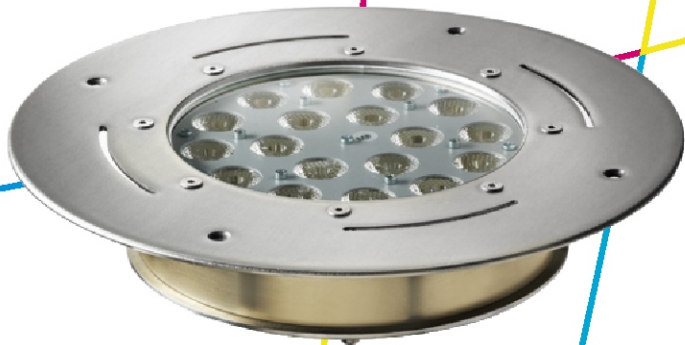
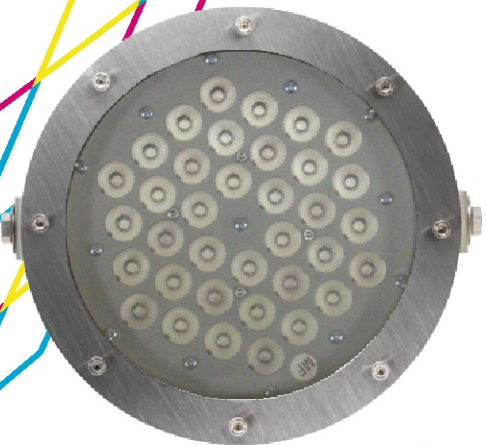


DIVE 36 SOLO

DIVE R 36 SOLO RGB



DIVE 36 SOLO RGB



User's Manual Rel 1.4 **GB**

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



The Lighting Company

Made in Italy

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DESCRIPTION

DIVE 36 SOLO is a new LED projector series designed for immersion in fountains, swimming pools or in sea water. DIVE 36 SOLO is made on BRONZE and stainless steel, offering an IP68 protection rating, and can be used either indoor or outdoor.

DIVE R 36 SOLO RGB is a LED projector designed for recessed installation, featuring a reinforced structure offering high resistance to mechanical stress.

An optional dedicated IP68 outercasing is available.

The DIVE R 36SOLO RGB is equipped with 36 x P4 LEDs (12 x Red, 12 x Green, 12 x Blue).

The DIVE R 36 SOLO RGB is a self-contained LED projector, and it is ready to receive a DMX control signal to work properly. It just needs a 12Vdc external power supply.

DIVE 36 SOLO RGB is a LED projector designed for fixed installation on walls or trusses (fitted with a fixing bracket), featuring a reinforced structure offering high resistance to mechanical stress.

The DIVE 36 SOLO RGB is equipped with 36 x P4 LEDs (12 x Red, 12 x Green, 12 x Blue).

The DIVE 36 SOLO RGB is a self-contained LED projector, and it is ready to receive a DMX control signal to work properly. It just needs a 12Vdc external power supply.

The DMX address settings and the choice of any internal function for both models can be done by the DIVE 36 SOLO remote control DLC900 (D.T.S. Code 03.LA.063)

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. DIVE 36 SOLO can be controlled via any DMX lighting console.

DIVE 36 SOLO RGB and DIVE R 36 SOLO RGB:

36 x P4 LEDs (12 x Red, 12 x Green, 12 x Blue); 16 million colours; linear colour temperature 3200°K ÷ 5500°K. The LEDs distribution pattern guarantees high mixing quality for RGB colours and a uniform projection on surfaces, no matter what colour is used.

DIVE R 36 SOLO RGB

03.LP001.T10	DIVE R 36 RGB SPOT LENSES
03.LP001.T25	DIVE R 36 RGB MEDIUM FLOOD LENSES
03.LP001.T40	DIVE R 36 RGB WIDE FLOOD LENSES

DIVE 36 SOLO RGB

03.LP009.T10	DIVE 36 RGB SPOT LENSES
03.LP009.T25	DIVE 36 RGB MEDIUM FLOOD LENSES
03.LP009.T40	DIVE 36 RGB WIDE FLOOD LENSES

LED technology

DIVE R 36 SOLO RGB: 36 x P4 LEDs (12 x Red, 12 x Green, 12 x Blue).

DIVE 36 SOLO RGB: 36 x P4 LEDs (12 x Red, 12 x Green, 12 x Blue).

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

IP68 protection level against the penetration of solids and liquids

Construction

DIVE 36 SOLO is made on BRONZE and stainless steel

Power supply

External power supply 12V DC (50W min. power)

Connection

4 x 1 sq mm multipolar black outdoor cable 5 meters length for 12V DC IN and DMX IN.

(Brown = 12V DC IN +, Black = 12V DC Ground and DMX Ground,

Yellow/Green = DMX IN data +, Grey = DMX IN data -).

ACCESSORIES

Lenses set Spot (DIVE 36 SOLO RGB / DIVE 36 R SOLO RGB) (Cod. 03.LK.043)

Lenses set Medium flood (DIVE 36 SOLO RGB / DIVE 36 R SOLO RGB) (Cod. 03.LK.044)

Lenses set Wide flood (DIVE 36 SOLO RGB / DIVE 36 R SOLO RGB) (Cod. 03.LK.045)

4 x 1 sq mm multipolar black outdoor cable H07RN-F (Cod. 0509C066)

DIVE 36 SOLO remote control DLC900 (Code 03.LA.063)

MAIN ELECTRICAL CHARACTERISTICS:

Input Voltage Range : V_{in} 12V DC

Power Consumption : 50 W

Output:

Power Output Range : 3 channels output 15W per channel

Output Current : 450 mA @ 100% per channel

Control Input:

Control Signal : DMX 512

Dimming System : Constant Current PWM

Address Range : DMX 512 channels addressable by DIVE 36 remote control DLC900

IMPORTANT SAFETY INFORMATION

Fire prevention:

Never locate the fixture on any flammable surface.
Minimum distance from flammable materials: 10 cm

Prevention from electric shock:

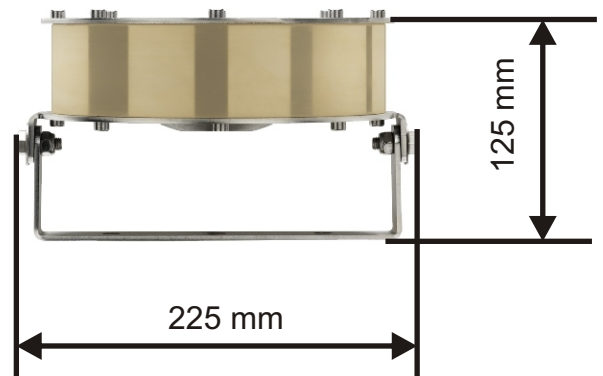
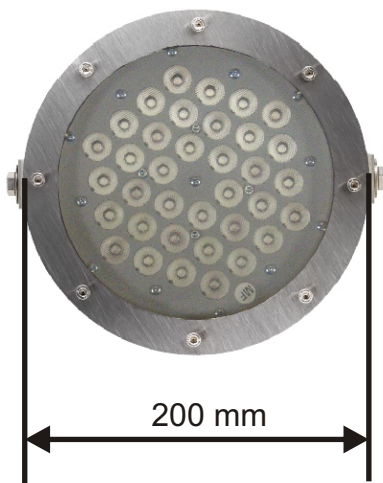
The use of a thermal magnetic circuit breaker is recommended for each external 12V DC Power supply connected to the DIVE 36 SOLO unit.

Safety:

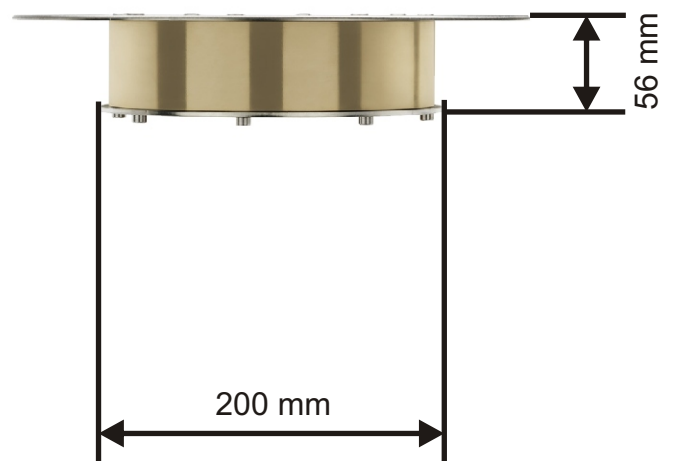
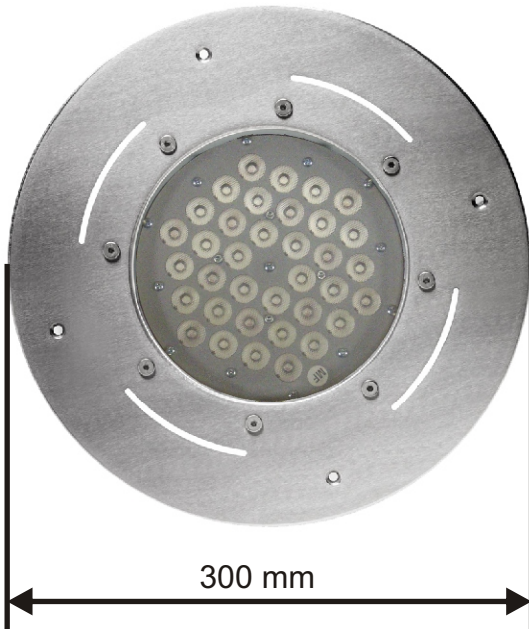
The external surface of the unit may exceed 50°C; never handle the unit until at least 5 minutes have elapsed since the unit was turned off.
The ambient temperature should not exceed 40°C and should not be lower than -10°C

UNIT DIMENSIONS:

DIVE 36 SOLO RGB

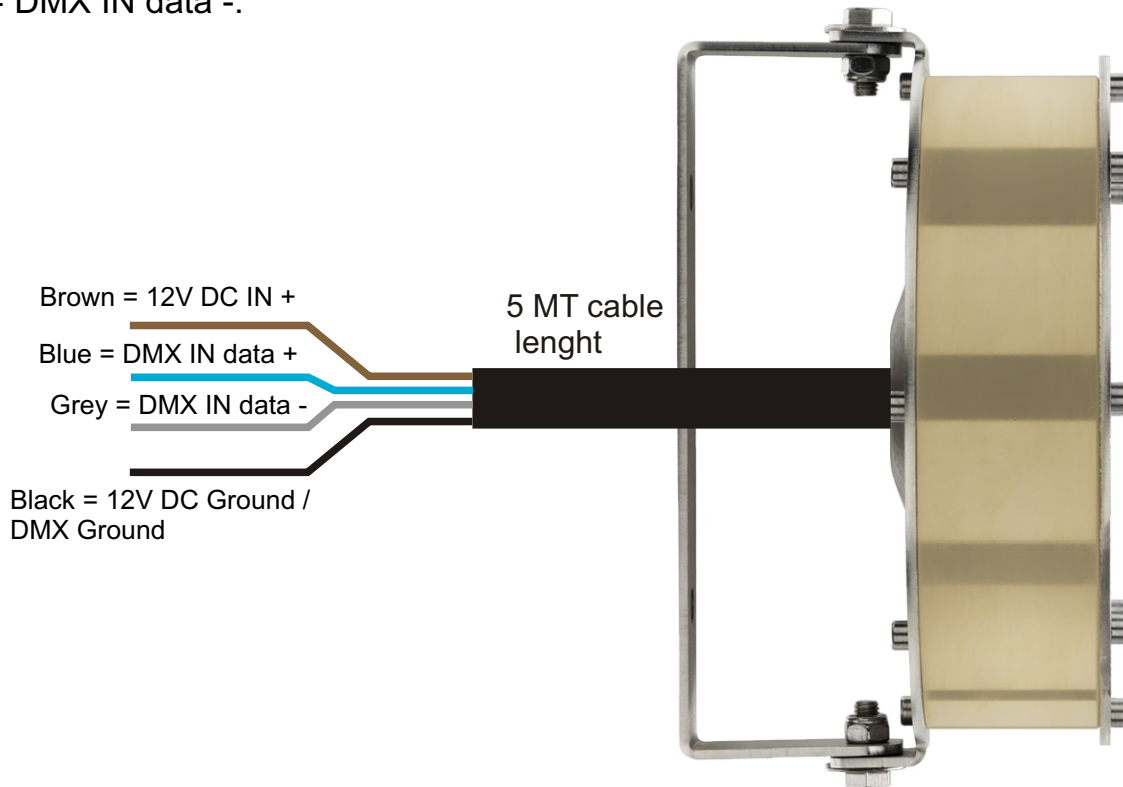


DIVE R 36 SOLO RGB

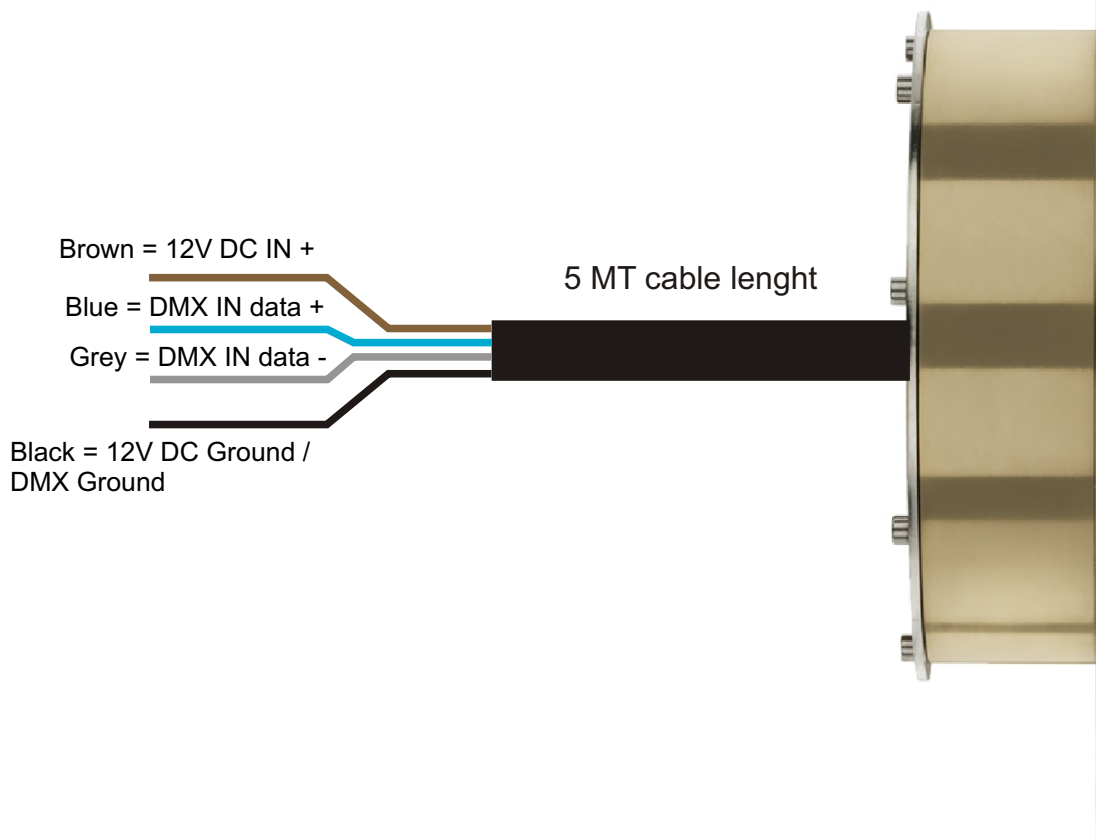


INPUT CONNECTIONS

4 x 1 sq mm multipolar black outdoor cable 5 meters length for 12V DC IN and DMX IN.
 Brown = 12V DC IN +, Black = 12V DC Ground and DMX Ground, Blue = DMX IN data +,
 Grey = DMX IN data -.

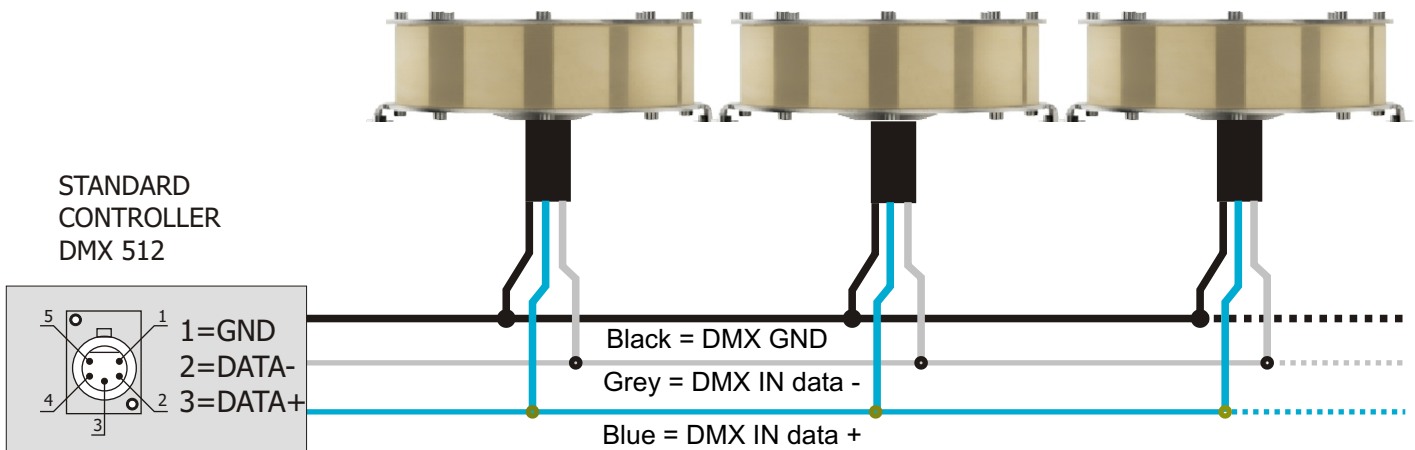


Brown = 12V DC IN +
 Black = 12V DC Ground and DMX Ground
 Blue = DMX IN data +
 Grey = DMX IN data -



DMX SIGNAL CONNECTION

DIVE 36 SOLO operates using the digital DMX 512 (1990) signal. Connection between the mixer and the projector or between projectors must be carried out using a two pair screened \varnothing 0.5 mm cable. Ensure that the conductors do not touch each other. Connect the mixer signal to the DMX IN projector cables and connect it to the next projector by connecting the DMX IN projector cables of the second one. This way, all the projectors are cascade connected.

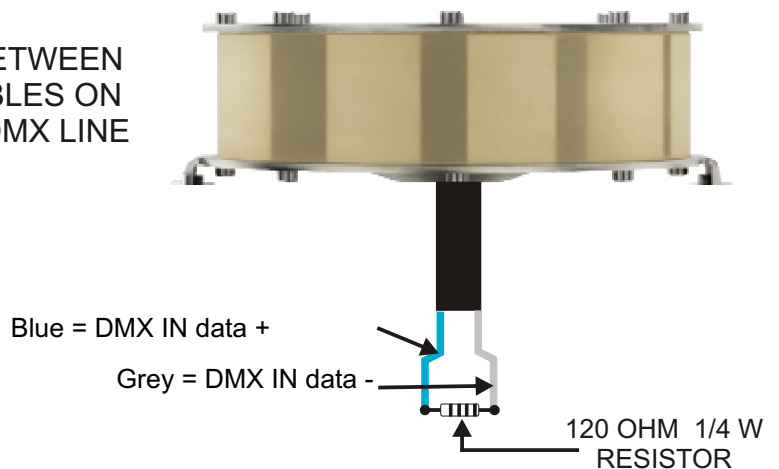


For installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

The DMX terminator is a 120 ohm 1/4 W resistor placed between DMX signal + and DMX signal - cables.

The DMX terminator must be applied on the last unit of the DMX line.

PLACE A 120 OHM 1/4 W RESISTOR BETWEEN DMX SIGNAL + AND DMX SIGNAL - CABLES ON THE LAST UNIT CONNECTED TO THE DMX LINE



By using the DIVE 36 SOLO remote control DLC900 (D.T.S. Code 03.LA.063) it will be possible to set the DMX address and visualize different datas on DIVE 36 SOLO projectors.

Please note that no DMX splitters must be connected between DIVE 36 SOLO REMOTE CONTROL and DIVE 36 SOLO LEDs projectors on the DMX line because this will stop the bidirectional communication between REMOTE CONTROL and DIVE 36 SOLO units.

DMX ADDRESS

DIVE 36 SOLO operates at 4 DMX channels MODE.

DMX channel 1 = RED, DMX channel 2 = GREEN, DMX channel 3 = BLUE,
DMX channel 4 = STROBE.

If you want to control different DIVE 36 SOLO units (on the same DMX line) separately, set the following addresses on the mixer:

Projector 1 A001
Projector 2 A005
Projector 3 A009
Projector 4 A013
Projector 5 A017
..... A....
projector 7 A025

Selecting the DMX address

By using the DIVE 36 SOLO remote control DLC900 (D.T.S. Code 03.LA.063) it will be possible to set the DMX address and visualize different datas on DIVE 36 SOLO projectors.

(Please note that no DMX splitters must be connected between DIVE 36 SOLO REMOTE CONTROL and DIVE 36 SOLO LEDs projectors on the DMX line because this will stop the bidirectional communication between REMOTE CONTROL and DIVE 36 SOLO units)

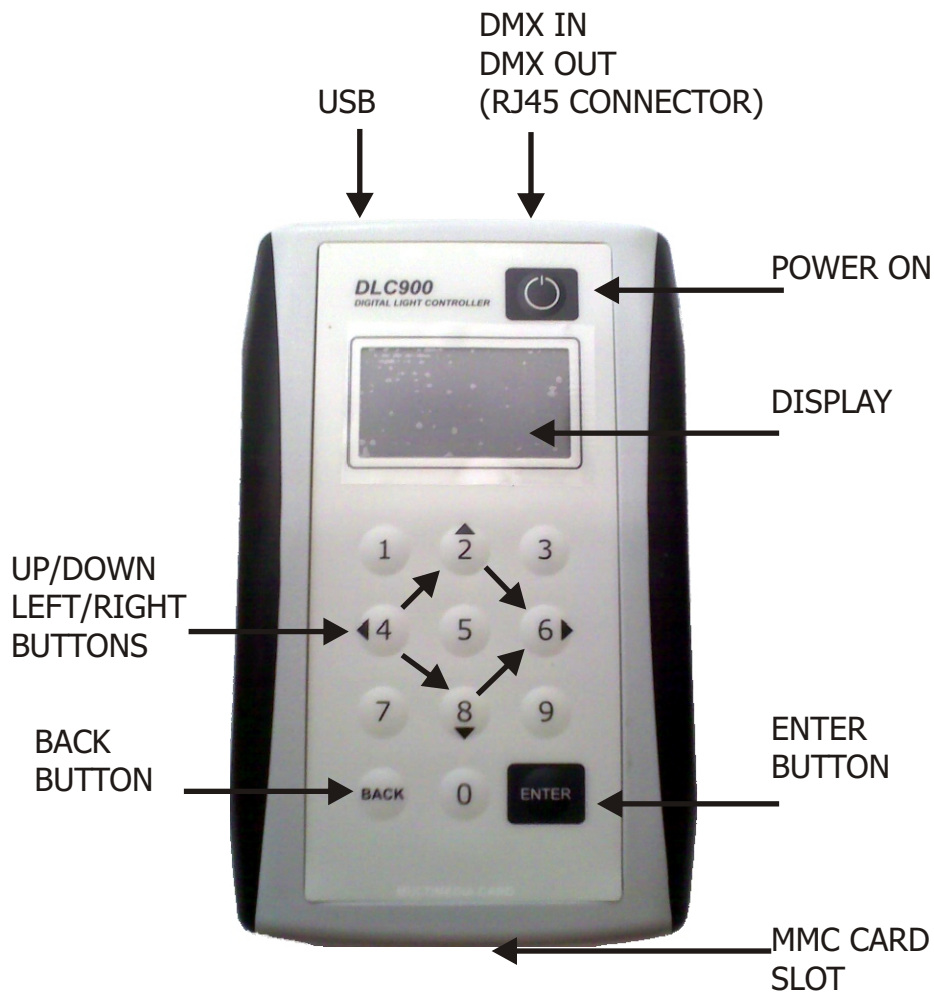
DIVE 36 SOLO remote control DLC900 DMX setting procedure for DIVE 36 SOLO units:

- 1- Connect the DIVE 36 SOLO remote control DLC900 to the DMX line
- 2- Be shure that all the DIVE36 SOLO units are turned ON
- 3- Turn ON the DIVE 36 SOLO remote control DLC900
- 4- Select "DeviceList" menu and press ENTER
- 5- On DIVE 36 SOLO remote control DLC900 are shown the connected DIVE 36 SOLO units (the one selected will be turned ON while all the others will remain OFF).
- 6- With UP and DOWN buttons select "Address" menu and press ENTER.
- 7- Now it will be possible to assign the desired DMX address to the selected DIVE 36 SOLO unit (by using UP, DOWN, ENTER, BACK buttons).
- 8-Repeat Steps 4 - 7 for all DIVE 36 SOLO units connected on the DMX line.

(Please refer to the dedicated DIVE 36 SOLO remote contro DLC900 User's manual for Setting details)

DIVE 36 SOLO REMOTE CONTROL DLC900

DIVE 36 SOLO remote control DLC900 (D.T.S. Code 03.LA.063)



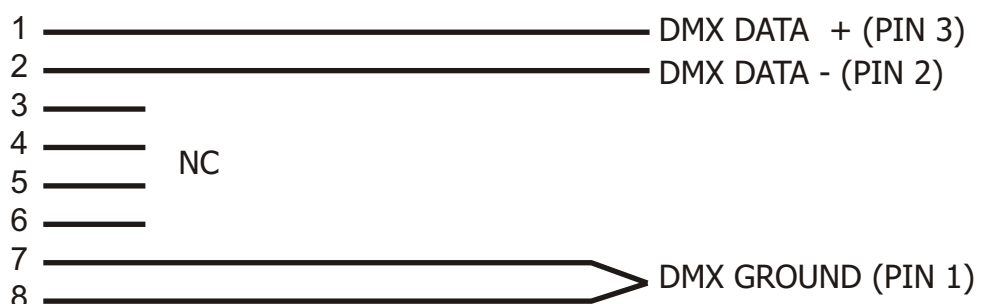
DMX IN / OUT (RJ45 CONNECTOR) PINOUT

1 = DMX DATA +
 2 = DMX DATA -
 3/4/5/6 = NC
 7/8 = DMX GROUND

RJ45 MALE / DMX 5 POLES FEMALE CABLE CONNECTOR PINOUT (INCLUDED IN THE BOX)

RJ45 MALE

DMX 5 POLES FEMALE



DMX PROTOCOL

DIVE 36 SOLO

4 CHANNELS MODE

- 1 RED**
- 2 GREEN**
- 3 BLUE**
- 4 STROBE**

DMX CHANNEL	1	Parameter: RED
-------------	----------	-----------------------

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

DMX CHANNEL	2	Parameter: GREEN
-------------	----------	-------------------------

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

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

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

DMX CHANNEL	4	Parameter: SHUTTER
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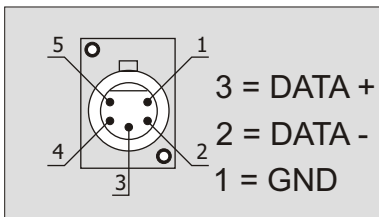
DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-9					No function
10-255					Strobe effect from slow to fast

EXTERNAL POWER SUPPLY AND DMX CONNECTION DIAGRAMS

D.T.S. CODE 0514L059
 POWER SUPPLY 320W 12V DC
 (MOD SP-320-12)
 MAX LOAD = 6 X DIVE 36 SOLO

D.T.S. CODE 0514L069
 POWER SUPPLY 150W 12V DC
 (MOD SP-150-12)
 MAX LOAD = 3 X DIVE 36 SOLO

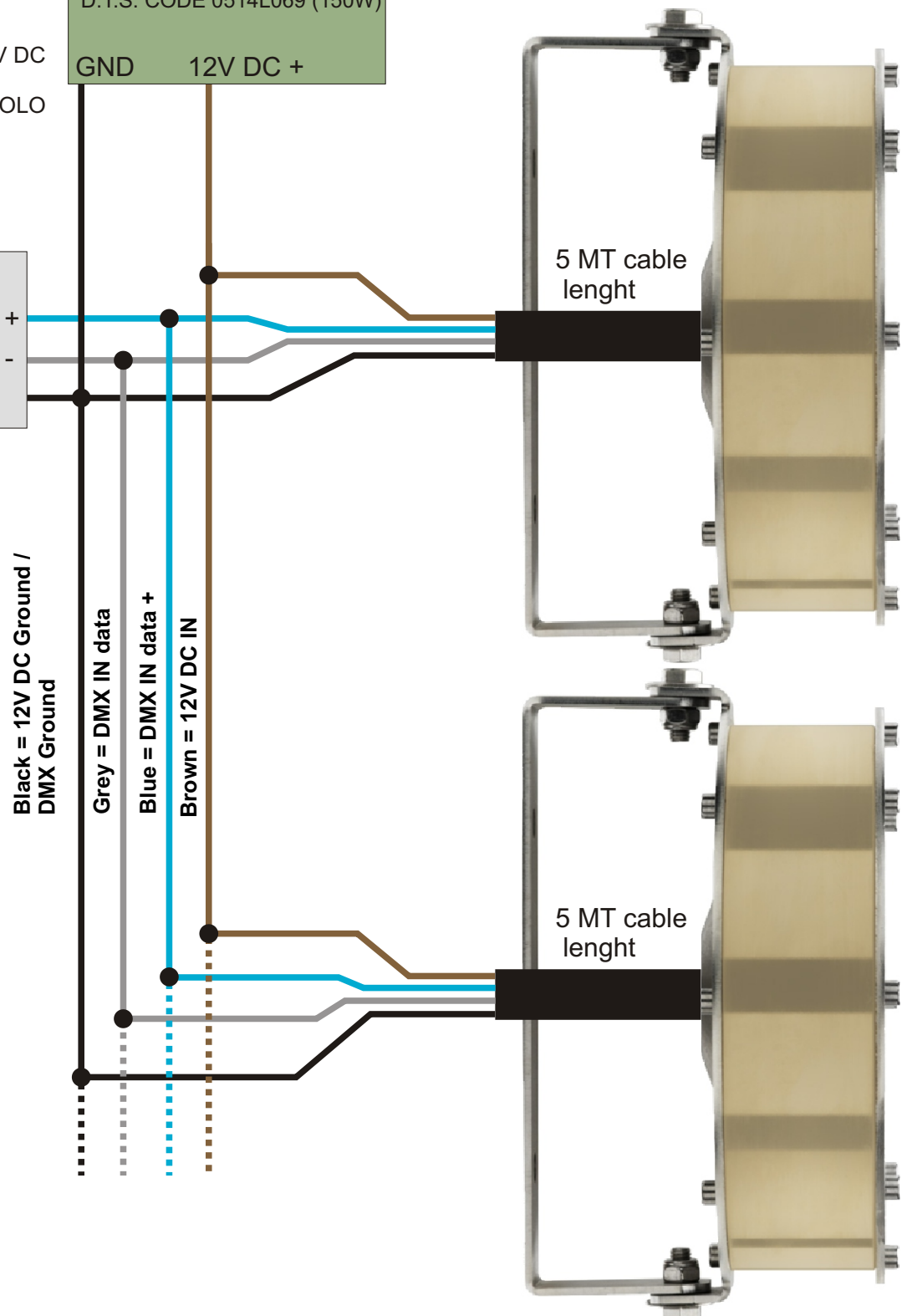
STANDARD CONTROLLER
 DMX 512



EXTERNAL POWER SUPPLY

EXTERNAL POWER SUPPLY
 12 V DC
 D.T.S. CODE 0514L059 (320W)
 D.T.S. CODE 0514L069 (150W)

GND 12V DC +



Brown = 12V DC IN +
Blue = DMX IN data +
Grey = DMX IN data -
Black = 12V DC Ground / DMX Ground

Connecting 1 x DIVE 36 SOLO with a 4 sq mm cable the voltage dropping will be 0,2 V every 10 meters
 Connecting 2 x DIVE 36 SOLO with a 4 sq mm cable the voltage dropping will be 0,4 V every 10 meters
 Connecting 2 x DIVE 36 SOLO with a 6 sq mm cable the voltage dropping will be 0,26 V every 10 meters
 Please note that on D.T.S. External power supplies 0514L059 and 0514L069 is included a voltage regulator trimmer in order to adjust the V OUT DC between 12-14 Volt DC.
 DIVE 36SOLO LEDS unit, implement a thermal sensor circuit that regulates the light output intensity in order to keep the unit temperature above 70° Celsius.

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The Lighting Company

ISO 9001:2000

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is certified to the
ISO 9001:2000 standard



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