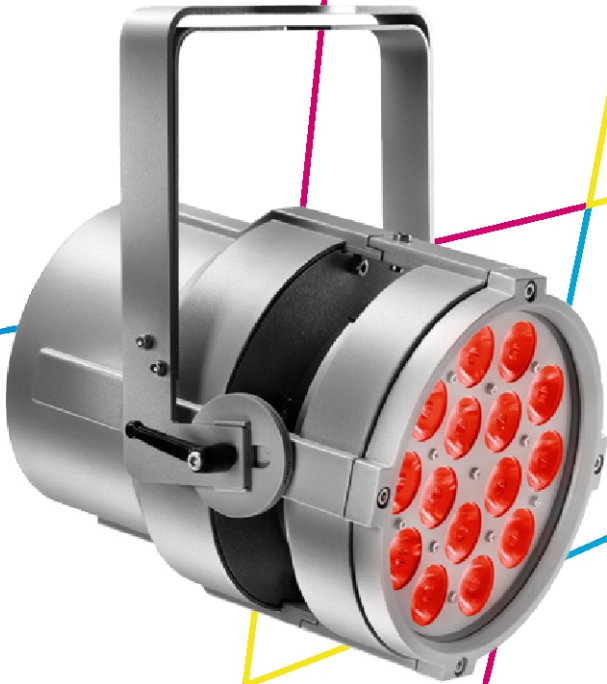


# TITAN SOLO



User's Manual Rel 1.6 **GB**

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



The Lighting Company

Made in Italy

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## DESCRIPTION

TITAN SOLO is a new range of compact self-contained LED projectors designed for fixed and mobile installations either indoor or outdoor.

All models are made on aluminium offering high resistance to mechanical stress, and IP20 or IP65 protection rating.

TITAN SOLO range features an integrated power supply and is therefore extremely easy to set up and use.

2 integrated power supply with different protection rating are available: IP20 (Powerconn + XLR connectors), and IP65 (3 x 1.5 sq mm Main AC cable 1 meter length + XLR Male / Female cable connectors 1 meter cable length).

TITAN is also available without integrated power supply.

Three dedicated lenses sets (Spot, Medium flood, Wide flood) are available for each model, offering different light beam projection angles with even coverage of lighted areas.

TITAN SOLO can be controlled via any DMX lighting console.

TITAN range comprises 3 models, which employ different sets of LEDs tailored for distinct applications: TITAN SOLO FULL COLOUR, TITAN SOLO RGB and TITAN SOLO WHITE.

TITAN SOLO FULL COLOUR: 15 x 3W Full Colour LEDs; 16 million colours; 990 Lux at 2 m (spot lenses); linear colour temperature 3200°K ÷ 5500°K; 16 selectable types of White.

The 15 Full Colour LEDs all generate the same colour at the same time, so that the illuminated object is not only uniformly lit, but also projects no false shadows.

TITAN SOLO RGB: 54 x 1W P4 LEDs (12 x Red, 15 x Green, 15 x Blue, 12 x Amber); 16 million colours; 4388 Lux at 2 m (spot lenses); linear colour temperature 3200°K ÷ 5500°K; 16 selectable types of White. The LEDs distribution pattern guarantees high mixing quality for RGB colours and a uniform projection on surfaces, no matter what colour is used.

TITAN SOLO WHITE: 54 x 1W P4 LEDs (42 White, 12 x Amber); 9900 Lux at 2 m (spot lenses); linear colour temperature 3200°K ÷ 5500°K; 16 selectable types of White.

TITAN SOLO WHITE is ideal in various applications where colour is not needed and white light must have well defined features.

### **Full colour LEDs Power supply on board**

03.LDB030S.F10	TITAN SOLO IP20 FULLCOLOUR SPOT LENSES
03.LDB030S.F25	TITAN SOLO IP20 FULLCOLOUR MEDIUM FLOOD LENSES
03.LDB030S.F40	TITAN SOLO IP20 FULLCOLOUR WIDE FLOOD LENSES
03.LDB036C.F10	TITAN SOLO C IP65 FULLCOLOUR SPOT LENSES
03.LDB036C.F25	TITAN SOLO C IP65 FULLCOLOUR MEDIUM FLOOD LENSES
03.LDB036C.F40	TITAN SOLO C IP65 FULLCOLOUR WIDE FLOOD LENSES

### **Red/Green/Blue/Amber LEDs Power supply on board**

03.LDB030S.T10	TITAN SOLO IP20 RGBA SPOT LENSES
03.LDB030S.T25	TITAN SOLO IP20 RGBA MEDIUM FLOOD LENSES
03.LDB030S.T40	TITAN SOLO IP20 RGBA WIDE FLOOD LENSES
03.LDB036C.T10	TITAN SOLO C IP65 RGBA SPOT LENSES
03.LDB036C.T25	TITAN SOLO C IP65 RGBA MEDIUM FLOOD LENSES
03.LDB036C.T40	TITAN SOLO C IP65RGBA WIDE FLOOD LENSES

### **3 X White /Amber LEDs Power supply on board**

03.LDB030S.W10	TITAN SOLO IP20 WHITE SPOT LENSES
03.LDB030S.W25	TITAN SOLO IP20WHITE MEDIUM FLOOD LENSES
03.LDB030S.W40	TITAN SOLO IP20WHITE WIDE FLOOD LENSES
03.LDB036C.W10	TITAN SOLO C IP65 WHITE SPOT LENSES
03.LDB036C.W25	TITAN SOLO C IP65 WHITE MEDIUM FLOOD LENSES
03.LDB036C.W40	TITAN SOLO C IP65 WHITE WIDE FLOOD LENSES

**LED technology**

TITAN SOLO FULL COLOUR: 15 x Full Colour LEDs; 990 Lux / 2 m (spot lenses)

TITAN SOLO RGB: 54 x 1W P4 LEDs (12 x Red, 15 x Green, 15 x Blue, 12 x Amber; 4388 Lux / 2 m (spot lenses)

TITAN SOLO WHITE: 54 x 1W P4 LEDs (42 x White, 12 x Amber) 9900 Lux / 2 m (spot lenses)

Variable white colour temperature:

3.200°K÷5.500°K

No infrared emission; no ultraviolet emission

LEDs average lifespan: 100.000 hours

**Optical units**

3 lenses sets available (Spot, Medium flood, Wide flood)

**Control**

Via any DMX lighting console

**Protection**

IP20 or IP65 protection level against the penetration of solids and liquids

**Construction**

TITAN SOLO is made on aluminium

**Power supply**

Internal power supply

**Connection**

M12 connection system between head and power supply (TITAN SOLO IP20 / TITAN SOLO IP65)

Powerconn + XLR panel connectors (TITAN SOLO IP20)

3 x 1.5 sq mm Main AC cable 1 meter lenght + XLR Male / Female cable connectors 1 meter cable lenght (TITAN SOLO IP65)

**ACCESSORIES**

Lenses set Spot (TITAN SOLO FULL COLOUR) (Cod. 03.LK.019)

Lenses set Medium flood (TITAN SOLO FULL COLOUR) (Cod. 03.LK.020)

Lenses set Wide flood (TITAN SOLO FULL COLOUR) (Cod. 03.LK.021)

Lenses set Spot (TITAN SOLO RGB / WHITE) (Cod. 03.LK.022)

Lenses set Medium flood (TITAN SOLO RGB / WHITE) (Cod. 03.LK.023)

Lenses set Wide flood (TITAN SOLO RGB / WHITE) (Cod. 03.LK.024)

10XAWG26 multipolar black outdoor cable (Cod. 0509C061)

M12 female (8 pole) cable connector (Cod. 0520P050)

M12 male (8 pole) cable connector (Cod 0520P051)

**MAIN ELECTRICAL CHARACTERISTICS:**

Input Voltage Range :  $V_{in}$  90 - 260 Vac

Frequency : 50 - 60 HZ

Power Consumption Range : 6 - 100 W

Power Factor ( Pf ) : 0.95 electronic PFC controller

Efficiency : 90% typical

**Output:**

Power Output Range : 4 channels output 1,5 - 25W per channel

Output Current : 350 mA @ 100% per channel (500mA @ 100% per channel in BOOST Mode)

Output Voltage :  $V_{out}$  48V

**Control Input:**

Control Signal : DMX 512

Dimming System : Constant Current PWM

Address Range : DMX 512 channels addressable by display

IMPORTANT SAFETY INFORMATION**Fire prevention:**

Never locate the fixture on any flammable surface.  
 Minimum distance from flammable materials: 10 cm  
 Replace any blown or damaged fuses only with those of identical value

**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 TITAN SOLO unit.  
 Use only AC supplies 90-260V, 50-60Hz  
 TITAN SOLO IP20 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.

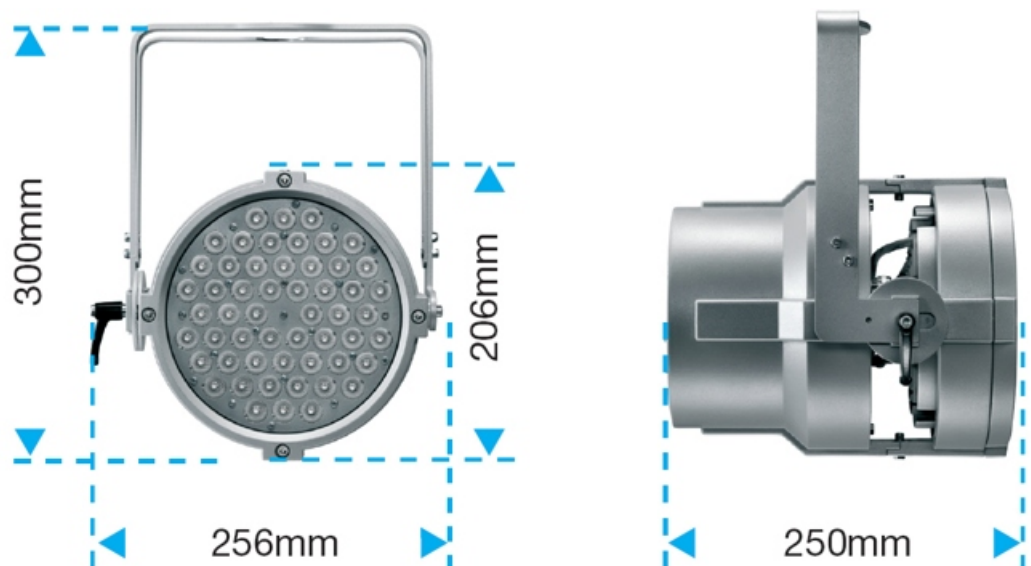
**Safety:**

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

UNIT DIMENSIONS:

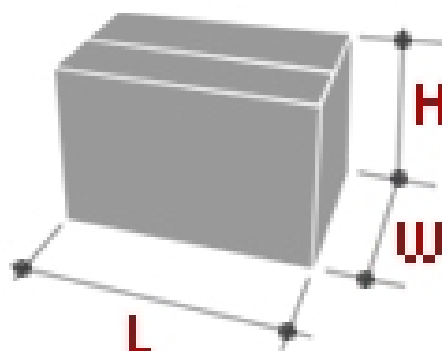
Unit Dimensions  
 (LxWxH)  
 250 x 256 x 206 mm

Weight  
 6,3 Kg



Packing Dimensions  
 (LxWxH)  
 300 x 320 x 220 mm

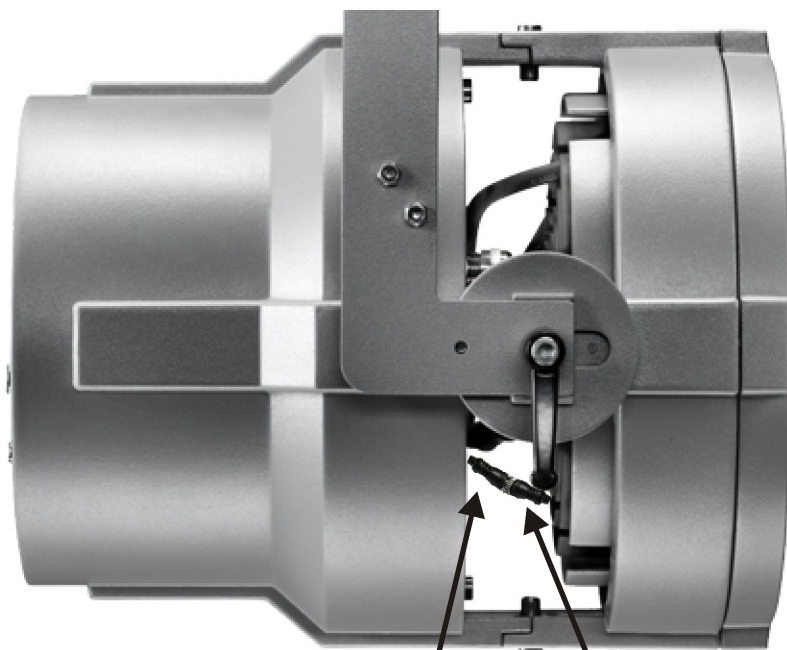
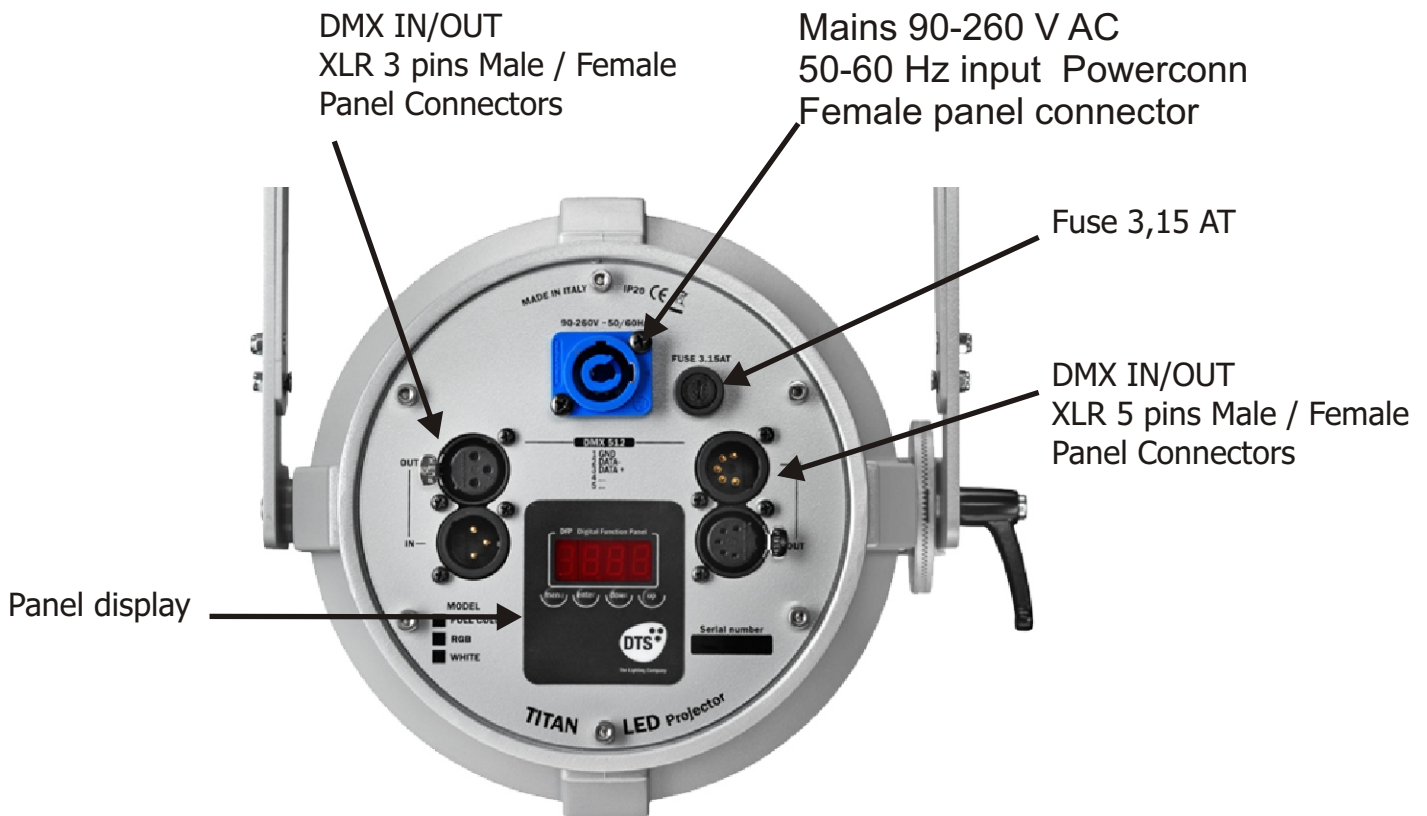
Weight  
 7,5 Kg





INPUT/OUTPUT CONNECTIONS

## TITAN SOLO IP20

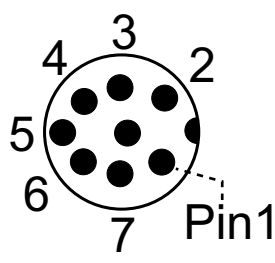
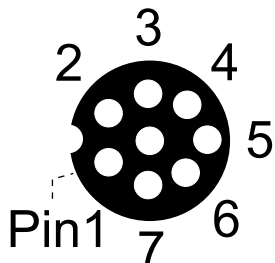


### LEDS CONNECTOR PINOUT

- 1-RED + (FC / RGB / WHITE)
- 2-RED - (FC / RGB / WHITE)
- 3-GREEN + (FC / RGB / WHITE)
- 4-GREEN - (FC / RGB / WHITE)
- 5-BLUE + (FC / RGB / WHITE)
- 6-BLUE - (FC / RGB / WHITE)
- 7-AMBER - (RGB / WHITE)**
- 8-AMBER + (RGB / WHITE)**

M12 LED output  
Female cable connector

M12 LED input  
Male cable connector



INPUT/OUTPUT CONNECTIONS

## TITAN SOLO IP65

Mains 90-260 V AC  
50-60 Hz input  
3 x 1.5mm<sup>2</sup> Cable

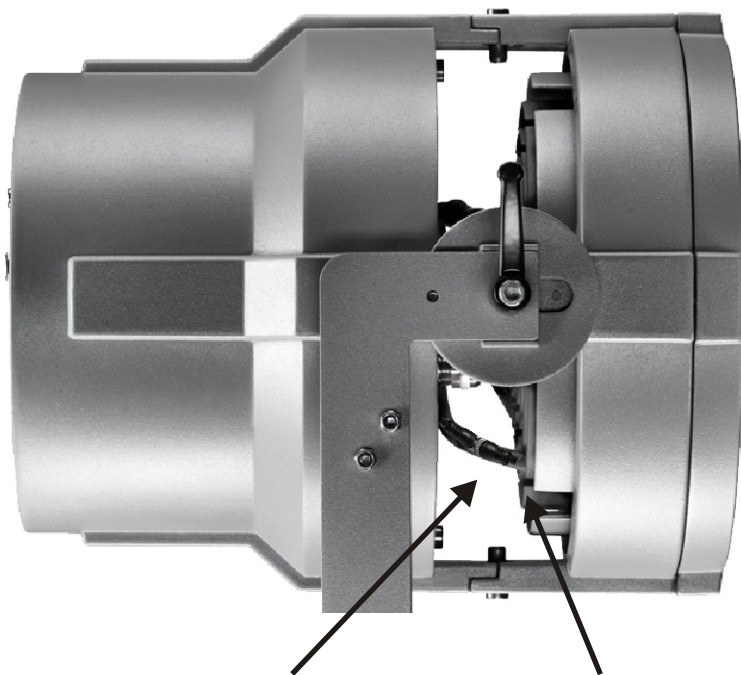
DMX IN/OUT  
XRL 5 pin Male  
Cable Connectors

Display panel



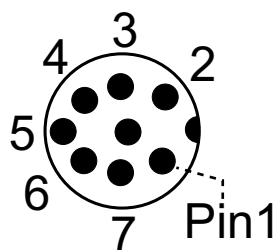
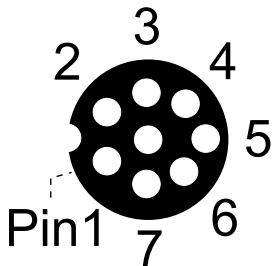
Fuse 3,15 AT

DMX IN/OUT  
XRL 5 pin Female  
Cable Connectors

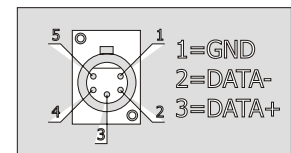


M12 LED output  
Female cable connector

M12 LED input  
Male cable connector



**CONTROLLER  
STANDARD  
DMX 512**



### LEDS CONNECTOR PINOUT

- 1-RED + (FC / RGB / WHITE)
- 2-RED - (FC / RGB / WHITE)
- 3-GREEN + (FC / RGB / WHITE)
- 4-GREEN - (FC / RGB / WHITE)
- 5-BLUE + (FC / RGB / WHITE)
- 6-BLUE - (FC / RGB / WHITE)
- 7-AMBER - (RGB / WHITE)
- 8-AMBER + (RGB / WHITE)

**Please note that the XLR connectors installed on the TITAN IP65 have an IP20 protection rate.**

**Thus, for any application where an IP65 rate is needed, the XLR connectors must be protected within an IP65-rated container.**

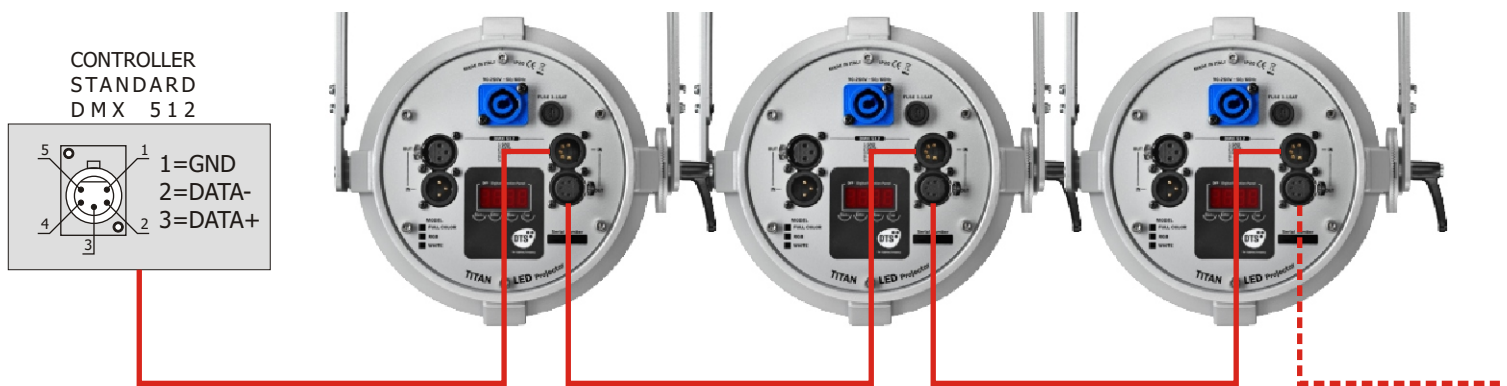
## DMX SIGNAL CONNECTION:

### TITAN SOLO IP20

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.



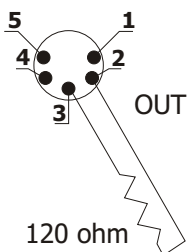
### P.S:

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

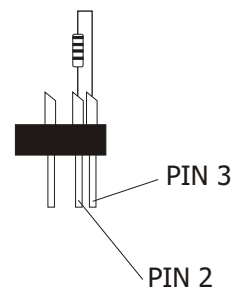
- DMX signal not present
- DMX reception problem

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





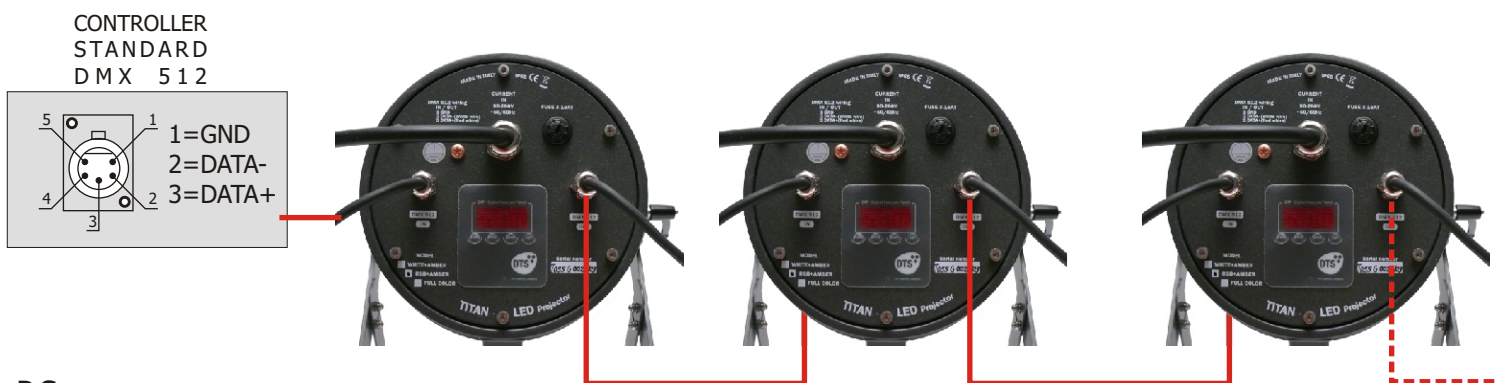
## DMX SIGNAL CONNECTION:

### TITAN SOLO IP65

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.



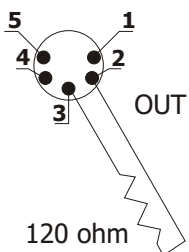
P.S:

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

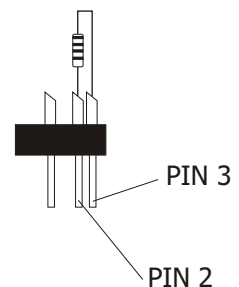
- DMX signal not present
- DMX reception problem

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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



**Please note that the XLR connectors installed on the TITAN IP65 have an IP20 protection rate.**

**Thus, for any application where an IP65 rate is needed, the XLR connectors must be protected within an IP65-rated container.**

## **DMX ADDRESS**

TITAN SOLO FULL COLOR can be used in three different modes: 6 DMX channels, 9 DMX channels (default) or CUSTOM DMX channels.

TITAN SOLO RGB and TITAN SOLO WHITE can be used in two different modes: 10 DMX channels (default) or CUSTOM DMX channels.

If you want to use the TITAN SOLO FULL COLOUR in 6 channels mode, select the 6 CH mode from the MODE menu and set the following addresses on the mixer: **(To be used only with DTS Wall mounted DMX controller 0514L007)**

Projector 1 A001  
 Projector 2 A009  
 Projector 3 A017  
 ..... A....  
 projector 6 A041

If you want to use the TITAN SOLO FULL COLOUR in 9 channels mode, select the 9 CH mode from the MODE menu and set the following addresses on the mixer:

Projector 1 A001  
 Projector 2 A010            If you want to select the next projector, just add "9"  
 Projector 3 A019  
 ..... A....  
 projector 6 A046

If you want to use the TITAN SOLO FULL COLOUR in CUSTOM DMX channels mode, select the CUSTOM mode from the MODE menu and set the parameters for Shutter, Dimmer, Red, Green, Blue, Ctc, Macro and Function to the desired DMX channels and confirm the settings with DONE

If you want to use the TITAN SOLO RGB / WHITE in 10 channels mode, select the 10 CH mode from the MODE menu and set the following addresses on the mixer:

Projector 1 A001  
 Projector 2 A011            If you want to select the next projector, just add "9"  
 Projector 3 A021  
 ..... A....  
 projector 6 A051

If you want to use the TITAN SOLO RGB / WHITE in CUSTOM DMX channels mode, select the CUSTOM mode from the MODE menu and set the parameters for Shutter, Dimmer, Red, Green, Blue, (White 1, White 2, White 3), Amber, Ctc, Macro and Function to the desired DMX channels and confirm the settings with DONE

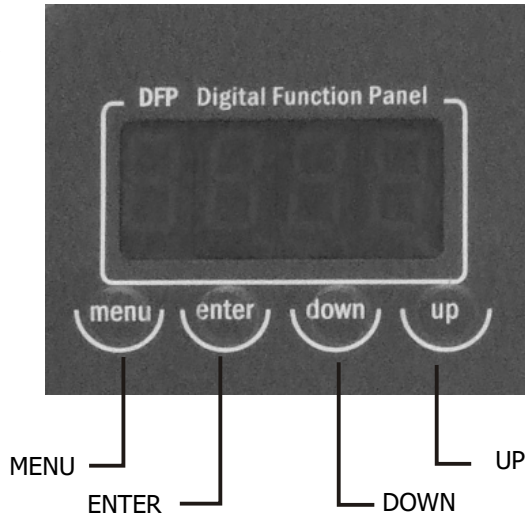
## **Selelcting the DMX address**

- 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.

# DISPLAY FUNCTIONS

## TITAN SOLO FULL COLOUR



# DISPLAY FUNCTIONS

The TITAN SOLO FULL COLOUR 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 2.10

<p><b>ADD 1</b> </p> <p><b>DISP</b> </p> <p><b>POS 1</b> </p> <p><b>Stby</b> </p> <hr/> <p><b>node</b> </p> <p><b>9CH</b> </p> <p><b>6CH</b> </p> <p><b>CUST</b> </p> <p><b>AUX</b> </p> <p><b>MACr</b> </p>	<p>REVERSE DISPLAY Reverses display's reading depending on the mounting position (On the ground or suspended).</p> <p>DISPLAY STAND BY To turn off the display (after 5 seconds) Or leave it always on.</p> <hr/> <p>DMX MODE To select DMX mode : 9 (default) - 6 - AUX - CUSTOM</p> <p>CUSTOM DMX mode let you set the parameters for Shutter, Dimmer, Red, Green, Blue, Ctc, Macro and Function to the desired DMX channels.</p> <p>AUX mode let you activate an external ON -OFF control on IR connector. (Not implemented on TITAN SOLO)</p> <p>MACRO Function, enable channel mapping macro rainbow effects STD (default)</p>	<p><b>AA</b> Floor position </p> <p><b>BB</b> Suspension position </p> <p><b>off</b> Display OFF </p> <p><b>on</b> Display always ON </p> <hr/> <p><b>9CH</b> 9 CHANNELS </p> <p><b>6CH</b> 6 CHANNELS </p> <p><b>CUST</b> Custom mode enabled  </p> <p><b>AUX</b> AUX MODE  </p> <p><b>MACr</b> </p>	<p><b>AA</b> Floor position </p> <p><b>BB</b> Suspension position </p> <p><b>off</b> Display OFF </p> <p><b>on</b> Display always ON </p> <hr/> <p><b>9CH</b> Default DMX Mode = 9 CH </p> <p><b>6CH</b> </p> <p><b>SEL</b> Custom mode enabled </p> <p><b>Shou</b> Show Custom settings </p> <p><b>SEt</b> Setting the parameters on Custom Mode </p> <p><b>AUX</b> Not implemented on TITAN SOLO </p> <p><b>Std</b> Standard mode enabled (Default) </p> <p><b>Ext</b> Show Custom settings </p>
--	---	---	--



65t



0n

Boost mode activated



Whit BOOST active, the LED's current is setted to 500mA (30% more gain). Default = Disable

**BOOST DRIVING**

This menu allow to increase the LED's current from 350mA to 500 mA



OFF

Boost mode deactivated



LED



rEd



01n

Default = 0



**LED**  
RGB Min/Max, Smooth and Compression level values settings

255

Default = 255



Up-Down



GrEE



01n

Default = 0



**RGB MINIMUM VALUES**  
This menu allow to select the minimum levels for Red, Green and blue

255

Default = 255



Up-Down



BLUE



01n

Default = 0



**RGB MAXIMUM VALUES**  
This menu allow to select the maximum levels for Red, Green and blue

255

Default = 255



These settings have priority on Master Dimmer (DMX channel 2)

Up-Down



50tH



2

Range = Off - 20  
Default = 2



**SMOOTH VALUE**  
This menu allow to select the value of the delay ( in milliseconds) for RGB and Dimmer channels reaction to DMX or Program variation.  
Off=25 ms delay (Fast response)  
20=250 ms delay (Slow response)

Off = 25 ms  
Istant response to DMX variation

20 = 250 ms  
Smooth response to DMX variation



COMP



LINE

Linear = Linear current output



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

QUAD

Quadratic = Linear light output



54nc



610

Range = 610 Hz -10 KHz  
Default = 610 Hz



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



AUTO



SURE



Up-Down

ChPr



SPEED



00 10



**AUTOMATIC MODE**  
Automatic demo game without DMX controller

WAIT

00 10

**ChPr**  
Chase with 16 steps previously created in REC MODE  
Speed and Wait time selectable by user

CUPr



rEd



120



**CUPr**  
RGB values selectable by user

GrEE

255

BLUE

104

ANbr

0



AUTO



SURE



rAIn



SPEED



00 10



#### AUTOMATIC MODE

Automatic demo game without DMX controller

#### Rainbow (rAIn)

Rainbow colours effect.  
Speed time selectable by user

#### CU01-CU16

Color Macros as on DMX channel 8 (Macro)

#### WHITE MACROS

16 macros for White color from 2000 to 7200 ° K

#### DIMMER

Dimmer level selectable by user as on DMX channel 2 (Dimmer)  
Dimmer level is active for all the programs and macros

#### SHUTTER

Shutter level selectable by user as on DMX channel 1 (Shutter)  
Shutter level is active only for CU01/CU16 and Wh01/Wh16 macros

#### ESC

Esc from Automatic Mode Menu

CU01



CU01



CU02

CU 16

Wh01



Wh01



Wh02

Wh 16

dI 00



255



SHUT



255



ESC



REC



9CH



r001

n001

n002

n0....

n0 16

#### REC MODE

In DMX Recorder Mode, it is possible to create and store the scenes of the ChPr by using an external DMX controller.  
The unit must be set to 9 channels MODE

#### DMX Recorder Mode

For the programming of ChPr by using a DMX controller, besides the 9 channels necessary to control the unit a further 3 DMX channels are needed.

So that in RECORDER mode ( via DMX) the unit will need 12 channels to be correctly programmed.

The three new DMX channels are:

#### DMX channel 10 = SCENES channel

From 0-10 = no function ( r001)

From 11-255 are displayed the programmable scenes (max 16 scenes from M001 to M0016 )

#### DMX channel 11 = EDIT channel:

-From 0-19 = no function

-From 20-234 the unit runs the configuration given by the received input DMX values.

With the channel SCENES it is possible to pass from one step to the next while with REC it is possible to record the selected scene.

-From 235-255 the unit runs the configuration given by the received input DMX values closing the sequence as last scene.

With the channel REC it is possible to record the selected scene as last scene.

#### DMX channel 12 = RECORDING channel

Records the set scene with a variation between 0 to 255 (the display flashes indicating that the scene has been recorded). It is advised that you keep the REC channel set to 0 and to run through the 255 only once you have decided to save the scene. If ChPr is not closed, by indicating the last scene ( Edit channel between 235-255), in playback mode all 16 scenes will be played through even if not programmed



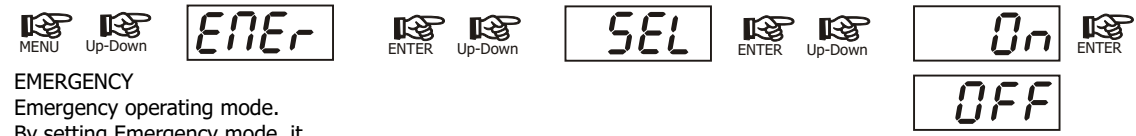


**SLAVE MODE**  
 Slave mode for ChPr program.  
 All slave units will be synchronised with master unit, running their own Chpr program.



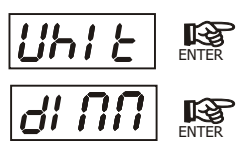
**INFRARED MODE**  
 Infrared remote control.  
 By activating Ir MODE, it will be possible to navigate through the unit functions by using the D.T.S. infrared remote control.  
 D.T.S. Code :0514L008  
 (Not implemented on TITAN SOLO)

**NOTE:**  
 External infrared remote sensor needed.  
 D.T.S. Code :03.LA.016  
 (Not implemented on TITAN SOLO)



**EMERGENCY**  
 Emergency operating mode.  
 By setting Emergency mode, it will be possible to select one of the 16 preprogrammed WHITE cues that will then run if DMX signal is missing or not available.  
 Useful for Emergency EXIT illumination on public areas.

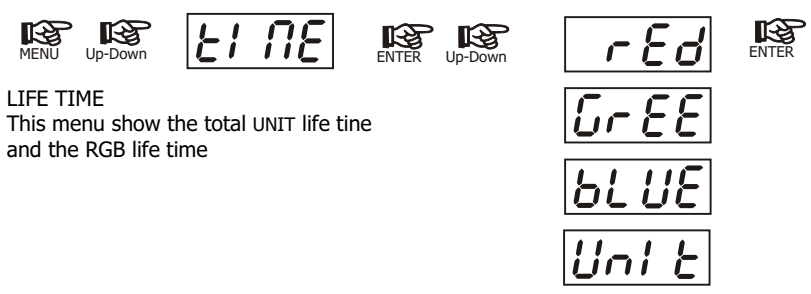
Default = OFF  
  
 Default = White 1  
  
 Default = 255



**DEFAULT**  
 To restore default settings



**TEMPERATURE**  
 Power supply temperature visualisation (°C)



**LIFE TIME**  
 This menu shows the total UNIT life time and the RGB life time



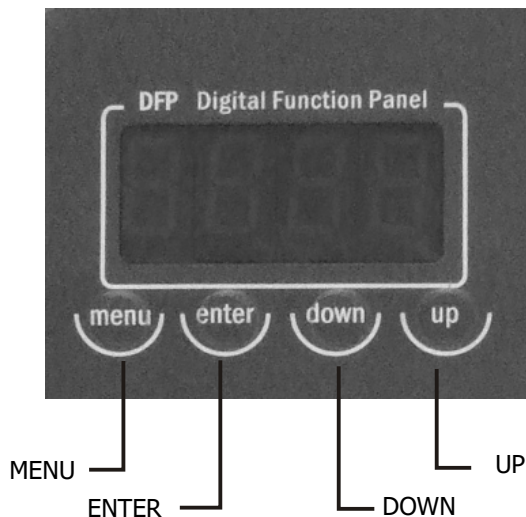
**TEST MODE**  
 RGB colours test with rainbow



**SOFTWARE**  
 Software version

# DISPLAY FUNCTIONS

## TITAN SOLO RGBA TITAN SOLO WHITE








### DISPLAY FUNCTIONS

























The TITAN SOLO FULL COLOUR 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 2.10

<p><b>ADD 1</b> </p> <p>REVERSE DISPLAY Reverses display's reading depending on the mounting position (On the ground or suspended).</p> <p><b>DISP</b> </p> <p>DISPLAY STAND BY To turn off the display (after 5 seconds) Or leave it always on.</p>	<p><b>POS 1</b> </p> <p><b>Stby</b> </p>	<p><b>AA</b> Floor position </p> <p><b>BB</b> Suspension position </p> <p><b>off</b> Display OFF </p> <p><b>on</b> Display always ON </p>
<p><b>node</b> </p> <p>DMX MODE To select DMX mode : 10 (default) - 6 - AUX - CUSTOM</p> <p>AUX mode let you activate an external ON -OFF control on IR connector. (Not implemented on TITAN SOLO)</p> <p>CUSTOM DMX mode let you set the parameters for Shutter, Dimmer, Red, Green, Blue, Ctc, Macro and Function to the desired DMX channels.</p> <p>MACRO Function, enable channel mapping macro rainbow effects STD (default)</p>	<p><b>10CH</b> 10 CHANNELS  </p> <p><b>6CH</b> 6 CHANNELS </p> <p><b>AUX</b> AUX MODE </p> <p><b>CUST</b> </p>	<p><b>9CH</b> Default DMX Mode = 9 CH </p> <p><b>SEL</b> Custom mode enabled </p> <p><b>Shou</b> Show Custom settings </p> <p><b>SEt</b> Setting the parameters on Custom Mode </p> <p><b>Std</b> Standard mode enabled (Default) </p> <p><b>EXT</b> Show Custom settings </p>

 <p><b>BOOST DRIVING</b> This menu allow to increase the LED's current from 350mA to 500 mA</p>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">b5t</div>	 <p>0n</p>  <p>OFF</p>	<p>Boost mode activated </p> <p>Boost mode deactivated </p>	<p>Whit BOOST active, the LED's current is setted to 500mA (30% more gain). Default = Disable</p>
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 <p><b>LED</b> RGBA Min/Max, Smooth and Compression level values settings</p> <p><b>RGBA MINIMUM VALUES</b> This menu allow to select the minimum levels for Red, Green, blue and Amber</p> <p><b>RGBA MAXIMUM VALUES</b> This menu allow to select the maximum levels for Red, Green, Blue and Amber</p> <p>These settings have priority on Master Dimmer (DMX channel 2)</p> <p><b>SMOOTH VALUE</b> This menu allow to select the value of the delay ( in milliseconds) for RGB and Dimmer channels reaction to DMX or Program variation. Off=25 ms delay (Fast response) 20=250 ms delay (Slow response)</p>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">LED</div>	 <p>rEd</p> <p>Up-Down </p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">GrEE</div> <p>Up-Down </p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">bLUE</div> <p>Up-Down </p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">ANbr</div> <p>Up-Down </p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">SNT4</div>	 <p>0n</p>  <p>NAH</p>  <p>0n</p>  <p>NAH</p>  <p>0n</p>  <p>NAH</p>  <p>0n</p>  <p>NAH</p>  <p>2</p>	<p>Default = 0 </p> <p>Default = 255 </p> <p>Default = 0 </p> <p>Default = 255 </p> <p>Default = 0 </p> <p>Default = 255 </p> <p>Default = 0 </p> <p>Default = 255 </p> <p>Range = Off - 20  Default = 2</p>	<p>Off = 25 ms Istant response to DMX variation</p> <p>20 = 250 ms Smooth response to DMX variation</p>
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<p><b>COMPRESSION</b> This menu allow to select between Linear current output or Quadratic current output for LEDs Default = Linear</p> <p><b>SYNC</b> This menu allow to adjust the PWM frequency value (Hz) in order to reduce flickering in the process of your camera recordings</p>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">COMP</div>	 <p>LINE</p>  <p>QUAD</p>	<p>Linear = Linear current output </p> <p>Quadratic = Linear light output </p>
	<div style="border: 1px solid black; padding: 2px; display: inline-block;">54nc</div>	 <p>610</p>	<p>Range = 610 Hz -10 KHz Default = 610 Hz </p>

 <p><b>AUTOMATIC MODE</b> Automatic demo game without DMX controller</p> <p><b>ChPr</b> Chase with 16 steps previously created in REC MODE Speed and Wait time selectable by user</p> <p><b>CUPr</b> RGB values selectable by user</p>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">AUTO</div>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">SURE</div>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">ChPr</div>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">SPEED</div>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">00 10</div>
				 <div style="border: 1px solid black; padding: 2px; display: inline-block;">WAIT</div>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">00 10</div>
			 <div style="border: 1px solid black; padding: 2px; display: inline-block;">CUPr</div>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">rEd</div>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">120</div>
				 <div style="border: 1px solid black; padding: 2px; display: inline-block;">GrEE</div>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">255</div>
				 <div style="border: 1px solid black; padding: 2px; display: inline-block;">bLUE</div>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">104</div>
				 <div style="border: 1px solid black; padding: 2px; display: inline-block;">ANbr</div>	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>



AUTO



SURE



rAIn



SPEED



00 10



#### AUTOMATIC MODE

Automatic demo game without DMX controller

#### Rainbow (rAIn)

Rainbow colours effect.  
Speed time selectable by user

#### CU01-CU16

Color Macros as on DMX channel 8 (Macro)

#### WHITE MACROS

16 macros for White color from 2000 to 7200 ° K

#### DIMMER

Dimmer level selectable by user as on DMX channel 2 (Dimmer)  
Dimmer level is active for all the programs and macros

#### SHUTTER

Shutter level selectable by user as on DMX channel 1 (Shutter)  
Shutter level is active only for CU01/CU16 and Wh01/Wh16 macros

#### ESC

Esc from Automatic Mode Menu

CU01



CU01



CU02

CU 16

Wh01



Wh01



Wh02

Wh 16

di 00



255



SHUT



255



ESC



REC



10CH



r001

n001

n002

no.....

no 16

#### REC MODE

In DMX Recorder Mode, it is possible to create and store the scenes of the ChPr by using an external DMX controller.  
The unit must be set to 10 channels MODE

#### DMX Recorder Mode

For the programming of ChPr by using a DMX controller, besides the 10 channels necessary to control the unit a further 3 DMX channels are needed.

So that in RECORDER mode ( via DMX) the unit will need 13 channels to be correctly programmed.

The three new DMX channels are:

#### DMX channel 11 = SCENES channel

From 0-10 = no function ( r001)

From 11-255 are displayed the programmable scenes (max 16 scenes from M001 to M0016 )

#### DMX channel 12 = EDIT channel:

-From 0-19 = no function

-From 20-234 the unit runs the configuration given by the received input DMX values.

With the channel SCENES it is possible to pass from one step to the next while with REC it is possible to record the selected scene.

-From 235-255 the unit runs the configuration given by the received input DMX values closing the sequence as last scene.

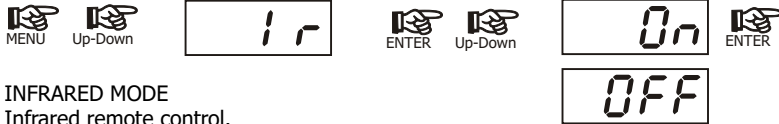
With the channel REC it is possible to record the selected scene as last scene.

#### DMX channel 13 = RECORDING channel

Records the set scene with a variation between 0 to 255 (the display flashes indicating that the scene has been recorded). It is advised that you keep the REC channel set to 0 and to run through the 255 only once you have decided to save the scene. If ChPr is not closed, by indicating the last scene ( Edit channel between 235-255), in playback mode all 16 scenes will be played through even if not programmed

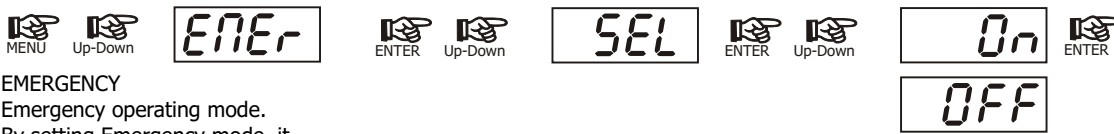


**SLAVE MODE**  
 Slave mode for ChPr program.  
 All slave units will be  
 synchronised with master unit,  
 running their own Chpr program.



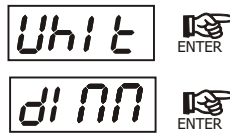
**INFRARED MODE**  
 Infrared remote control.  
 By activating Ir MODE, it will be  
 possible to navigate through the  
 unit functions by using the D.T.S.  
 infrared remote control.  
 D.T.S. Code :0514L008  
 (Not implemented on TITAN  
 SOLO)

**NOTE:**  
 External infrared remote sensor  
 needed.  
 D.T.S. Code :03.LA.016  
 (Not implemented on TITAN  
 SOLO)



**EMERGENCY**  
 Emergency operating mode.  
 By setting Emergency mode, it  
 will be possible to select one of  
 the 16 preprogrammed WHITE  
 cues that will then run if DMX  
 signal is missing or not available.  
 Useful for Emergency EXIT  
 illumination on public areas.

Default = OFF  
  
 Default = White 1  
  
 Default = 255



**DEFAULT**  
 To restore default settings



**TEMPERATURE**  
 Power supply temperature  
 visualisation (°C)



**LIFE TIME**  
 This menu shows the total UNIT life time  
 and the RGBA life time



**TEST MODE**  
 RGB colours test with rainbow



**SOFTWARE**  
 Software version



## HIDDEN MENU

### For technical personnel only

To operate this menu:

-Connect the unit to the main

-While reset is running, press the MENU and ENTER keys at the same time.

**RESN** Reset EEPROM (Reset all settings)  
ATTENTION: by pressing this key you must repeat all previous calibrations

**UPLD** UPLOAD  
This menu allow to upgrade the unit's software by computer

**DLDD** DOWNLOAD  
This menu allow to save unit's programs into computer

**TEMP** TEMPERATURE  
This menu allow to set the maximum operating temperature before LEDs reduction current control will be activated

**CHAN** CHANNELS  
This menu allow to set 3 channels or 4 channels LEDs output mode  
3 LEDs channels output mode = TITAN SOLO FULL COLOUR  
4 LEDs channels output mode = TITAN SOLO RGB / TITAN SOLO WHITE

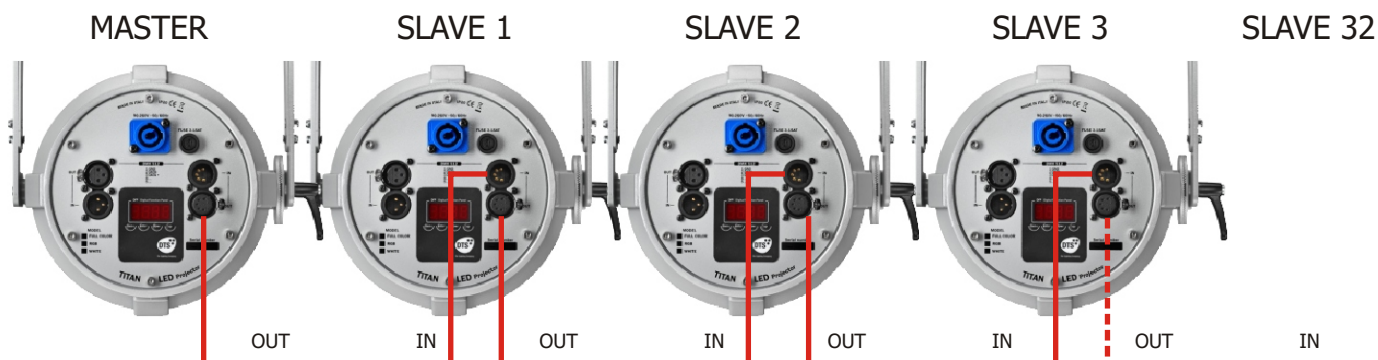
**NPOT** MAXIMUM LEDs OUTPUT POWER  
This menu allow to set the maximum power available on LEDs (1-100 %)

**LOCH** MAXIMUM LEDs OUTPUT POWER  
This menu allow to ativation / deactivation the adjustment lock set.  
Entering the code enabling the menu item LOCH(100) after that you can enable or dasable the adjustment lock

**ESC** EXIT  
Exit from hidden menu.

## **AUTOMATIC OPERATION (AUTO):**

TITAN SOLO can work in automatic mode without a DMX controller. First of all connect the projectors with a DMX cable (picture below). A maximum quantity of 32 slave units can be connected to the same Master unit.



To activate Auto mode on the first unit, use the menu to run through the different modes until AUTO appears on the display, and press enter.

Now it is possible to choose between the different pre-programmed games (CUPr-RAIn-CU01/CU16-Wh01/Wh16) or ChPr which is user programmable through REC mode. To confirm game activation press ENTER on the selected GAME.

### **CUPr-RAIn-CU01/CU16-Wh01/Wh16**

The first unit that will work as a Master should be placed in Automatic mode (AUTO), the other units have to be placed in 9 channels DMX mode (MODE 9CH) for TITAN SOLO FULL COLOUR or in 10 channels DMX mode (MODE 10 CH) for TITAN SOLO RGB / WHITE and the DMX address should be set at A001. For RaIn (rainbow) game it is possible to select the speed for the colour changing (SPEE). DIMMER function (in AUTOMATIC MODE) is active for all the programs. SHUTTER function (in AUTOMATIC MODE) is active only for CU01/CU16 and Wh01/Wh16 macros.

### **ChPr MASTER/SLAVE**

The first unit that will function as a Master must be set to Automatic mode (AUTO), the other units must be set to Slave mode (SLAV), selectable through the menu. In this way all the Slave units will be synchronised with the master and running their own ChPr game.

On the master unit it is possible to vary the Speed time (SPEE) for the colour changing and the Wait time (UAIt) between the steps.

Speed time and Wait time on the Master, have priority on the slave units.

NB: It is possible to run GA.Pr on the Slave units even though these do not have GA.Pr programmed. You can do this by setting the units to 9 ch DMX MODE for TITAN SOLO FULL COLOUR or 10 channels DMX mode for TITAN SOLO RGB / WHITE and selecting DMX address A001.

### **Rec mode**

It is possible to program your own game on the TITAN SOLO that will then run it in AUTO mode (ChPr). Each unit can have its own programmed game.

In REC mode the unit must be set to 9 channels mode for TITAN SOLO FULL COLOUR and 10 channels mode for TITAN SOLO RGB / TITAN SOLO WHITE.

To program the ChPr by using a DMX controller, you need 3 more channels in addition to the 9/10 channels necessary to control the unit.

So that in RECORDER mode (via DMX) the unit will need 12/13 DMX channels to be correctly programmed.

The three new DMX channels are:

### TITAN SOLO FULL COLOUR

DMX channel 10 = SCENES channel

From 0-10 = no function ( r001)

From 11-255 are displayed the programmable scenes (max 16 scenes from M001 to M0016 )

DMX channel 11 = EDIT channel:

-From 0-19 = no function

-From 20-234 the unit runs the configuration given by the received input DMX values.

With the channel SCENES it is possible to pass from one step to the next while with REC it is possible to record the selected scene.

-From 235-255 the unit runs the configuration given by the received input DMX values closing the sequence as last scene.

With the channel REC it is possible to record the selected scene as last scene.

DMX channel 12 = RECORDING channel

Records the set scene with a variation between 0 to 255 (the display flashes indicating that the scene has been recorded).It is advised that you keep the REC channel set to 0 and to run through the 255 only once you have decided to save the scene. If ChPr is not closed, by indicating the last scene ( Edit channel between 235-255), in playback mode all 16 scenes will be played through even if not programmed

### TITAN SOLO RGB / TITAN SOLO WHITE

DMX channel 11 = SCENES channel

From 0-10 = no function ( r001)

From 11-255 are displayed the programmable scenes (max 16 scenes from M001 to M0016 )

DMX channel 12 = EDIT channel:

-From 0-19 = no function

-From 20-234 the unit runs the configuration given by the received input DMX values.

With the channel SCENES it is possible to pass from one step to the next while with REC it is possible to record the selected scene.

-From 235-255 the unit runs the configuration given by the received input DMX values closing the sequence as last scene.

With the channel REC it is possible to record the selected scene as last scene.

DMX channel 13 = RECORDING channel

Records the set scene with a variation between 0 to 255 (the display flashes indicating that the scene has been recorded).It is advised that you keep the REC channel set to 0 and to run through the 255 only once you have decided to save the scene. If ChPr is not closed, by indicating the last scene ( Edit channel between 235-255), in playback mode all 16 scenes will be played through even if not programmed

DMX PROTOCOL

## TITAN SOLO FULL COLOUR

**9 CHANNELS MODE (Default)**

- 1 SHUTTER**
- 2 DIMMER**
- 3 RED**
- 4 GREEN**
- 5 BLUE**
- 6 WHITE (Pre-programmed whites at different color temperatures)**
- 7 CTC**
- 8 COLOURS MACRO**
- 9 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 (3400ms-20ms)</b>
<b>120-149</b>					<b>Pulse open at variable speed from slow to fast (43s-100ms)</b>
<b>150-179</b>					<b>Pulse close at variable speed from slow to fast (43s-100ms)</b>
<b>180-204</b>	<b>192</b>				<b>Random Strobe (Master and RGB 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	<b>4</b>	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	<b>5</b>	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	<b>6</b>	Parameter: <b>WHITE (Pre-programmed White at diff. color temperature)</b>
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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 9 (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 7 CTC enabled 43 color temp. Correction Macros: 2000°K-7200°K)</b>			

**IF CHANNEL 9 (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 7 CTC enabled 43 color temp. Correction Macros: 2000°K-7200°K)</b>			

DMX CHANNEL	<b>7</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

**IF CHANNEL 6 (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 6 (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	8	Parameter: <b>COLOUR MACROS</b>
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IF:  **node**  **MAC**  **Std**  **PLEASE CHECK PAGE 11**

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

DMX CHANNEL	8	Parameter: <b>COLOUR MACROS</b>
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IF:  **node**  **MAC**  **EXT**  **PLEASE CHECK PAGE 11**

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-14					No Function
15-22					Macro 1
23-30					Macro 2
31-38					Macro 3
39-46					Macro 4
47-54					Macro 5
55-62					Macro 6
63-70					Macro 7
71-78					Macro 8
79-86					Macro 9
87-94					Macro 10
95-102					Macro 11
103-110					Macro 12
111-118					Macro 13
119-126					Macro 14
127-134					Macro 15
135-142					Macro 16

DMX CHANNEL	8	Parameter: <b>COLOUR MACROS</b>
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IF:  

**NODE**

**MAC**

**EHL**



**PLEASE CHECK PAGE 11**

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
143-150					<b>Rainbow Speed 1 (1 Sec.)</b>
151-158					<b>Rainbow Speed 2 (5 Sec.)</b>
159-166					<b>Rainbow Speed 3 (10 Sec.)</b>
167-174					<b>Rainbow Speed 4 (20 Sec.)</b>
175-182					<b>Rainbow Speed 5 (30 Sec.)</b>
183-190					<b>Rainbow Speed 6 (60 Sec.)</b>
191-198					<b>Rainbow Speed 7 (120 Sec.)</b>
199-206					<b>Rainbow Speed 8 (180 Sec.)</b>
207-214					<b>Random Speed 1 (0.5 sec.)</b>
215-222					<b>Random Speed 2 (1 Sec.)</b>
223-230					<b>Random Speed 3 (2 Sec.)</b>
231-238					<b>Random Speed 4 (5 Sec.)</b>
239-246					<b>Random Speed 5 (10 Sec.)</b>
247-255					<b>Random Speed 6 (30 Sec.)</b>

DMX CHANNEL	9	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
0-79					<b>Custom White Recall (Enable CH 7 for Custom white Recall)</b>
80-160					<b>Custom White Create (Enable CH 7 for Custom white Creation)</b>
161-255					<b>Custom White Store (Store the Custom White created)</b>

## 6 CHANNELS MODE (For use with DTS Wall mounted DMX controller 0514L007)

- 1 **GREEN**
- 2 **RED**
- 3 **BLUE**
- 4 **DIMMER**
- 5 **NOT USED**
- 6 **SHUTTER**

DMX CHANNEL	<b>1</b>	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	<b>2</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	<b>3</b>	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	<b>4</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>5</b>	Parameter: <b>NOT USED</b>
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
<b>0-255</b>					<b>No Function</b>

DMX CHANNEL	<b>6</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 (3400ms-20ms)</b>			
<b>120-149</b>		<b>Pulse open at variable speed from slow to fast (43s-100ms)</b>			
<b>150-179</b>		<b>Pulse close at variable speed from slow to fast (43s-100ms)</b>			
<b>180-204</b>	<b>192</b>		<b>Random Strobe (Master and RGB 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 PROTOCOL

## TITAN SOLO RGBA

**10 CHANNELS MODE (Default)**

- 1 SHUTTER**
- 2 DIMMER**
- 3 RED**
- 4 GREEN**
- 5 BLUE**
- 6 AMBER**
- 7 WHITE (Pre-programmed whites at different colour temperatures)**
- 8 CTC**
- 9 COLOURS 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 (3400ms-20ms)</b>
<b>120-149</b>					<b>Pulse open at variable speed from slow to fast (43s-100ms)</b>
<b>150-179</b>					<b>Pulse close at variable speed from slow to fast (43s-100ms)</b>
<b>180-204</b>	<b>192</b>				<b>Random Strobe (Master and RGBA 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>AMBER</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 White at diff. color temperature)</b>
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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	8	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	9	Parameter: <b>COLOUR MACROS</b>
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IF:   **node**   **MAC**   **Std**  **PLEASE CHECK PAGE 15**

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	9	Parameter: <b>COLOUR MACROS</b>
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IF:  MENU Up-Down

**node**

 ENTER Up-Down

**MACR**

 ENTER Up-Down

**EHL**

 ENTER

**PLEASE CHECK PAGE 15**

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-14					No Function
15-22					Macro 1
23-30					Macro 2
31-38					Macro 3
39-46					Macro 4
47-54					Macro 5
55-62					Macro 6
63-70					Macro 7
71-78					Macro 8
79-86					Macro 9
87-94					Macro 10
95-102					Macro 11
103-110					Macro 12
111-118					Macro 13
119-126					Macro 14
127-134					Macro 15
135-142					Macro 16
143-150					Rainbow Speed 1 (1 Sec.)
151-158					Rainbow Speed 2 (5 Sec.)
159-166					Rainbow Speed 3 (10 Sec.)
167-174					Rainbow Speed 4 (20 Sec.)
175-182					Rainbow Speed 5 (30 Sec.)
183-190					Rainbow Speed 6 (60 Sec.)
191-198					Rainbow Speed 7 (120 Sec.)
199-206					Rainbow Speed 8 (180 Sec.)
207-214					Random Speed 1 (0.5 sec.)
215-222					Random Speed 2 (1 Sec.)
223-230					Random Speed 3 (2 Sec.)
231-238					Random Speed 4 (5 Sec.)
239-246					Random Speed 5 (10 Sec.)
247-255					Random Speed 6 (30 Sec.)

DMX CHANNEL	10	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
0-79					Custom White Recall (Enable CH 6 for Custom white Recall)
80-160					Custom White Create (Enable CH 6 for Custom white Creation)
161-255					Custom White Store (Store the Custom White created )

DMX PROTOCOL

## TITAN SOLO WHITE

**10 CHANNELS MODE (Default)**

- 1 SHUTTER**
- 2 DIMMER**
- 3 WHITE 1**
- 4 WHITE 2**
- 5 WHITE 3**
- 6 AMBER**
- 7 WHITE (Pre-programmed whites at different colour temperatures)**
- 8 CTC**
- 9 COLOURS 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 (3400ms-20ms)</b>
<b>120-149</b>					<b>Pulse open at variable speed from slow to fast (43s-100ms)</b>
<b>150-179</b>					<b>Pulse close at variable speed from slow to fast (43s-100ms)</b>
<b>180-204</b>	<b>192</b>				<b>Random Strobe (Master and White 1-3 + Amber 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>WHITE 1</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>WHITE 2</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>WHITE 3</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>AMBER</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 White at diff. color temperature)</b>
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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-Amber 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	8	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)**

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

0-255	Smooth RGB linear Hue correction				
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DMX CHANNEL	9	Parameter: <b>COLOUR MACROS</b>
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IF:        **PLEASE CHECK PAGE 15**

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

DMX CHANNEL	9	Parameter: <b>COLOUR MACROS</b>
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IF:   **MODE**

**MODE**

  **MACR**

**MACR**

  **EXT**

**EXT**

**PLEASE CHECK PAGE 15**

DMX range Value	Mid point DMX value	Move range (degrees)		Option	Function
0-14					No Function
15-22					Macro 1
23-30					Macro 2
31-38					Macro 3
39-46					Macro 4
47-54					Macro 5
55-62					Macro 6
63-70					Macro 7
71-78					Macro 8
79-86					Macro 9
87-94					Macro 10
95-102					Macro 11
103-110					Macro 12
111-118					Macro 13
119-126					Macro 14
127-134					Macro 15
135-142					Macro 16
143-150					Rainbow Speed 1 (1 Sec.)
151-158					Rainbow Speed 2 (5 Sec.)
159-166					Rainbow Speed 3 (10 Sec.)
167-174					Rainbow Speed 4 (20 Sec.)
175-182					Rainbow Speed 5 (30 Sec.)
183-190					Rainbow Speed 6 (60 Sec.)
191-198					Rainbow Speed 7 (120 Sec.)
199-206					Rainbow Speed 8 (180 Sec.)
207-214					Random Speed 1 (0.5 sec.)
215-222					Random Speed 2 (1 Sec.)
223-230					Random Speed 3 (2 Sec.)
231-238					Random Speed 4 (5 Sec.)
239-246					Random Speed 5 (10 Sec.)
247-255					Random Speed 6 (30 Sec.)

DMX CHANNEL	10	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
0-79					<b>Custom White Recall (Enable CH 7 for Custom white Recall)</b>
80-160					<b>Custom White Create (Enable CH 7 for Custom white Creation)</b>
161-255					<b>Custom White Store (Store the Custom White created )</b>

**NOTES**

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