX dimming command. OFF = Instant response. **4 = 100 ms smooth response (Default).** 20 = 500 ms smooth response.

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
LED	GAMMA CORR.	QUAD 2.0		**Allows to set quadratic current output for LED (Default).**
		2.2		Allows to set gamma curve 2.2 .
		S-CURVE		Allows to set S-curve to emulates light intensity characteristics of the tungsten halogen lamps.
		LINE		Allows to set linear light output.
	FREQUENCY	610 - 5000 HZ		Allows to adjust the PWM frequency value (Hz) in order to reduce flickering in the process of your camera recordings. Range = 610 Hz – 5 KHz **Default = 1000 Hz**

"GAMMA CORR." GRAPHICS:



MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
WIRELESS (optional Lumen Radio Wireless DMX TX-RX interface kit code 03.LA.241 is needed)	STATUS	DISABLED		Allows to control the unit via Wireless DMX. **Default = Disabled.**
		ENABLED		
	DIRECTION	RECEIVER		**The unit receives signal via Wireless DMX and transmit the signal to the DMX Output connector (Default).**
		TRANSMITTER		The unit works as Wireless DMX Transmitter. The unit receives signal from DMX Input connector and transmit the signal via Wireless.
	UNLINK			Operation as Receiver: To log off the unit from paired wireless transmitter device. Operation as Transmitter: To log off all the paired wireless receiver devices.
	ONLY FOR TRANSMITTER LINK			To log on all the free wireless receiver devices.

EUPHONY 3 can be used as Wireless DMX transmitter/receiver.
Optional Lumen Radio Wireless DMX TX-RX interface kit (Code 03.LA.241) is needed.

Operation as Receiver (default)
Enable Wireless DMX control under WIRELESS -> STATUS menu.
On the main display will appear “WIRELESS RX” (Default) above the DMX address.

To log on the unit to Lumen Radio or Wireless Solution compatible transmitter devices, press the connect button on the wireless transmitter device.
To optimize the wireless communication maintain TX to RX line of sight.
The maximum distance should not exceed 100 meters.
Select UNLINK menu to log off the unit from paired wireless trasmitter device.

Operation as Transmitter
Enable Wireless DMX control under WIRELESS -> STATUS menu.
Set the unit as Transmitter under DIRECTION -> TRANSMITTER menu.
On the main display will appear “WIRELESS TX” above the DMX address.

Connect the unit via DMX Input connector and pair the free wireless receiver devices by selecting LINK menu.
To optimize the wireless communication maintain TX to RX line of sight.
The maximum distance should not exceed 100 meters.
Select UNLINK menu to log off all the paired wireless receiver devices.

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
SYSTEM INFO	SOFTWARE	EUPHONY 3 08 NOV 2019 MOTOR: V.12 LED: V.1.00		Unit model, motors firmware release date, Motors board and LED Driver board firmware release.
	TEMPERATURES	LED: 041°C DRV-1: 043°C DRV-2: 044°C MICRO: 040°C		LED: LED temperature monitoring. DRV-1: output 1 and output 2 of LED Driver board temperature monitoring. DRV-2: output 3 and output 4 of LED Driver board temperature monitoring. MICRO: Micro controller temperature monitoring.
	TIME COUNTERS	UNIT: 0082H DRIVER: 0080H RED: 0045H GREEN: 0068H BLUE: 0023H WHITE: 0037H		Unit, LED Driver board and LED channels life time.
	ADDRESSES	RDM: 0710:00011655		RDM ID.
RESERVED	ENTER CODE 0 – 255 (code 100)	PAN LOCK	NO	Lock the Pan to the desired value. **NO = Default.**
			YES	
		TILT LOCK	NO	Lock the Tilt to the desired value. **NO = Default.**
			YES	
		PAN FREE	NO	Remove power to Pan motor. **NO = Default.**
			YES	
		TILT FREE	NO	Remove power to Tilt motor. **NO = Default.**
			YES	
		LOCK DETECTOR	ON	Allows to activate the Lock detector on Pan and Tilt. If for any reason there is something blocking the movement for Pan&Tilt motors during the initial reset (example unit into the flight case and power connected), it automatically will stop to reset Pan&Tilt motors after 5 seconds from the startup and a warning message (Pan locked-Tilt locked) will appear on unit display. **ON = Default.**
			OFF	
		REBOOT		Unit reboot without needing of turning OFF the unit.
		EXIT TO MAIN		Exit from Reserved menu.

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
DEFAULT				To restore factory settings.
MANUAL CONTR.	RESET	HEAD MOTORS		To reset head motors only.
		PAN TILT		To reset Pan and Tilt only.
		ALL MOTORS		To reset all motors.
	RESTORE DEF.			To restore parameters default settings.
	RED	0 - 255		Manual mode with functions value selectable by user. **Default = 255**
	GREEN	0 - 255		**Default = 255**
	BLUE	0 - 255		**Default = 255**
	WHITE	0 - 255		**Default = 255**
	SHUTTER	0 - 255		**Default = 15**
	DIMMER MSB	0 - 255		**Default = 255**
	DIMMER LSB	0 - 255		**Default = 255**
	CCT	0 - 255		**Default = 0**
	MACRO COLOR	0 - 255		**Default = 0**
	PAN MSB	0 - 255		**Default = 128**
	PAN LSB	0 - 255		**Default = 128**
	TILT MSB	0 - 255		**Default = 128**
	TILT LSB	0 - 255		**Default = 128**
	SPEED MOVEMENT	0 - 255		**Default = 0**
	ZOOM	0 - 255		**Default = 128**

13- ERROR MESSAGES

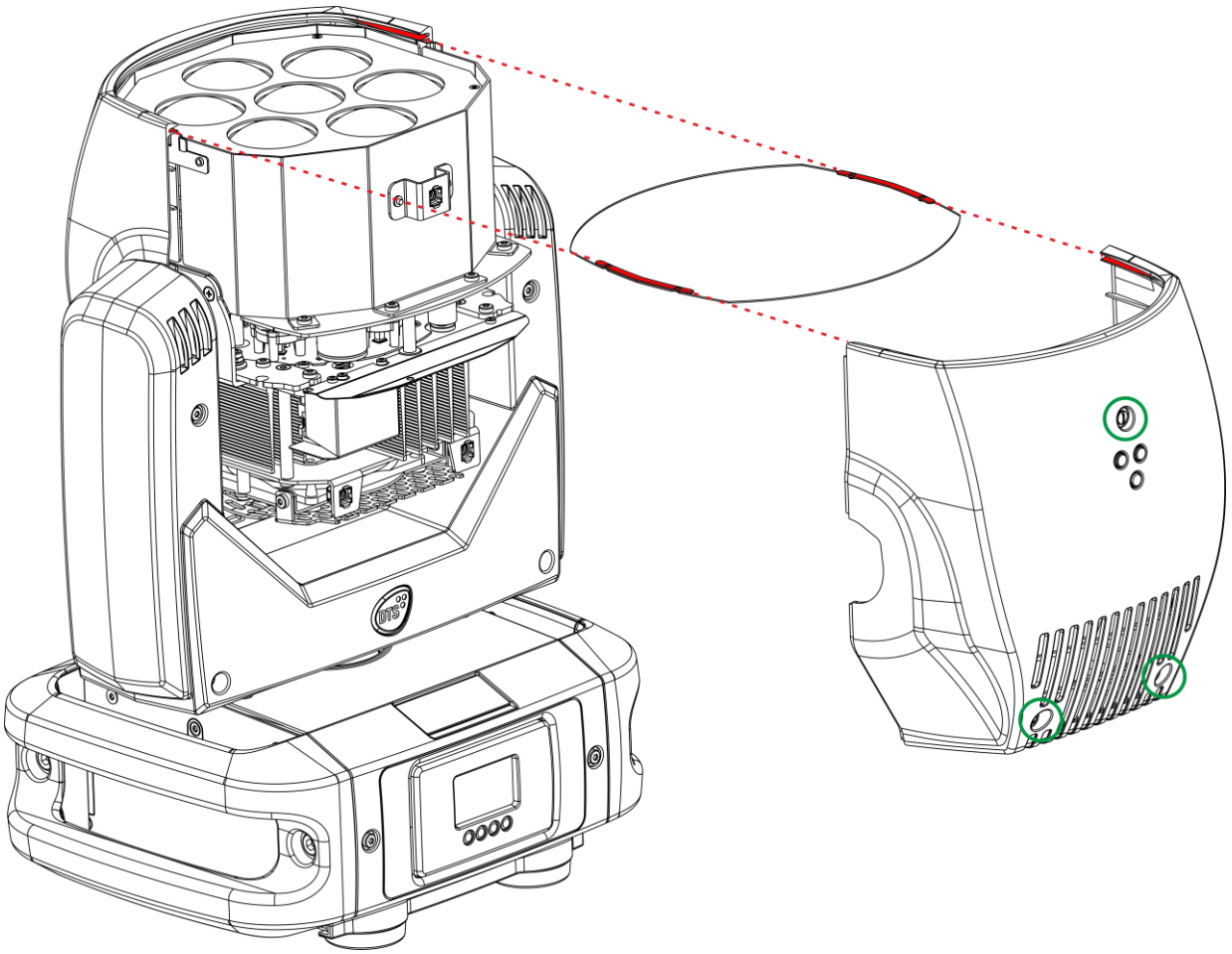
ERROR SHOWN ON DISPLAY	APPEARS WHEN
PAN	-Pan motor fault -Pan encoder fault -Pan motor driver on Pan&Tilt PCB fault -Wiring connection between Pan encoder and Pan&Tilt PCB fault
PAN LOCKED	-Pan locked -Pan motor fault -Pan encoder fault -Pan motor driver on Pan&Tilt PCB fault -Wiring connection between Pan encoder and Pan&Tilt PCB fault
TILT	-Tilt motor fault -Tilt encoder fault -Tilt motor driver on Pan&Tilt PCB fault -Wiring connection between Tilt encoder and Pan&Tilt PCB fault
TILT LOCKED	-Tilt locked -Tilt motor fault -Tilt encoder fault -Tilt motor driver on Pan&Tilt PCB fault -Wiring connection between Tilt encoder and Pan&Tilt PCB fault
PAN ZERO SENSOR LINE	-Pan magnet missing -Pan hall sensor PCB fault -Wiring connection between Pan hall sensor PCB and Pan&Tilt PCB fault
TILT ZERO SENSOR LINE	-Tilt magnet missing -Tilt hall sensor PCB fault -Wiring connection between Tilt hall sensor PCB and Pan&Tilt PCB fault
TEMP. LED MOD.	LED module temperature detected under -10°C or over 90°C. Unit immediately goes in black-out.
TEMP. LED DRV 1	Output from 1 to 4 of LED Driver PCB temperature detected under -10°C or over 90°C. Unit immediately goes in black-out.
TEMP. LED DRV 2	Output from 5 to 8 of LED Driver PCB temperature detected under -10°C or over 90°C. Unit immediately goes in black-out.
TEMP. LED MICRO	Micro controller on LED Driver PCB temperature detected under -10°C or over 80°C. Unit immediately goes in black-out.
TEMP. SENS n	Thermal sensor “number” damaged. Unit immediately goes in black-out.
COLOUR DATA INTEGRITY* *In case of LED Driver PCB replacement will be shown these error messages	**NOT PRESENT:** LED calibration not made **READ ERROR:** LED calibration data reading problem **INCOMPLETE DATA:** LED calibration incomplete data
SUPPLY VOLTS TOO LOW	PCBs input voltage <46,5Vdc.
SUPPLY VOLTS TOO HIGH	PCBs input voltage >49,5Vdc.
BUS ZOOM BOARD	-Pan&Tilt PCB driver fault -Zoom motors PCB driver fault -Zoom motors PCB input voltage missing -Internal Bus wiring connection fault
BUS LED DRIVER	-Pan&Tilt PCB driver fault -LED Driver PCB driver fault -LED Driver PCB input voltage missing -Internal Bus wiring connection fault

14- SOFT FROST FILTER INSTALLATION

A Soft frost filter (code 02SK0472) is provided as standard accessory.

To properly install the filter:

1- Loose the 3 ¼-turn screws on one side of the head.
2- Insert the filter on the remaining cover as shown in the picture.
3- Put in place the previously removed cover and tighten again the 3 ¼-turn screws.



15- PERIODIC CLEANING

15.1- Lenses and reflectors

Even a fine layer of dust can reduce the luminous output substantially.
Regularly clean all lenses and the reflector using a soft cotton cloth, dampened with a specialist lens cleaning solution.

15.2- Fans and air passages

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

16- PERIODIC CONTROLS

Attention

Disconnect mains power prior to opening the projector housing.

Mechanical parts

Periodically check all mechanical parts, gears, guides, belts, etc. for wear and tear, replacing them if necessary.
Periodically check the lubrification of all components, particularly the parts subject to high temperatures.
If necessary, lubrificate with suitable lubrificant, available from your DTS distributor.
Check the tension of the belts and adjust it if necessary.

Electrical components

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

Fuse replacement

Locate the fuse, which protects the lamp and electronics, in the base of EUPHONY 3.
Using a multimeter, test the condition of the fuse, replacing it with one of equivalent type (T 5A 250V) if necessary.

17- DMX PROTOCOL

1. “STANDARD 18 CH” mode (Default)

1 RED
2 GREEN
3 BLUE
4 WHITE
5 SHUTTER
6 DIMMER msb
7 DIMMER lsb
8 CCT *(Priority on RGBW and MACRO channels)*
9 MACRO COLOR *(Priority on RGBW channels)*
10 PAN msb
11 PAN lsb
12 TILT msb
13 TILT lsb
14 PAN/TILT SPEED
15 Reserved
16 ZOOM
17 FIXTURE CONTROL
18 RESET

Ch	*Name*	*DMX Levels*	
1	RED	000-255	Proportional color from min to max
2	GREEN	000-255	Proportional color from min to max
3	BLUE	000-255	Proportional color from min to max
4	WHITE	000-255	Proportional color from min to max
5	SHUTTER	000-009	Blackout
		010-019	Open
		020-029	Blackout
		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 (R G B W CCT MACRO Dimmer channels active)
		205-229	Full independent random strobe (Dimmer channels active)
		230-255	Open
6	DIMMER msb	000-255	Proportional master dimmer msb from min to max
7	DIMMER lsb	000-255	Proportional master dimmer lsb from min to max
8	CCT	000-009	No function
		010-255	Correlated color temperature from 2700K to 8000K
		Relevant CCT values:	
		010	2700 K (R255 G147 B0 W26 GAMMA=LINE)
		033	3000 K (R245 G156 B0 W40 GAMMA=LINE)
		055	3200 K (R244 G161 B0 W49 GAMMA=LINE)
		077	3500 K (R240 G165 B0 W68 GAMMA=LINE)
		099	4000 K (R235 G176 B0 W105 GAMMA=LINE)
		121	4500 K (R218 G179 B4 W125 GAMMA=LINE)
		143	5000 K (R214 G193 B8 W138 GAMMA=LINE)
		165	5600 K (R185 G192 B12 W170 GAMMA=LINE)
		187	6000 K (R180 G196 B15 W190 GAMMA=LINE)
		209	6500 K (R174 G202 B20 W216 GAMMA=LINE)
		232	7000 K (R168 G204 B24 W255 GAMMA=LINE)
		255	8000 K (R168 G229 B41 W255 GAMMA=LINE)

Ch	*Name*	*DMX Levels*	
9	MACRO COLOR	000-009	No Function
		010-024	COL 1: LEE FILTER NO. 19 "FIRE" (R255 G64 B0 W0 GAMMA=QUAD) (R255 G16 B0 W0 GAMMA=LINE)
		025-034	COL 2: LEE FILTER NO. 20 "MEDIUM AMBER" (R255 G160 B28 W0 GAMMA=QUAD) (R255 G100 B3 W0 GAMMA=LINE)
		035-044	COL 3: LEE FILTER NO. 25 "SUNSET RED" (R255 G111 B23 W0 GAMMA=QUAD) (R255 G48 B2 W0 GAMMA=LINE)
		045-054	COL 4: LEE FILTER NO. 101 "YELLOW" (R255 G196 B0 W42 GAMMA=QUAD) (R255 G150 B0 W7 GAMMA=LINE)
		055-064	COL 5: LEE FILTER NO. 104 "DEEP AMBER" (R255 G175 B0 W39 GAMMA=QUAD) (R255 G120 B0 W6 GAMMA=LINE)
		065-074	COL 6: LEE FILTER NO. 106 "PRIMARY RED" (R255 G0 B0 W0 GAMMA=QUAD) (R255 G0 B0 W0 GAMMA=LINE)
		075-084	COL 7: LEE FILTER NO. 111 "DARK PINK" (R255 G66 B0 W115 GAMMA=QUAD) (R255 G17 B0 W52 GAMMA=LINE)
		085-094	COL 8: LEE FILTER NO. 113 "MAGENTA" (R255 G28 B28 W45 GAMMA=QUAD) (R255 G3 B3 W8 GAMMA=LINE)
		095-104	COL 9: LEE FILTER NO. 118 "LIGHT BLUE" (R0 G255 B112 W0 GAMMA=QUAD) (R0 G255 B49 W0 GAMMA=LINE)
		105-114	COL 10: LEE FILTER NO. 122 "FERN GREEN" (R151 G255 B0 W50 GAMMA=QUAD) (R90 G255 B0 W10 GAMMA=LINE)
		115-124	COL 11: LEE FILTER NO. 126 "MAUVE" (R255 G0 B118 W0 GAMMA=QUAD) (R255 G0 B55 W0)
		125-134	COL 12: LEE FILTER NO. 137 "LAVANDER" (R255 G224 B118 W97 GAMMA=QUAD) (R255 G197 B55 W37 GAMMA=LINE)
		135-144	COL 13: LEE FILTER NO. 139 "PRIMARY GREEN" (R87 G255 B0 W0 GAMMA=QUAD) (R30 G255 B0 W0 GAMMA=LINE)
		145-154	COL 14: LEE FILTER NO. 147 "APRICOT" (R255 G146 B23 W42 GAMMA=QUAD) (R255 G84 B2 W7 GAMMA=LINE)
		155-164	COL 15: LEE FILTER NO. 154 "PALE ROSE" (R255 G164 B0 W105 GAMMA=QUAD) (R255 G106 B0 W43 GAMMA=LINE)
		165-174	COL 16: LEE FILTER NO. 181 "CONGO BLUE" (R94 G107 B255 W0 GAMMA=QUAD) (R35 G45 B255 W0 GAMMA=LINE)
		175-184	RGB RAINBOW COLOR MIXING: SPEED 1 (6 SEC.)
		185-194	RGB RAINBOW COLOR MIXING: SPEED 2 (15 SEC.)
		195-204	RGB RAINBOW COLOR MIXING: SPEED 3 (30 SEC.)
		205-214	RGB RAINBOW COLOR MIXING: SPEED 4 (45 SEC.)
		215-224	RGB RAINBOW COLOR MIXING: SPEED 5 (60 SEC.)
		225-234	RGB RAINBOW COLOR MIXING: SPEED 6 (120 SEC.)
		235-244	RGB RAINBOW COLOR MIXING: SPEED 7 (150 SEC.)
		245-255	RGB RAINBOW COLOR MIXING: SPEED 8 (180 SEC.)
10	PAN msb	000-255	PAN msb
11	PAN lsb	000-255	PAN lsb
12	TILT msb	000-255	TILT msb
13	TILT msb	000-255	TILT lsb
14	PAN/TILT SPEED	000-009	Fast movement
		010-025	Standard movement
		026-127	Vector mode from fast to slow
		128-247	Variable time reaction to dmx signal (fast to slow)
		248-250	Silent movement
		251-255	Snap movement
15	RESERVED	000-255	Reserved
16	ZOOM	000-255	Linear zoom from narrow to wide

Ch	*Name*	*DMX Levels*	
17	FIXTURE CONTROL Staying on desired option for 5 seconds	000-009	No function
		010-024	SMOOTH OFF
		025-026	SMOOTH 1
		027-028	SMOOTH 2
		029-030	SMOOTH 3
		031-032	SMOOTH 4 (DEFAULT)
		033-034	SMOOTH 5
		035-036	SMOOTH 6
		037-038	SMOOTH 7
		039-040	SMOOTH 8
		041-042	SMOOTH 9
		043-044	SMOOTH 10
		045-046	SMOOTH 11
		047-048	SMOOTH 12
		049-050	SMOOTH 13
		051-052	SMOOTH 14
		053-054	SMOOTH 15
		055-056	SMOOTH 16
		057-058	SMOOTH 17
		059-060	SMOOTH 18
		061-062	SMOOTH 19
		063-064	SMOOTH 20
		065-066	GAMMA CORRECTION QUAD 2.0 (DEFAULT)
		067-068	GAMMA CORRECTION LINEAR
		069-070	GAMMA CORRECTION S-CURVE
		071-072	GAMMA CORRECTION 2.2
		073-084	RESERVED
		085-104	OUTPUT FREQUENCY 610 Hz
		105	OUTPUT FREQUENCY 800 Hz
		106	OUTPUT FREQUENCY 1000 Hz (DEFAULT)
		107	OUTPUT FREQUENCY 1500 Hz
		108	OUTPUT FREQUENCY 2000 Hz
		109	OUTPUT FREQUENCY 2500 Hz
		110	OUTPUT FREQUENCY 3000 Hz
		111	OUTPUT FREQUENCY 3500 Hz
		112	OUTPUT FREQUENCY 4000 Hz
		113	OUTPUT FREQUENCY 4500 Hz
		114	OUTPUT FREQUENCY 5000 Hz
		115-154	RESERVED
		155-156	65 - DISPLAY STAND-BY DISABLED (DEFAULT)
		157-158	66 - DISPLAY STAND-BY ENABLED
		159-160	DISPLAY STAND-BY FORCED ENABLED
		161-174	RESERVED
		175-176	NO DMX ACTION – KEEP LAST DMX (DEFAULT)
		177-178	NO DMX ACTION – BLACK OUT
		179-180	RESERVED
		181-182	NO DMX ACTION – DEMO PROGRAM (STEPS 01-48)
		183-184	NO DMX ACTION – SINGLE CUE (RGBW + dimmer + P&T + zoom + cct values selectable via “NDMX>SINGLE CUE” menu)

Ch	*Name*	*DMX Levels*	
17	FUNCTIONS Staying on desired option for 5 seconds	185-186	72 - PAN NORMAL (DEFAULT)
		187-188	73 - PAN REVERSE
		189-196	RESERVED
		197-198	78 - TILT NORMAL (DEFAULT)
		199-200	79 - TILT REVERSE
		201-208	RESERVED
		209-210	84 – ZOOM NORMAL (DEFAULT)
		211-212	85 - ZOOM REVERSE
		213-234	RESERVED
		235-236	OPERATING MODE SILENT
		237-238	OPERATING MODE STANDARD (DEFAULT)
		239-240	RESERVED
		241-242	FAN MODE CONSTANT (DEFAULT)
		243-244	FAN MODE AUTO
		245-252	RESERVED
		253-255	SET DEFAULTS SMOOTH = 4 GAMMA CORRECTION = QUAD 2.0 OUTPUT FREQUENCY = 1000 Hz DISPLAY STAND-BY = DISABLED NO DMX ACTION = KEEP LAST DMX PAN = NORMAL TILT = NORMAL ZOOM = NORMAL OPERATING MODE = STANDARD FAN MODE = CONSTANT
18	RESET	000-009	No function
		010-075	PAN TILT reset (stay on desired option for at least 3 seconds)
		076-239	ZOOM reset (stay on desired option for at least 3 seconds)
		240-255	TOTAL Unit reset (stay on desired option for at least 3 seconds)

21- DMX PROTOCOL

2. “COMPATIBILITY 20CH” mode (compatibility with NICK NRG Series)

1 PAN msb
2 PAN lsb
3 TILT msb
4 TILT lsb
5 PAN/TILT SPEED
6 Reserved
7 FREQUENCY
8 SHUTTER
9 DIMMER
10 RED
11 GREEN
12 BLUE
13 WHITE
14 WHITE PRE-PROGRAMMED
15 CTC
16 MACRO
17 FUNCTION
18 ZOOM
19 ZOOM SPEED
20 RESET

Ch	*Name*	*DMX levels*	
1	PAN	0..255	PAN msb
2	PAN FINE	0..255	PAN lsb
3	TILT	0..255	TILT msb
4	TILT FINE	0..255	TILT lsb
5	PAN / TILT SPEED	0..10	Standard
		11..25	Maximum speed
		26..127	From maximum to minimum speed
		128..247	Variable reaction to DMX signal (fast to slow)
		248..255	Slow reaction time to DMX signal
6	Reserved	000..255	Reserved
7	FREQUENCY	0..45	No function
		46..55	610 Hz
		56..65	800 Hz
		66..75	1000 Hz (Default)
		76..85	1500 Hz
		86..95	2000 Hz
		96..105	2500 Hz
		106..115	3000 Hz
		116..125	3500 Hz
		126..135	4000 Hz
		136..145	4500 Hz
		146..155	5000 Hz
		156..255	Reserved

Ch	*Name*	*DMX levels*	
8	SHUTTER	0..9	Black-out
		10..19	Open
		20..29	Black-out
		30..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
		205..229	Full independent random strobe
		230..255	Open
9	DIMMER	0..255	Proportional dimmer from min to max
10	RED	0..255	Proportional colour from min to max
11	GREEN	0..255	Proportional colour from min to max
12	BLUE	0..255	Proportional colour from min to max
13	WHITE	0..255	Proportional colour from min to max
14	WHITE PRE-PROGRAMMED	0..55	No function
		56..105	Full (Red, Green, Blue and White at full)
		106..155	DTS White (R 216, G 255, B 216, W 255)
		156..205	Custom white create (RGBW levels selectable by DMX)
		206..255	White CTC (channel 15 CTC enabled)
15	CTC	0..255	Linear control temperature correction (256 whites from 2700K to 8000K) Relevant values: 0 = 2700 K (R255 G147 B0 W26 GAMMA=LINE) 255 = 8000 K (R168 G229 B41 W255 GAMMA=LINE)
16	MACRO if MACRO = STD	0..14	No function
		15..30	COL 1: (R255 G0 B0 W0 GAMMA=LINE) (R255 G0 B0 W0 GAMMA=QUAD)
		31..46	COL 2: (R255 G12 B0 W0 GAMMA=LINE) (R255 G55 B0 W0 GAMMA=QUAD)
		47..62	COL 3: (R255 G113 B0 W0 GAMMA=LINE) (R255 G170 B0 W0 GAMMA=QUAD)
		63..78	COL 4: (R255 G255 B0 W0 GAMMA=LINE) (R255 G255 B0 W0 GAMMA=QUAD)
		79..94	COL 5: (R113 G255 B0 W0 GAMMA=LINE) (R170 G255 B0 W0 GAMMA=QUAD)
		95..110	COL 6: (R012 G255 B0 W0 GAMMA=LINE) (R055 G255 B0 W0 GAMMA=QUAD)
		111..126	COL 7: (R0 G255 B0 W0 GAMMA=LINE) (R0 G255 B0 W0 GAMMA=QUAD)
		127..142	COL 8: (R0 G255 B12 W0 GAMMA=LINE) (R0 G255 B55 W0 GAMMA=QUAD)
		143..158	COL 9: (R0 G255 B113 W0 GAMMA=LINE) (R0 G255 B170 W0 GAMMA=QUAD)
		159..174	COL 10: (R0 G255 B255 W0 GAMMA=LINE) (R0 G255 B255 W0 GAMMA=QUAD)
		175..190	COL 11: (R0 G113 B255 W0 GAMMA=LINE) (R0 G170 B255 W0 GAMMA=QUAD)
		191..206	COL 12: (R0 G12 B255 W0 GAMMA=LINE) (R0 G55 B255 W0 GAMMA=QUAD)
		207..222	COL 13: (R0 G0 B255 W0 GAMMA=LINE) (R0 G0 B255 W0 GAMMA=QUAD)
		223..238	COL 14: (R12 G0 B255 W0 GAMMA=LINE) (R55 G0 B255 W0 GAMMA=QUAD)
		239..254	COL 15: (R113 G0 B255 W0 GAMMA=LINE) (R170 G0 B255 W0 GAMMA=QUAD)
		255	COL 16: (R255 G0 B255 W0 GAMMA=LINE) (R255 G0 B255 W0 GAMMA=QUAD)

Ch	*Name*	*DMX levels*	
16	MACRO if MACRO = EXT	0..14	No function
		15..24	COL 1: (R255 G0 B0 W0 GAMMA=LINE) (R255 G0 B0 W0 GAMMA=QUAD)
		25..34	COL 2: (R255 G12 B0 W0 GAMMA=LINE) (R255 G55 B0 W0 GAMMA=QUAD)
		35..44	COL 3: (R255 G113 B0 W0 GAMMA=LINE) (R255 G170 B0 W0 GAMMA=QUAD)
		45..54	COL 4: (R255 G255 B0 W0 GAMMA=LINE) (R255 G255 B0 W0 GAMMA=QUAD)
		55..64	COL 5: (R113 G255 B0 W0 GAMMA=LINE) (R170 G255 B0 W0 GAMMA=QUAD)
		65..74	COL 6: (R012 G255 B0 W0 GAMMA=LINE) (R055 G255 B0 W0 GAMMA=QUAD)
		75..84	COL 7: (R0 G255 B0 W0 GAMMA=LINE) (R0 G255 B0 W0 GAMMA=QUAD)
		85..94	COL 8: (R0 G255 B12 W0 GAMMA=LINE) (R0 G255 B55 W0 GAMMA=QUAD)
		95..104	COL 9: (R0 G255 B113 W0 GAMMA=LINE) (R0 G255 B170 W0 GAMMA=QUAD)
		105..114	COL 10: (R0 G255 B255 W0 GAMMA=LINE) (R0 G255 B255 W0 GAMMA=QUAD)
		115..124	COL 11: (R0 G113 B255 W0 GAMMA=LINE) (R0 G170 B255 W0 GAMMA=QUAD)
		125..134	COL 12: (R0 G12 B255 W0 GAMMA=LINE) (R0 G55 B255 W0 GAMMA=QUAD)
		135..144	COL 13: (R0 G0 B255 W0 GAMMA=LINE) (R0 G0 B255 W0 GAMMA=QUAD)
		145..154	COL 14: (R12 G0 B255 W0 GAMMA=LINE) (R55 G0 B255 W0 GAMMA=QUAD)
		155..164	COL 15: (R113 G0 B255 W0 GAMMA=LINE) (R170 G0 B255 W0 GAMMA=QUAD)
		165..174	COL 16: (R255 G0 B255 W0 GAMMA=LINE) (R255 G0 B255 W0 GAMMA=QUAD)
		175..184	Rainbow: a new colour every 6 s (RED, YELLOW, GREEN, CYAN, BLUE, MAGENTA)
		185..194	Rainbow: a new colour every 15 s (RED, YELLOW, GREEN, CYAN, BLUE, MAGENTA)
		195..204	Rainbow: a new colour every 30 s (RED, YELLOW, GREEN, CYAN, BLUE, MAGENTA)
		205..214	Rainbow: a new colour every 45 s (RED, YELLOW, GREEN, CYAN, BLUE, MAGENTA)
		215..224	Rainbow: a new colour every 60 s (RED, YELLOW, GREEN, CYAN, BLUE, MAGENTA)
		225..234	Rainbow: a new colour every 120 s (RED, YELLOW, GREEN, CYAN, BLUE, MAGENTA)
		235..244	Rainbow: a new colour every 150 s (RED, YELLOW, GREEN, CYAN, BLUE, MAGENTA)
		245..255	Rainbow: a new colour every 180 s (RED, YELLOW, GREEN, CYAN, BLUE, MAGENTA)
17	FUNCTION	0..79	If channel 14 White Pre-Programmed = DMX range value 156 – 205: Custom White Recall
		80..160	Custom White create (enable custom white creation)
		161..255	Custom White store (store the custom white created)
18	ZOOM	0..255	Linear Zoom from narrow to wide
19	Reserved	0..255	Reserved
20	RESET	0..15	No function
		16..75	PAN TILT reset
		76..239	ZOOM reset
		240..255	TOTAL Unit reset

NOTES

NOTES

ISO 9001:2015
DTS quality system is certified to the ISO 9001:2015 standard

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MADE IN ITALY

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