

DIVE 3

DIVE 3 R



DIVE 3



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 3 is a compact LED projector designed for underwater installation in fountains, swimming pools, etc.

DIVE 3 is made of bronze and stainless steel, offering an IP68 protection level, and it can be installed at a max depth of 2 m, immersed either in water or sea water.

DIVE 3 is a modern alternative to conventional compact light sources, offering a new approach to underwater lighting in terms of light quality, flexibility of use, energy savings and component duration.

DIVE 3 FULL COLOUR features 3 x 3W Full Colour LEDs. The Full Colour LED's guarantee high quality colour mixing (significantly superior to conventional light sources and other systems using normal LED's) Colour synthesis takes place in fact inside every single LEDs.

LED capable of independently generating up to 16 million colours.

The DIVE 3 FULL COLOUR light source is able therefore to project a perfectly uniform beam of light onto objects and surfaces, no matter what colour is used.

Luminosity at 2 m, with spot lenses, is 200 Lux.

Colour temperature can also be regulated with linear variations between 3200°K and 6500°K, passing progressively from warmer tones to cooler ones.

DIVE 3 RGB features 3 x 1W P4 LEDs (1 Red, 1 Green, 1 Blue) which can generate 16 million colours.

Luminosity is 700 Lux at 2 m (spot lenses); colour temperature can be controlled linearly from 3200°K to 5500°K.

DIVE 3 WHITE 3200°-5500°K features 3 x 1W P4 LEDs (2 White 5500°K LEDs and 1 Amber LED) Luminosity is 600 Lux at 2 m (spot lenses); white colour temperature can be controlled linearly from 3200°K to 5500°K.

DIVE 3 WHITE 3200°K features 3 x 3200°K P4 White LEDs; luminosity is 320 Lux at 2 m (spot lenses).

Three interchangeable lens fittings are available for each model : Spot, Medium Flood and Wide Flood. These three lenses offer different aperture angles for the light beam, always ensuring constantly regular and uniform projection on objects and surfaces.

The DIVE 3 can be remotely powered and controlled by two dedicated external power suppliers / controllers: Z60 (up to 20 units DIVE 3 FULL COLOUR or 60 units DIVE 3 RGB / DIVE 3 WHITE) or Z30 (up to 10 units DIVE 3 FULL COLOUR or 30 units DIVE 3 RGB / DIVE 3 WHITE).

DIVE 3 units connected to Z60 or Z30 can also be remote-controlled using the USITT DMX512 standard digital communication protocol.

If you use the DIVE 3 out of water or immersion in not public areas, **ONLY** in these cases it will be possible to use also Z1, Z4 or Z8 power suppliers.

DIVE 3 is available in two models:

DIVE 3 R (recessed) is compact LED projector designed for underwater **recessed** installation in fountains, swimming pools, etc.

DIVE 3 (bracket) is compact LED projector designed for underwater installation in fountains, swimming pools, etc.

LED technology:**DIVE 3 FULL COLOUR:** 3 x 3W Full Colour LEDs.**DIVE 3 RGB:** 3 x 1W P4 LEDs (1 Red, 1 Green, 1 Blue)**DIVE 3 WHITE 3200°-5500°K:** 3 x 1W P4 LEDs (2 White 5500°K LEDs and 1 Amber LED)**DIVE 3 WHITE 3200°K:** 3 x 3200°K P4 White LEDs

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 (external power supply needed)**Protection:** IP68 protection level (max immersion depth: 2 m)**Construction:** Bronze and stainless steel**Power suppliers / LED controllers** Z60 or Z30**Connection:** Provided with 5 mt of cable and with a RJ12 connector**Weight** 1,7 Kg**ACCESSORIES****Lenses sets**

- Spot (Cod. 0506A001)
- Medium flood (Cod. 0506A002)
- Wide flood (Cod. 0506A003)

Power supply / LED controllers

- Z60 with R12 connectors (Cod. 03.LA.053)
- Z60 with screws connectors (Cod. 03.LA.076)
- Z30 with R12 connectors (Cod.03.LA.072)
- Z30 with screws connectors (Cod. 03.LA.077)

Connectors / tools

- RJ12 6-pole male connector (Cod. 0508B058)
- Crimping tool for RJ connectors (Cod. 0508A036)

Outer case IP65 (Cod.03.LA.079)**MAIN ELECTRICAL CHARACTERISTICS:**

Input: Constant current power supply (350-500 mA)

Consumption : 9-15 W DIVE 3 FULL COLOUR ; 3-5 W DIVE 3 RGB / DIVE 3 WHITE

03.LP005.F10	DIVE 3 FULL COLOR P5 NARROW BRACKET
03.LP005.F25	DIVE 3 FULL COLOR P5 MEDIUM BRACKET
03.LP005.F40	DIVE 3 FULL COLOR P5 WIDE BRACKET
03.LP005.T10	DIVE 3 RGB P4 NARROW BRACKET
03.LP005.T25	DIVE 3 RGB P4 MEDIUM BRACKET
03.LP005.T40	DIVE 3 RGB P4 WIDE BRACKET
03.LP005.W10	DIVE 3 WHITE+A P4 NARROW BRACKET
03.LP005.W25	DIVE 3 WHITE+A P4 MEDIUM BRACKET
03.LP005.W40	DIVE 3 WHITE+A P4 WIDE BRACKET
03.LP014.W10	DIVE 3 3200°K P4 NARROW BRACKET
03.LP014.W25	DIVE 3 3200°K P4 MEDIUM BRACKET
03.LP014.W40	DIVE 3 3200°K P4 WIDE BRACKET
03.LP013.F10	DIVE/R 3 FULL COLOR P5 NARROW RECESSED
03.LP013.F25	DIVE/R 3 FULL COLOR P5 MEDIUM RECESSED
03.LP013.F40	DIVE/R 3 FULL COLOR P5 WIDE RECESSED
03.LP013.T10	DIVE/R 3 RGB P4 NARROW RECESSED
03.LP013.T25	DIVE/R 3 RGB P4 MEDIUM RECESSED
03.LP013.T40	DIVE/R 3 RGB P4 WIDE RECESSED
03.LP015.W10	DIVE/R 3 3200°K P4 NARROW RECESSED
03.LP015.W25	DIVE/R 3 3200°K P4 MEDIUM RECESSED
03.LP015.W40	DIVE/R 3 3200°K P4 WIDE RECESSED

IMPORTANT SAFETY INFORMATION

Fire prevention:

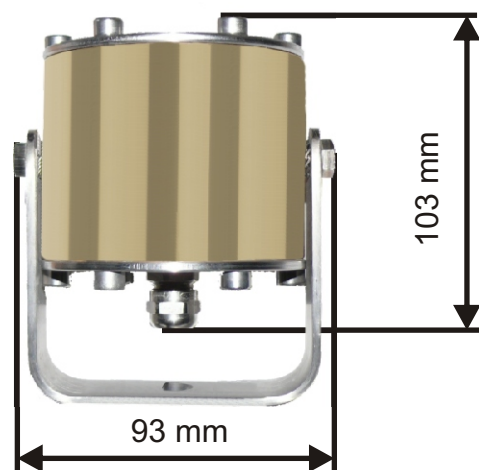
Never locate the fixture on any flammable surface.
Minimum distance from flammable materials: 10 cm

Safety:

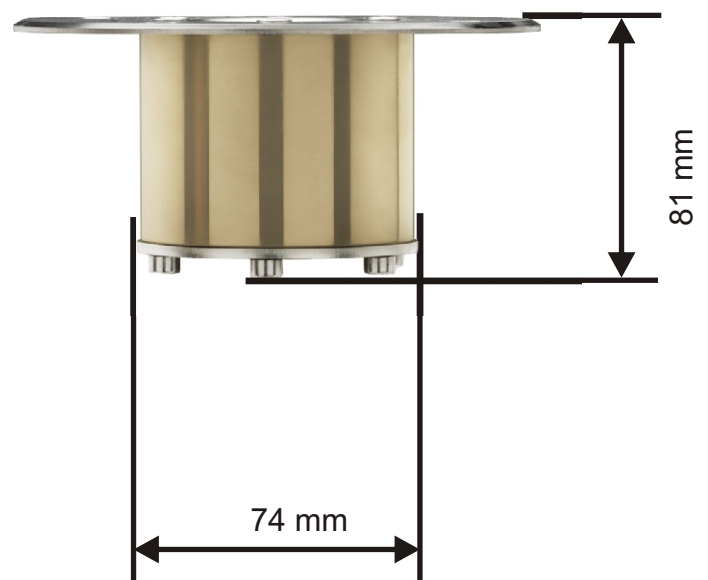
The external surface of the unit may exceed 50°C; never handle the unit until at least 5 minutes have elapsed since the unit was turned off.
The ambient temperature should not exceed 40°C and should not be lower than -10°C

UNIT DIMENSIONS:

DIVE 3



DIVE 3 R

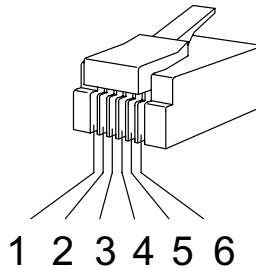


WIRING DIAGRAM

DIVE 3 LED PROJECTOR is provided with a RJ12 connector

RJ12 : 6P6C

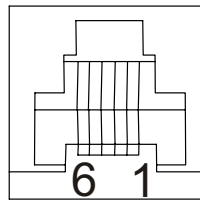
6P6C indicates 6 positions 6 cables



**6-pin Male (RJ12)
Modular Plug**

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

Power supply LED output connector



6-pin Female (RJ12)

For application where IP68 2m. rating is not necessary, DIVE 3 LED PROJECTOR cabling connection can be done with a standard UTP TIA/EIA 568-B2 category 5E cable.

The maximum distance between power supply and the DIVE 3 unit should not exceed 100 meters.

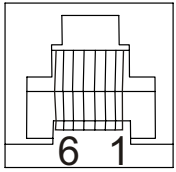
For IP68 rating application, D.T.S. recommends the use of a IP68 cable as the 4X2XAWG24 multipolar black outdoor cable (D.T.S. Code: 0509C062).

The maximum distance between power supply and the last DIVE 3 unit on the LEDs line should not exceed 100 meters.

LED UNITS WIRING CONNECTION

IP68 2M APPLICATIONS

03.LA.053 (RJ12 OUTPUT)



6-pin Female (RJ12)

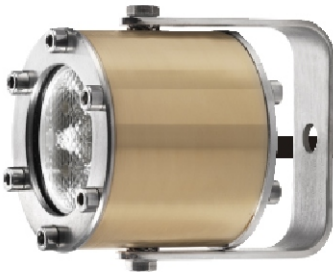
Z60 / Z30 POWER SUPPLIERS LEDS CONTROLLERS



LEDs OUT 5



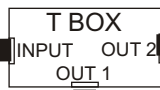
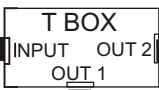
DIVE 3 R FULL COLOUR



DIVE 3 FULL COLOUR



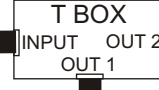
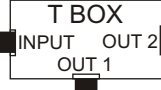
DIVE 3 WHITE



DIVE 3 WHITE



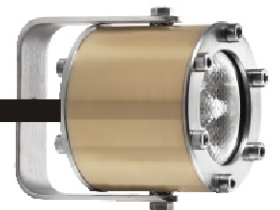
DIVE 3 WHITE



DIVE 3 RGB



DIVE 3 RGB



DIVE 3 RGB

IMPORTANT:

The maximum number of DIVE3 FULL COLOUR units connectable to each Z60 / Z30 LEDs output is 1 pcs.

The maximum number of DIVE 3 RGB / DIVE 3 WHITE units connectable to each Z60 / Z30 LEDs output is 3 pcs.

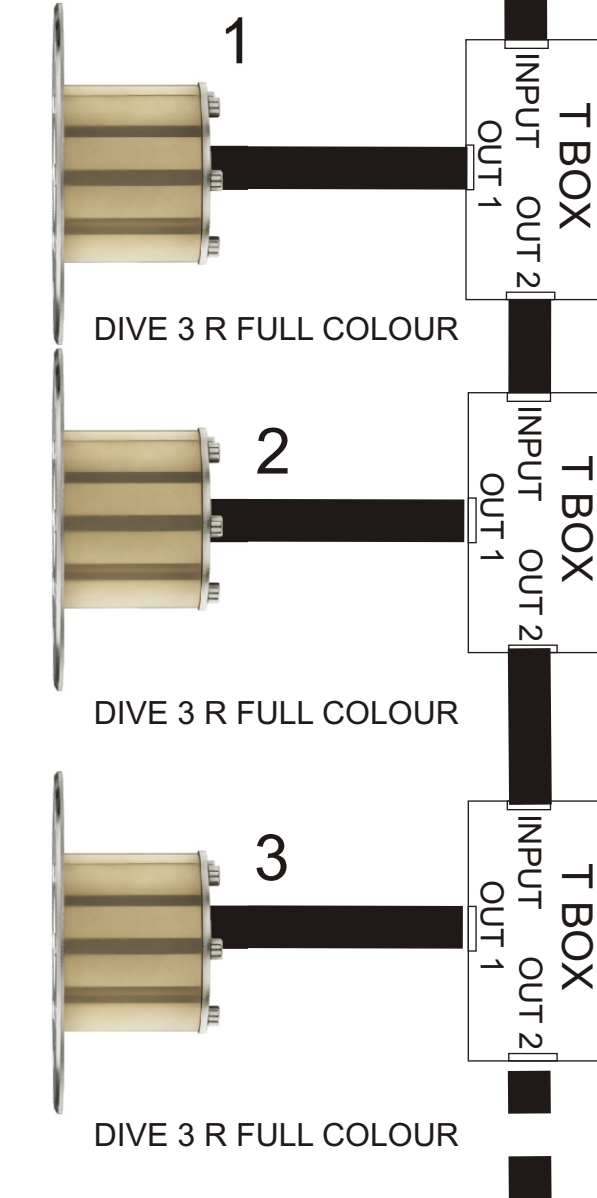
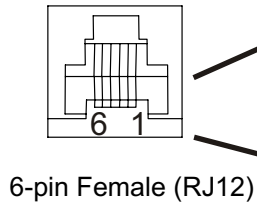
NEVER CONNECT NOR DISCONNECT A NEW UNIT WHEN THE POWER SUPPLY IS TURNED ON.

POWER SUPPLY WIRING CONNECTIONS

IP65 APPLICATIONS

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

D.T.S. T-BOX
CODE 03.LA001



INPUT

OUT 2



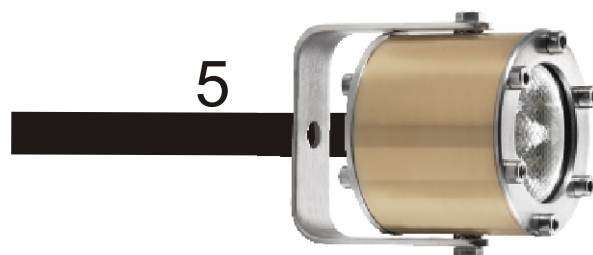
OUT 1

IMPORTANT:

The maximum number of DIVE3 FULL COLOUR units connectable to the Z1 Power supply is 5 pcs.

Never plug the cable coming from the Power supply into OUT 1 or OUT 2 of the T-BOX when other DIVE3 FULL COLOUR units are connected, because a wrong connection can seriously damage the lamps.

NEVER CONNECT NOR DISCONNECT A NEW UNIT WHEN THE POWER SUPPLY IS TURNED ON.



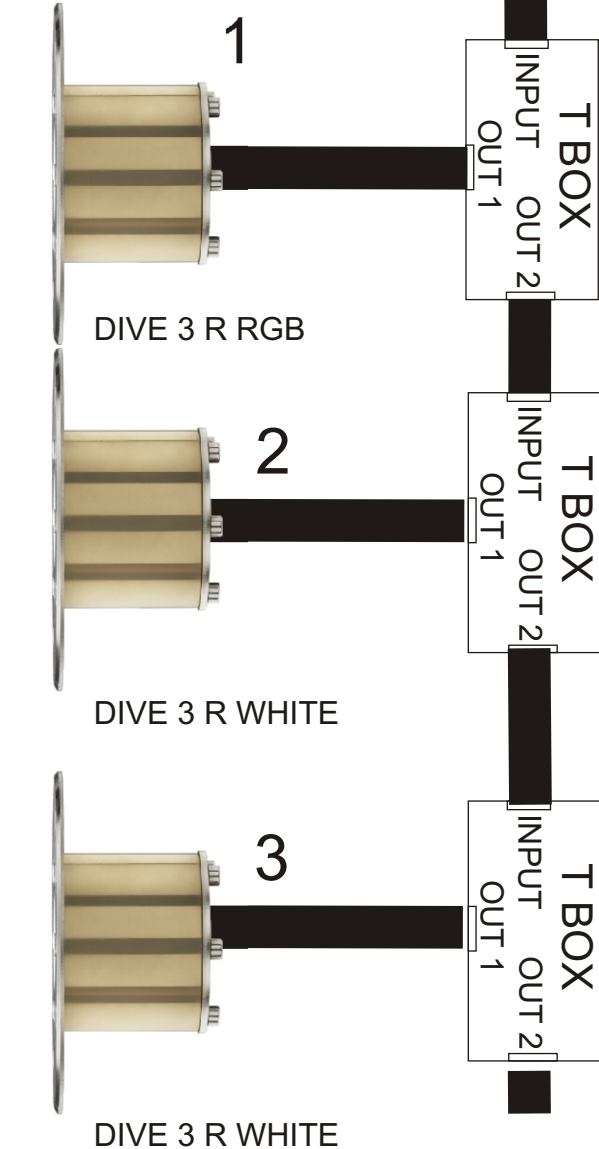
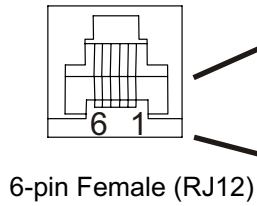
DIVE 3 FULL COLOUR

POWER SUPPLY WIRING CONNECTIONS

IP65 APPLICATIONS

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

D.T.S. T-BOX
CODE 03.LA001



INPUT

OUT 2



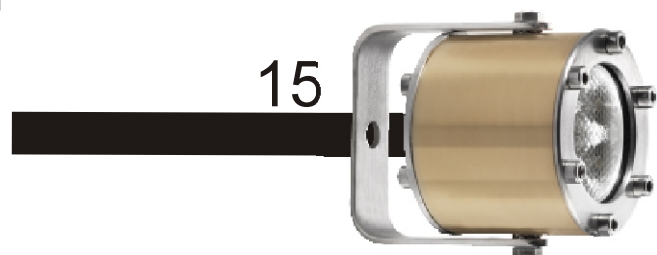
OUT 1

IMPORTANT:

The maximum number of DIVE3 DIVE 3 RGB / DIVE 3 WHITE units connectable to the Z1 Power supply is 15 pcs.

Never plug the cable coming from the Power supply into OUT 1 or OUT 2 of the T-BOX when other DIVE3 FULL COLOUR units are connected, because a wrong connection can seriously damage the lamps.

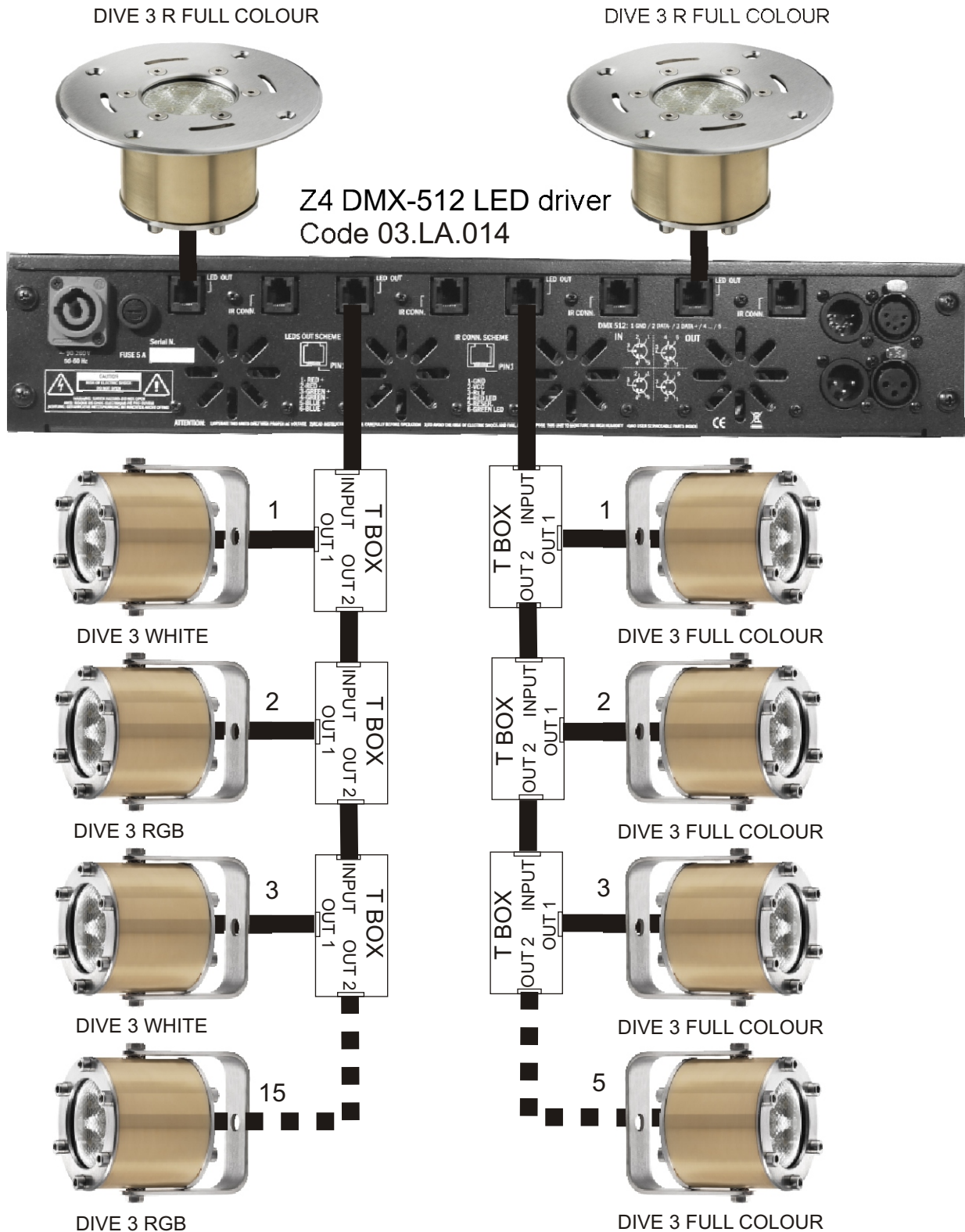
NEVER CONNECT NOR DISCONNECT A NEW UNIT WHEN THE POWER SUPPLY IS TURNED ON.



DIVE 3 RGB

WIRING CONNECTIONS

IP65 APPLICATIONS



IMPORTANT:

The maximum number of DIVE3 FULL COLOUR units connectable to the Z4 Power supply is 5 pcs each LED output (20 pcs totally).
 The maximum number of DIVE 3 RGB / DIVE 3 WHITE units connectable to the Z4 Power supply is 15 pcs each LED output (60 pcs totally).
Never plug the cable coming from the Power supply into OUT 1 or OUT 2 of the T-BOX when other DIVE3 FULL COLOUR units are connected, because a wrong connection can seriously damage the lamps.
NEVER CONNECT NOR DISCONNECT A NEW UNIT WHEN THE POWER SUPPLY IS TURNED ON.

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The Lighting Company

ISO 9001:2000

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ISO 9001:2000 standard



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