

PROFILO LED 200 CT



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1- SYMBOLS

Graphic symbols used on this manual:



THIS SYMBOL INDICATES A HOT SURFACE



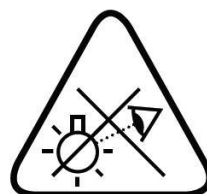
THIS SYMBOL INDICATES ELECTRIC SHOCK RISK



THIS SYMBOL INDICATES GENERAL RISK

t_a 40°C

THIS SYMBOL INDICATES THE MAXIMUM OPERATING AMBIENT TEMPERATURE



THIS SYMBOL MEANS “DO NOT STARE AT THE OPERATING LIGHT SOURCE”



Risk Group 2

THIS SYMBOL INDICATES PHOTOBIOLOGICAL SAFETY



THIS SYMBOL INDICATES THE EUROPEAN COMMUNITY DIRECTIVE 2012/19/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 unit is not for residential 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

DTS product codes:

03.TP039.46 PROFILO LED 200 CT 5P BLACK

03.TP045.46 PROFILO LED 200 CT 3P BLACK

Output

Single high-power white LED with linearly tunable color temperature (2700K – 6500K)

CRI > 90

LED lifespan: 50.000 hours (70% lumen output)

Optical group

15.5°- 38° linear zoom

High definition zoom lens with double optical condenser lens

Control

DMX 512 / RDM or Manual control

7 DMX channels (Default) or 2 DMX channels

4-digit 7-segment LED display + 4 soft keys

Internal operating system updatable via DTS Dongle Firmware Uploader

Power supply

Full-range 100-240Vac 50-60 Hz

Consumption: 200W Max

Connections

Power supply: PowerCON TRUE1 In&Out panel connectors

DMX: XLR 5 pins or XLR 3 pins In&Out panel connectors

Internal safety devices

Overvoltage and overtemperature circuits protection

Operating temperature

-10° / 40°C

Physical

IP20

Internal system with four removable shutters

Yoke featuring an exclusive sliding system with clutch for a wider tilt

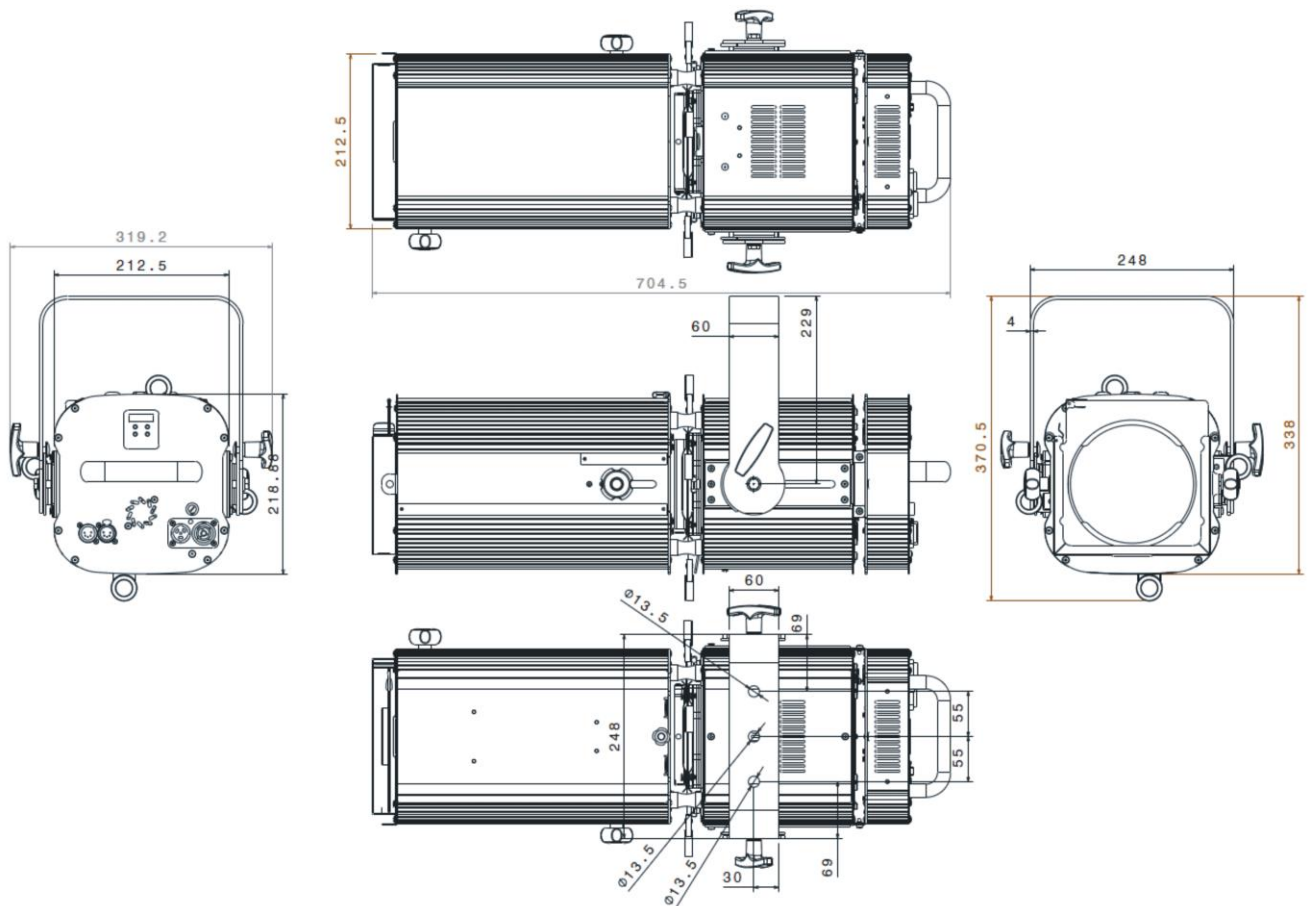
Weight: 16 Kg

Certifications



Pending

DIMENSIONS



5- ACCESSORIES

On board

- 1 x Soft edge filter assembly (code 02TP0047)
- 1 x Filterframe black finishing (code 02M00420.49)

In the box

- 1 x PowerCON TRUE1 female cable connector (code 0520P066)
- 1 x XLR 5 pins female cable connector (code 0508B147)
- 1 x XLR 5 pins male cable connector (code 0508B148)
- 4 x Shutter blade assembly (code 02TP0045)
- 1 x User's Manual

Optional (on request)

- Iris/diaphragm (code 03.TA225)
- Gobo holder (DTS Code 03.TA226)
- "C" Clamp G60 (Max. Load 50 Kg) (DTS Code 0521A004)
- Safety cable 3 mm x 60 cm, max capacity load 60 Kg (code 0521A010)
- DTS Dongle Firmware Uploader (code 03.LA.206)

6- IMPORTANT SAFETY INFORMATION

6.1 Fire prevention:

Replace any blown or damaged fuses only with those of identical value: T 3.15A 250V.

6.2 Prevention from electric shock:



High voltage is present inside the unit. Unplug the unit prior to performing any operation which involves touching the inside of the unit.
This equipment must be grounded, do not connect to non-grounded supplies.
The use of a thermal magnetic circuit breaker is recommended for each PROFILO LED 200 CT unit. Use only AC supplies 100-240V 50-60 Hz.
PROFILO LED 200 CT should never be located in position exposed to rain or in areas of extreme humidity.
A good air ventilation is essential for proper equipment work.

6.3 Safety:



Risk Group 2 product according to EN 62471. Risk Group 2



CAUTION. Do not look directly into the light output. May be harmful to the eyes and skin.

Do not stare at the operating light source.



The luminaire should be positioned so that prolonged staring into the luminaire at a distance of 6,71 m is not expected.

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 external surface of the unit may exceed 70°C; never handle the unit until at least 5 minutes have elapsed since the unit was turned off.

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



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

6.4 Waste Electrical and Electronic equipment (WEEE) directive:



The unit, accessories and packaging should be sorted for environmental-friendly recycling.

For EC countries: according to the European Directive 2012/19/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.

7- INSTALLATION

The unit is suitable for dry locations only.

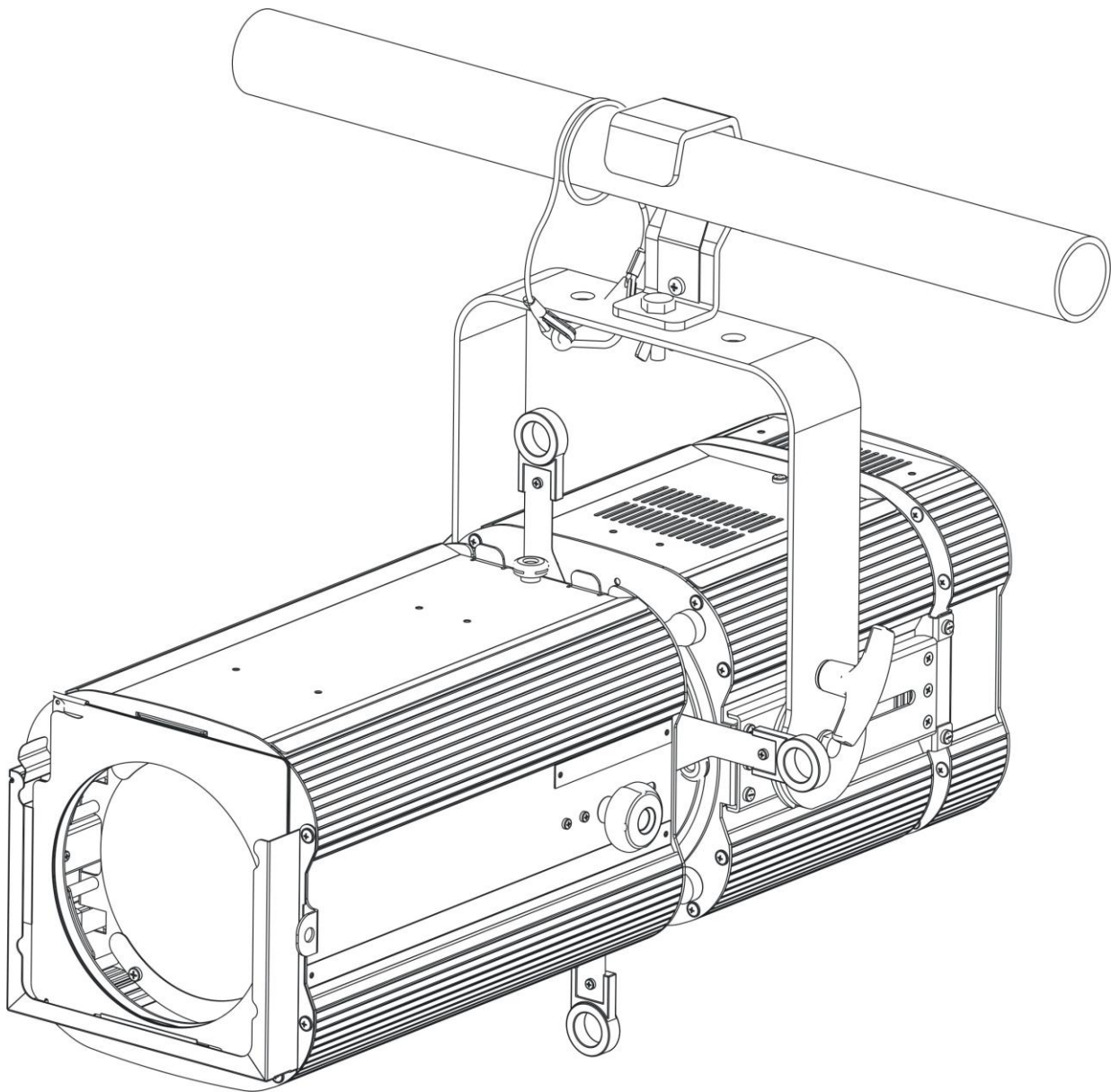
PROFILO LED 200 CT can be installed on a truss or on the ceiling.

It is recommended the use of appropriate clamps to fix the unit to the mounting surface.

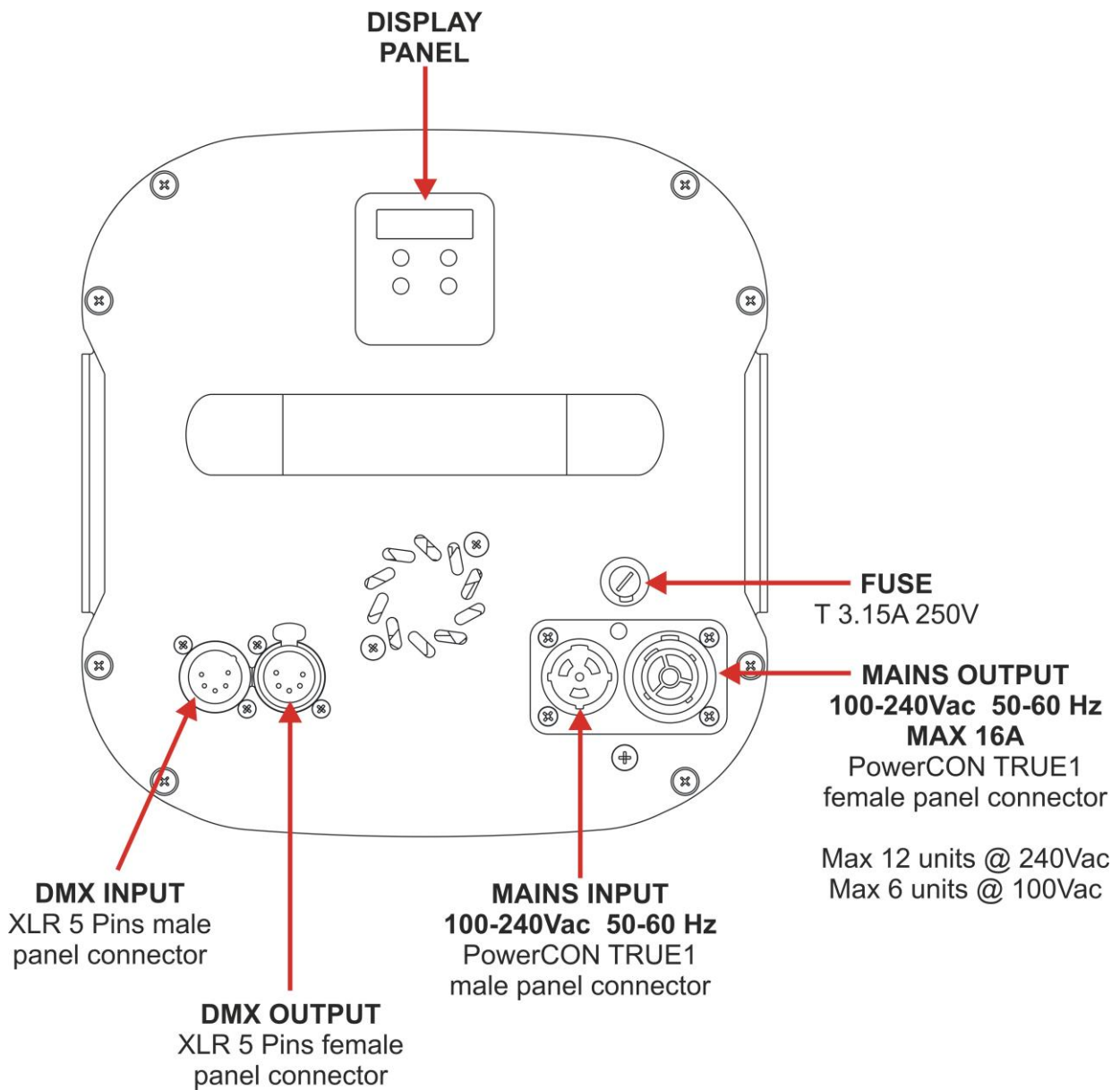
ATTENTION:

A safety cable (code 0521A010) must be securely fixed to the unit's mounting bracket and to the support structure of the projector as shown in the picture below.

Fixing clamps and safety cable are available on request.



8- INPUT / OUTPUT CONNECTIONS



9- DMX SIGNAL CONNECTION:

The unit operates using a digital DMX 512 signal.

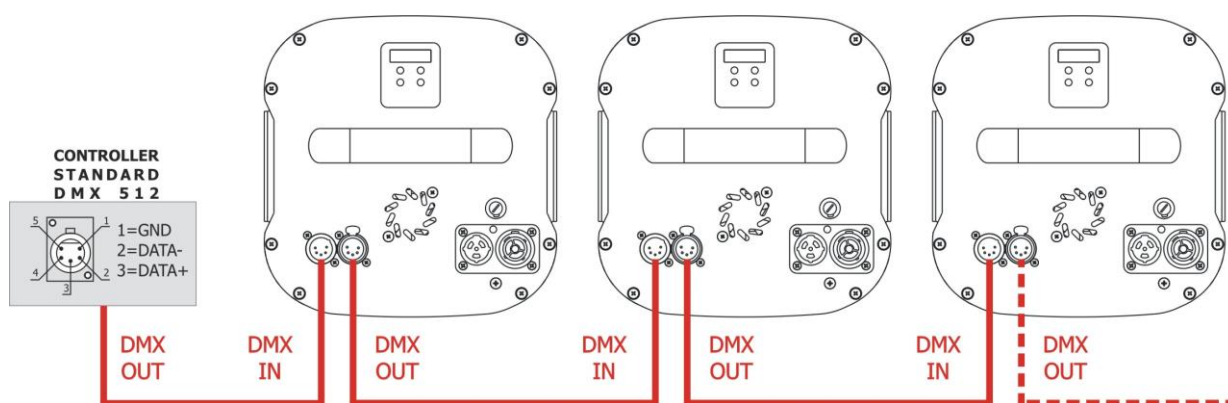
Connection between the controller and the unit or between units must be carried out using a two pair screened \varnothing 0.5 mm.

Ensure that the conductors do not touch each other.

Do not connect the cable ground to the DMX connector 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 unit to the DMX IN plug of the second one.

In this way, all the projectors are cascade connected.



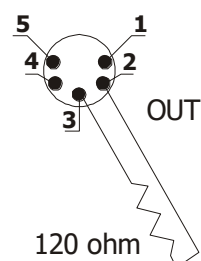
If the display showing the DMX address flashes, then one of the following errors has occurred:

- DMX signal not present
- DMX reception problem

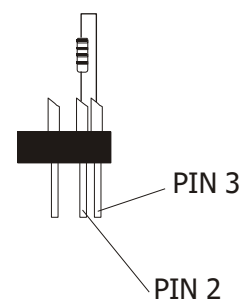
For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

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

PROFILO LED 200 CT can be controlled with 7 DMX channels (Default) or 2 DMX channels.

In order to use the unit in 7 DMX channels mode (Default), set the following addresses on the mixer:

Projector 1 A001

Projector 2 A008

Projector 3 A015

..... A....

projector 6 A036

If you want to select the next projector, just add "7"

9.2 Selecting the DMX address

1) Press the UP-DOWN key until you reach the required DMX address. 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 controlled by the new DMX address.

TIPS: 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 set DMX address, DMX mode and other parameters.

PROFILO LED 200 CT accepts the following RDM commands:

DEVICE_INFO	To read the following parameters: <ul style="list-style-type: none"> • RDM protocol version • Fixture model ID • Fixture type • Software version ID • DMX channels • DMX mode • DMX address • Total sub-fixtures • Total sensors
IDENTIFY_DEVICE	LED ON at max power to identify the fixture
DMX_START_ADDRESS	To read / set the DMX address
SOFTWARE_VERSION_LABEL	Software version ID
SUPPORTED_PARAMETERS	List of all supported parameters
PARAMETER_DESCRIPTION	Description / details of Manufacturer Specific parameter as "NO DMX ACTION"
DMX_PERSONALITY	To set the DMX mode
DMX_PERSONALITY_DESCRIPTION	Description / details of the DMX mode
DEVICE_MODEL_DESCRIPTION	Description / details of the Fixture model
MANUFACTURER_LABEL	Producer ID
SENSOR_DEFINITION, SENSOR VALUE	Description / values of sensors
SENSORS	
1: LED TEMPERATURE	LED temperature
2: MICRO TEMPERATURE	Micro controller temperature
3: DRIVER 1 TEMPERATURE	Output 1 of LED Driver board temperature
4: DRIVER 2 TEMPERATURE	Output 4 of LED Driver board temperature
RDM MANUFACTURER-SPECIFIC PIDs	
NO DMX ACTION	To set the desired fixture's behavior in case DMX signal is missing or not available. <ul style="list-style-type: none"> 1 = Black-out 2 = All channels ON @ 60% 3 = All channels ON @ 100% 4 = WHITE CCT (Correlated color temperature): <ul style="list-style-type: none"> NO DMX SELECTABLE WHITE CCT 1 = 2700K (Default) 2 = 3000K 3 = 3200K 4 = 3500K 5 = 4000K 6 = 4500K 7 = 5000K 8 = 5600K 9 = 6500K NO DMX SELECTABLE WHITE INTENS. 0 ÷ 255 (Default = 0) 5 = Keep last valid DMX signal (Default)

11- FIRMWARE UPDATING

To update the firmware release of the PROFILO LED 200 CT 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 PROFILO LED 200 CT unit.

Updating the firmware release.

Please follow the procedure below to perform the update:

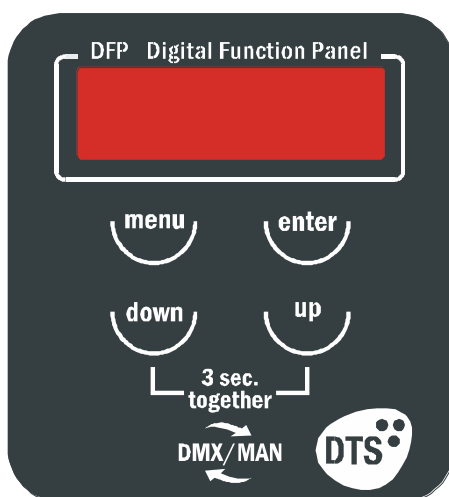
1. Connect the DTS Dongle Firmware Uploader to a spare USB port on the PC.
2. Connect the unit DMX input to the DTS Dongle Firmware Uploader DMX output with a standard DMX cable and turn ON the unit.
3. Send the new firmware release into the unit by using “DTS Firmware Upgrade Utility v.2.02” program. 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 PROFILO LED 200 CT 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • To select any required menu. • To confirm any changes.
UP / DOWN	<ul style="list-style-type: none"> • To navigate the menus structure. • To change any value.

Firmware release	1.02
RDM Device Model ID	0x0D47
DMX Personality IDs	0x01 "7 channels" 0x02 "2 channels"

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
DISP	Pos1	RR		Display normal orientation for floor mounting position (Default)
		BB		Display inverted orientation for suspended mounting position
	Stby	OFF		Display always ON (Default)
		ON		Display goes OFF after 10 seconds
Menu	7 CH			Allows to select 7 DMX channels mode (Default)
	2 CH			Allows to select 2 DMX channels mode
LED	SntH	OFF-20		Allows to select the value of the delay (in milliseconds) for Dimmer channel reaction to DMX or Program variation. Off = Instant response to DMX variation. 4 = 100 ms Smooth response to DMX variation (Default) 20 = 500 ms Smooth response to DMX variation.
		QuAd		Allows to select Quadratic current for linear light output (Default)
		LinE		Allows to select Linear current output
	Sync	610-5000		Allows to adjust the PWM frequency value (Hz) in order to reduce flickering in the process of your camera recordings. Default = 610 Hz
	bSt	ON		Allows to increase the LED's current from 70% to 100%
		OFF		Default = ON
Auto	SurE	White	2700 6500	Automatic mode without DMX controller. 9 White color temperature selection from 2700K (Default) to 6500K as on DMX channel 6 (CCT). In Auto mode the unit do generate DMX for slave units.
		dimM	0-255	Dimmer level selectable by user as on DMX channel 4 (DIMMER) Default = 255
		SHut	0-255	Shutter level selectable by user as on DMX channel 3 (SHUTTER) Default = 15
		Esc		Esc from automatic mode menu
SLAV	SurE	SLU		Slave mode. The unit is forced to DMX address 1 and 7 DMX channels mode receiving signal from the unit set in Auto mode.
		Esc		Esc from slave mode
FAn	SIL			Allows to select the internal fans speed.
	Std			Standard mode: High fans speed. Silent mode: Low fans speed for a very low noise operation. Default = SIL

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION	
ndnH	LdnH			No DMX action. Keep last valid DMX signal (Default)	
	60			All channels ON @ 60%	
	100			All channels ON @ 100%	
	WHIT	cct	2700	2700 6500	9 White color temperature selection from 2700K (Default) to 6500K as on DMX channel 6 (CCT).
			dimm		0-255
	oFF			Black-out	
dfSE	SurE			To restore default settings	
tENP	LEd	025.0		LED temperature monitoring	
	Micr	025.0		Micro controller temperature monitoring	
	drU1	025.0		Output 1 of LED Driver board temperature monitoring	
	drU2	025.0		Output 4 of LED Driver board temperature monitoring	
tINE	WARn			Shows the total unit life time and the Warm White / Cold White LEDs life time	
	colD				
	unit				
SoFt	v.1.02			Software version	

13- MANUAL MODE

Manual mode can be activated by pressing at the same time 'UP' and 'DOWN' keys on unit display for 3 seconds (A001).

In Manual mode it is possible to select:

cct	2700 6500	9 White color temperature selection from 2700K to 6500K as on DMX channel 6 (CCT) Default = 2700K
dimm	0-255	Dimmer level selectable by user as on DMX channel 4 (DIMMER) Default = 255
SHUt	0-255	Shutter level selectable by user as on DMX channel 3 (SHUTTER) Default = 15
Esc		Esc from Manual mode

When Manual mode is active, unit switch OFF/ON cycle will maintain Manual Mode selection.

In Manual mode the DMX signal is ignored.

14- ERROR MESSAGES

ERROR SHOWED ON DISPLAY	APPEARS WHEN
<i>LEd SEnSor Error</i>	LED thermal sensor damaged (open or in short circuit). Unit immediately goes in black-out.
<i>LEd ouErTEnPErAturE</i>	LED temperature detected over 70°C. Unit immediately goes in black-out.
<i>Micro SEnSor Error</i>	Micro controller thermal sensor damaged (open or in short circuit). Unit immediately goes in black-out.
<i>Micro ouErTEnPErAturE</i>	Micro controller temperature detected over 75°C. Unit immediately goes in black-out.
<i>drU1 SEnSor Error</i>	Thermal sensor on output 1 of LED Driver board damaged (open or in short circuit). Unit immediately goes in black-out.
<i>drU1 ouErTEnPErAturE</i>	Temperature detected over 75°C on output 1 of LED Driver board. Unit immediately goes in black-out.
<i>drU2 SEnSor Error</i>	Thermal sensor on output 4 of LED Driver board damaged (open or in short circuit). Unit immediately goes in black-out.
<i>drU2 ouErTEnPErAturE</i>	Temperature detected over 75°C on output 4 of LED Driver board. Unit immediately goes in black-out.

15- DMX PROTOCOL

Firmware release	1.02
RDM Device Model ID	0x0D47
DMX Personality IDs	0x01 “7 channels” 0x02 “2 channels”

7 CHANNELS MODE (Default)

- 1 WARM WHITE 2700K**
- 2 COLD WHITE 6500K**
- 3 SHUTTER**
- 4 DIMMER**
- 5 DIMMER FINE**
- 6 CCT**
- 7 FUNCTIONS**

<i>Ch</i>	<i>Name</i>	<i>DMX levels</i>			
1	WARM WHITE 2700K	0..255	Proportional color from min to max		
2	COLD WHITE 6500K	0..255	Proportional color from min to max		
3	SHUTTER	0..9	Black-out		
		10..19	Open		
		20..29	Black-out		
		30..119	Strobe (da 3,27 s a 30 ms)		
		120..149	Pulse up (da 42,6 s a 120 ms)		
		150..179	Pulse down (da 42,6 s a 120 ms)		
		180..204	Random strobe (Warm White, Cold White, Dimmer, Dimmer Fine active)		
		205..229	Independent random strobe (Dimmer, Dimmer Fine active)		
		230..235	Single flash 30 ms (Warm White, Cold White, Dimmer, Dimmer Fine active)		
		236..255	Open		
4	DIMMER	0..255	Proportional dimmer from min to max		
5	DIMMER FINE	0..255	Proportional dimmer from min to max		
6	CCT	0..010	No func.		
		011	2700K		
		054	3000K		
		083	3200K		
		126	3500K		
		169	4000K		
		198	4500K		
		226	5000K		
		241	5600K		
		255	6500K		
				Linear color temperature correction from 2700K to 6500K. Relevant CCT (Correlated Color Temperature) values: 11 = 2700K 54 = 3000K 83 = 3200K 126 = 3500K 169 = 4000K 198 = 4500K 226 = 5000K 241 = 5600K 255 = 6500K	

<i>Ch</i>	<i>Name</i>	<i>DMX levels</i>	
7	FUNCTIONS (staying on desired option for 5 seconds)	0..14	No function
		15..24	SMOOTH OFF
		25..26	SMOOTH 1 (25 ms)
		27..28	SMOOTH 2 (50 ms)
		29..30	SMOOTH 3 (75 ms)
		31..32	SMOOTH 4 (100 ms) (DEFAULT)
		33..34	SMOOTH 5 (125 ms)
		35..36	SMOOTH 6 (150 ms)
		37..38	SMOOTH 7 (175 ms)
		39..40	SMOOTH 8 (200 ms)
		41..42	SMOOTH 9 (225 ms)
		43..44	SMOOTH 10 (250 ms)
		45..46	SMOOTH 11 (275 ms)
		47..48	SMOOTH 12 (300 ms)
		49..50	SMOOTH 13 (325 ms)
		51..52	SMOOTH 14 (350 ms)
		53..54	SMOOTH 15 (375 ms)
		55..56	SMOOTH 16 (400 ms)
		57..58	SMOOTH 17 (425 ms)
		59..60	SMOOTH 18 (450 ms)
		61..62	SMOOTH 19 (475 ms)
		63..64	SMOOTH 20 (500 ms)
		65..74	GAMMA CORRECTION (<i>сoПP</i>) QUADRATIC (DEFAULT)
		75..84	GAMMA CORRECTION (<i>сoПP</i>) LINEAR
		85..104	OUTPUT FREQUENCY 610 Hz (DEFAULT)
		105	OUTPUT FREQUENCY 800 Hz
		106	OUTPUT FREQUENCY 1000 Hz
		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..134	RESERVED
		135..144	BOOST ON (DEFAULT)
		145..154	BOOST OFF
		155..164	DISPLAY STAND-BY OFF (DEFAULT)
		165..174	DISPLAY STAND-BY ON
		175..176	NO DMX ACTION – KEEP LAST DMX (DEFAULT)
		177..178	NO DMX ACTION – Black-out
		179..180	NO DMX ACTION – All channels ON @ 100%
		181..182	NO DMX ACTION – All channels ON @ 60%
		183..184	NO DMX ACTION – WHITE CCT (active CCT as per display menu > NDMX > WHIT or via RDM Custom PIDs (Default = 2700K)
		185..194	RESERVED
195..204	RESERVED		
205..214	RESERVED		
215..224	RESERVED		
225..234	RESERVED		
235..244	FAN STANDARD MODE		
245..252	FAN SILENT MODE (DEFAULT)		
253..255	SET DEFAULTS VALUES FOR FUNCTIONS: SMOOTH = 4 (100 ms) GAMMA CORRECTION (<i>сoПP</i>) = QUADRATIC OUTPUT FREQUENCY = 610 Hz BOOST = ON DISPLAY STAND-BY = OFF NO DMX ACTION = KEEP LAST DMX FAN MODE = SILENT		

2 CHANNELS MODE

- 1 WARM WHITE 2700K**
- 2 COLD WHITE 6500K**

<i>Ch</i>	<i>Name</i>	<i>DMX levels</i>	
1	WARM WHITE 2700K	0..255	Proportional color from min to max
2	COLD WHITE 6500K	0..255	Proportional color from min to max

PROUDLY
MADE IN ITALY



DTS products are designed
and manufactured at the
DTS plants in Italy



ISO 9001:2015

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

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