

FOCUS SOLO ZOOM IP65



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TECHNICAL FEATURES

DTS Product codes:

03.LCB016E11FC99	FOCUS SOLO ZOOM IP65 FC Black finishing
03.LCB016E11FY99	FOCUS SOLO ZOOM IP65 HQS Black finishing

Output

1 x Full Color (RGBW) LED

858 Lumens

LED lifespan: 50.000 hours (70% lumen output)

Available on demand: HQS - High Quality Spectrum - LED generation (R/G/B/CY)

Optical group

Long-excursion 3,5° - 52° manual zoom

Control

DMX 512 / RDM

Internal operating system updatable via DTS Dongle Firmware Uploader

DMX

4 DMX Channels (Default) or 11 DMX channels

Power supply

LED Driver on board

External Constant Voltage PSU 12-48Vdc range

Power consumption: 20W max

Connections

End-stripped 4 poles cable (90 cm)

Internal safety devices

Overtemperature circuit protection

Operating temperature

-10° / 40°C

Physical

IP65

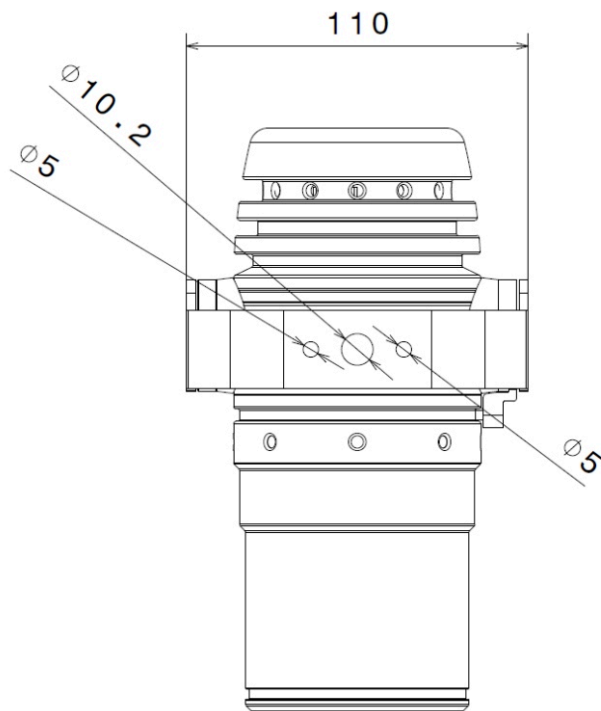
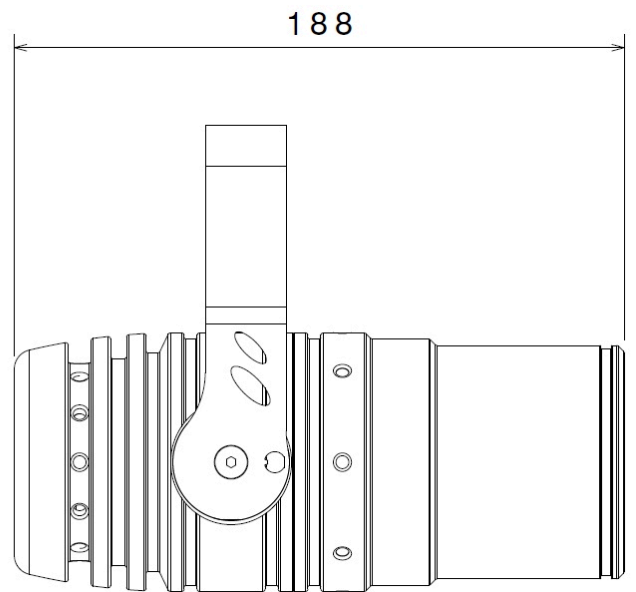
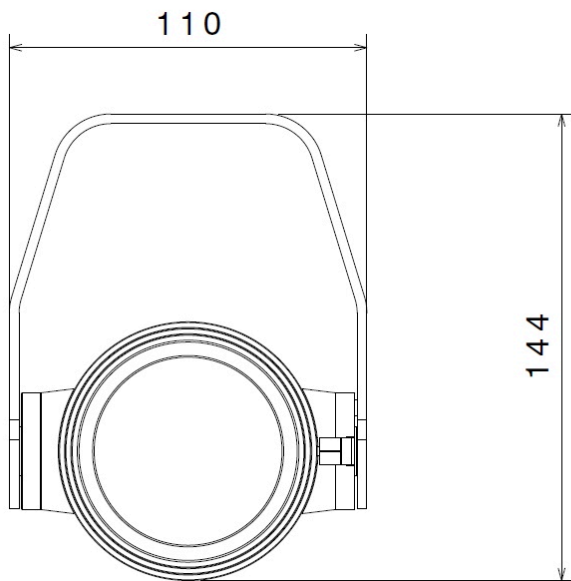
Housing: Aluminium

Weight: 1,15 Kg

Finishing: Black

Certifications

CE Certification

UNIT DIMENSIONS

IMPORTANT SAFETY INFORMATION

Fire prevention:

It is permissible to place the unit on normally flammable surfaces. Suitable for mounting on normally flammable materials surfaces greater than 200°C with some combustion time lag.

Minimum distance from the closest illuminable surface: 0,5 m.

Prevention of electric shock:

Class II LED product according to standard EN 60598-1.

Safety:

Risk group 2 product according to EN 62471. CAUTION. Do not look directly into the light output. May be harmful to the eyes and skin. Do not stare at the operating light source.

The unit is not for household use and must be installed by a qualified electrician or experienced person. LEDs are not replaceable.

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°.

CONNECTIONS

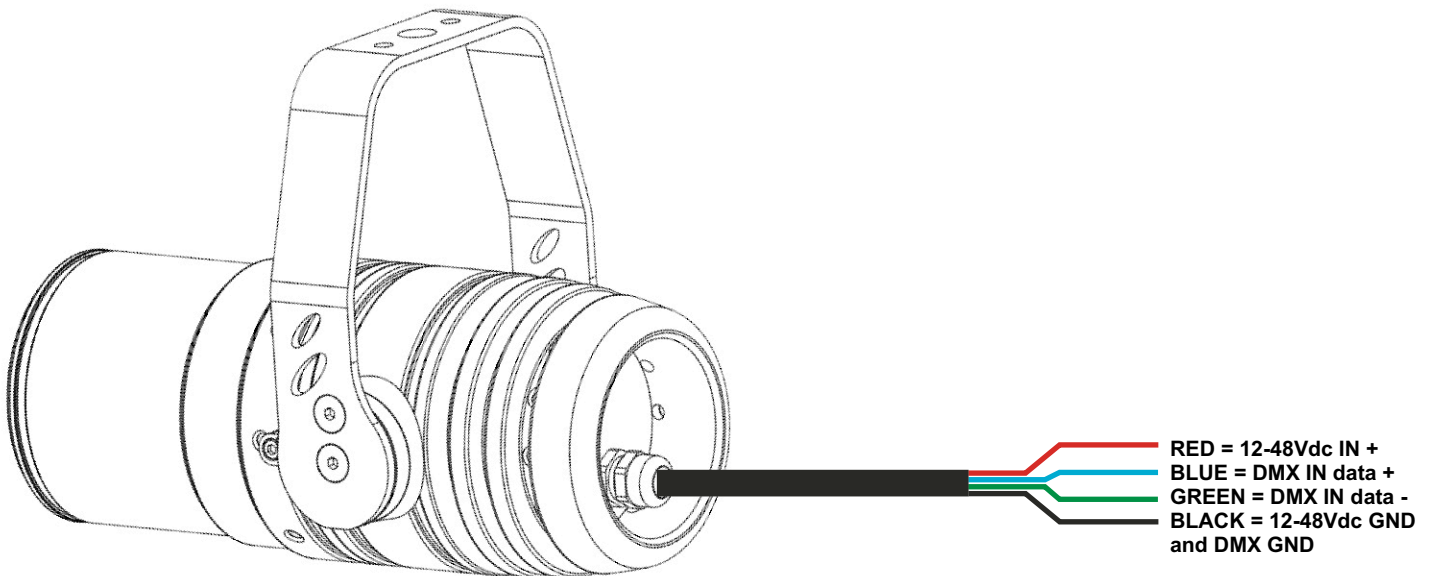
FOCUS SOLO ZOOM IP65 is provided with end-stripped 4 poles cable (90 cm length).

RED wire = 12-48Vdc IN +

BLACK wire = 12-48Vdc GND and DMX GND

BLUE wire = DMX IN data +

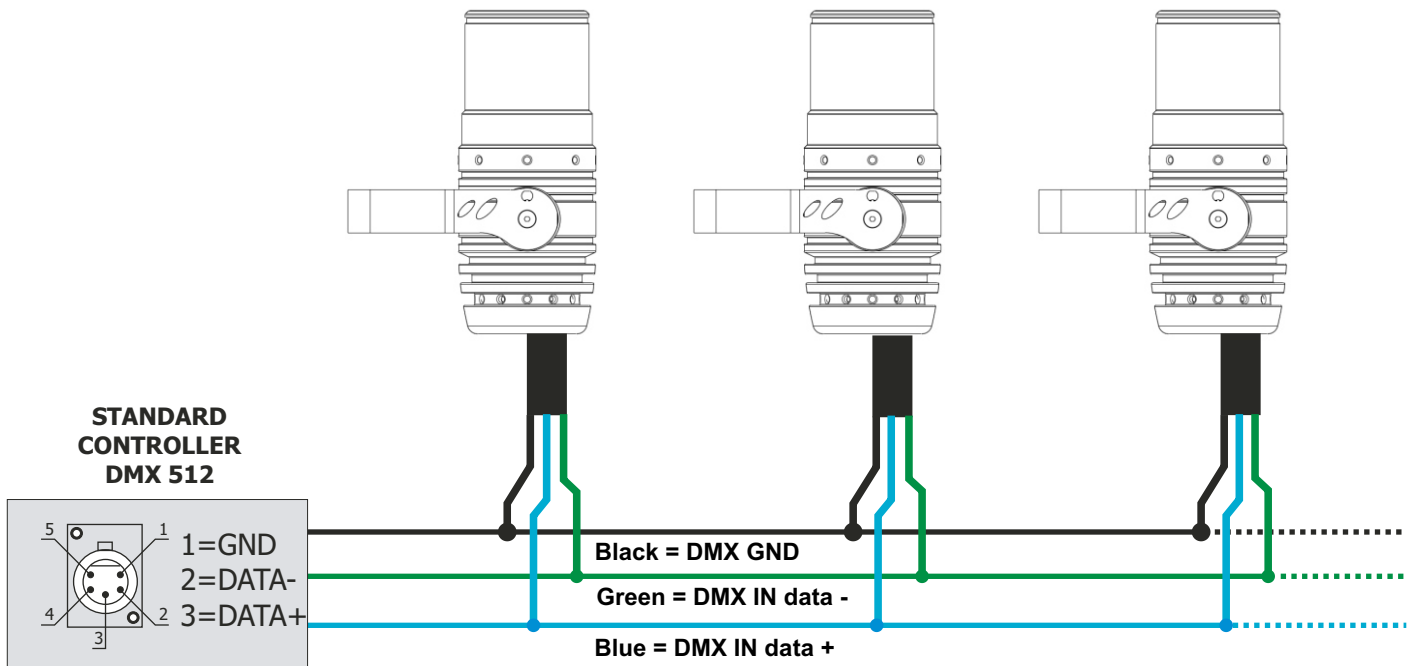
GREEN wire = DMX IN data -



DMX SIGNAL CONNECTION

FOCUS SOLO ZOOM IP65 operates using the digital DMX 512 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.

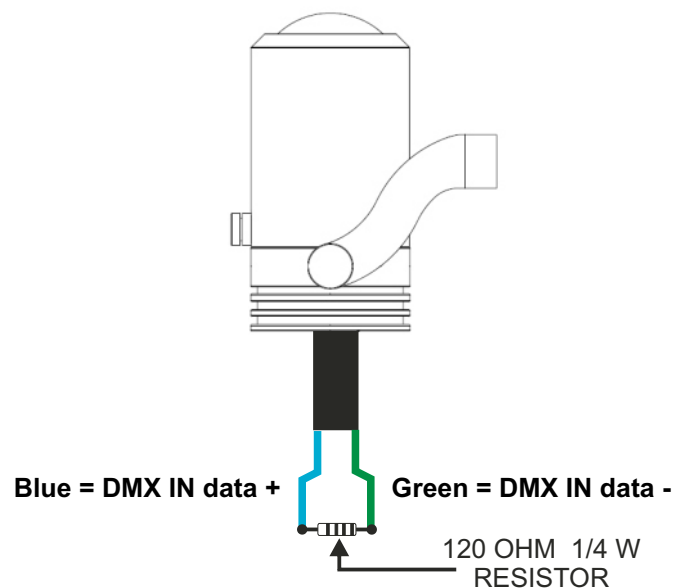


For installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

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 DTS Dongle DLC901 (Code 03.LA.063.1) it will be possible to set the DMX address, DMX mode and other parameters on FOCUS SOLO ZOOM IP65 projectors. Please note that no DMX splitters must be connected between DLC901 and FOCUS SOLO ZOOM IP65 on the DMX line because this will stop the bidirectional communication between the Dongle and the projectors.

DMX ADDRESS

FOCUS SOLO ZOOM IP65 operates with 4 DMX channels (Default) or 11 DMX channels. If you want to control different FOCUS SOLO ZOOM IP65 units in 4 DMX channels mode 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

FIRMWARE UPDATING

To update the firmware release of the FOCUS SOLO ZOOM IP65 you need:

- DTS Dongle Firmware Uploader (code 03.LA.206).
- "DTS Firmware Upgrade Utility v.2.02" program installed on PC.
- Latest firmware release available for FOCUS SOLO ZOOM IP65 unit.

Updating the firmware release.

Please follow the procedure below to perform the update:

1. Connect the DTS Dongle Firmware Uploader to a spare USB port on the PC.
2. Connect the unit DMX input to the DTS Dongle Firmware Uploader DMX output with a standard DMX cable and turn ON the unit.
3. Send the new firmware release into the unit by using "DTS Firmware Upgrade Utility v.2.02" program. At the end of the procedure, the unit will reset.

For more information please refer to an authorised DTS service centre.

RDM FUNCTIONS

FOCUS SOLO ZOOM IP65 accepts the following RDM commands:

DEVICE_INFO	To read the following info: - RDM protocol version - Device Model ID - Fixture type - Firmware release - DMX address - DMX mode - DMX channels - Total sub-devices - Total sensors
IDENTIFY_DEVICE	LED ON at max power to identify the fixture
DMX_START_ADDRESS	To read / set the DMX address
SOFTWARE_VERSION_LABEL	LED Driver firmware release
SUPPORTED_PARAMETERS	List of all supported parameters
PARAMETER_DESCRIPTION	Description / details of Manufacturer specific PIDs
DMX_PERSONALITY	To set the DMX mode
DMX_PERSONALITY_DESCRIPTION	Description / details of the DMX mode
DEVICE_MODEL_DESCRIPTION	Fixture type
MANUFACTURER_LABEL	Manufacturer
SENSOR_DEFINITION SENSOR_VALUE	List of sensors To read the value of each sensor

RDM MANUFACTURER SPECIFIC PIDs

SMOOTH	Read/Write Smooth value [OFF, 1,..20] def. 4 0 = OFF 1 = 1 .. 20 = 20
GAMMA CORRECTION	Read/Write Gamma Correction value [Linear / Quadratic] def. Quadratic 1 = LINEAR 2 = QUADRATIC
PWM OUT FREQUENCY	Read/Write Pwm Output frequency value [610 Hz .. 20KHz] def. 610 Hz 0 = 610 Hz 1 = 800 Hz 2 = 1000 Hz 3 = 1500 Hz 4 = 2000 Hz 5 = 2500 Hz 6 = 3000 Hz 7 = 3500 Hz 8 = 4000 Hz 9 = 4500 Hz 10 = 5000 Hz 11 = 5500 Hz 12 = 6000 Hz 13 = 6500 Hz 14 = 7000 Hz 15 = 7500 Hz 16 = 8000 Hz 17 = 8500 Hz 18 = 9000 Hz 19 = 9500 Hz 20 = 10000 Hz 21 = 11000 Hz 22 = 12000 Hz 23 = 13000 Hz 24 = 14000 Hz 25 = 15000 Hz 26 = 16000 Hz 27 = 17000 Hz 28 = 18000 Hz 29 = 19000 Hz 30 = 20000 Hz
BOOST	Read/Write Boost value [OFF / ON] def. ON 0 = OFF 1 = ON
NO DMX ACTION	1 = ALL OFF 2 = 60% (default) 3 = 100% 4 = CUSTOM 5 = KEEP LAST 6 = CUSTOM 2 7 = CUSTOM 3 8 = CUSTOM 4
RED NO DMX	Red level with NO DMX ACTION = 4 (CUSTOM)
RED FINE NO DMX	Red Fine level with NO DMX ACTION = 4 (CUSTOM)
GREEN NO DMX	Green level with NO DMX ACTION = 4 (CUSTOM)
GREEN FINE NO DMX	Green Fine level with NO DMX ACTION = 4 (CUSTOM)
BLUE NO DMX	Blue level with NO DMX ACTION = 4 (CUSTOM)
BLUE FINE NO DMX	Blue Fine level with NO DMX ACTION = 4 (CUSTOM)
WHITE NO DMX	White level with NO DMX ACTION = 4 (CUSTOM)
WHITE FINE NO DMX	White Fine level with NO DMX ACTION = 4 (CUSTOM)

RDM MANUFACTURER SPECIFIC PIDs

DIM NO DMX	Dimmer level with NO DMX ACTION = 4 (CUSTOM)
DIM FINE NO DMX	Dimmer Fine level with NO DMX ACTION = 4 (CUSTOM)
RED2 NO DMX	Red level with NO DMX ACTION = 6 (CUSTOM 2)
RED2 FINE NO DMX	Red Fine level with NO DMX ACTION = 6 (CUSTOM 2)
GRN2 NO DMX	Green level with NO DMX ACTION = 6 (CUSTOM 2)
GRN2 FINE NO DMX	Green Fine level with NO DMX ACTION = 6 (CUSTOM 2)
BLU2 NO DMX	Blue level with NO DMX ACTION = 6 (CUSTOM 2)
BLU2 FINE NO DMX	Blue Fine level with NO DMX ACTION = 6 (CUSTOM 2)
WHT2 NO DMX	White level with NO DMX ACTION = 6 (CUSTOM 2)
WHT2 FINE NO DMX	White Fine level with NO DMX ACTION = 6 (CUSTOM 2)
DIM2 NO DMX	Dimmer level with NO DMX ACTION = 6 (CUSTOM 2)
DIM2 FINE NO DMX	Dimmer Fine level with NO DMX ACTION = 6 (CUSTOM 2)
RED3 NO DMX	Red level with NO DMX ACTION = 7 (CUSTOM 3)
RED3 FINE NO DMX	Red Fine level with NO DMX ACTION = 7 (CUSTOM 3)
GRN3 NO DMX	Green level with NO DMX ACTION = 7 (CUSTOM 3)
GRN3 FINE NO DMX	Green Fine level with NO DMX ACTION = 7 (CUSTOM 3)
BLU3 NO DMX	Blue level with NO DMX ACTION = 7 (CUSTOM 3)
BLU3 FINE NO DMX	Blue Fine level with NO DMX ACTION = 7 (CUSTOM 3)
WHT3 NO DMX	White level with NO DMX ACTION = 7 (CUSTOM 3)
WHT3 FINE NO DMX	White Fine level with NO DMX ACTION = 7 (CUSTOM 3)
DIM3 NO DMX	Dimmer level with NO DMX ACTION = 7 (CUSTOM 3)
DIM3 FINE NO DMX	Dimmer Fine level with NO DMX ACTION = 7 (CUSTOM 3)
RED4 NO DMX	Red level with NO DMX ACTION = 8 (CUSTOM 4)
RED4 FINE NO DMX	Red Fine level with NO DMX ACTION = 8 (CUSTOM 4)
GRN4 NO DMX	Green level with NO DMX ACTION = 8 (CUSTOM 4)
GRN4 FINE NO DMX	Green Fine level with NO DMX ACTION = 8 (CUSTOM 4)

BLU4 NO DMX	Blue level with NO DMX ACTION = 8 (CUSTOM 4)
BLU4 FINE NO DMX	Blue Fine level with NO DMX ACTION = 8 (CUSTOM 4)
WHT4 NO DMX	White level with NO DMX ACTION = 8 (CUSTOM 4)
WHT4 FINE NO DMX	White Fine level with NO DMX ACTION = 8 (CUSTOM 4)
DIM4 FINE NO DMX	Dimmer level with NO DMX ACTION = 8 (CUSTOM 4)
DIM4 FINE NO DMX	Dimmer Fine level with NO DMX ACTION = 8 (CUSTOM 4)

DMX PROTOCOL

Firmware Release	1.00
RDM Device Model ID	0x0D56
DMX Personality IDs	0x01 "RGBW 4ch (def)" 0x02 "PROM 11ch"

4 CHANNELS MODE (DEFAULT)

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

DMX CHANNEL	1	Parameter: RED
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	2	Parameter: GREEN
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	3	Parameter: BLUE
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	4	Parameter: WHITE
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

11 CHANNELS MODE

- 1 RED**
- 2 RED FINE**
- 3 GREEN**
- 4 GREEN FINE**
- 5 BLUE**
- 6 BLUE FINE**
- 7 WHITE**
- 8 WHITE FINE**
- 9 DIMMER**
- 10 DIMMER FINE**
- 11 PROM**

DMX CHANNEL	1	Parameter: RED
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	2	Parameter: RED FINE
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	3	Parameter: GREEN
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	4	Parameter: GREEN FINE
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	5	Parameter: BLUE			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	6	Parameter: BLUE FINE			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	7	Parameter: WHITE			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	8	Parameter: WHITE FINE			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	9	Parameter: DIMMER			
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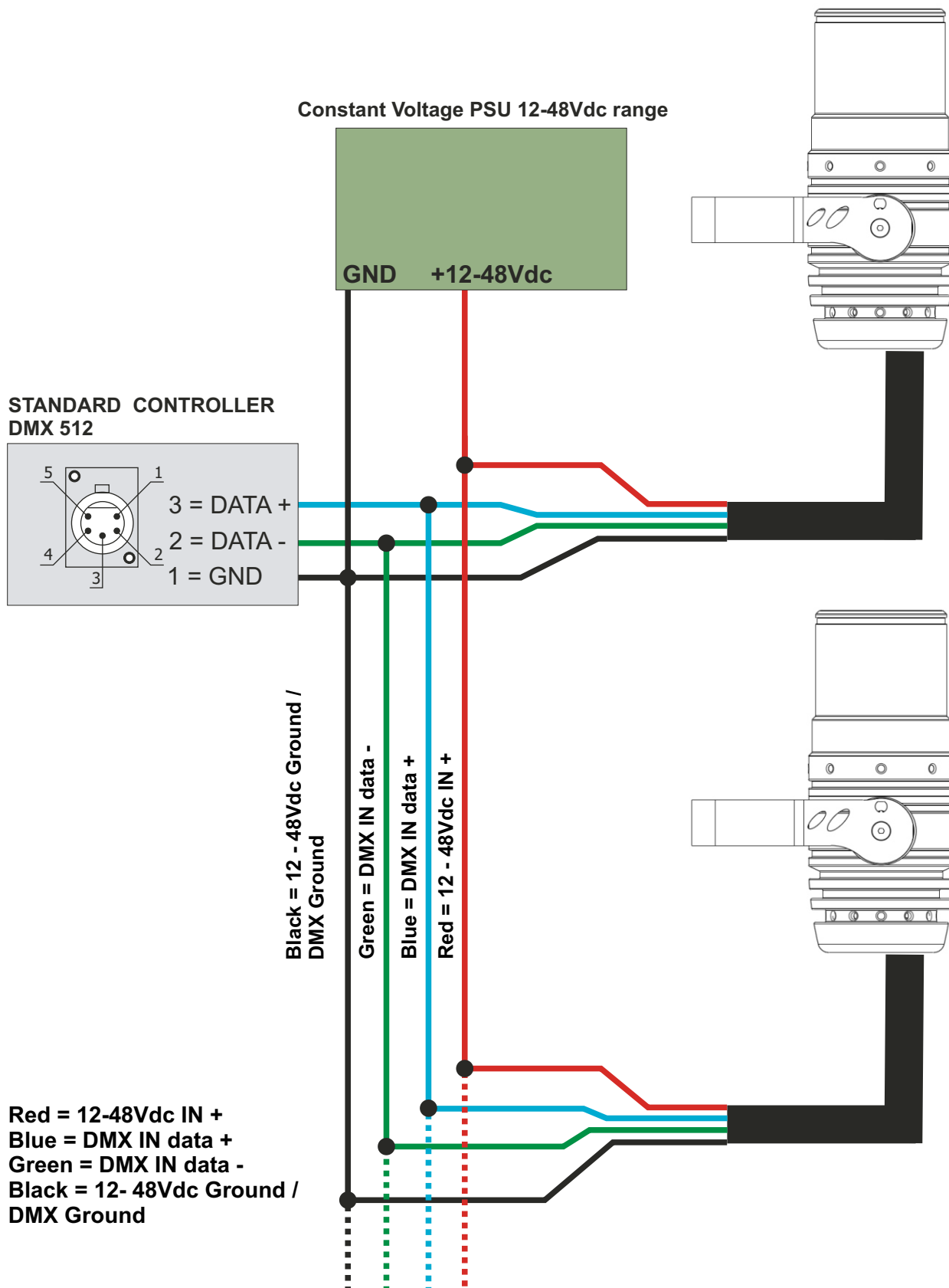
DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	10	Parameter: DIMMER FINE			
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DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-255					Proportional color from Min to Max

DMX CHANNEL	11	Parameter: PROM (staying on desired option for 5 seconds)			
DMX range Value	Mid point DMX value	Move range (degrees)	Mode	Option	Function
0-9				No function	
10-19				NO DMX ACTION - KEEP LAST DMX	
20-29				NO DMX ACTION - BLACK OUT	
30-39				NO DMX ACTION - RGBW @ 100%	
40-49				NO DMX ACTION - RGBW @ 60% (default)	
50-69				Reserved	
70-79				NO DMX ACTION - CUSTOM	
80-89				NO DMX ACTION - CUSTOM 2	
90-99				NO DMX ACTION - CUSTOM 3	
100-109				NO DMX ACTION - CUSTOM 4	
110-129				Reserved	
130-149				VIEW CUSTOM (to show Custom Preset) RGBW, RGBW Fine, Dimmer, Dimmer Fine = 128 (default) Input DMX signal from channels 1 to 10 is ignored	
150-169				VIEW CUSTOM 2 (to show Custom 2 Preset) RGBW, RGBW Fine, Dimmer, Dimmer Fine = 128 (default) Input DMX signal from channels 1 to 10 is ignored	
170-189				VIEW CUSTOM 3 (to show Custom 3 Preset) RGBW, RGBW Fine, Dimmer, Dimmer Fine = 128 (default) Input DMX signal from channels 1 to 10 is ignored	
190-209				VIEW CUSTOM 4 (to show Custom 4 Preset) RGBW, RGBW Fine, Dimmer, Dimmer Fine = 128 (default) Input DMX signal from channels 1 to 10 is ignored	
210-229				Reserved	
230				CREATE AND STORE CUSTOM CREATE: set ch11 to value 0..9 and set desired RGBW+Dimmer levels STORE: set ch11 to value 230 and wait 5 seconds	
231				CREATE AND STORE CUSTOM 2 CREATE: set ch11 to value 0..9 and set desired RGBW+Dimmer levels STORE: set ch11 to value 231 and wait 5 seconds	
232				CREATE AND STORE CUSTOM 3 CREATE: set ch11 to value 0..9 and set desired RGBW+Dimmer levels STORE: set ch11 to value 232 and wait 5 seconds	
233				CREATE AND STORE CUSTOM 4 CREATE: set ch11 to value 0..9 and set desired RGBW+Dimmer levels STORE: set ch11 to value 233 and wait 5 seconds	
234-253				Reserved	
254				SET DEFAULTS: NO DMX ACTION - RGBW @ 60% CUSTOM PRESET - RGBW+Dimmer default values CUSTOM PRESET 2 - RGBW+Dimmer default values CUSTOM PRESET 3 - RGBW+Dimmer default values CUSTOM PRESET 4 - RGBW+Dimmer default values	
255				No function	

POWER SUPPLY AND DMX CONNECTION DIAGRAMS



PROUDLY
MADE IN ITALY



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



ISO 9001:2008

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

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