

# DRIVENET 416 POWER SCREW TERMINALS



CE

User's Manual rel 1.4 **GB**

D.T.S. Illuminazione srl - ITALY  
<http://www.dts-lighting.it>



Made in Italy

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## **DESCRIPTION**

### **Overview**

DRIVENET 416 POWER is a full-range 90-260Vac 50-60 Hz power supply unit dedicated specifically for use with D.T.S. products featuring LED technology.

DRIVENET 416 POWER features 16 output channels (4 channels x 4 groups), and can control set-ups of D.T.S. LED products in various combinations.

DRIVENET 416 POWER is provided with a screw terminals connection panel.

DRIVENET 416 POWER can also be remote-controlled using the USITT DMX 512 standard digital communication protocol, by RDM or Art-Net (optional interface required).

Thanks to the "Monitoring" function it can be possible to check the status (current and voltage) of the connected units.

DRIVENET 416 POWER is housed in a rack-mountable or wall mounting sturdy metal case, that offers high resistance to mechanical stress; its body is covered with a coat of epoxy paint.

Distance between projectors and DRIVENET 416 POWER controller up to 50 meters.

### **D.T.S. Product codes:**

03.LA.191 DRIVENET 416 POWER Screw terminals outputs

## **TECHNICAL SPECIFICATIONS**

**Main voltage:** Full-range 90-260Vac 50-60 Hz

**Output channels:** 16 (4 channels x 4 groups)

**Output current:** 1600mA

**Output voltage:** 48Vdc

**Max power:** 1200W

**Control:** DMX 512, RDM or Art-Net (optional interface required)

**DMX channels:** 16 (default), 32 ch, 10 ch, 14 ch, 40 ch, 56 ch, 24 ch and 1 ch

**Output connections:** Screw terminals

**Maximum projector distance:** up to 50 meters

**IP protection:** IP 20

**Working temperature:** -10° / 40°

**Rack mountable:** 2 rack units

**Display:** Touch colour graphic display

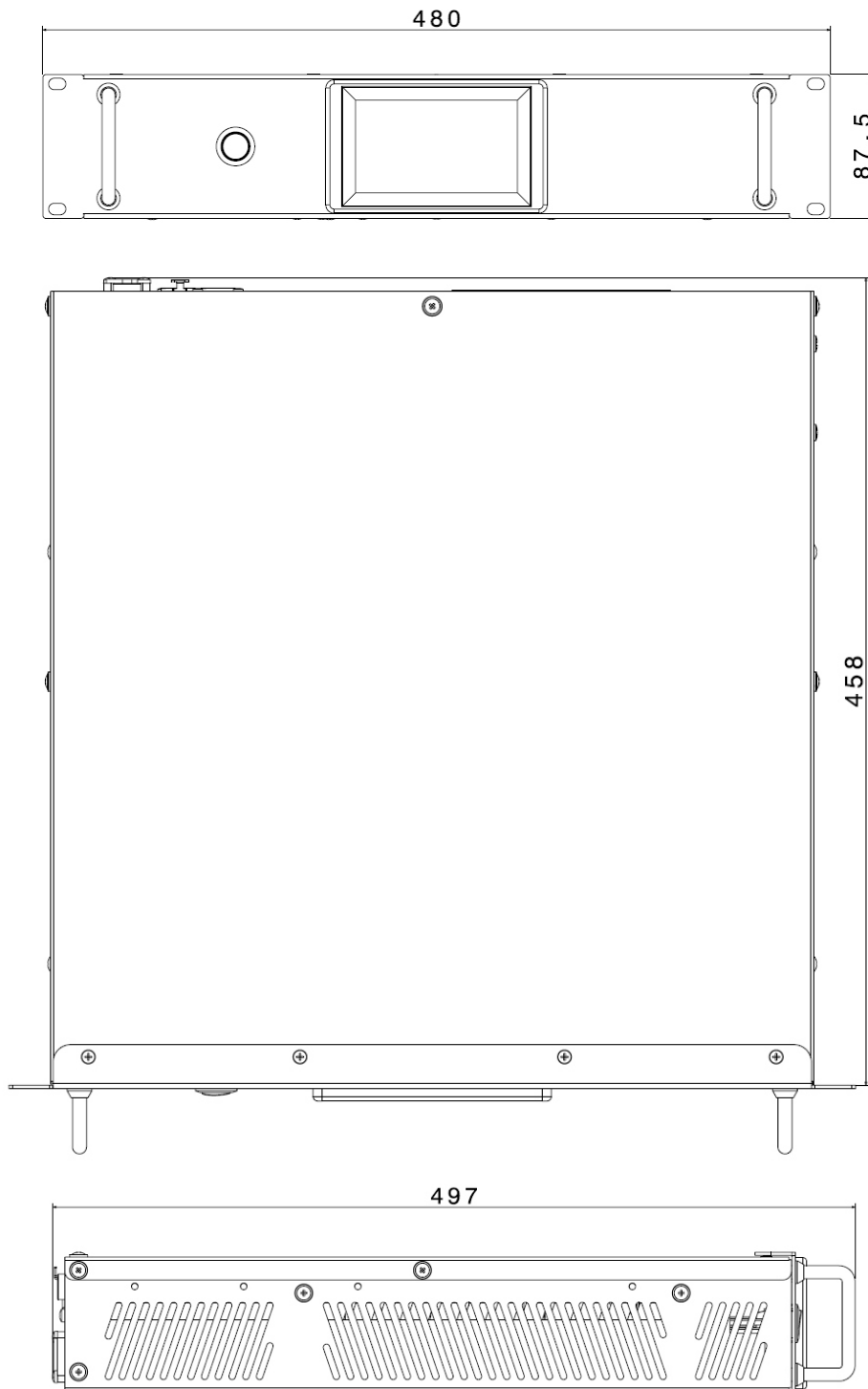
**Weight:** 9.5 Kg

## RDM FUNCTIONS

DRIVENET 416 POWER do accept the following RDM commands:

- Discovery
- Read/set DMX address
- Read/set personality
- Identify (All LEDs ON at max power)
- Producer ID
- Model description
- Software version

## DIMENSIONS



## IMPORTANT SAFETY INFORMATION

### Fire prevention:

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.

Replace any blown or damaged fuse only with one of identical value (15AT).

### 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 DRIVENET 416 POWER.

Use only AC supplies 90-260V 50-60 Hz.

The unit 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.

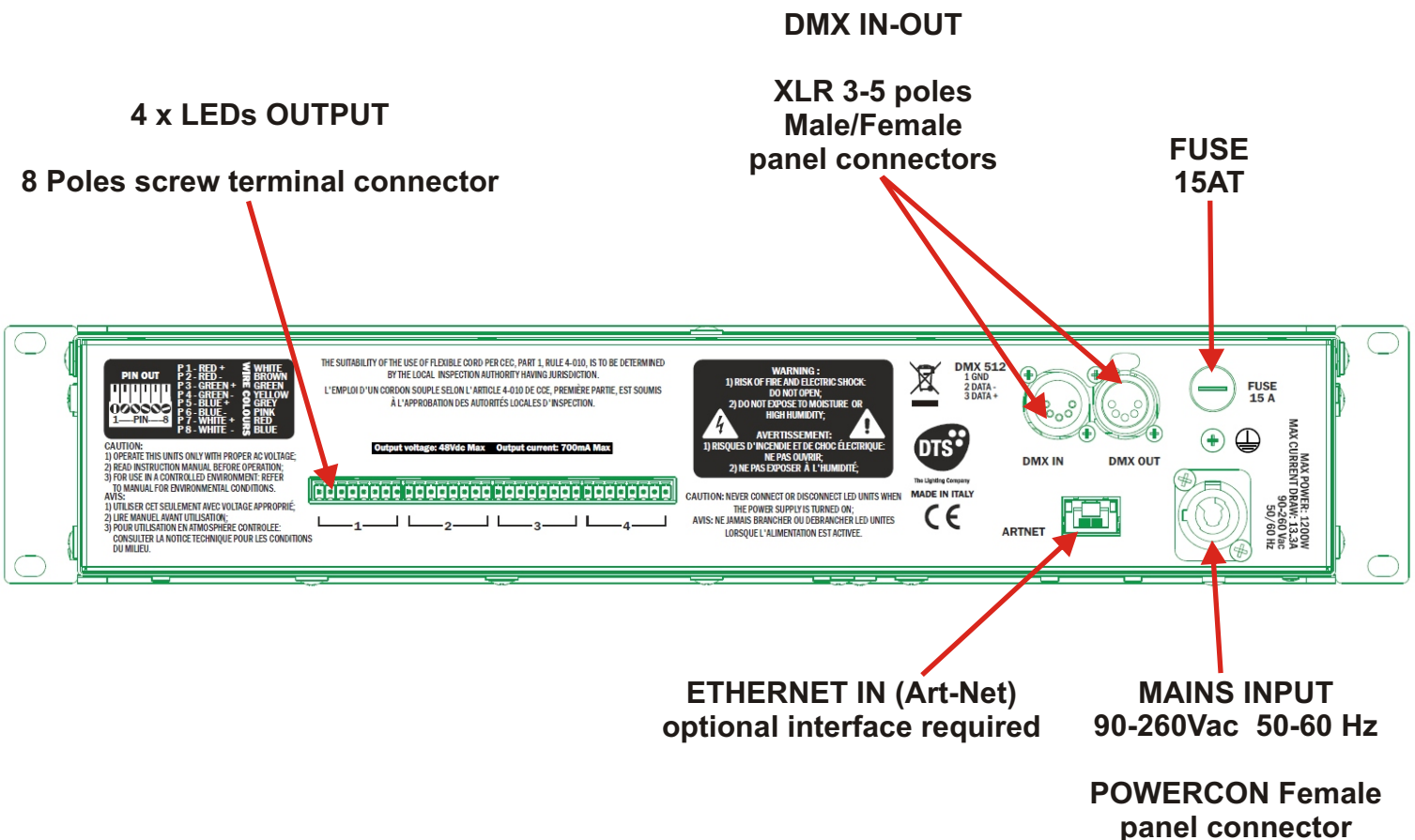
### Safety:

The external surface of the unit may exceed 50°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 and should not be lower than -10°C.

## CONNECTION PANEL



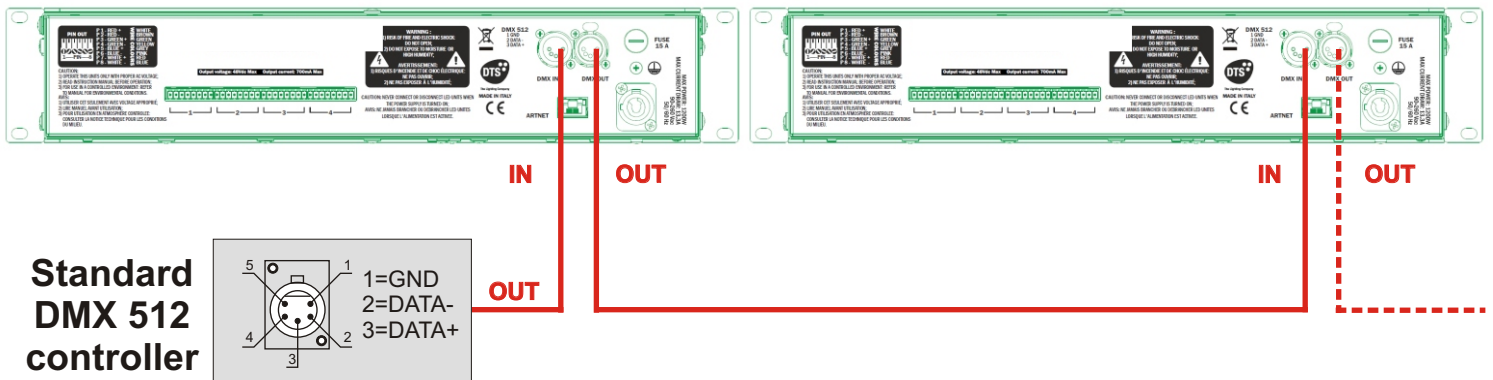
The maximum distance between DRIVENET 416 POWER and projector should not exceed 50 meters.

## 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 cable and a CANNON XLR 5 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 of the Z8 plug and connect it to the next unit by connecting the DMX OUT plug on the first Z8 to the DMX IN plug of the second one.

This way, all the projectors are cascade connected.

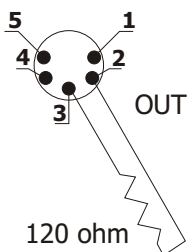


P.S: If the display showing the DMX address flashes, then one of the following errors has occurred:

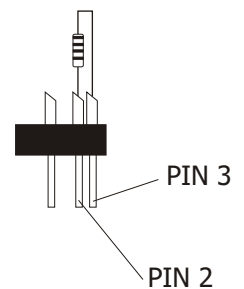
- DMX signal not present
- DMX reception problem

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



## DMX ADDRESS

DRIVENET 416 POWER can be used in 8 DMX modes: 16 ch (default), 32 ch, 10 ch, 14 ch, 40 ch, 56 ch, 24 ch or 1 ch mode.

If you want to use the DRIVENET 416 POWER in 16 channels mode, select the "**Full type - 8 bit**" mode from the DMX MODE menu under DMX SETUP and set the following addresses on the mixer:

Projector 1	A001	
Projector 2	A017	If you want to select the next projector, just add "16"
Projector 3	A033	
.....	A....	
projector 6	A081	

If you want to use the DRIVENET 416 POWER in 10 channels mode, select the "**Z1 type - 8 bit**" mode from the DMX MODE menu under DMX SETUP and set the following addresses on the mixer:

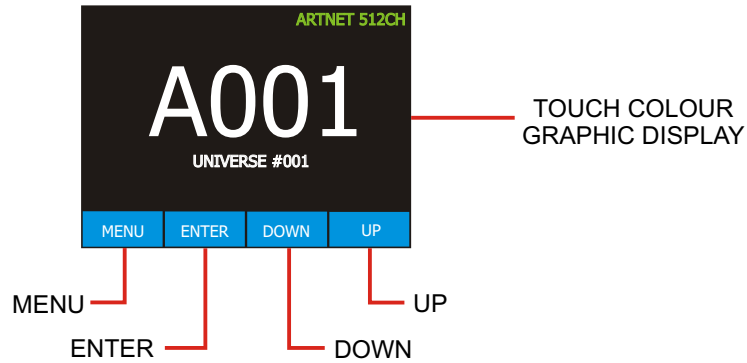
Projector 1	A001	
Projector 2	A011	If you want to select the next projector, just add "10"
Projector 3	A021	
.....	A....	
projector 6	A051	

### Selecting the DMX address

- 1) Press the UP-DOWN key until you reach the required DMX address. The numbers on the display will start flashing (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.

## DISPLAY FUNCTIONS




## DISPLAY FUNCTIONS

The DRIVENET 416 POWER 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 signal 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.

### Software version 1.13



Display



#### DISPLAY POSITION

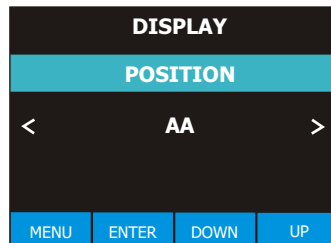
Reverses display's reading depending on the mounting position (on the ground or suspended).

#### DISPLAY STANDBY

To turn off the display (after 30 seconds) or Leave it always on.

#### TOUCH SCREEN CALIBRATION

To calibrate the touch screen.



#### DISPLAY POSITION

ON THE GROUND (Default)  
SUSPENDED

#### DISPLAY STANDBY

OFF = Display standby disabled (default)  
ON = Display goes off after 30 seconds

#### TOUCH SCREEN CALIBRATION

To calibrate the touch screen







## DMX Setup



## DMX MODE

To select DMX mode:

Full Type 8 bit 16 DMX ch.

Full Type 16 bit 32 DMX ch.

Z1 Type 8 bit 10 DMX ch.

Z1 Type 16 bit 14 DMX ch (for Chase and Cue recording).

Z1 Full 8 bit 10x4 = 40 DMX ch.

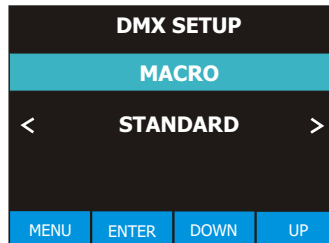
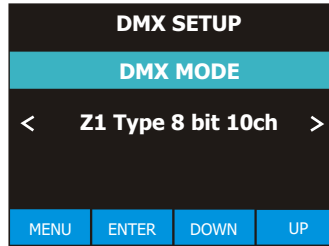
Z1 Full 16 bit 14x4 = 56 DMX ch.

Z1 Short Full 8 bit 6x4 = 24 DMX ch.

Z1 Short Full 16 bit 10x4 = 40 DMX ch.

1 CH Full = 1 DMX channel

MACRO mode: Standard or Extended



## DMX MODE MAP

**Full type - 8 bit** = 16 DMX ch (default)  
= RGBW 4 ch each output: 1-Red, 2-Green, 3-Blue, 4-White.

**Full type - 16 bit** = 32 DMX ch mode  
= RGBW 2 ch each colour; 8 ch each output:  
1-Red 8 bit, 2-Red 16 bit, 3-Green 8 bit,  
4-Green 16 bit, 5-Blue 8 bit, 6-Blue 16 bit,  
7-White 8 bit, 8-White 16 bit

**Z1 type - 8 bit** = 10 DMX ch mode with all the outputs automatically set on DMX starting channel 1:

1=Shutter, 2=Dimmer, 3=Red, 4=Green,  
5=Blue, 6=White, 7=White control, 8=CTC,  
9=Macro, 10=Function

**Z1 type - 16 bit** = 14 DMX ch mode with Dimmer and RGBW channels with 16 bit control and all outputs automatically set on DMX starting address 1:

1=Shutter, 2=Dimmer, 3=Red 8 bit, 4=Red 16 bit, 5=Green 8 bit, 6=Green 16 bit, 7=Blue 8 bit, 8=Blue 16 bit, 9=White 8 bit, 10=White 16 bit, 11=White control, 12=CTC, 13=Macro, 14=Function

**Z1 full - 8 bit** = (10x4) 40 DMX ch mode same as Z1 type 8 bit 10 ch but each output with independent DMX control:

Output 1=DMX 1, Output 2= DMX 11, Output 3= DMX 21 ...

**Z1 full - 16 bit** = (14x4) 56 DMX ch mode same as Z1 type 16 bit 14ch but each output with independent DMX control:

Output 1 = DMX 1, Output 2 = DMX 15, Output 3 = DMX 29...

**Z1 short full - 8 bit** = (6x4) 24 DMX ch. mode with Dimmer, Shutter and RGBW 8 bit channels and each output with independent DMX control

Output 1 = DMX 1, Output 2 = DMX 7, Output 3 = DMX 13...

**Z1 short full - 16 bit** = (10x4) 40 DMX ch. mode with RGBW 16 bit each colour and each output with independent DMX control

Output 1 = DMX 1, Output 2 = DMX 11, Output 3 = DMX 21...

1-Dimmer, 2-Shutter, 3-Red 8 bit, 4-Red 16 bit, 5-Green 8 bit, 6-Green 16 bit, 7-Blue 8 bit, 8-Blue 16 bit, 9-White 8 bit, 10-White 16 bit

1 ch full = 1 DMX channel

## MACRO

**STANDARD** = Standard mode enabled (default)

**EXTENDED** = Enable rainbow effects on Macro channel





## LED



## RGBA MINIMUM VALUES

This menu allows to select the minimum levels for Red/White1, Green/White2, Blue/White3 and White/White4.

## RGBA MAXIMUM VALUES

This menu allows to select the maximum levels for Red/White1, Green/White2, Blue/White3 and White/White4. These settings have priority on Master Dimmer channel.

## SMOOTH VALUE

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

4 = 25 ms delay (Fast response)

20 = 250 ms delay (Slow response)

## GAMMA CORRECTION

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

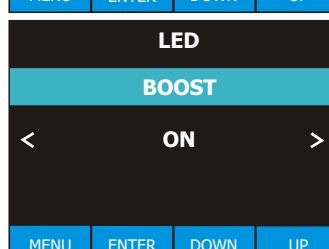
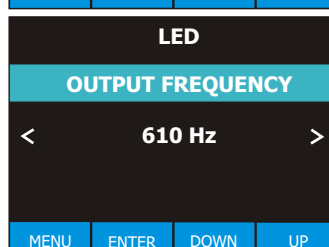
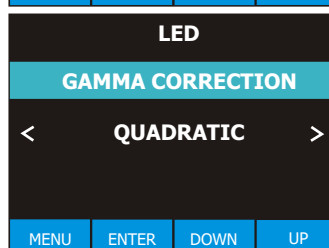
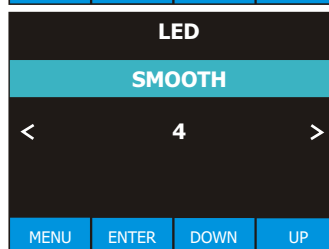
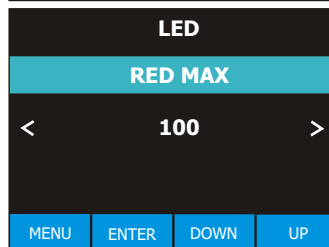
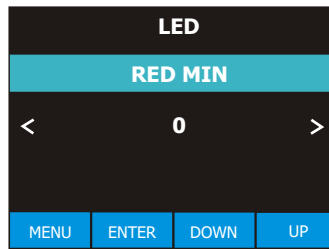
## OUTPUT FREQUENCY

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

## LED BOOST

With Boost ON, the LED's current has the same value pre-set into the "LED CURRENTS" menu (see below).

With Boost OFF the medium current of each output channel is approximately 30% less (through PWM modulation) of the maximum current pre-set into the "LED CURRENTS" menu.



RED Min default = 0  
RED Max default = 100

GREEN Min default = 0  
GREEN Max default = 100

BLUE Min default = 0  
BLUE Max default = 100

AMBER Min default = 0  
AMBER Max default = 100

SMOOTH  
Range = Off - 20  
Default = 4

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

OUTPUT FREQUENCY  
Range = 610 Hz - 20 KHz  
Default = 610 Hz

LED BOOST  
ON-OFF  
Default = OFF



## LED CURRENTS

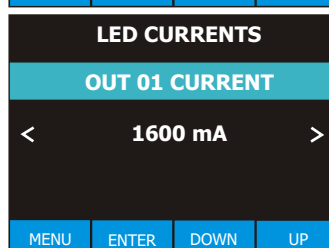
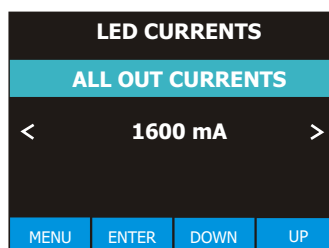


## ALL OUTPUT CHANNELS CURRENT SELECTION

This menu allows to select the same maximum LED current (peak) for all output channels.

## OUTPUT CHANNEL CURRENT SELECTION

This menu allows to select the maximum LED current (peak) independently for each output channel.



LED CURRENTS  
Range = 200 mA - 1600 mA (50mA by 50mA selectable steps)  
Default = 1600 mA





**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 and Dimmer values selectable by user.

**PERSONAL COLOURS**

RGBA, Dimmer and Shutter values selectable by user.

**RAINBOW**

Rainbow colours effect.

Speed time, Dimmer and Shutter values Selectable by user.

**FIXED COLOURS**

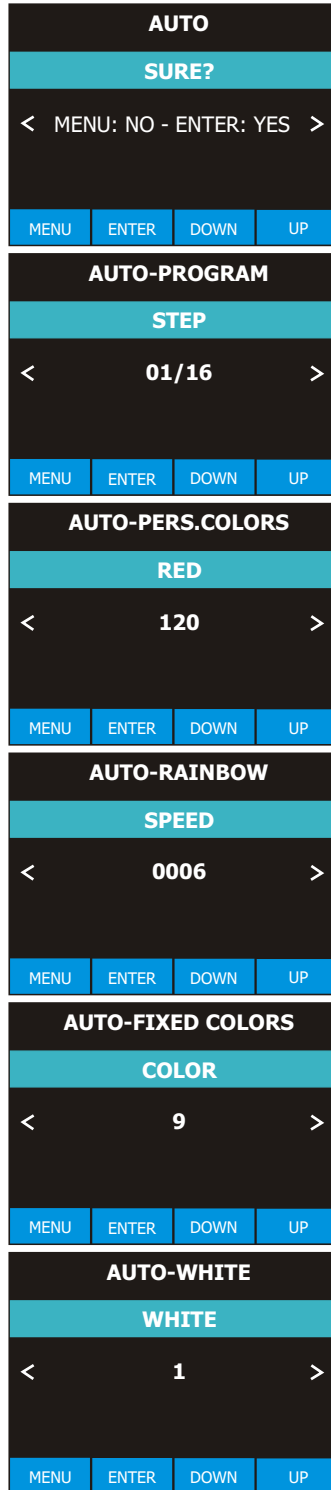
Sixteen colour macros as on "MACRO" channel.

Dimmer and Shutter values selectable by user.

**WHITE MACROS**

Sixteen macros for White colour.

Dimmer and Shutter 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 and Wait of the Master unit.

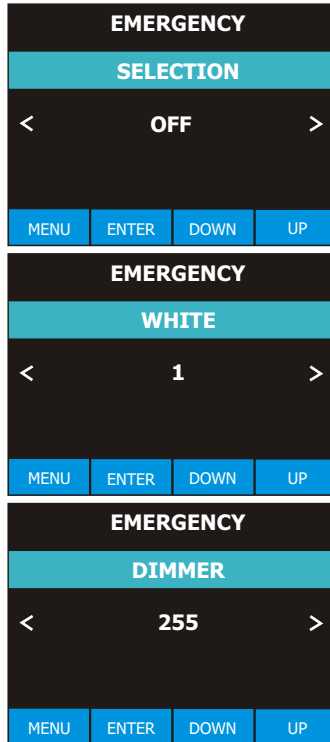




EMERGENCY



EMERGENCY OPERATING MODE.  
By setting this mode, it will be possible to select one of the 16 pre-programmed White cues that will then run if DMX signal is missing or not available. Useful for emergency exit illumination on public areas.  
Dimmer level selectable by user.



EMERGENCY  
Disable = Default



WHITE (1-16)  
Default = WHITE 1

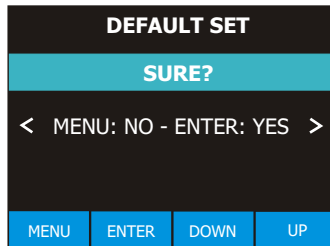
DIMMER  
Default = 255



DEFAULT SET



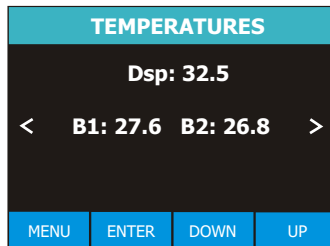
DEFAULT SETTINGS  
To restore factory settings



TEMPERATURES



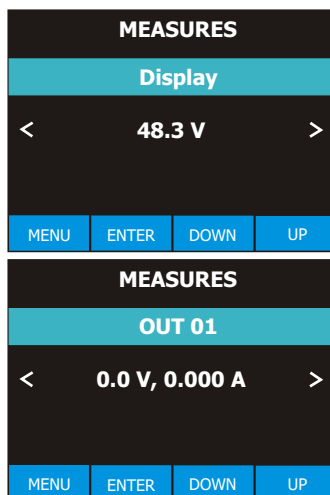
TEMPERATURES MONITORING  
Display board and LED Driver boards temperature



MEASURES



STATUS OF THE CONNECTED UNITS  
This menu allows to check the status (current and voltage) of the connected units.

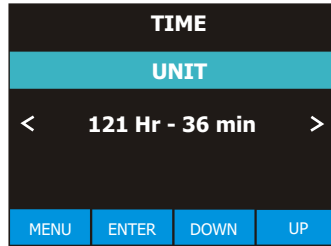




**TIME**



This menu shows the total UNIT life time and the RGBA life time



**NETWORK**



**Art-NET COMMUNICATION PROTOCOL**  
This menu allows to enable/disable the Art-NET communication protocol. With Art-NET enabled the Art-NET signal has the priority on the DMX signal.

**Art-NET DMX UNIVERSE**  
This menu allows to set the DMX universe.

**NETWORK SETTINGS**

This menu allows to choose the mode to set the network parameters (IP address, Subnet mask, Gateway, DNS):

USE DHCP = automatic setting of the network parameters through a DHCP server on the local area network.

FIXED = Fixed setting of the network parameters.

CUSTOM = Manual setting of the network parameters.

**IP ADDRESS**

This menu shows the IP address of the DRIVENET. You can set up all bytes of the IP address only if NETWORK SETTINGS = CUSTOM.

**SUBNET MASK**

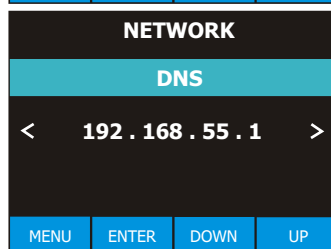
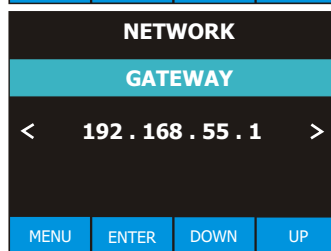
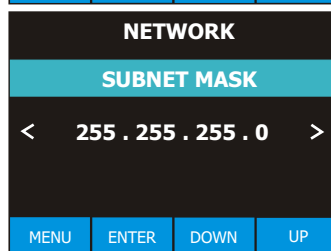
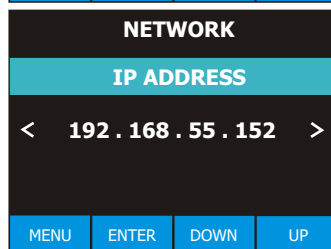
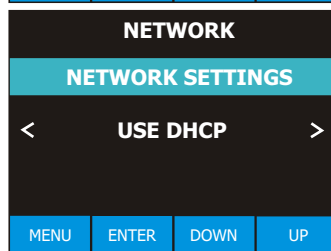
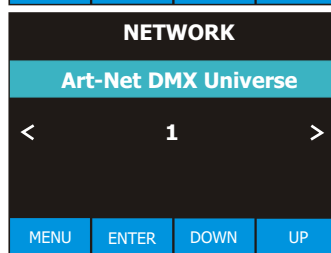
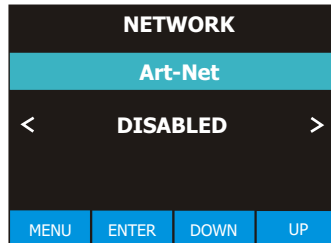
This menu shows the subnet mask. You can set up all bytes of the subnet mask only if NETWORK SETTINGS = CUSTOM.

**GATEWAY**

This menu shows the gateway. You can set up all bytes of the gateway only if NETWORK SETTINGS = CUSTOM.

**DNS**

This menu shows the domain name server. You can set up all bytes of the DNS only if NETWORK SETTINGS = CUSTOM.



Art-NET ENABLED or DISABLED  
Default = DISABLED



Art-NET DMX Universe  
Range: 0 - 255  
Default = 0

NETWORK SETTINGS: USE DHCP, FIXED or CUSTOM  
Default = USE DHCP

IP ADDRESS  
IP address displaying

SUBNET MASK  
Subnet mask displaying

GATEWAY  
Gateway displaying

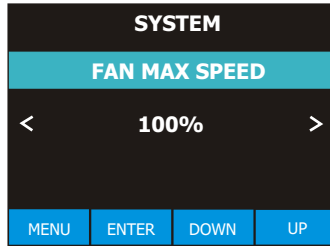
DNS  
Domain name server displaying



**SYSTEM**



**FAN MAX SPEED**  
This menu allows to select the internal fans speed



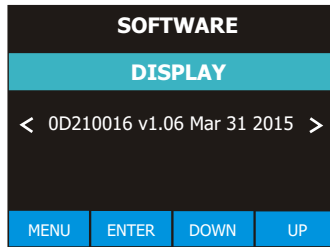
**FAN MAX SPEED**  
50% - 100%  
Default = 100%



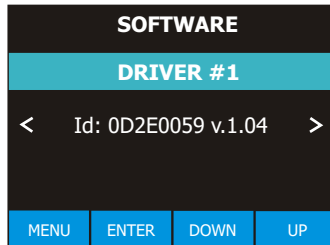
**SOFTWARE**



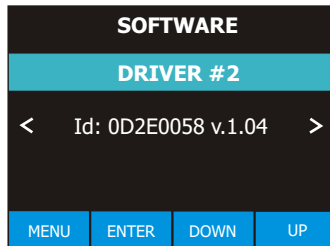
**SOFTWARE**  
Display board and LED Driver boards software version



Display board software version



LED Driver board 1 software version



LED Driver board 2 software version

**DMX PROTOCOL****“FULL TYPE - 8 BIT” 16 DMX Channels (Default)**

<b>1</b>	<b>RED</b>	<b>1</b>
<b>2</b>	<b>GREEN</b>	<b>1</b>
<b>3</b>	<b>BLUE</b>	<b>1</b>
<b>4</b>	<b>WHITE</b>	<b>1</b>
<b>5</b>	<b>RED</b>	<b>2</b>
<b>6</b>	<b>GREEN</b>	<b>2</b>
<b>7</b>	<b>BLUE</b>	<b>2</b>
<b>8</b>	<b>WHITE</b>	<b>2</b>
<b>9</b>	<b>RED</b>	<b>3</b>
<b>10</b>	<b>GREEN</b>	<b>3</b>
<b>11</b>	<b>BLUE</b>	<b>3</b>
<b>12</b>	<b>WHITE</b>	<b>3</b>
<b>13</b>	<b>RED</b>	<b>4</b>
<b>14</b>	<b>GREEN</b>	<b>4</b>
<b>15</b>	<b>BLUE</b>	<b>4</b>
<b>16</b>	<b>WHITE</b>	<b>4</b>

DMX CHANNEL	<b>1</b>	Parameter: <b>RED 1</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>2</b>	Parameter: <b>GREEN1</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>3</b>	Parameter: <b>BLUE 1</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>4</b>	Parameter: <b>WHITE 1</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>5</b>	Parameter: <b>RED 2</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>6</b>	Parameter: <b>GREEN 2</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>7</b>	Parameter: <b>BLUE 2</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>8</b>	Parameter: <b>WHITE 2</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>9</b>	Parameter: <b>RED 3</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>10</b>	Parameter: <b>GREEN 3</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>11</b>	Parameter: <b>BLUE 3</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	<b>12</b>	Parameter: <b>WHITE 3</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>



DMX CHANNEL	13	Parameter: <b>RED 4</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	14	Parameter: <b>GREEN 4</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	15	Parameter: <b>BLUE 4</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

DMX CHANNEL	16	Parameter: <b>WHITE 4</b>			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>000-255</b>					<b>Proportional colour</b>

**DMX PROTOCOL****"Z1 TYPE - 8 BIT" 10 DMX Channels**

- 1 SHUTTER**
- 2 DIMMER**
- 3 RED**
- 4 GREEN**
- 5 BLUE**
- 6 WHITE**
- 7 WHITE PRE-PROGRAMMED (Whites at different colour temperatures)**
- 8 CTC**
- 9 MACRO**
- 10 FUNCTIONS**

DMX CHANNEL	<b>1</b>	Parameter: <b>SHUTTER</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>0-9</b>	<b>5</b>				<b>Black-out</b>
<b>10-19</b>	<b>14</b>				<b>Open</b>
<b>20-29</b>	<b>24</b>				<b>Black-out</b>
<b>30-119</b>					<b>Strobe at variable speed from slow to fast (3,27 s - 30 ms)</b>
<b>120-149</b>					<b>Pulse open at variable speed from slow to fast (42,6 s - 120 ms)</b>
<b>150-179</b>					<b>Pulse close at variable speed from slow to fast (42,6 s - 120 ms)</b>
<b>180-204</b>	<b>192</b>				<b>Random Strobe (Master and RGBW active)</b>
<b>205-229</b>	<b>218</b>				<b>Random Strobe (Full)</b>
<b>230-255</b>	<b>240</b>				<b>Open</b>

DMX CHANNEL	<b>2</b>	Parameter: <b>DIMMER</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>0-255</b>					<b>Proportional dimmer</b>

DMX CHANNEL	<b>3</b>	Parameter: <b>RED</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>0-255</b>					<b>Proportional colour</b>

DMX CHANNEL	4	Parameter: <b>GREEN</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>0-255</b>					<b>Proportional colour</b>

DMX CHANNEL	5	Parameter: <b>BLUE</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>0-255</b>					<b>Proportional colour</b>

DMX CHANNEL	6	Parameter: <b>WHITE</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>0-255</b>					<b>Proportional colour</b>

DMX CHANNEL	7	Parameter: <b>WHITE PRE-PROGRAMMED</b> (Whites at diff. color temperature)
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>0-55</b>	<b>23</b>				<b>No Function</b>
<b>56-105</b>	<b>80</b>				<b>Full (Red-Green-Blue at Full)</b>
<b>106-155</b>	<b>130</b>				<b>White DTS</b>

**IF CHANNEL 10 (FUNCTIONS) = CUSTOM WHITE RECALL (Dmx range value 0 - 79)**

<b>156-205</b>	<b>180</b>	<b>Custom White Recall</b>
<b>206-255</b>	<b>225</b>	<b>White CTC (Channel 8 CTC enabled 43 color temp. Correction Macros: 2000°K-7200°K)</b>

**IF CHANNEL 10 (FUNCTIONS) = CUSTOM WHITE CREATE (Dmx range value 80 - 160)**

<b>156-205</b>	<b>180</b>	<b>Custom White Create (RGB levels selectable by DMX)</b>
<b>206-255</b>	<b>225</b>	<b>White CTC (Channel 8 CTC enabled 43 color temp. Correction Macros: 2000°K-7200°K)</b>

DMX CHANNEL	<b>8</b>	Parameter: <b>CTC (Color temperature correction)</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
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**IF CHANNEL 7 (White) = WHITE CTC (Dmx range value 206 - 255)**

<b>0-255</b>	<b>43 color temp. Correction Macros: 0 = 2000°K / 128 = 5500°K / 255 = 7200°K</b>				
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**IF CHANNEL 7 (White) = NO FUNCTION (Dmx range value 0 - 43)**

<b>0-255</b>	<b>Smooth RGB linear Hue correction</b>				
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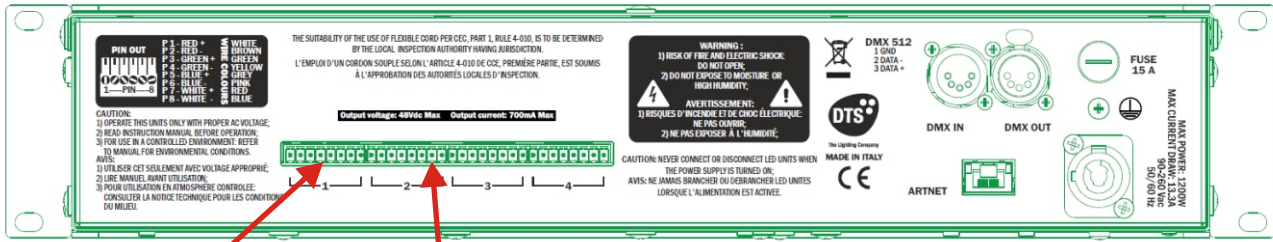
DMX CHANNEL	<b>9</b>	Parameter: <b>MACRO</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>0-14</b>					<b>No Function</b>
<b>15-29</b>					<b>Macro 1</b>
<b>30-44</b>					<b>Macro 2</b>
<b>45-59</b>					<b>Macro 3</b>
<b>60-74</b>					<b>Macro 4</b>
<b>75-89</b>					<b>Macro 5</b>
<b>90-104</b>					<b>Macro 6</b>
<b>105-119</b>					<b>Macro 7</b>
<b>120-134</b>					<b>Macro 8</b>
<b>135-149</b>					<b>Macro 9</b>
<b>150-164</b>					<b>Macro 10</b>
<b>165-179</b>					<b>Macro 11</b>
<b>180-194</b>					<b>Macro 12</b>
<b>195-209</b>					<b>Macro 13</b>
<b>210-225</b>					<b>Macro 14</b>
<b>226-239</b>					<b>Macro 15</b>
<b>240-255</b>					<b>Macro 16</b>

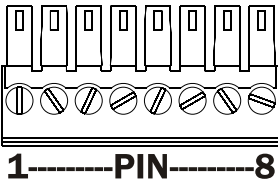
DMX CHANNEL	<b>10</b>	Parameter: <b>FUNCTIONS (Recall, Create and Store the Custom white)</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>0-79</b>		<b>Custom White Recall (Enable CH 7 for Custom white Recall)</b>			
<b>80-160</b>		<b>Custom White Create (Enable CH 7 for Custom white Creation)</b>			
<b>161-255</b>		<b>Custom White Store (Store the Custom White created )</b>			

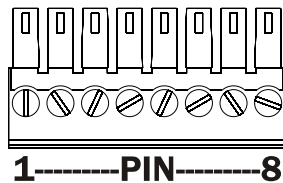
**WIRING DIAGRAMS**



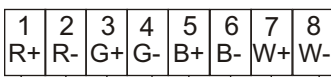
8 poles screw terminals



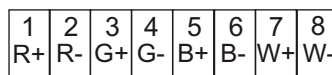
8 poles screw terminals



LEDs OUTPUT 1



LEDs OUTPUT 2



CONNECTION		
PIN OUT	LED	WIRES COLOURS
PIN 1	RED +	WHITE
PIN 2	RED -	BROWN
PIN 3	GREEN +	GREEN
PIN 4	GREEN -	YELLOW
PIN 5	BLUE +	GREY
PIN 6	BLUE -	PINK
PIN 7	WHITE +	RED
PIN 8	WHITE -	BLUE



**DONUT 1**



**DONUT 2**

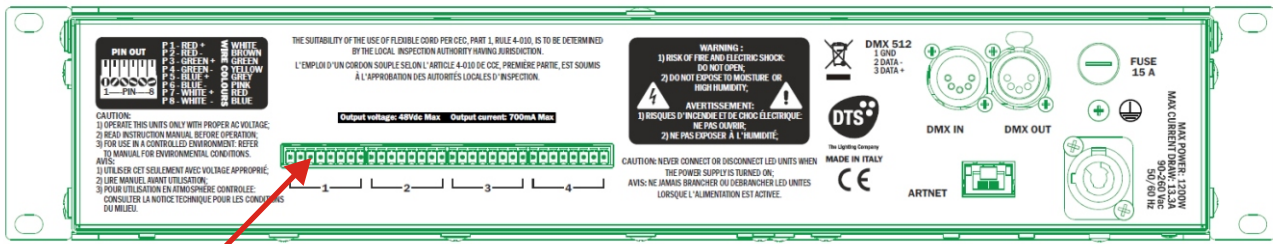
**IMPORTANT:**

The maximum number of DONUT unit connectable to each DRIVENET 416 POWER output is 1 piece.

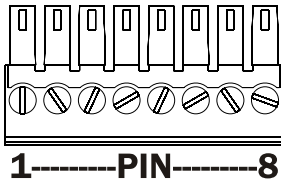
NEVER CONNECT OR DISCONNECT DONUT UNIT WHEN THE POWER SUPPLY IS TURNED ON.

The maximum distance between the DRIVENET 416 POWER and the DONUT unit should not exceed 50 meters.

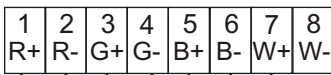
**WIRING DIAGRAMS**



8 poles screw terminals

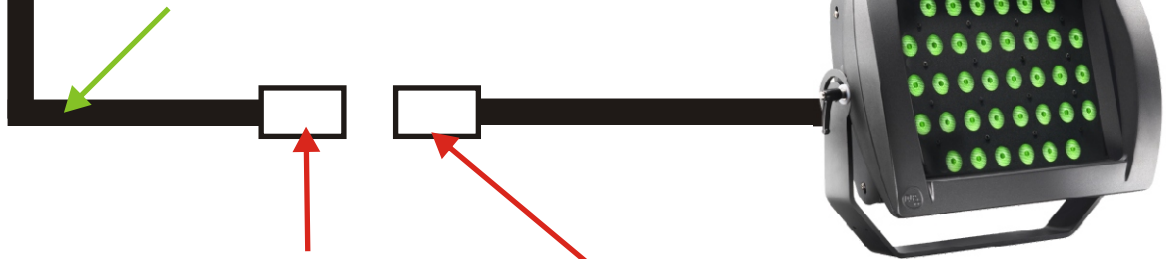


LEDs OUTPUT 1



CONNECTION		
PIN OUT	LED	WIRES COLOURS
PIN 1	RED +	BLUE
PIN 2	RED -	RED
PIN 3	GREEN +	GREEN
PIN 4	GREEN -	BROWN
PIN 5	BLUE +	YELLOW
PIN 6	BLUE -	BLACK
PIN 7	WHITE +	ORANGE
PIN 8	WHITE -	Not connected

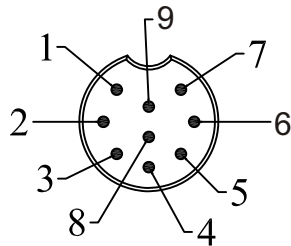
Interface cable



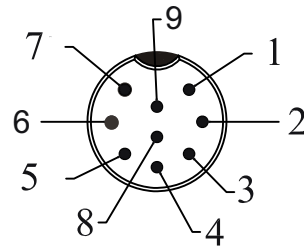
DELTA 8 B HEAD FC

CONNECTION		
PIN OUT	LED	WIRES COLOURS
PIN 1	RED +	BLUE
PIN 2	GREEN +	GREEN
PIN 3	BLUE +	YELLOW
PIN 4	WHITE +	ORANGE
PIN 5	COMMON	RED
PIN 6	R G B W -	BROWN
PIN 7		BLACK
PIN 8	NTC (not connected)	GREY
PIN 9		WHITE

M16 Female connector



M16 Male connector

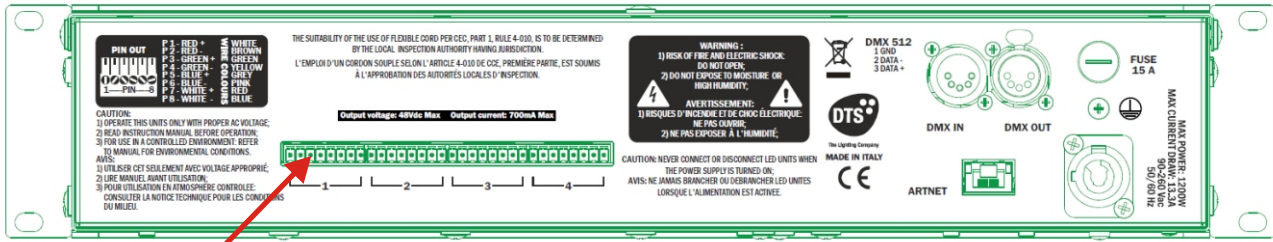


The maximum number of DELTA 8 B HEAD FC or CT model connectable to each output of the DRIVENET 416 POWER is 1 piece.

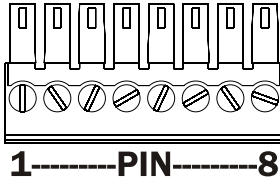
**NEVER CONNECT OR DISCONNECT DELTA UNIT WHEN THE POWER SUPPLY IS TURNED ON.**

The maximum distance between the DRIVENET 416 POWER and the DELTA unit should not exceed 50 meters.

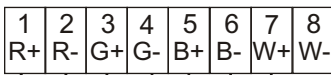
**WIRING DIAGRAMS**



8 poles screw terminals

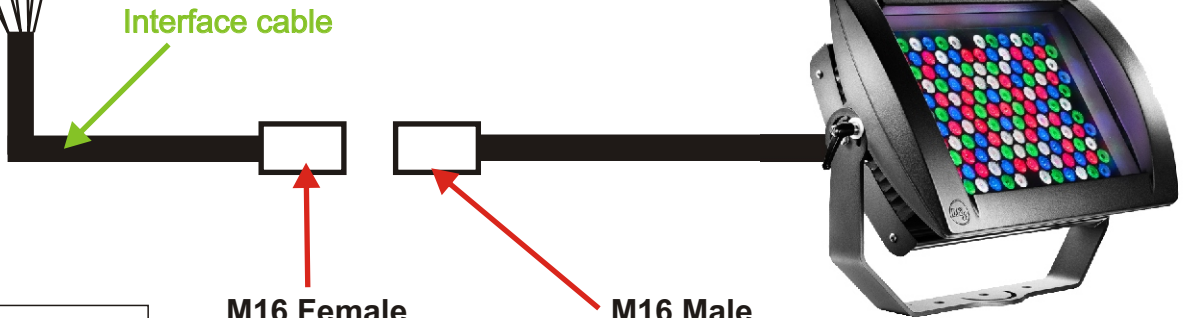


LEDs OUTPUT 1

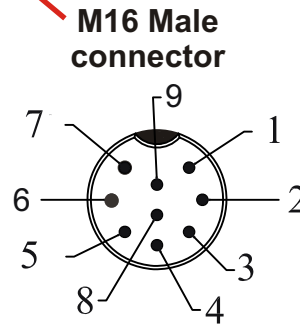
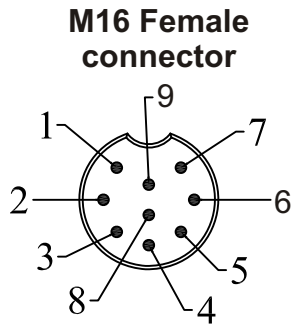


CONNECTION		
PIN OUT	LED	WIRES COLOURS
PIN 1	RED +	BLUE
PIN 2	RED -	RED
PIN 3	GREEN +	GREEN
PIN 4	GREEN -	BROWN
PIN 5	BLUE +	YELLOW
PIN 6	BLUE -	BLACK
PIN 7	WHITE +	ORANGE
PIN 8	WHITE -	Not connected

DELTA 8 B HEAD RGBW 144



CONNECTION		
PIN OUT	LED	WIRES COLOURS
PIN 1	RED +	BLUE
PIN 2	GREEN +	GREEN
PIN 3	BLUE +	YELLOW
PIN 4	WHITE +	ORANGE
PIN 5	COMMON	RED
PIN 6	R G B W -	BROWN
PIN 7		BLACK
PIN 8	NTC (not connected)	GREY
PIN 9		WHITE

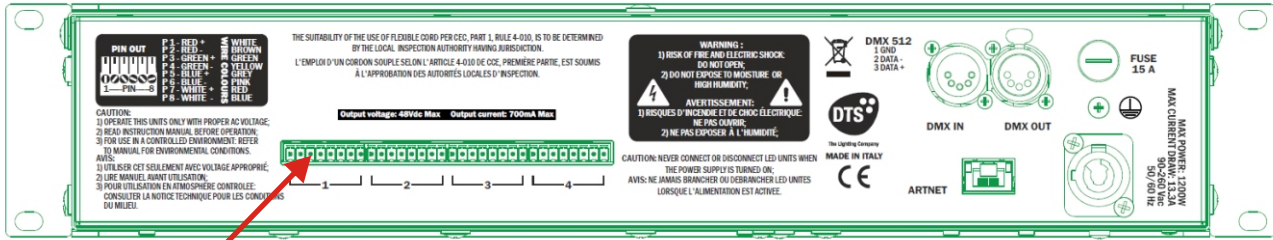


The maximum number of DELTA 8 B HEAD RGBW 144 connectable to each output of the DRIVENET 416 POWER is 1 piece.

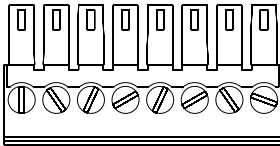
**NEVER CONNECT OR DISCONNECT DELTA UNIT WHEN THE POWER SUPPLY IS TURNED ON.**

The maximum distance between the DRIVENET 416 POWER and the DELTA unit should not Exceed 50 meters.

**WIRING DIAGRAMS**

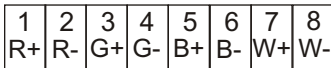


8 poles screw terminals



1-----PIN-----8

**LEDs OUTPUT 1**

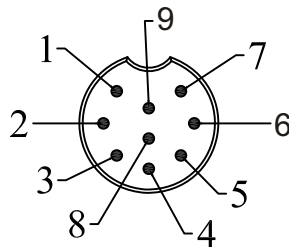


CONNECTION		
PIN OUT	LED	WIRES COLOURS
PIN 1	RED +	BLUE
PIN 2	RED -	RED
PIN 3	GREEN +	GREEN
PIN 4	GREEN -	BROWN
PIN 5	BLUE +	YELLOW
PIN 6	BLUE -	BLACK
PIN 7	WHITE +	ORANGE
PIN 8	WHITE -	Not connected

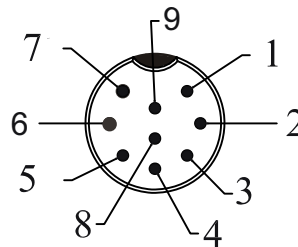
**FOS 100 POWER FC**

Interface cable

**M16 Female connector**



**M16 Male connector**



CONNECTION		
PIN OUT	LED	WIRES COLOURS
PIN 1	RED +	BLUE
PIN 2	GREEN +	GREEN
PIN 3	BLUE +	YELLOW
PIN 4	WHITE +	ORANGE
PIN 5	COMMON	RED
PIN 6	R G B W -	BROWN
PIN 7		BLACK
PIN 8	NTC (not connected)	GREY
PIN 9		WHITE

The maximum number of FOS 100 POWER unit FC or CT version connectable to each output of the DRIVENET 416 POWER is 1 piece.

The minimum number of FOS 50 POWER unit FC or CT version connectable to each output of the DRIVENET 416 POWER is 2 pcs (1 x FOS 50 POWER IN/OUT + 1 x FOS 50 POWER END).

NEVER CONNECT OR DISCONNECT FOS UNIT WHEN THE POWER SUPPLY IS TURNED ON.

The maximum distance between the DRIVENET 416 POWER and the FOS POWER unit should not exceed 50 meters.



**NOTES**

**NOTES**

**NOTES**

PROUDLY  
MADE IN ITALY



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



**ISO 9001:2008**

DTS quality system is certified  
to the ISO 9001:2008 standard

**D.T.S. Illuminazione s.r.l** - Via Fagnano Selve 12-14  
47843 Misano Adriatico (RN) Italy  
Tel.: +39 0541 611131 Fax +39 0541 611111  
Info@dts-lighting.it www.dts-lighting.it



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