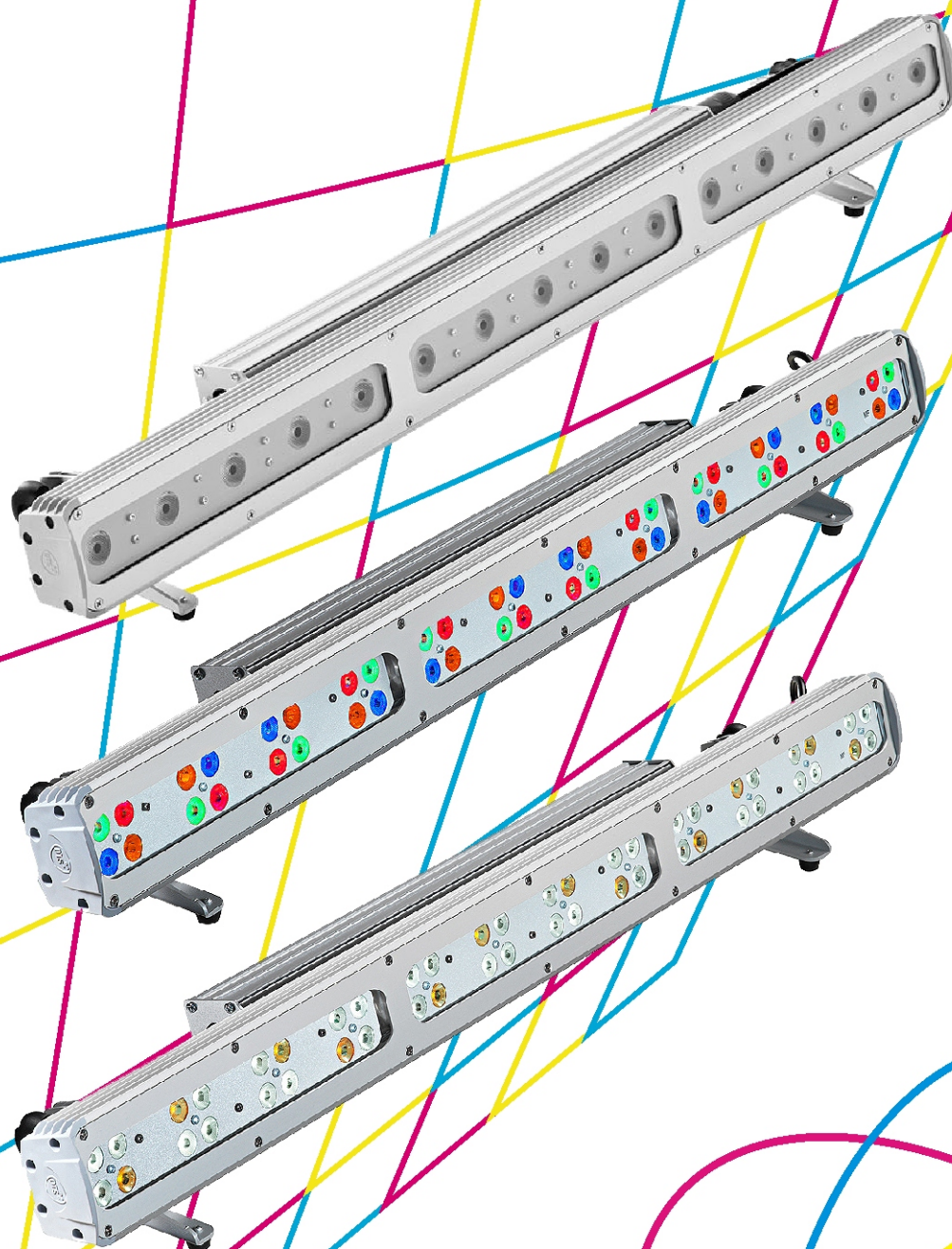


FOS 100



User's Manual Rel 3.2 **GB**

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



The Lighting Company

Made in Italy

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DESCRIPTION

FOS 100 is a new compact self-contained LED bar designed for colouring large surfaces with a uniform projection, either indoor and outdoor.

FOS 100 can be used for many applications, such as: professional, for an ample range of special events; theatre and television, for uniform background colours and cycloramas; architectural, for lighting building facades, public and commercial spaces, monuments, etc.

FOS 100 is made on aluminium and steel offering high resistance to mechanical stress, with an IP65 protection rating.

FOS 100 length is 99 cm.

Various FOS 100 units can be easily connected together: the LEDs distribution pattern guarantees no black spaces between the LEDs of in-line bars, and an even coverage of lighted surfaces.

FOS 100 is available with or without a Z10 integrated power supply.

The Z10 power supply is available either with IP65 or IP20 protection rating.

Three dedicated lenses sets (Spot, Medium flood, Wide flood) are available for each model, offering different light beam projection angles.

FOS 100 SOLO can be controlled via any DMX lighting console.

FOS 100 range comprises various models, which employ different sets of LEDs tailored for distinct applications:

FOS 100+ FULL COLOUR (Full colour LEDs);

FOS 100 RGBA (Red + Green + Blue + Amber LEDs);

FOS 100 WHITE (White + Amber LEDs).

FOS 100+ FULL COLOUR and FOS 100+ SOLO FULL COLOUR

15 x 3W Full Colour LEDs • Integrated power supply (FOS 100+ SOLO FULL COLOUR)

FOS 100 RGBA and FOS 100 SOLO RGBA

48 x 1W RGB+Amber LEDs (12+12+12+12) • Integrated power supply (FOS 100 SOLO RGBA)

FOS 100 WHITE and FOS 100 SOLO WHITE

48 x 1W White+Amber LEDs (36+12) • Integrated power supply (FOS 100 SOLO WHITE)

FOS 100 TRIPLE SOLO

3 x FOS 100 + 3 x Z10 + 1 x TRIPLE BRACKET 100

All FOS 100 SOLO models are available with Z10 power supply IP65 or IP20 rated

All FOS 100 models are also available without integrated power supply

All FOS 100 models are also available with spot / medium flood / wide flood lenses

LED technology

FOS 100+/SOLO FULL COLOUR: 15 x 3W P5 II Full colour LEDs

16 million colours; linear colour temperature 3200°K ÷ 5500°K; 16 selectable types of White.

FOS 100/SOLO RGBA: 48 x 1W P4 LEDs (12 x Red, 12 x Green, 12 x Blue, 12 x Amber) 16 million colours; linear colour temperature 3200°K ÷ 5500°K; 16 selectable types of White.

FOS 100/SOLO WHITE: 48 x 1W P4 LEDs (36 x White, 12 x Amber); Linear colour temperature 3200°K ÷ 5500°K; 16 selectable types of White.

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

IP65 or IP20 (FOS 100 SOLO / FOS 100+ SOLO) protection level against the penetration of solids and liquids

Construction

FOS is made on aluminium and steel

Power supply

Integrated power supply (FOS 100 SOLO / FOS 100+ SOLO) / LED controller (Z10 IP65 or Z10 IP20);

External dedicated (FOS 100) Z1, Z4 or Z8 power supplies / LED controllers

Connection

M12 connection system between Power supply and LED bar (All versions).

Powerconn + XLR connectors (FOS 100 SOLO IP20 / FOS 100+ SOLO IP20);

Harting connectors (FOS 100 SOLO IP65 / FOS 100+ SOLO IP65)

MAIN ELECTRICAL CHARACTERISTICS (FOS 100 SOLO / FOS 100+ SOLO)

Input Voltage Range : Vin 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 (RGBA) 1,5 - 25W per channel

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

Output Voltage : Vout 70V

Control Input:

Control Signal : DMX 512

Dimming System : Constant Current PWM

Address Range : DMX 512 channels addressable by display

ACCESSORIES

- Lenses set Spot available for each model
- Lenses set Medium flood available for each model
- Lenses set Wide flood available for each model
- 10XAWG26 multipolar black outdoor cable (Cod. 0509C061)
- M12 female (8 pole) cable connector (Cod. 0520P050)
- M12 male (8 pole) cable connector (Cod. 0520P051)
- Z10 Outdoor (IP65) power supply / LED controller (grey) (Cod. 03.LA.020.IP65.26)
- Z10 Indoor (IP20) power supply / LED controller (grey) (Cod. 03.LA.020.26)
- Z1 power supply / LED controller (Cod. 03.LA.009)
- Z4 RACK power supply / LED controller (Cod. 03.LA.014)
- Z8 RACK power supply / LED controller (Cod. 03.LA.075)
- Z1 OUTDOOR power supply / LED controller (Cod. 03.LA.009.IP65)

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 FOS 100 SOLO unit.

Use only AC supplies 90-260V, 50-60Hz FOS 100 SOLO IP20 model should never be located in position exposed to rain or in areas of extreme humidity.

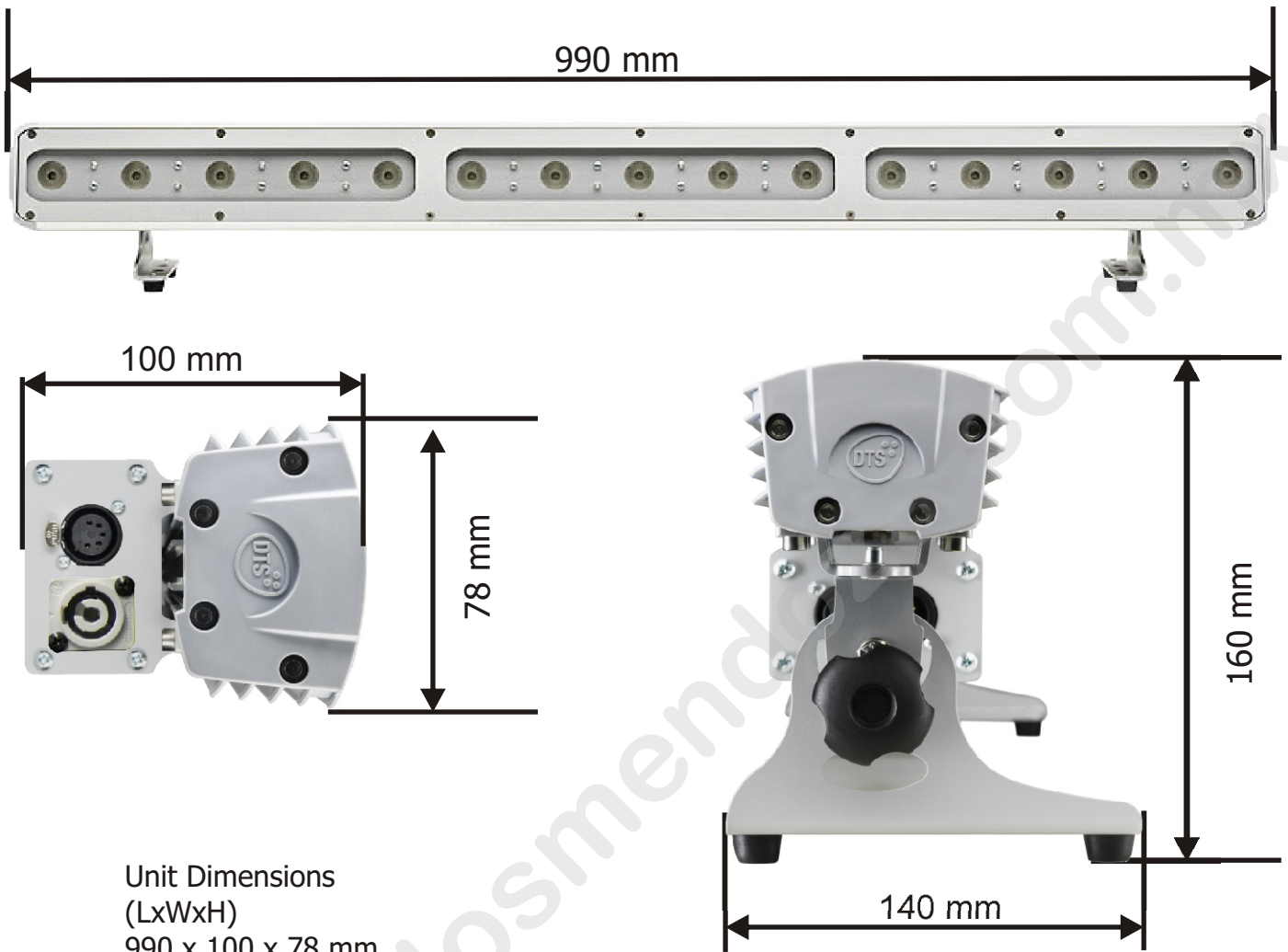
A good air ventilation is essential for proper equipment work.

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

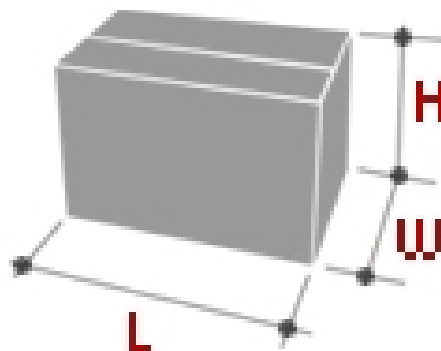
UNIT DIMENSIONS:FOS 100 SOLO/ FOS 100+ SOLO

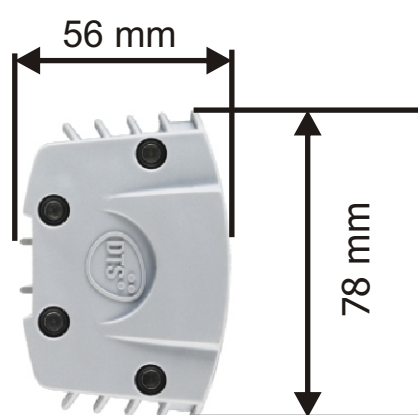
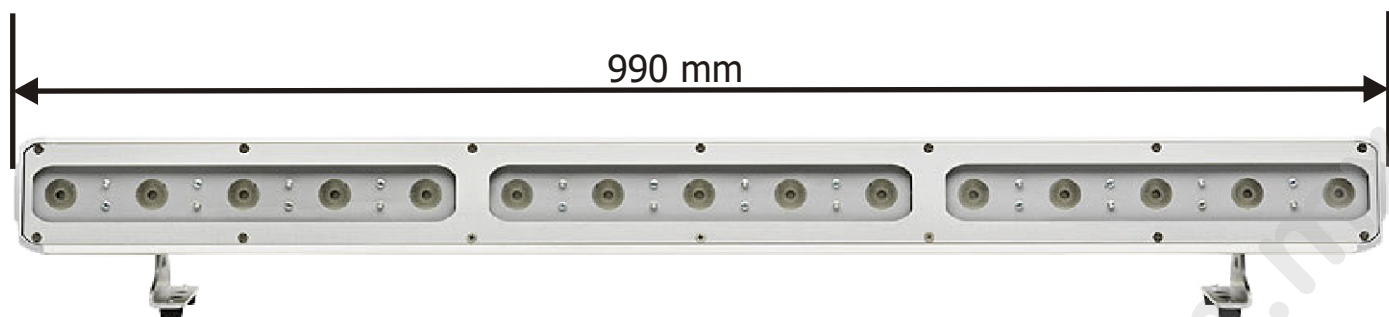
Unit Dimensions
(LxWxH)
990 x 100 x 78 mm

Weight
7 Kg

Packing Dimensions
(LxWxH)
1060 x 160 x 200 mm

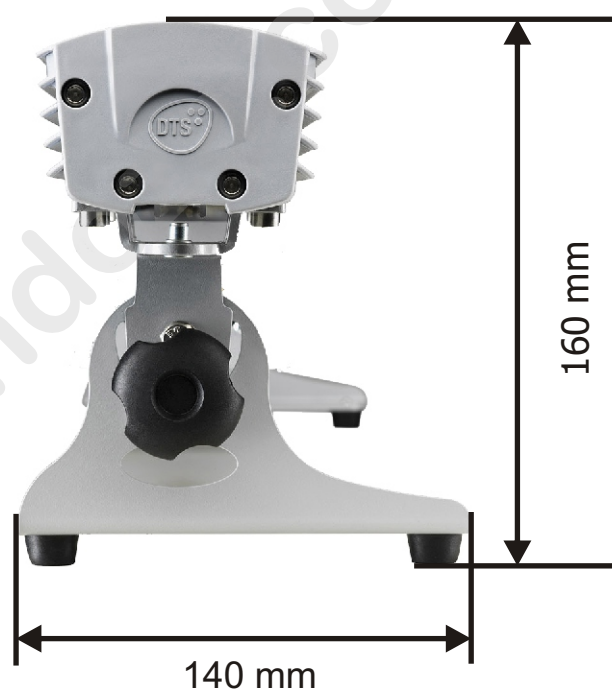
Weight
8,5 Kg



UNIT DIMENSIONS:FOS 100 / FOS 100+

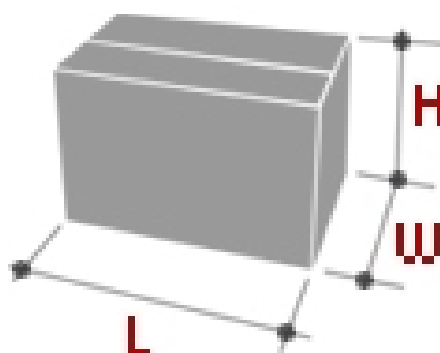
Unit Dimensions
(LxWxH)
990 x 56 x 78 mm

Weight
5,5 Kg



Packing Dimensions
(LxWxH)
1060 x 160 x 200 mm

Weight
7 Kg



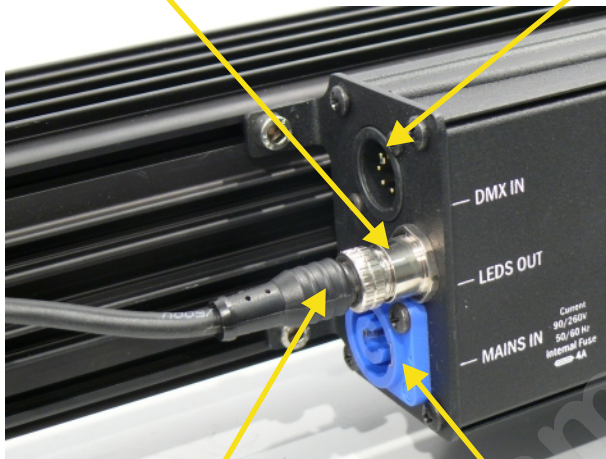
INPUT/OUTPUT CONNECTIONS

FOS 100 SOLO IP20 / FOS 100+ SOLO IP20



M12 LED output
Female panel connector

DMX IN/OUT
XLR 5 pins Male / Female
Panel Connectors

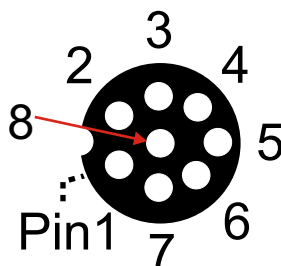
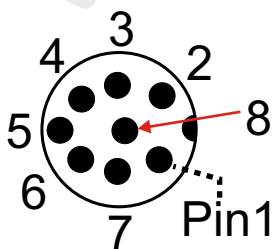


Mains 90-260 V AC
50-60 Hz input Powercon
Female panel connector

Mains 90-260 V AC
50-60 Hz output Powercon
Female panel connector
MAX load:
230 V AC = 20 FOS 100 SOLO
100 V AC = 10 FOS 100 SOLO

M12 LED input
Male cable connector

M12 LED output
Female panel connector



LEDS CONNECTOR PINOUT

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

INPUT/OUTPUT CONNECTIONS

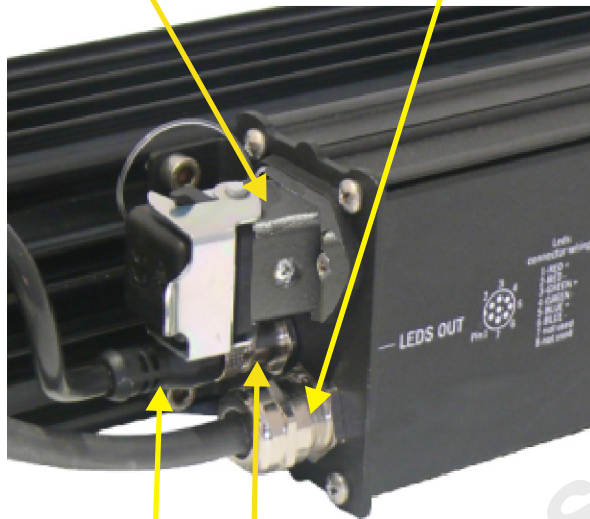
FOS 100 SOLO IP65 / FOS 100+ SOLO IP65



Mains 90-260 V Ac
50-60 Hz input cable

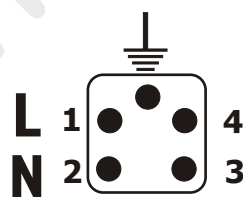
Mains 90-260 V Ac
50-60 Hz output ILME 5 pins
Female panel connector
MAX load:
230 V Ac = 20 FOS 100 SOLO
100 V Ac = 10 FOS 100 SOLO

DMX IN/OUT
ILME 4 pins Female
Panel Connectors

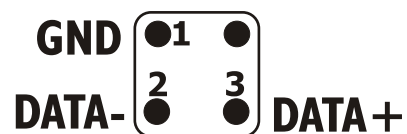


DMX IN/OUT
ILME 4 pins Female
Panel Connectors

MAINS OUTPUT
FEMALE PANEL
CONNECTOR

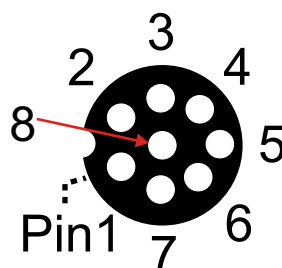
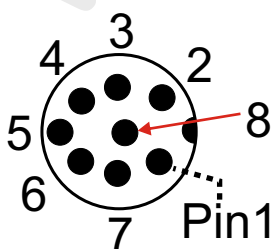


DMX IN-OUT
FEMALE PANEL
CONNECTOR



M12 LED input
Male cable connector

M12 LED output
Female panel connector



LEDS
CONNECTOR PINOUT

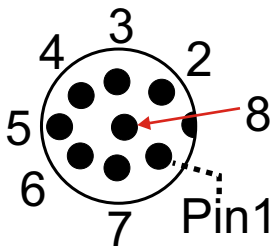
- 1-RED + (FC / RGBA / WHITE)
- 2-RED - (FC / RGBA / WHITE)
- 3-GREEN + (FC / RGBA / WHITE)
- 4-GREEN - (FC / RGBA / WHITE)
- 5-BLUE + (FC / RGBA / WHITE)
- 6-BLUE - (FC / RGBA / WHITE)
- 7-AMBER -** (RGBA / WHITE)
- 8-AMBER +** (RGBA / WHITE)

INPUT/OUTPUT CONNECTIONS

FOS 100 / FOS 100+



**M12 LED input
Male cable connector**



LEDS CONNECTOR PINOUT

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

For application where IP65 rating is not necessary, FOS 100 / 100+ cabling connection can be done with a standard UTP TIA/EIA 568-B2 category 5E cable.

The maximum distance between power supply and the unit should not exceed 100 meters.

For IP65 rating application, D.T.S. recommends the use of a IP65/68 cable as the 10XAWG26 multipolar black outdoor cable (IP68) (D.T.S. Code: 0509C061).

The maximum distance between power supply and the unit should not exceed 100 meters.

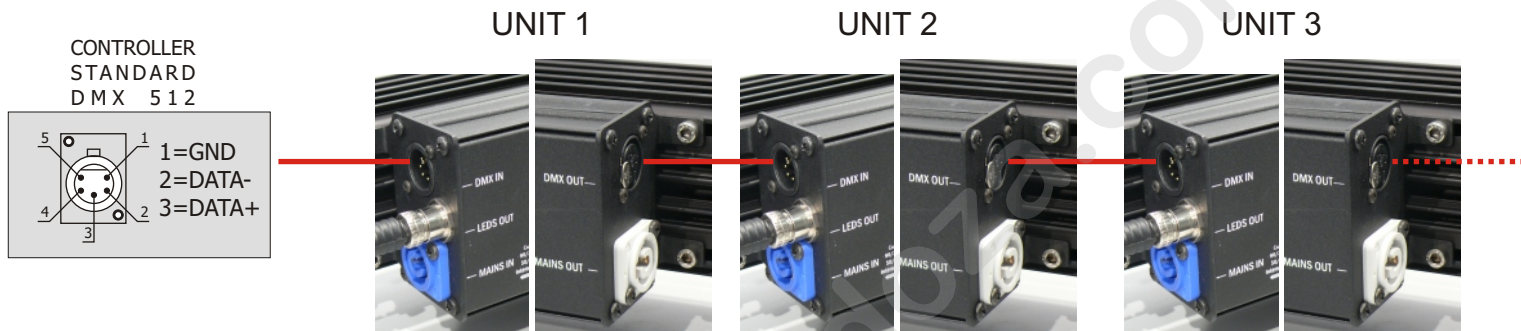
DMX SIGNAL CONNECTION:

FOS 100 SOLO IP20 / FOS 100+ 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.



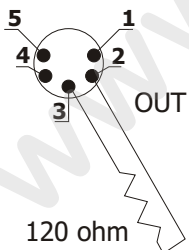
P.S:

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

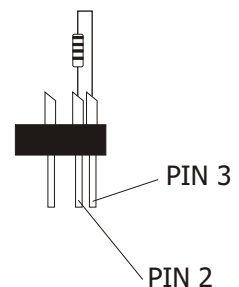
- DMX signal not present
- DMX reception problem

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



The standard configuration of the FOS 100 SOLO FULL COLOUR is with XLR 5 pins connectors.

DMX SIGNAL CONNECTION:

FOS 100 SOLO IP65 FOS 100+ 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.



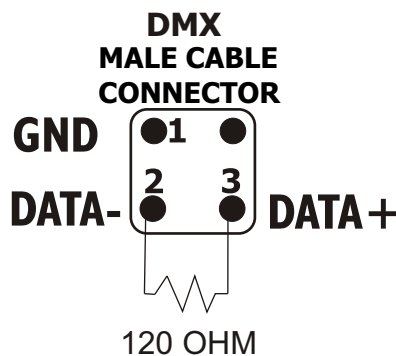
P.S:

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

- DMX signal not present
- DMX reception problem

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

The DMX terminator is a male DMX cable connector with a 120 ohm resistor Between pin 2 and 3. The DMX terminator must be plugged into the DMX out panel connector of the last unit connected to the DMX line.



PLACE A 120 OHM RESISTOR BETWEEN PIN 2 AND 3 OF A MALE DMX CONNECTOR AND PLUG IT INTO THE DMX OUT PANEL CONNECTOR OF THE LAST UNIT CONNECTED TO THE DMX LINE

DMX ADDRESS

FOS 100+ SOLO FULL COLOR can be used in three different modes: 6 DMX channels, 9 DMX channels (default) or CUSTOM DMX channels.

FOS 100 SOLO RGBA and FOS 100 SOLO WHITE can be used in two different modes: 10 DMX channels (default) or CUSTOM DMX channels.

If you want to use the FOS 100+ 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 select the next projector, just add "8"

DTS Wall mounted DMX controller 0514L007 assign 8 DMX channels per unit also if some channels are not used

If you want to use the FOS 100+ 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
Projector 3 A019
..... A....
projector 6 A046

If you want to select the next projector, just add "9"

If you want to use the FOS 100+ 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 FOS 100 SOLO RGBA / 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
Projector 3 A021
..... A....
projector 6 A051

If you want to select the next projector, just add "10"

If you want to use the FOS 100 SOLO RGBA / 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

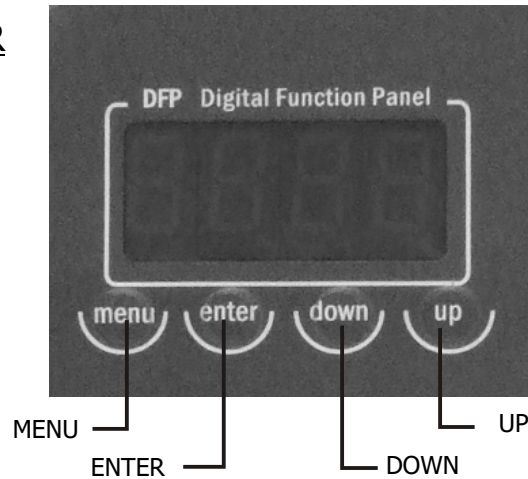
Selecting the DMX address

- 1) Press the UP-DOWN key until you reach the required DMX address. The numbers on the display will start to flash (but the new DMX address hasn't yet been set).
- 2) Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now controlled by the new DMX address.

TIPS: if you keep pushed the UP or DOWN keys, the channels are calculated more quickly and you get a faster selection.

DISPLAY FUNCTIONS

FOS 100+ SOLO FULL COLOUR



DISPLAY FUNCTIONS

The FOS 100+ 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 3.70

 MENU  Up-Down	 ENTER  Up-Down	 ENTER  Up-Down	 ENTER
ADD 1	DISP	POS 1	AA
REVERSE DISPLAY Reverses display's reading depending on the mounting position (On the ground or suspended).			Floor position
	 Up-Down	 ENTER  Up-Down	 ENTER
			yy
DISPLAY STAND BY To turn off the display (after 5 seconds) Or leave it always on.			Display OFF
			 ENTER
			off
			Display always ON
			 ENTER
			on
 MENU  Up-Down	 ENTER  Up-Down	 ENTER  Up-Down	 ENTER
node		9CH	9 CHANNELS
DMX MODE To select DMX mode : 9 ch (default) - 5 ch - RGB (3ch) - 1 ch - AUX - CUSTOM - Wall(6 ch)	 Up-Down	 ENTER  Up-Down	 ENTER
	 Up-Down	 ENTER  Up-Down	 ENTER
	 Up-Down	 ENTER  Up-Down	 ENTER
AUX mode let you activate an external ON -OFF control on IR connector.	 Up-Down	 ENTER  Up-Down	 ENTER
CUSTOM DMX mode let you set the parameters for Shutter, Dimmer, Red, Green, Blue, Ctc, Macro and Function to the desired DMX channels.	 Up-Down	 ENTER  Up-Down	 ENTER
	 Up-Down	 ENTER  Up-Down	 ENTER
	 Up-Down	 ENTER  Up-Down	 ENTER
	 Up-Down	 ENTER  Up-Down	 ENTER
	 Up-Down	 ENTER  Up-Down	 ENTER
	 Up-Down	 ENTER  Up-Down	 ENTER
	 Up-Down	 ENTER  Up-Down	 ENTER
			Wall
			1CH
			1 CHANNEL
			RGB (3 CHANNELS)
			5CH
			5 CHANNELS
			CUST
			AUX MODE
			Default DMX Mode = 9 CH
			SEL
			Custom mode enabled
			Shou
			Show Custom settings
			Set
			Setting the parameters on Custom Mode
			External ON - OFF control on IR connector
			Std
			Custom mode enabled
			Ext
			Show Custom settings



b5t



0n

Boost mode activated



Whit BOOST active, the LED's current is set 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



MrFc



0n

Mr16 mode activated



Mr16 limit ON

Mr16 FULL COLOR

Programmed RGB value for Mr16 full color led lamp



OFF

MR16 mode deactivated



Mr16 limit OFF (Default)



LED



rEd



01n

Default = 0

**LED**

RGB Min/Max, Smooth and Compression level values settings

nAh

Default = 255

**RGB MINIMUM VALUES**

This menu allow to select the minimum levels for Red, Green and blue

Up-Down



GrEE



01n

Default = 0



nAh

Default = 255

**RGB MAXIMUM VALUES**

This menu allow to select the maximum levels for Red, Green and blue

Up-Down



bLUE



01n

Default = 0



nAh

Default = 255



These settings have priority on Master Dimmer (DMX channel 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)

Up-Down



5nAh



4

Range = Off-20
Default = 4

Off = 25 ms

Instant response to DMX variation

20 = 250 ms

Smooth response to DMX variation

COMPRESSION

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



CONP



LI nE

Linear = Linear current output



QUAD

Quadratic = Linear light output

**SYNC**

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



54nc



610

Range = 610 Hz -10 KHz
Default = 610 Hz

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



SURE



SLU



ESC

SLAVE MODE

Slave mode for ChPr program.

All slave units will be synchronised with master unit, running their own Chpr program.



Ir



On



OFF

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

NOTE:

External infrared remote sensor needed.

D.T.S. Code :03.LA.016



EMER



SEL



On



OFF

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

White



di nn



DFSE



SURE



ENTER

DEFAULT

To restore default settings



Life



Up-Down



red



LIFE TIME

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

GREEN

BLUE

Unit



TEST



TEST MODE

RGB colours test with rainbow



SOFT



r370

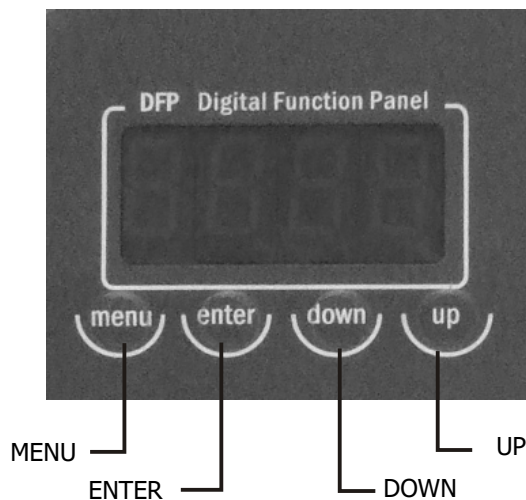
SOFTWARE

Software version

DISPLAY FUNCTIONS

FOS 100 SOLO RGBA

FOS 100 SOLO WHITE



DISPLAY FUNCTIONS

The FOS 100 SOLO RGBA / WHITE 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.

Z10 RGBA (4 leds channels output) Software version 3.70

 MENU  Up-Down	 ENTER  Up-Down	 ENTER  Up-Down	 ENTER
ADD 1	DISP	POS 1	AA Floor position
REVERSE DISPLAY Reverses display's reading depending on the mounting position (On the ground or suspended).	 Up-Down	 ENTER  Up-Down	 ENTER
	Stby	off	Suspension position
DISPLAY STAND BY To turn off the display (after 5 seconds) Or leave it always on.		on	Display OFF
			Display always ON
 MENU  Up-Down	 ENTER  Up-Down	10CH 10 CHANNELS	 ENTER Default DMX Mode = 10 CH
DMX MODE To select DMX mode : 10 ch (default) - 6 ch - RGBA - 1 ch - AUX - CUSTOM - Wall (ch)	 Up-Down	6CH 6 CHANNELS	 ENTER
	 Up-Down	1CH 1 CHANNEL	 ENTER
AUX mode let you activate an external ON -OFF control on IR connector.	 Up-Down	RGBA (4 CHANNELS)	 ENTER
CUSTOM DMX mode let you set the parameters for Shutter, Dimmer, Red, Green, Blue, Amber, Ctc, Macro and Function to the desired DMX channels.	 Up-Down	6CH 6 CHANNELS	 ENTER
	 Up-Down	CUST	 ENTER  Up-Down
	 Up-Down	AUX AUX MODE	 ENTER External ON - OFF control on IR connector
	 Up-Down	MAC	 ENTER  Up-Down
		SEL	 ENTER Custom mode enabled
		Shou	 ENTER Show Custom settings
		Set	 ENTER Setting the parameters on Custom Mode
		Std	 ENTER Custom mode enabled
		Ext	 ENTER Show Custom settings



b5t



On

Boost mode activated



Whit BOOST active, the LED's current is set 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



MrFc



On

Mr16 mode activated



Mr16 limit ON

Mr16 FULL COLOR
Programmed RGB value for Mr16 full color led lamp



OFF

MR16 mode deactivated



Mr16 limit OFF (Default)



LED



red



Min

Default = 0



LED
RGBA Min/Max, Smooth and Compression level values settings



GrEE



MAX

Default = 255



RGBA MINIMUM VALUES
This menu allow to select the minimum levels for Red, Green, Blue and Amber



BLUE



Min

Default = 0



RGBA MAXIMUM VALUES
This menu allow to select the maximum levels for Red, Green, Blue and Amber



AMbr



Min

Default = 255



Default = 0



Default = 255



Default = 0



Default = 255



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

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



SntH



4

Range = Off - 20
Default = 4



Off = 25 ms
Instant response to DMX variation

20 = 250 ms
Smooth response to DMX variation

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



CONP



Line

Linear = Linear current output



QUAD

Quadratic = Linear light output



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



54nc



610

Range = 610 Hz -10 KHz
Default = 610 Hz



  AUTO  SUFE   AUTOMATIC MODE Automatic demo game without DMX controller	 ChPr  SPEED  00 10   wait 00 10
ChPr Chase with 16 steps previously created in REC MODE Speed and Wait time selectable by user CUPr RGB values selectable by user	 CUPr  red  120   GrEE 255  BLUE 104  ANbr 0
Rainbow (rAIn) Rainbow colours effect. Speed time selectable by user CU01-CU16 Color Macros as on DMX channel 8 (Macro)	 rAIn  SPEED  00 10   CU01     CU02  CU16
WHITE MACROS 16 macros for White color from 2000 to 7200 ° K	 UH01    UH02 UH03 UH04 UH05 UH..... UH16
DIMMER Dimmer level selectable by user as on DMX channel 2 (Dimmer) <u>Dimmer level is active for all the programs and macros</u>	  di nn   255   SHUT  255 
SHUTTER Shutter level selectable by user as on DMX channel 1 (Shutter) <u>Shutter level is active only for CU01/CU16 and Wh01/Wh16 macros</u>	ESC
ESC Esc from Automatic Mode Menu	



REC



10CH



r001

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

n001

n002

n0....

n0 16

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



SLAU



SUR-E



SLU



ESC

SLAVE MODE

Slave mode for ChPr program.

All slave units will be synchronised with master unit, running their own Chpr program.



Ir



On



OFF

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

NOTE:

External infrared remote sensor needed.

D.T.S. Code :03.LA.016



ENER



SEL



On



OFF

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.

Usefull for Emergency EXIT illumination on public areas.

WHITE



di nn



Default = OFF

Default = White 1

Default = 255



dfse

sure

DEFAULT

To restore default settings



time

red

LIFE TIME

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

GrEE

bLUE

ANbr

Unit



test

TEST MODE

RGBA colours test with rainbow



soft

r370

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.

reset

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

duld

DOWNLOAD

This menu allow to save unit's programs into computer

chan

CHANNELS

This menu allow to set 3 channels or 4 channels LEDs output mode

3 LEDs channels output mode = Z1 RGB

4 LEDs channels output mode = Z1 RGBA

npot

MAXIMUM LEDs OUTPUT POWER

This menu allow to set the maximum power available on LEDs (1-100 %)

esc

EXIT

Exit from hidden menu.

AUTOMATIC OPERATION (AUTO):

FOS 100 SOLO / FOS 100+ 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 FOS 100+ SOLO FULL COLOUR or in 10 channels DMX mode (MODE 10 CH) for FOS 100 SOLO RGBA / 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 (UAIIt) 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 other units even though these do not have GA.Pr programmed.

You can do this by setting the units to 9 ch DMX MODE for FOS 100+ SOLO FULL COLOUR or 10 channels DMX mode for FOS 100 SOLO RGBA / WHITE and selecting DMX address A001.

Rec mode

It is possible to program your own game on the FOS 100 SOLO / FOS 100+ 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 FOS 100+ SOLO FULL COLOUR and 10 channels mode for FOS 100 SOLO RGBA / FOS 100 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:

FOS 100+ 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

FOS 100 SOLO RGBA / FOS 100 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

FOS 100+ 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	1	Parameter: SHUTTER
-------------	----------	---------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-9	5				Black-out
10-19	14				Open
20-29	24				Black-out
30-119					Strobe at variable speed from slow to fast (3400ms-20ms)
120-149					Pulse open at variable speed from slow to fast (43s-100ms)
150-179					Pulse close at variable speed from slow to fast (43s-100ms)
180-204	192				Random Strobe (Master and RGB active)
205-229	218				Random Strobe (Full)
230-255	240				Open

DMX CHANNEL	2	Parameter: DIMMER
-------------	----------	--------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional dimmer

DMX CHANNEL	3	Parameter: RED
-------------	----------	-----------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	4	Parameter: GREEN
-------------	----------	-------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	5	Parameter: BLUE
-------------	----------	------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	6	Parameter: WHITE (Pre-programmed White at diff. color temperature)
-------------	----------	---

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-55	23				No Function
56-105	80				Full (Red-Green-Blue at Full)
106-155	130				White DTS

IF CHANNEL 9 (FUNCTIONS) = CUSTOM WHITE RECALL (Dmx range value 0 - 79)

156-205	180	Custom White Recall			
206-255	225	White CTC (Channel 7 CTC enabled 43 color temp. Correction Macros: 2000°K-7200°K)			

IF CHANNEL 9 (FUNCTIONS) = CUSTOM WHITE CREATE (Dmx range value 80 - 160)

156-205	180	Custom White Create (RGB levels selectable by DMX)			
206-255	225	White CTC (Channel 7 CTC enabled 43 color temp. Correction Macros: 2000°K-7200°K)			

DMX CHANNEL	7	Parameter: CTC (Color temperature correction)
-------------	----------	--

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
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IF CHANNEL 6 (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 6 (White) = NO FUNCTION (Dmx range value 0 - 43)

0-255	Smooth RGB linear Hue correction				
--------------	---	--	--	--	--

DMX CHANNEL	8	Parameter: COLOUR MACROS
-------------	---	---------------------------------

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: FUNCTIONS (Recall,Create and Store the Custom white)
-------------	---	--

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)

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	1	Parameter: GREEN
-------------	----------	-------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	2	Parameter: RED
-------------	----------	-----------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	3	Parameter: BLUE
-------------	----------	------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	4	Parameter: DIMMER
-------------	----------	--------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional dimmer

DMX CHANNEL	5	Parameter: NOT USED
-------------	----------	----------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					No Function

DMX CHANNEL	6	Parameter: SHUTTER
-------------	----------	---------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-9	5				Black-out
10-19	14				Open
20-29	24				Black-out
30-119		Strobe at variable speed from slow to fast (3400ms-20ms)			
120-149		Pulse open at variable speed from slow to fast (43s-100ms)			
150-179		Pulse close at variable speed from slow to fast (43s-100ms)			
180-204	192		Random Strobe (Master and RGB active)		
205-229	218		Random Strobe (Full)		
230-255	240		Open		

DMX PROTOCOL

FOS 100 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	1	Parameter: SHUTTER
-------------	----------	---------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-9	5				Black-out
10-19	14				Open
20-29	24				Black-out
30-119					Strobe at variable speed from slow to fast (3400ms-20ms)
120-149					Pulse open at variable speed from slow to fast (43s-100ms)
150-179					Pulse close at variable speed from slow to fast (43s-100ms)
180-204	192				Random Strobe (Master and RGBA active)
205-229	218				Random Strobe (Full)
230-255	240				Open

DMX CHANNEL	2	Parameter: DIMMER
-------------	----------	--------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional dimmer

DMX CHANNEL	3	Parameter: RED
-------------	----------	-----------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	4	Parameter: GREEN
-------------	----------	-------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	5	Parameter: BLUE
-------------	----------	------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	6	Parameter: AMBER
-------------	----------	-------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	7	Parameter: WHITE (Pre-programmed White at diff. color temperature)
-------------	----------	---

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-55	23				No Function
56-105	80				Full (Red-Green-Blue at Full)
106-155	130				White DTS

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

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

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

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

DMX CHANNEL	8	Parameter: CTC (Color temperature correction)
-------------	----------	--

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
-----------------	---------------------	----------------------	------	--------	----------

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				
--------------	---	--	--	--	--

IF CHANNEL 7 (White) = NO FUNCTION (Dmx range value 0 - 43)

0-255	Smooth RGB linear Hue correction				
--------------	---	--	--	--	--

DMX CHANNEL	9	Parameter: COLOUR MACROS
-------------	----------	---------------------------------

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	10	Parameter: FUNCTIONS (Recall, Create and Store the Custom white)
-------------	-----------	---

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-79		Custom White Recall (Enable CH 7 for Custom white Recall)			
80-160		Custom White Create (Enable CH 7 for Custom white Creation)			
161-255		Custom White Store (Store the Custom White created)			

DMX PROTOCOL

FOS 100 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	1	Parameter: SHUTTER
-------------	----------	---------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-9	5				Black-out
10-19	14				Open
20-29	24				Black-out
30-119					Strobe at variable speed from slow to fast (3400ms-20ms)
120-149					Pulse open at variable speed from slow to fast (43s-100ms)
150-179					Pulse close at variable speed from slow to fast (43s-100ms)
180-204	192				Random Strobe (Master and White 1-3 + Amber active)
205-229	218				Random Strobe (Full)
230-255	240				Open

DMX CHANNEL	2	Parameter: DIMMER
-------------	----------	--------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional dimmer

DMX CHANNEL	3	Parameter: WHITE 1
-------------	----------	---------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	4	Parameter: WHITE 2
-------------	----------	---------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	5	Parameter: WHITE 3
-------------	----------	---------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	6	Parameter: AMBER
-------------	----------	-------------------------

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional colour

DMX CHANNEL	7	Parameter: WHITE (Pre-programmed White at diff. color temperature)
-------------	----------	---

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-55	23				No Function
56-105	80				Full (White 1-3 + Amber at Full)
106-155	130				White DTS

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

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

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

156-205	180	Custom White Create (White 1-3 + Amber levels selectable by DMX)
206-255	225	White CTC (Channel 8 CTC enabled 43 color temp. Correction Macros: 2000°K-7200°K)

DMX CHANNEL	8	Parameter: CTC (Color temperature correction)
-------------	----------	--

DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
-----------------	---------------------	----------------------	------	--------	----------

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 White linear colour temperature correction				
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DMX CHANNEL	9	Parameter: COLOUR MACROS
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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

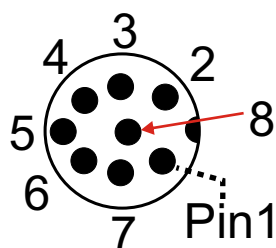
DMX CHANNEL	10	Parameter: FUNCTIONS (Recall, Create and Store the Custom white)
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-79		Custom White Recall (Enable CH 7 for Custom white Recall)			
80-160		Custom White Create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

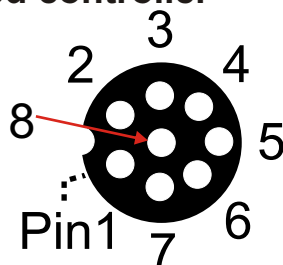
WIRING DIAGRAM

FOS 100+ FULL COLOUR / FOS 100 RGBA / FOS 100 WHITE are provided with an M12 male connector (30cm cable length).

M12 LED input
Male cable connector
on board:
FOS 100 all models



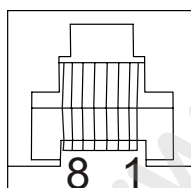
M12 LED output
Female panel connector
on board :
Z10 / Z1 outdoor
led controller



LEDS CONNECTOR PINOUT

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

Rj45 LED output
Female panel connector
on board :
Z4 / Z1 led controller



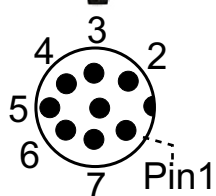
8-pin Female (RJ45)

LEDS CONNECTOR PINOUT

- Pin 1 = RED +
- Pin 2 = RED -
- Pin 3 = GREEN +
- Pin 4 = GREEN -
- Pin 5 = BLUE +
- Pin 6 = BLUE -
- Pin 7 = AMBER +
- Pin 8 = AMBER -

WIRING CONNECTIONS

FOS 100+ FULL COLOUR

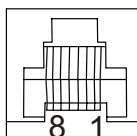


PIN CONNECTOR
MALE / MASCHIO
ON BOARD:
FOS 100 FULL COLOUR

Pin 1 = RED +
Pin 2 = RED -
Pin 3 = GREEN +
Pin 4 = GREEN -
Pin 5 = BLUE +
Pin 6 = BLUE -
Pin 7 = NOT USED
Pin 8 = NOT USED

LEDS CONNECTOR PINOUT

Pin 1 = RED +
Pin 2 = RED -
Pin 3 = GREEN +
Pin 4 = GREEN -
Pin 5 = BLUE +
Pin 6 = BLUE -
Pin 7 = AMBER +
Pin 8 = AMBER -



8-pin Female (RJ45)



Z1 DMX-512 LED driver
Code 03.LA.009

IMPORTANT:

The maximum number of FOS 100 FULL COLOUR connectable to the Z1 Power supply is 1 pcs.

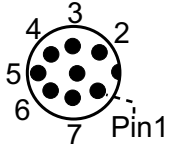
NEVER CONNECT NOR DISCONNECT A FOS 100 / FOS 100+ UNIT WHEN THE POWER SUPPLY IS TURNED ON.

WIRING CONNECTIONS

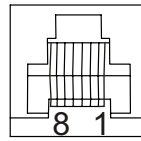
FOS 100 RGBA



PIN CONNECTOR
MALE / MASCHIO
ON BOARD:
FOS 100

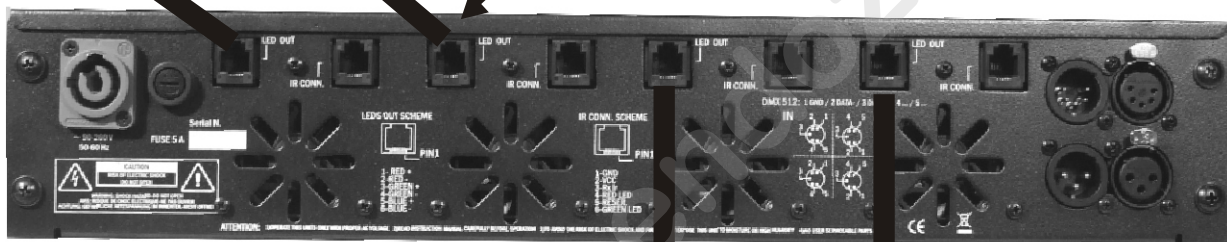


FOS 100+ FULL COLOUR



8-pin Female (RJ45)

Z4 DMX-512 LED driver
Code 03.LA.014



FOS 100 WHITE + AMBER



FOS 100+ FULL COLOUR

LEDS CONNECTOR PINOUT

- Pin 1 = RED +
- Pin 2 = RED -
- Pin 3 = GREEN +
- Pin 4 = GREEN -
- Pin 5 = BLUE +
- Pin 6 = BLUE -
- Pin 7 = AMBER +
- Pin 8 = AMBER -

IMPORTANT:

The maximum number of FOS units connectable to the Z4 Power supply is 1 pcs each LED output (4 pcs totally).

NEVER CONNECT NOR DISCONNECT A FOS 100 / FOS 100+ UNIT WHEN THE POWER SUPPLY IS TURNED ON.

FOS 100+ FULL COLOUR / FOS 100+ SOLO FULL COLOUR codes

03.LB001.26.FP10	FOS 100+ IP65 FULLCOL.SPOT SILVER
03.LB001.26.FP25	FOS 100+ IP65 FULLCOL.MEDIUM SILVER
03.LB001.26.FP40	FOS 100+ IP65 FULLCOL.WIDE SILVER
03.LB001.FP10	FOS 100+ IP65 FULLCOL.SPOT V.BLACK
03.LB001.FP25	FOS 100+ IP65 FULLCOL.MEDIUM BLACK
03.LB001.FP40	FOS 100+ IP65 FULLCOL.WIDE BLACK
03.LB001S.26.FP10	FOS 100+ SOLO IP65 FULLCOL.SPOT SILVER
03.LB001S.26.FP25	FOS 100+ SOLO IP65 FULLCOL.MEDIUM SILVER
03.LB001S.26.FP40	FOS 100+ SOLO IP65 FULLCOL.WIDE SILVER
03.LB001S.FP10	FOS 100+ SOLO IP65 FULLCOL.SPOT BLACK
03.LB001S.FP25	FOS 100+ SOLO IP65 FULLCOL.MEDIUM BLACK
03.LB001S.FP40	FOS 100+ SOLO IP65 FULLCOL.WIDE BLACK
03.LB004S.26.FP10	FOS 100+ SOLO IP20 FULLCOL.SPOT SILVER
03.LB004S.26.FP25	FOS 100+ SOLO IP20 FULLCOL.MEDIUM SILVER
03.LB004S.26.FP40	FOS 100+ SOLO IP20 FULLCOL.WIDE SILVER
03.LB004S.FP10	FOS 100+ SOLO IP20 FULLCOL.SPOT BLACK
03.LB004S.FP25	FOS 100+ SOLO IP20 FULLCOL.MEDIUM BLACK
03.LB004S.FP40	FOS 100+ SOLO IP20 FULLCOL.WIDE BLACK
03.LB005S.26.FP	FOS 100+ TRIPLE SOLO FULLC.IP20 SILVER
03.LB005S.FP	FOS 100+ TRIPLE SOLO FULLC.IP20 BLACK
03.LB007S.26.FP	FOS 100+ TRIPLE SOLO FULLC.IP65 SILVER
03.LB007S.FP	FOS 100+ TRIPLE SOLO FULLC.IP65 BLACK

FOS 100 RGBA / FOS 100 SOLO RGBA codes

03.LB001.26.T10	FOS 100 IP65 RGBA SPOT SILVER
03.LB001.26.T25	FOS 100 IP65 RGBA MEDIUM SILVER
03.LB001.26.T40	FOS 100 IP65 RGBA WIDE SILVER
03.LB001.T10	FOS 100 IP65 RGBA SPOT BLACK
03.LB001.T25	FOS 100 IP65 RGBA MEDIUM BLACK
03.LB001.T40	FOS 100 IP65 RGBA WIDE BLACK
03.LB001S.26.T10	FOS 100 SOLO IP65 RGBA SPOT SILVER
03.LB001S.26.T25	FOS 100 SOLO IP65 RGBA MEDIUM SILVER
03.LB001S.26.T40	FOS 100 SOLO IP65 RGBA WIDE SILVER
03.LB001S.T10	FOS 100 SOLO IP65 RGBA SPOT BLACK
03.LB001S.T25	FOS 100 SOLO IP65 RGBA MEDIUM BLACK
03.LB001S.T40	FOS 100 SOLO IP65 RGBA WIDE BLACK
03.LB004S.26.T10	FOS 100 SOLO IP20 RGBA SPOT SILVER
03.LB004S.26.T25	FOS 100 SOLO IP20 RGBA MEDIUM SILVER
03.LB004S.26.T40	FOS 100 SOLO IP20 RGBA WIDE SILVER
03.LB004S.T10	FOS 100 SOLO IP20 RGBA SPOT BLACK
03.LB004S.T25	FOS 100 SOLO IP20 RGBA MEDIUM BLACK
03.LB004S.T40	FOS 100 SOLO IP20 RGBA WIDE BLACK
03.LB005S.26.T	FOS 100 TRIPLE SOLO RGBA IP20 SILVER
03.LB005S.T	FOS 100 TRIPLE SOLO RGBA IP20 BLACK
03.LB007S.26.T	FOS 100 TRIPLE SOLO RGBA IP65 SILVER
03.LB007S.T	FOS 100 TRIPLE SOLO RGBA IP65 BLACK

FOS 100 WHITE / FOS 100 SOLO WHITE codes

03.LB001.26.W10	FOS 100 IP65 WHI+AMB SPOT SILVER
03.LB001.26.W25	FOS 100 IP65 WHI+AMB MEDIUM SILVER
03.LB001.26.W40	FOS 100 IP65 WHI+AMB WIDE SILVER
03.LB001.W10	FOS 100 IP65 WHI+AMB SPOT BLACK
03.LB001.W25	FOS 100 IP65 WHI+AMB MEDIUM BLACK
03.LB001.W40	FOS 100 IP65 WHI+AMB WIDE BLACK
03.LB001S.26.W10	FOS 100 SOLO IP65 WHI+AMB SPOT SILVER
03.LB001S.26.W25	FOS 100 SOLO IP65 WHI+AMB MEDIUM SILVER
03.LB001S.26.W40	FOS 100 SOLO IP65 WHI+AMB WIDE SILVER
03.LB001S.W10	FOS 100 SOLO IP65 WHI+AMB SPOT BLACK
03.LB001S.W25	FOS 100 SOLO IP65 WHI+AMB MEDIUM BLACK
03.LB001S.W40	FOS 100 SOLO IP65 WHI+AMB WIDE BLACK
03.LB004S.26.W10	FOS 100 SOLO IP20 WHI+AMB SPOT SILVER
03.LB004S.26.W25	FOS 100 SOLO IP20 WHI+AMB MEDIUM SILVER
03.LB004S.26.W40	FOS 100 SOLO IP20 WHI+AMB WIDE SILVER
03.LB004S.W10	FOS 100 SOLO IP20 WHI+AMB SPOT BLACK
03.LB004S.W25	FOS 100 SOLO IP20 WHI+AMB MEDIUM BLACK
03.LB004S.W40	FOS 100 SOLO IP20 WHI+AMB WIDE BLACK
03.LB005S.26.W	FOS 100 TRIPLE SOLO WHI+AMB IP20 SILVER
03.LB005S.W	FOS 100 TRIPLE SOLO WHI+AMB IP20 BLACK
03.LB007S.26.W	FOS 100 TRIPLE SOLO WHI+AMB IP65 SILVER
03.LB007S.W	FOS 100 TRIPLE SOLO WHI+AMB IP65 BLACK

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The Lighting Company

ISO 9001:2000

D.T.S. quality system
is certified to the
ISO 9001:2000 standard



D.T.S. products are designed
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