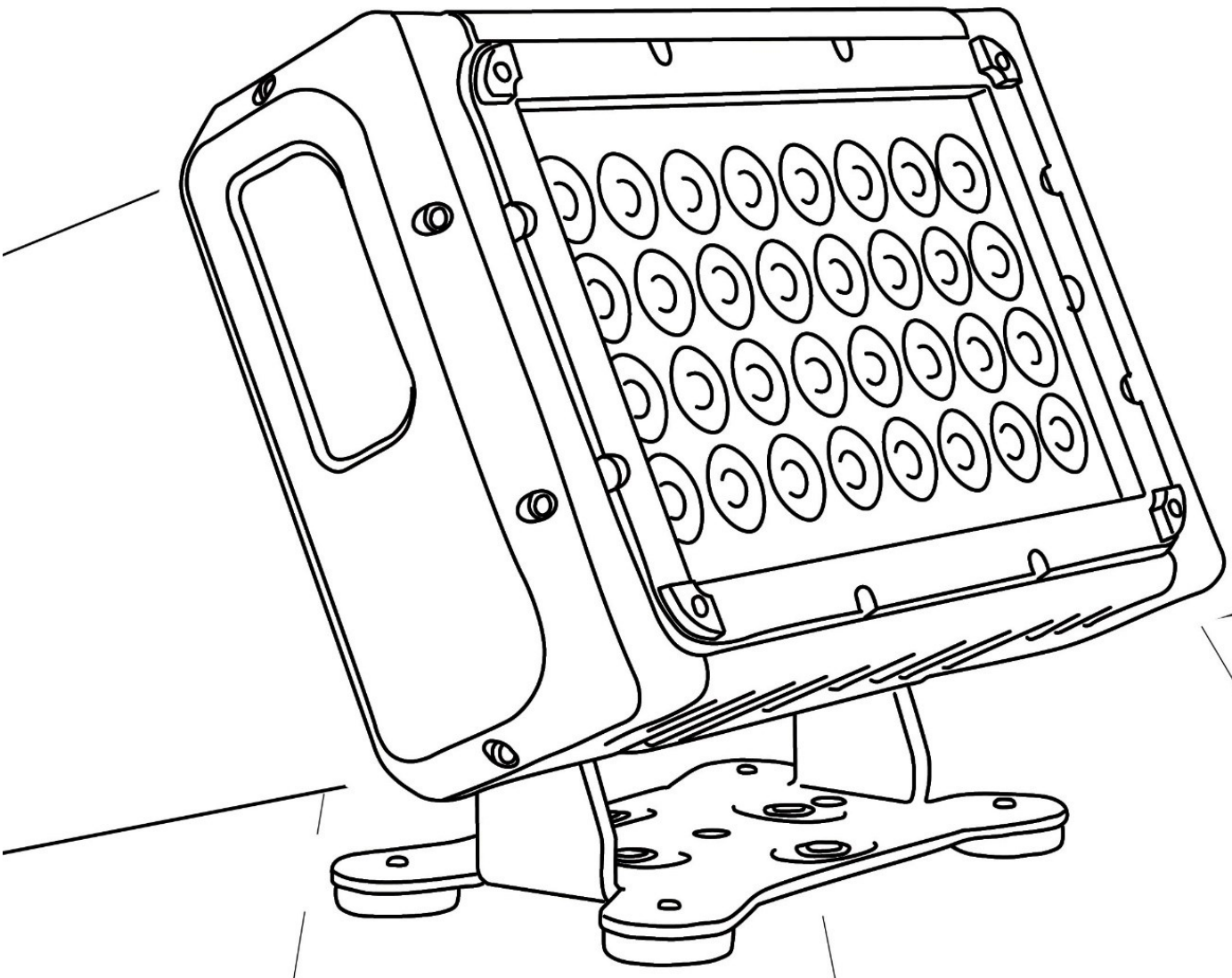
X BRICK

USER'S MANUAL



Release	1.06	**Code: 0517I347**	**For more information**
Language	EN		

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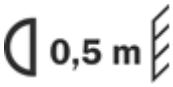
Table of Contents

1 Symbols

Symbol	Meaning
	General risk.
	Electric shock risk
	Hot surface
t_a 40°C	Maximum operating ambient temperature.
	Minimum distance from illuminated objects.
	Do not stare at the operating light source.
	Photobiological safety risk group2
	Never expose the front lens to sunlight or any strong artificial Light source from any angle to avoid damage of head internal parts.
	European Community Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE).

2 General Warning

Carefully read the instruction contained in this User Manual, as they give important information regarding your safety and others during installation, use, and maintenance of the product.

The product is not suitable for domestic use and must be installed by a qualified electrician or experienced person only.

The device must always be equipped with an efficient ground connection.

3 Important Safety Information

3.1 Fire Prevention

- **Minimum distance from illuminated surface: 0.5 m**

- **Never expose the front lens, from any angle, to direct sunlight or strong artificial light sources to avoid damage to internal parts of the product.**
  The lens may act as a powerful magnifying glass if exposed towards the sun or any strong artificial light source; this will cause damage to the internal parts even when the unit is turned off.
  It is strongly recommended to leave the front lens directed towards the ground when switching off or leaving the unit unattended.

- **The unit features various air inlets and cooling fans. Under no circumstances should these be blocked or obstructed whilst the projector is operating. Doing so may cause the fixture to seriously overheat, damaging it and compromising its proper operation.**
- Each fixture produces heat and must be installed in a well-ventilated place.
- Connect the projector to mains power via a thermal magnetic circuit breaker.

3.2 Prevention of Electric Shock

- **High voltage is present inside the unit.**
  Unplug the unit prior to performing any function which involves handling of the insides of all parts of the product.

- **Class I appliance: connection must be made to a mains system fitted with an efficient earthing.**
- X BRICK requires the assistance of specialized personnel for all servicing. Please always refer to an authorized DTS service center.

3.3 Level of protection IP

- **The projector is classified as an ordinary appliance and its protection level against the penetration of solid and liquid objects is IP65.**
- Suitable for wet locations
- The projector contains electric and electronic components which should under no circumstances come into contact with oil, water, or any other liquid. The proper functioning of the unit would be compromised should this occur**.**

3.4 Safety

- **Risk Group 2 product according to IEC 62471.**
  Do not look directly at the light output and do not stare at the light beam through optical instruments or any other device that may concentrate the light beam. May be harmful to the eyes and skin.

- **Do not stare at the operating light source.**
  The luminaire should be positioned so that prolonged staring into the luminaire from a minimum distance of 25,94 m is not expected.

- The light source contained in this luminaire shall only be replaced by the manufacturer or their service agent or a similar qualified person.
- The unit is not for domestic use and must be installed by a qualified electrician or experienced person only.
- The projector should always be installed with the proper tools. The fixing point must always be capable of supporting the weight of the unit.
- Always use a safety cable to sustain the weight of the unit in case of failure of the main fixing point.

- **The external surface of the unit's body, at various points, may exceed 50 °C. Never handle the unit until at least five minutes have passed since it was turned off.**

t_a 40°C

- **Ambient temperature should not exceed 40 °C.**
- This fixture is intended for use where humidity does not exceed 90% (non-condensing).
- After storage, and before switching on the fixture, please ensure that its ambient temperature has been restored to acceptable values.
- Never install the fixture in places that lack a constant air flow.

3.5 Waste Electrical and Electronic Equipment (WEEE) Directive:

- **The projector, the accessories, and the packaging should be sorted for environmental-friendly recycling.**
  For EC countries: according to the European Directive 2012/19/EU for Waste Electrical and Electronic Equipment and its implementation into national right, luminaires that are no longer usable must be collected separately and disposed of in an environmentally correct manner.

4 General Warranty Conditions

The unit is guaranteed for 36 months from the date of purchase against manufacturing material defects.
The warranty covers defects in materials and workmanship. The warranty is not applicable where a defect is caused by misuse or unauthorized repair of the product.
Any functional or/and physical modification of the product is not allowed.

5 Technical Features

5.1 Output

- 32x Full RGBW LEDs Ostar Stage 'N'
- Lumens output: 15,300 lm
- LED lifespan: 50,000 hours (70% lumen output)

5.2 Optical Group

- 8° projection angle
- Range of quick-mounting holographic filters included: 20° / 40° / 60°x10° (no mounting tools required)
- Uniform projection on surfaces

5.3 Color Generation

- 16 million colors
- Linear CCT (2,700 K – 8,000 K)
- 16 gel filter emulations)

5.4 User interface

- LCD display + capacitive touch keys

5.5 Control

- RDM / DMX512 protocols
- Wireless DMX TX/RX (2.4 GHz; 2.15 dBi antenna)
  Operating frequency bandwidth: 2,400 – 2,483 MHz
  Radio frequency power: 20 dBm EIRP Max
- Internal operating system updatable via DTS firmware uploader dongle.

5.5.1 DMX MODES

Full operation modes

- "Chase" (Default)
- "Extended"

- “Sectors RGBW x4”
- “Sectors RGBW fine x4”
- “Sectors RGBW+Shut+Dim x4”

DMX single layer modes (compatible with all BRICK and MINI BRICK DMX modes)

- “Standard”
- “Global RGBW”
- “Global RGBW+Shut+Dim”
- “Global RGBW+Dim Fine

5.6 Tilt

- 105° excursion manual tilt

5.7 Power Supply

- Wide-range 100-240 Vac 50/60 Hz
- Power consumption: 650 W max
- Power Factor: PF >0.90

5.8 Connections

X BRICK and **X BRICK Wireless** models only

- PowerCON TRUE1 In/Out IP65 panel connectors w/ water-proof caps
- XLR 5 pins In/Out IP65 panel connectors w/ water-proof caps

X BRICK PI and **X BRICK PI Wireless** models only

- Power Cable 3 x 1,5 mm2; length: 1,5 m
- DMX Input Cable XLR 5-pole IP65 male connector; length: 1,5 m
- DMX Output Cable XLR 5-pole IP65 female connector; length: 1,5 m

5.9 Internal Protection Devices

- Overvoltage and over temperature circuits protection

5.10 Operating Temperature

- -20 °C / 40 °C

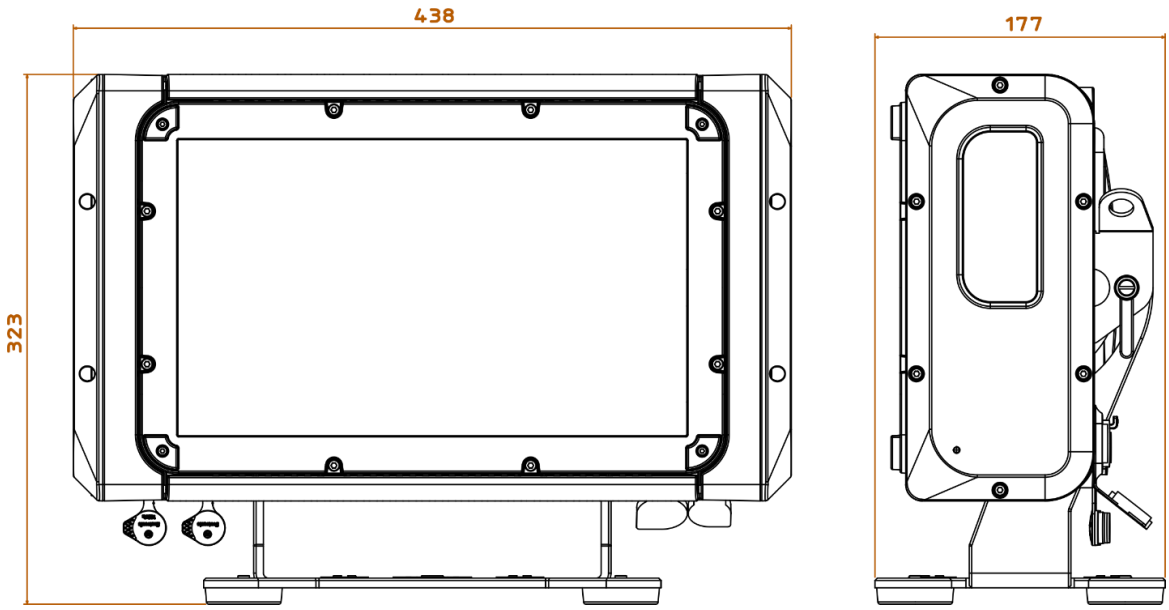
5.11 Storage Temperature

- -20 °C / 60 °C

5.12 Physical

- IP65
- Weight: 14 kg

5.13 Dimensions



6 Included Items

- 1x Holographic filter 20° (code 0506A043.D18)
- 1x Holographic filter 40° (code 0506A045.D18)
- 1x Holographic filter 60°x10° (code 0506A092.D18)

  Attention:

  The holographic filters supplied can only be installed on the outside of the front glass, as indicated on page 15 of this manual.

  Only on request and at the time of ordering, the aforementioned filters can be installed inside the front glass, by DTS personnel during the production phase
- 1x Display UV protection (code 03.LA.218)
- 1x Omega bracket with ¼-turn “Fast Lock” connection (code 02K00467)

X BRICK and **X BRICK Wireless** models only

- 1x PowerCON TRUE1 female connector (code code 0520P066)

7 Accessories on Request

- Holographic filter 10° (code 0506A101.D18)
- Holographic filter 60° (code 0506A103.D18)
- Holographic filter 80° (code 0506A121.D18)
- Holographic filter 30°x60° (code 0506A133.D18)
- Barndoor, black finishing (code 03.LA.237.11)
- Visor, black finishing (code 03.LA.236.11)
- Aliscaf clamp (tube diameter 48-51 mm) (Max load 200 Kg) (code 0521A033) **(indicated for any kind of loads, both vertical and/or horizontal)**
- Professional Quick trigger clamp (Max load 100 Kg) (code 0521A037) **(not indicated for**

horizontal load)

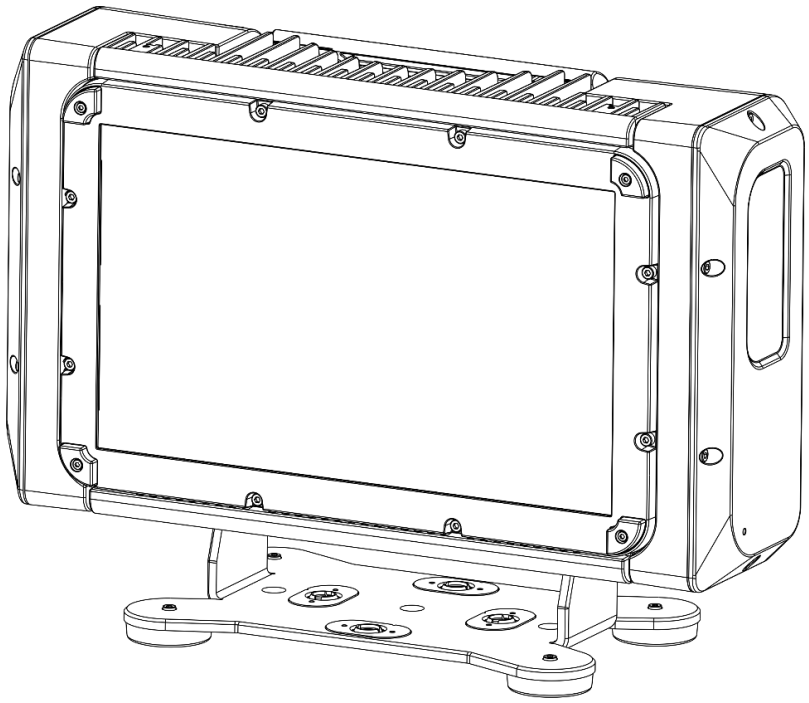
- Safety cable 5 x 600 mm (Max load 60 Kg) (code 0521A038)
- DTS firmware uploader dongle (code 03.LA.206)
- Permanent installation kit IP68: Power IN IP68 cable connector + 2 x DMX IN/OUT IP68 cable connectors (code 03.LA.214)

8 Installation

The unit is suitable for wet locations.

8.1 Floor Mounted Installation

X BRICK may be either floor or ceiling mounted.
For floor mounted installations, X BRICK is equipped with four rubber mounting feet on its bracket that allow the fixture be used as a self-standing projector.

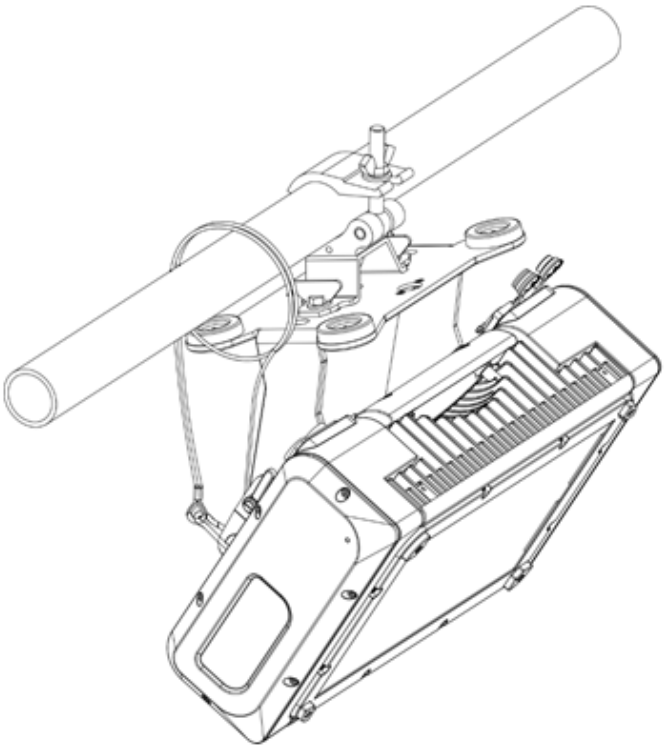


8.2 Ceiling Mounted Installation

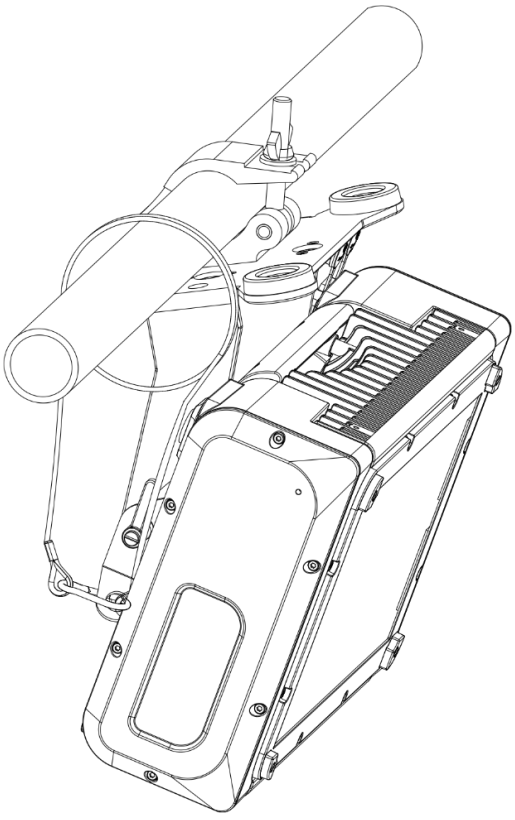
For ceiling mounted installations, DTS recommend the use of appropriate clamps to fix the unit to the mounting surface.
An Omega bracket with “Fast Lock” connections, already mounted on the unit, allows to hang the X BRICK by using proper truss fixing clamps.
The supporting structure from which the unit is hung should be capable of bearing the weight of the unit, as should any clamps used to hang it.
When outdoor and installing X BRICK vertically, ensure to mount the unit with the display facing towards the ground.

8.2.1 Installation With Omega Bracket

Four ¼-turn “Fast Lock” connections placed in the base of the unit allow X BRICK to hang by using Omega bracket (provided with the unit) in conjunction with an Aliscaf clamp (available on demand).



8.2.2 Installation Without Omega Bracket

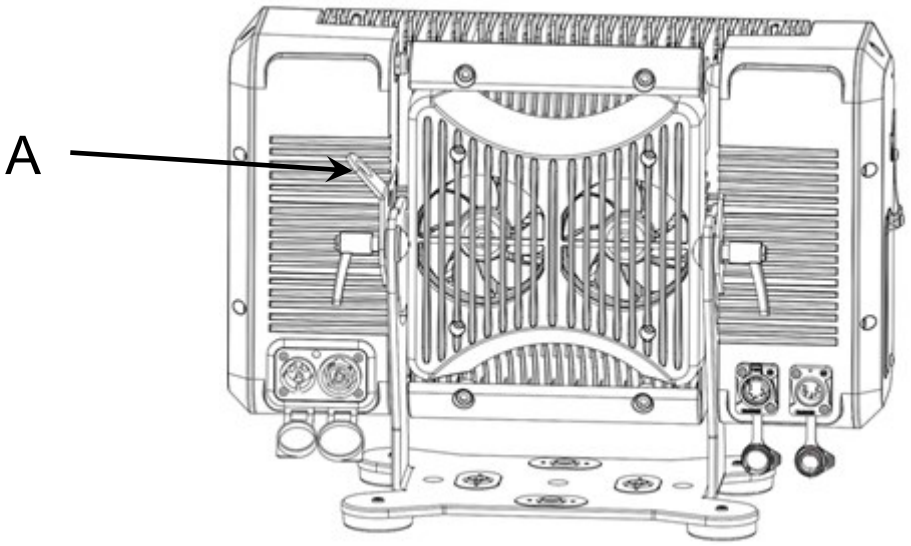


8.3 Safety Cable

A safety cable must be securely fixed to X BRICK and to the suspension truss in order to avoid the fixture accidentally falling, should the main fixing point fail.
The safety cable used must be approved by a notified body according to IEC 60598-2-17 and must be capable of bearing at least 10 times the weight of the unit. For more information, please refer to an authorized DTS service center.

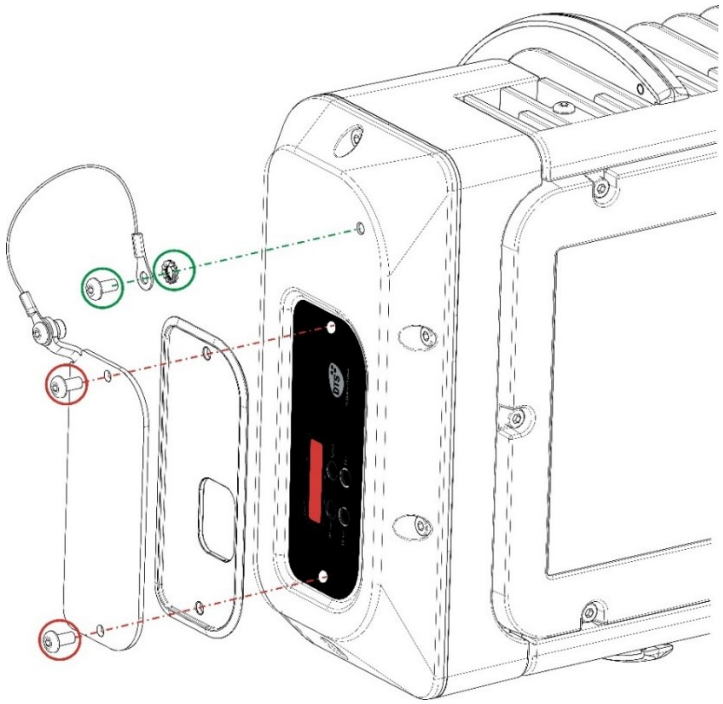
A suitable safety cable (code 0521A038) is available on demand.

You may attach the safety cable to the attachment point (A) located at the back of the X BRICK, as shown in the picture below.

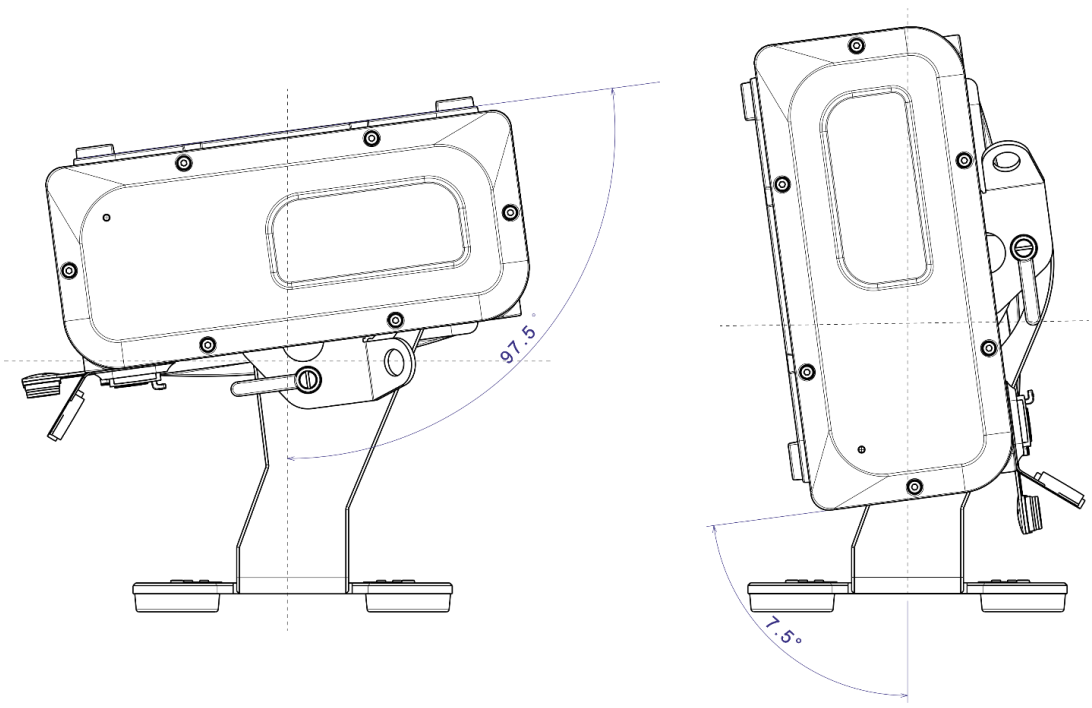


8.4 Display UV Protection

For outdoor installations, X BRICK is provided with a “Display UV Protection” kit (code 03.LA.218).
To properly install the protective device, put in place the Display UV Protection plate and the gasket over the display panel. Fix them both with the two screws (marked in red) provided with the kit.
Fix the safety cable on the side cap with the screw and washer (marked in green) provided with the kit.



8.5 Movement



8.6 Holographic Filter Installation

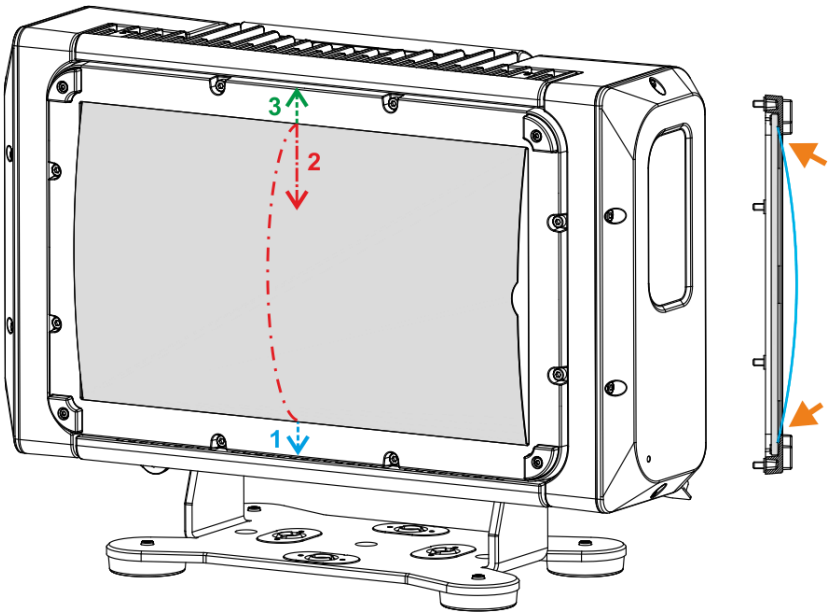
X BRICK offers a wide range of quickly interchangeable holographic filters (no tools required).

To install the holographic filter:

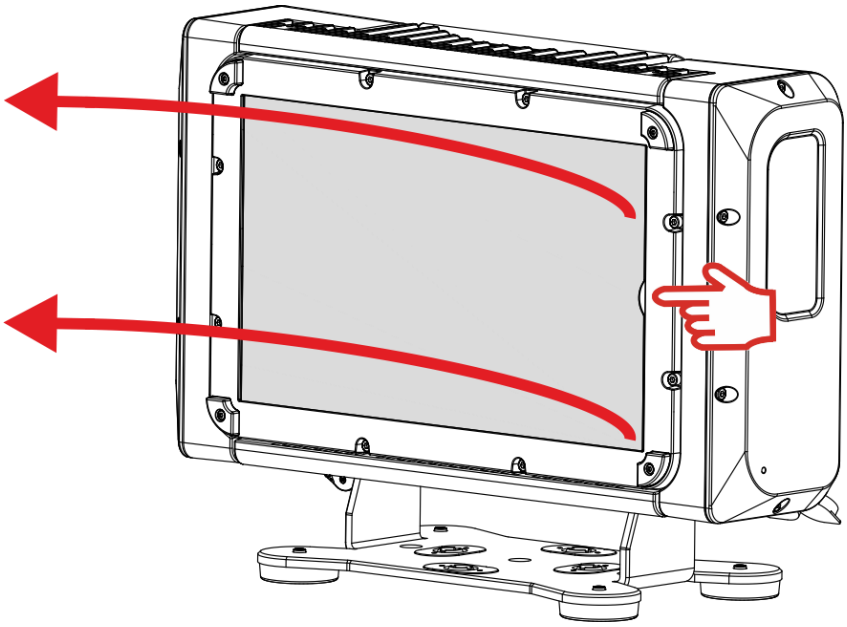
1- Position the bottom side of the filter into the gap, as shown in the picture below (figure 1)

2- Gently bend the filter

3- Position now the top side of the filter into the gap, as shown in the picture below (figure 2-3)



To remove the filter, simply lift it from the side, as shown in the picture below



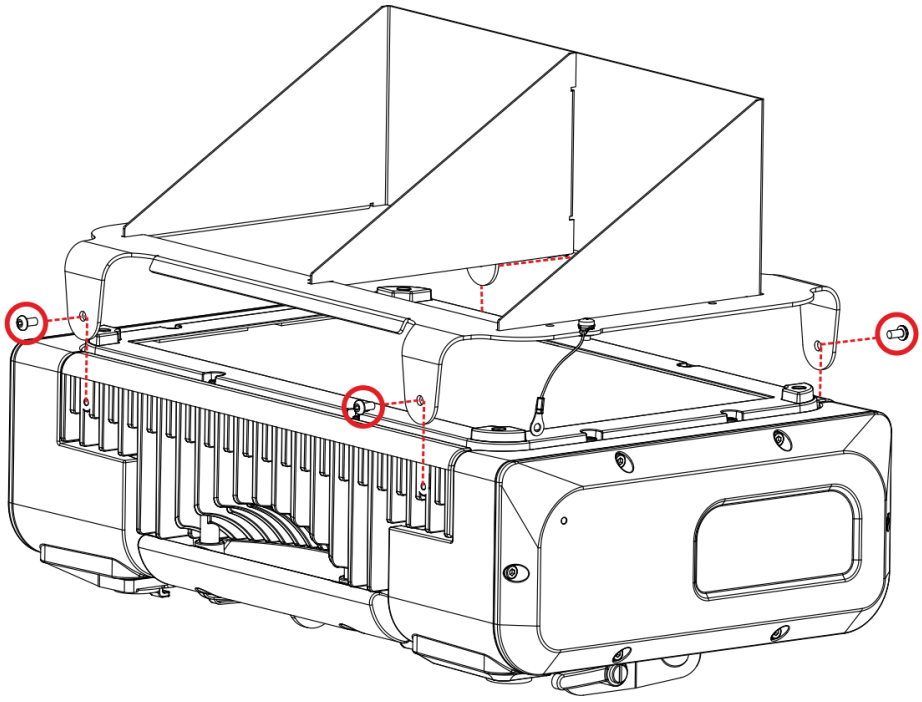
TIP For permanent outdoor installation, the holographic filter can also be installed internally (beneath the front glass cover) Only on request and at the time of ordering, by DTS personnel during the production phase.
Removal of the front glass by unauthorized personnel will void the warranty.

9 Accessories on Request - Installation

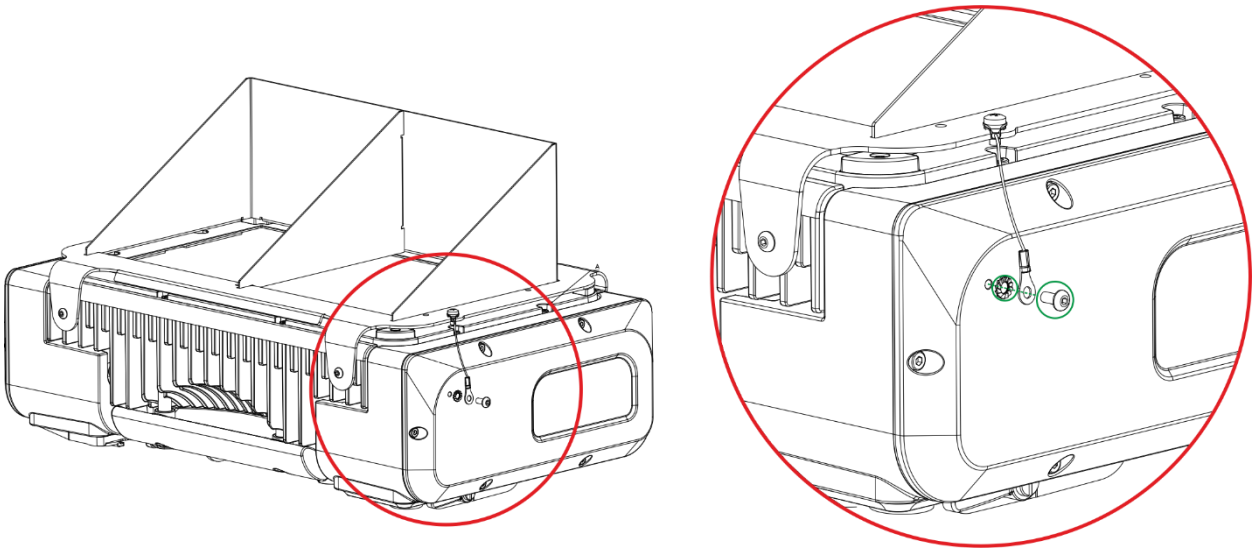
9.1 Visor Installation

A visor for X BRICK is available on demand.

To fix the visor to the unit, remove the screws as shown in the picture below (marked in red) and then reapply them to their former position, now with the visor properly positioned in place.



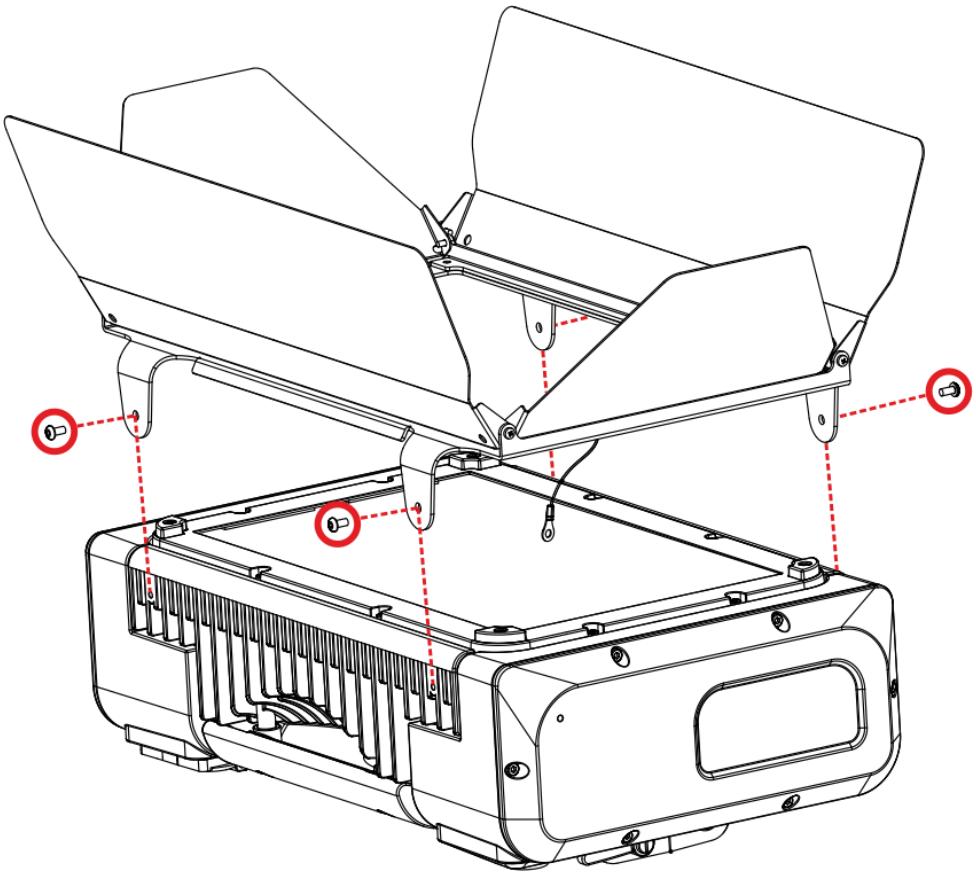
Once installed, fix the visor to the unit with a safety cable. Attach the safety cable to the side cap by using the screw and washer provided with the kit (marked in red below).



9.2 Barndoor Installation

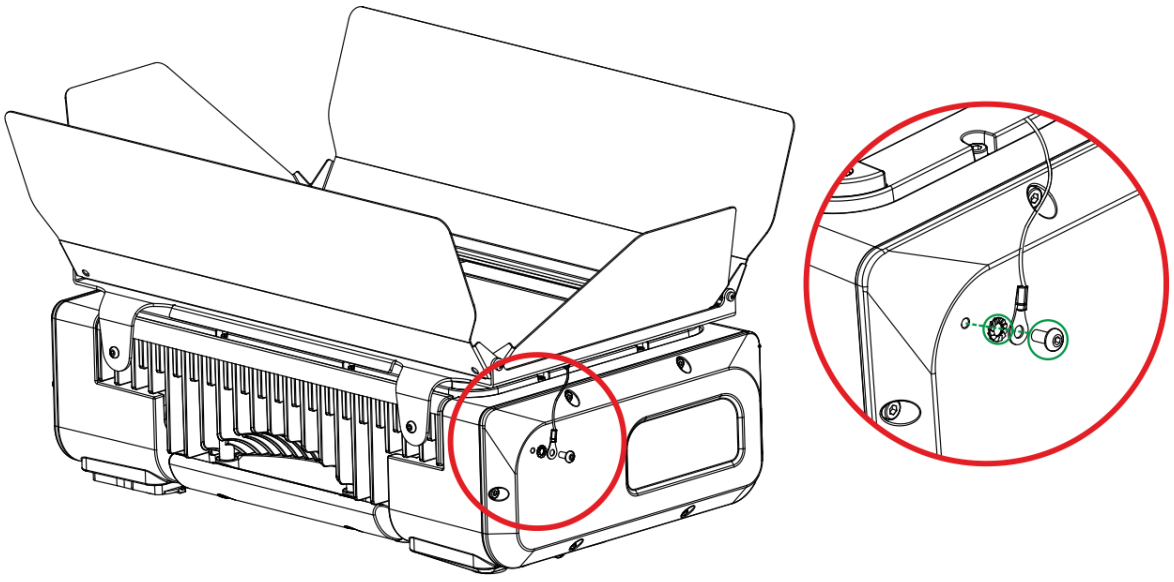
A barndoor for X BRICK is available on demand.

To fix the barndoor to the unit, remove the screws as shown in the picture below (marked in red) and then



reapply them to their former position, now with the barndoor properly positioned in place.

Once installed, fix the safety cable on the side cap as seen in the picture below. The screw and washer (marked in green) are included in the package.



10 Maintenance

D.T.S. Illuminazione Srl's products are of higher quality and design, therefore must be treated with care.
The following recommendations will help you keep your warranty intact, to make the best possible use of the product, and to maximize their lifespan:
Do not use the product (or products) before carefully reading this manual.
Failing to comply with the instructions on this manual may cause injury or damage.
Periodically check the status of the cables. Make sure the cables are not damaged.
Ensure that a sufficient air flow is given to the device, removing any obstruction that may prevent proper cooling of the product.
DO NOT use aggressive chemicals, solvents or abrasive detergents to clean the product. For the body, use a wet cloth. For the front panel, use window cleaning products.
For the best duration of the product painting, periodic washing with fresh water is recommended. Cleaning frequency varies in accordance with the salinity present in the place of installation Avoid high pressure water jets.
If the product does not work the way it is meant to, please contact the nearest authorized support center or refer directly to D.T.S. Illuminazione S.r.l.
Do not try to repair the product yourself. In case of need, please contact the nearest authorized support center or refer directly to D.T.S. Illuminazione Srl.

10.1 Front Glass Cover

Even a fine layer of dust can substantially reduce the luminous output of the luminaire.
Regularly clean the front glass cover using a soft cotton cloth, dampened with a dedicated glass cleaning solution.

10.2 Fans and Air Passages

The fans and air passages must be cleaned approximately every 6 weeks.
This time period will of course vary depending on the conditions in which the projector is operating.
Suitable instruments for performing this type of maintenance are a brush and a common vacuum cleaner or air compressor.
If necessary, clean the fans and air passages more frequently than suggested.

10.3 Periodic Check-ups

• **Mechanical parts**
Periodically check all mechanical parts and gaskets. Please refer to an authorized DTS service center if maintenance is needed.
• **Electrical components**

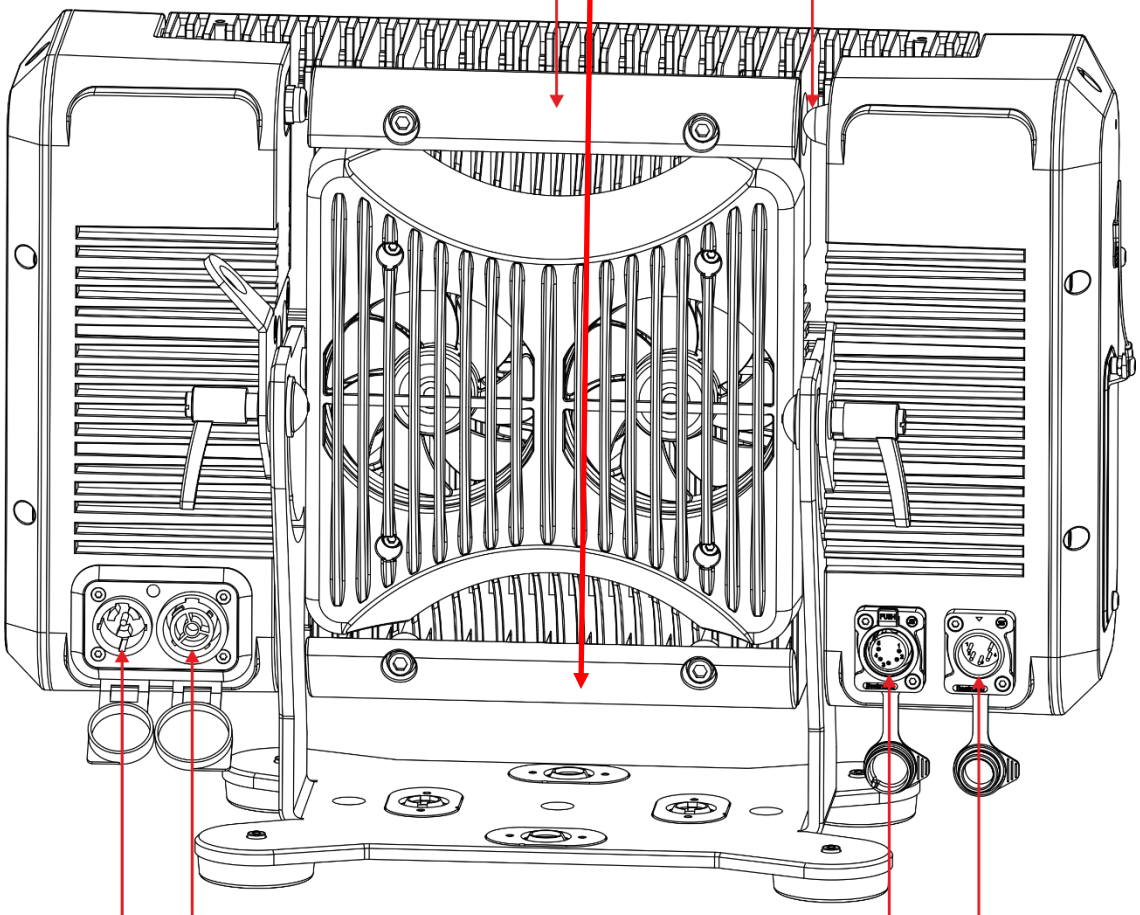
Check all electrical components for correct earthing and proper connection of all connectors.

11 Mains Connection

11.1 X BRICK and X BRICK Wireless models only

WIRELESS DMX
Built-in Lumen Radio
Wireless DMX
transmitter/receiver
ONLY
X BRICK PI Wireless
X BRICK Wireless

Ergonomic double handles



MAINS OUT
100-240Vac 50-60 Hz (MAX 10A)
PowerCON TRUE1 female
IP65 panel connector
with water-proof cap

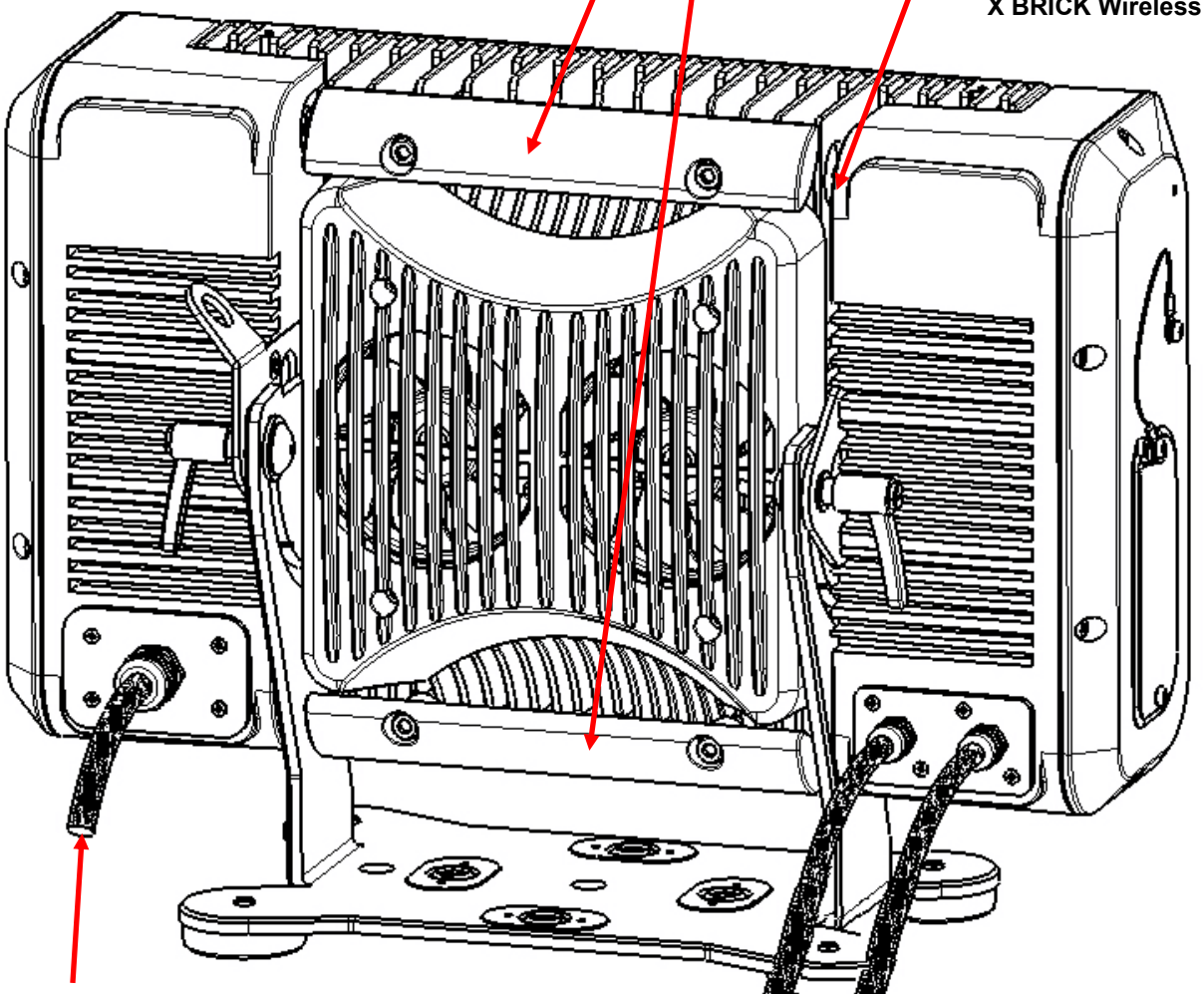
Max 3 X-BRICK units @ 230Vac
Max 1 X-BRICK units @ 100Vac

DMX OUT
XLR 5-pole female
IP65 panel connector
with water-proof cap

DMX IN
XLR 5-pole male
IP65 panel connector
with water-proof cap

MAINS IN
100-240Vac 50-60 Hz
PowerCON TRUE1 male
IP65 panel connector
with water-proof cap

11.2 X BRICK PI and X BRICK PI Wireless only



Terminal block or plug not included.
Installation may require advice from a qualified person.

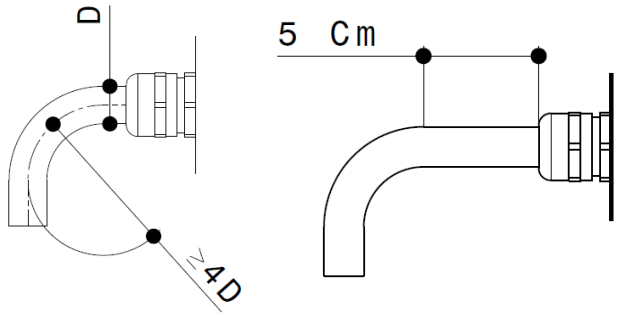
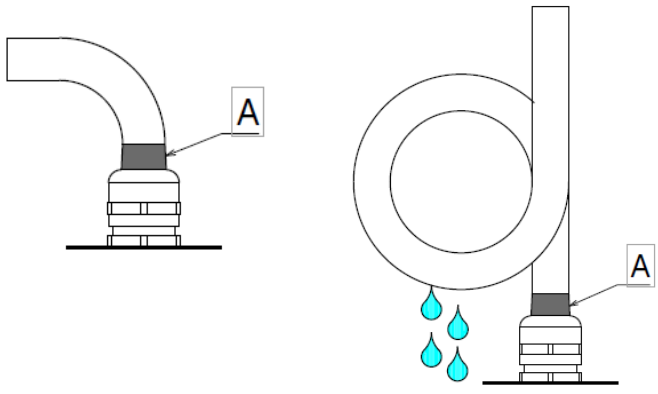
If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

11.2.1 Preparation Procedure for Cables and Connectors

- Test all X BRICK units before the installation.
- Report any operational defects to D.T.S. Illuminazione S.r.l or their official distributor or dealer.
- Do not install any X BRICK that presents any operational defect.
- Plan any potential cable folding (please refer to the following paragraph “Cable Folding”).
- Fasten both ends of the cables with connections fit for the environment in which they are made.
- Connect the X BRICK to their power supply units with appropriate connection cables.
- Cut the cable to the necessary length.
- Should the length of the cables be insufficient, provide an extension by using a cable with the same features. The junction between the two must be ranked at minimum IP65, or be made and left in a closed and dry location.
- Should the cables be damaged, they must be adequately repaired by restoring their IP protection rating.
- For junctions Cable – Cable use permanent installation kit IP68: Power IN IP68 cable connector + 2 x DMX IN/OUT IP68 cable connectors (code 03.LA.214)

11.2.2 Cable Folding

Cables MUST NOT be folded with a curvature radius inferior to four times their external diameter (4x cable diameter).
The cable, when extending from the product, must be kept straight for a minimum length of 5 cm (1.97 in) next to the cable gland.

Traction forces on contact points, and on the cable gland, must be avoided as per procedure: when extending from the product, the cable must not be folded for at least 5 cm (1.97 in). Bends on the cable must have a curvature radius over four times the diameter of the cable itself.	
Avoid positioning the fixtures with their cables extending from them in a vertical position. If this can’t be avoided: • After the installation, add silicon glue to the cable surface next to the device (picture on the right, letter **A**); • Place the cable in order to obtain a “draining” ring (see picture on the right).	

WARNING: do not use acetic silicones.

11.3 Protection

The use of a thermal magnetic circuit breaker is recommended for each X BRICK.

12 DMX Signal Connection

- The unit operates using the digital USITT DMX512 signal.
- Connection between the light controller and the projector, or between projectors, must be carried out using a two-pair shielded ø 0.5 mm cable, and a XLR 5 connector.
- Ensure that the conductors do not touch each other. Do not connect the ground cable to the XLR chassis. The housing of the plug must be isolated.
- Connect the light controller to the DMX IN panel connector of the projector to create a link to the next projector, simply connect the DMX OUT plug of the former to the DMX IN plug of the new fixture in line.

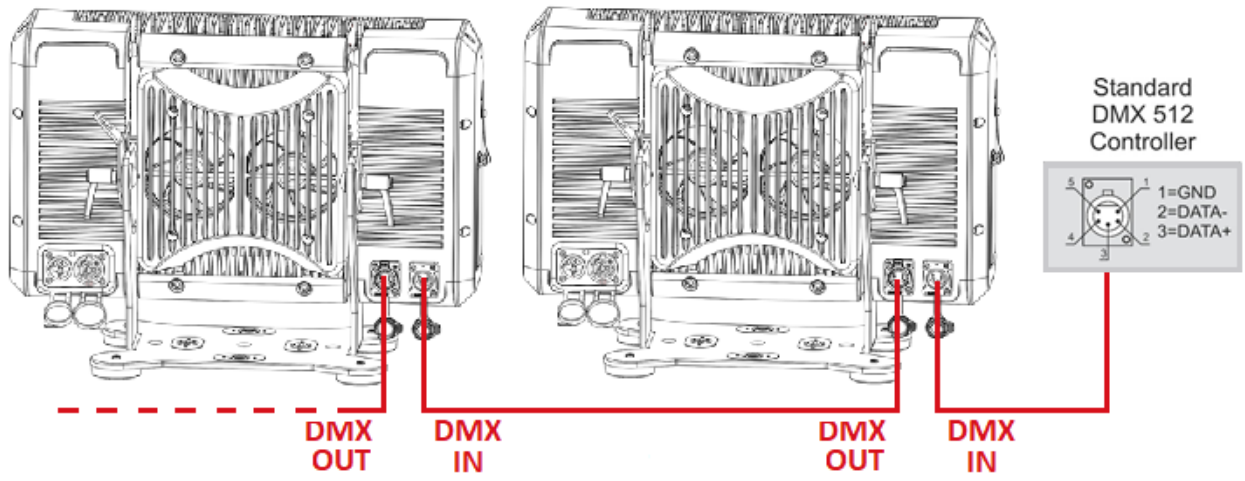
Following this procedure, all the projectors will be cascade connected.

PS. If the unit's display is flashing when showing the DMX address, then one of the following errors has occurred:

• DMX signal not present

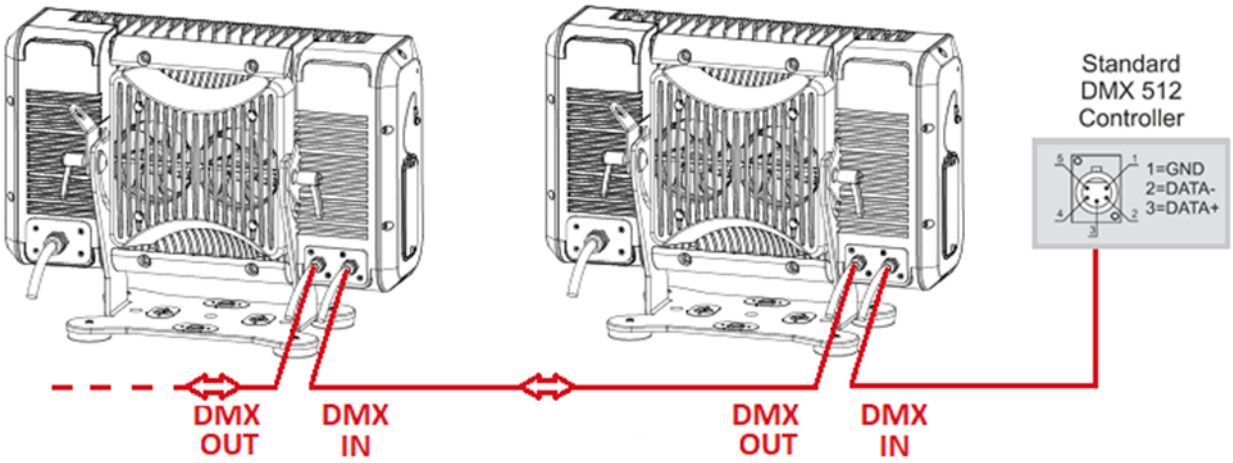
• DMX reception problem

X BRICK and **X BRICK Wireless**



Assure a cumulative leakage current of less than 3.5mA on the control circuit.

X BRICK PI and **X BRICK PI Wireless**



In permanent installations IP 65, use Cable–Cable junction also for DMX.

Available on request: Permanent installation kit IP68: Power IN IP68 cable connector + 2 x DMX IN/OUT IP68 cable connectors (code 03.LA.214)

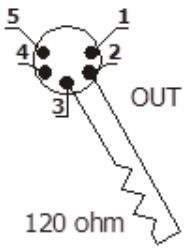
Assure a cumulative leakage current of less than 3.5mA on the control circuit.

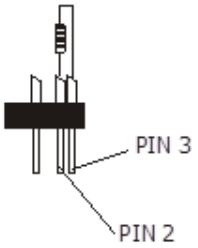
12.1 DMX terminator

The use of a DMX terminator is recommended.

The DMX terminator is a male XLR 5 pins connector with a 120 Ω resistor between pin 2 and pin 3.

The DMX terminator must be plugged in into the last unit's DMX OUT panel connector of the DMX line.





Place a 120 Ω resistor between pin 2 and 3 of a male XRL connector;

Plug the resistor into the DMX OUT panel connector of the last unit connected to the DMX line.

12.2 DMX Modes

X BRICK can be used in nine different DMX modes:

Full operation modes

- "Chase" (23 ch) (Default)
- "Extended" (29 ch)
- "Sectors RGBW x4" (16 ch)
- "Sectors RGBW fine x4" (32 ch)
- "Sectors RGBW+Shut+Dim x4" (24 ch)

DMX single layer modes (compatible with all BRICK and MINI BRICK DMX modes)

- "Standard" (10 ch)
- "Global RGBW" (4 ch)
- "Global RGBW+Shut+Dim" (6 ch)

e.g., when using the unit in "Chase" (23 DMX channels) (Default) mode, set the following addresses on the light desk as shown below:

Projector 1	A001	
Projector 2	A024	*If you want to select the next projector, just add "23" to the former DMX address*
Projector 3	A047	
…..	A….	
Projector 6	A116	

12.3 Setting Up the DMX Address

1 Press the UP and DOWN key until you reach the desired DMX address. The numbers on the display will start flashing (new DMX address hasn't yet been set).

2 Press ENTER to confirm your selection. The numbers on the display will stop flashing; the projector is now set to the new DMX address.

TIP: if you keep pressed down the UP or DOWN keys, address scrolling will be quicker allowing thus for a faster selection.

13 Updating the Firmware

In order to update to the latest firmware release of the X BRICK, you will need:

- DTS firmware uploader dongle (code 03.LA.206).
- "DTS Firmware Upgrade Utility v.2.02" program installed on PC (Windows OS).
- Latest firmware release available for the X BRICK.

Updating to the latest firmware release:

To perform the update, please follow the procedure as described below:

1 Connect the DTS Firmware Uploader Dongle to a spare USB port on the PC.

2 Connect the unit's DMX IN to the DTS Firmware Uploader Dongle's DMX OUT with a standard DMX cable and turn on the fixture.

3 Send the new firmware release into the unit by using "DTS Firmware Upgrade Utility v.2.02" program.

4 At the end of the procedure, the unit will reboot.

For more information, please refer to an authorized DTS service center.

14 Display Functions

The X BRICK display panel shows all the available control menus.

By selecting the available functions on these menus, you will be able to change the fixture's settings and behavior.

Beware that changing these settings may vary the operating functions of the unit so that it may not respond correctly to the signal given to it. Carefully read the instructions and tables below before carrying out any variations or selections.

MENU	• To access the control menus in the display panel. • To return to the previous level in the menu structure without saving any changes. • To exit the menus.
ENTER	• To select any desired menu. • To confirm any selection made or save any changes.
UP / DOWN	• To navigate the menus' structure. • To scroll between any values.

MASTER FIRMWARE RELEASE **SLAVE FIRMWARE RELEASE**	**1.04** **1.01**
RDM Device Model ID	**0x0D65**
DMX Personality IDs	**0x01 "STANDARD (10CH)"** **0x02 "CHASE (23CH)"** **0x03 "EXTENDED (29CH)"** **0x04 "GLOBAL RGBW (4CH)"** **0x05 "GLOBAL RGBW+SHUT+DIM (6CH)"** **0x06 "GLOBAL RGBW+DIM FINE (10CH)"** **0x07 "SECTORS RGBW X4 (16CH)"** **0x08 "SECTORS RGBW FINE X4 (32CH)"** **0x09 "SECTORS RGBW+SHUT+DIM X4 (24CH)"**

"DISPLAY KEY-LOCK" FUNCTION

"Display key-lock" function can be enabled/disabled by contemporary pressing ENTER + DOWN keys for 3 seconds.

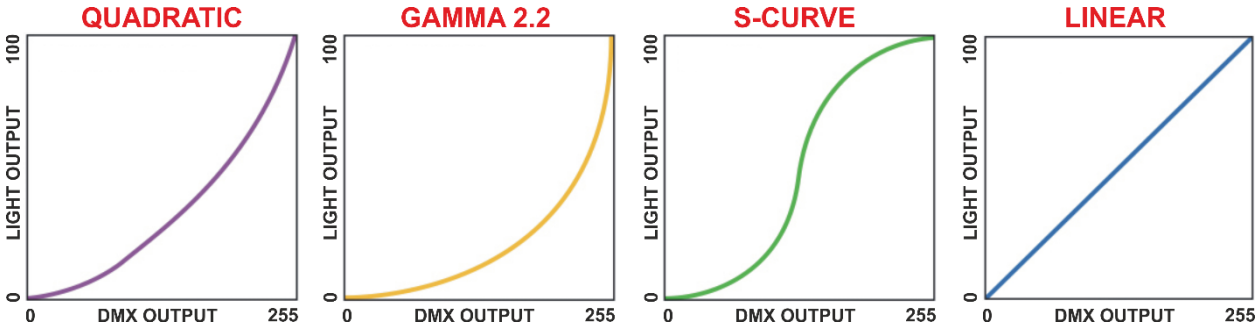
MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
DISPLAY	FLIP	SUSPENDED		Reverses display's reading depending on the mounting position. On the ground or suspended. **Suspended (Default).**
		ON THE GROUND		
	STANDBY	DISABLED		**Display stand-by disabled (Default).**
		ENABLED		Display goes OFF after 10 seconds.
		FORCED EN.		Display forced OFF even if control signal is missing or error messages are shown.
MODE	1 – 10CH STANDARD			Allows to select STANDARD mode (10 DMX channels). Single layer operation for compatibility with all BRICK models.
	2 – 23CH CHASE			**Allows to select CHASE mode (23 DMX channels). Default**
	3 – 29CH EXTENDED			Allows to select EXTENDED mode (29 DMX channels).
	4 – 4CH GLOBAL RGBW			Allows to select GLOBAL RGBW mode (4 DMX channels). Single layer operation for compatibility with all BRICK models.
	5 – 6CH GLOBAL RGBW+SHUT+DIM			Allows to select GLOBAL RGBW+SHUT+DIM mode (6 DMX channels). Single layer operation for compatibility with all BRICK models.
	6 – 10CH GLOBAL RGBW+DIM FINE			Allows to select GLOBAL RGBW+DIM FINE mode (10 DMX channels). Single layer operation for compatibility with all BRICK models.
	7 – 16CH SECTORS RGBW X4			Allows to select SECTORS RGBW mode (16 DMX channels).
	8 – 32CH SECTORS RGBW FINE X4			Allows to select SECTORS RGBW FINE X4 mode (32 DMX channels).
	9 – 24CH SECTORS RGBW +SHUT+DIM X4			Allows to select SECTORS RGBW+SHUT+DIM X4 mode (24 DMX channels).
NO DMX ACTION	KEEP LAST DMX			Allows to set the desired unit's behavior in case DMX signal is missing or not available. **Keep last valid DMX signal (Default).**

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
	BLACKOUT			Black-out.
	PROGRAM 1-16	1 - 16		Chase with 16 steps previously created in REC mode. Speed time and wait time values (in seconds) selectable by user. **Default = 10.**
		SPEED	1 - 3600	
		WAIT	1 - 3600	
	RGB 100			RGB channels @ 100%.
	RGB 60			RGB channels @ 60%.
	CUSTOM	RED	0 - 255	Custom. RGBW, RGBW Fine and Dimmer values selectable by user. **Default = 128.**
		RED FINE	0 - 255	**Default = 128.**
		GREEN	0 - 255	**Default = 128.**
		GREEN FINE	0 - 255	**Default = 128.**
		BLUE	0 - 255	**Default = 128.**
		BLUE FINE	0 - 255	**Default = 128.**
		WHITE	0 - 255	**Default = 128.**
		WHITE FINE	0 - 255	**Default = 128.**
		DIMMER	0 - 255	**Default = 128.**
		DIMMER FINE	0 - 255	**Default = 128.**
	CUSTOM2			Custom2. RGBW, RGBW Fine and Dimmer values selectable by user only via RDM.
	CUSTOM3			Custom3. RGBW, RGBW Fine and Dimmer values selectable by user only via RDM.
	CUSTOM4			Custom4. RGBW, RGBW Fine and Dimmer values selectable by user only via RDM.
MODE AUTO	PROGRAM 1-16	1 - 16		Automatic mode without DMX controller. Chase with 16 steps previously created in REC mode. Speed time and wait time values (in seconds) selectable by user **(Default = 10)**. In Auto mode the unit do generate DMX for slave units.
		SPEED	1 - 3600	
		WAIT	1 - 3600	

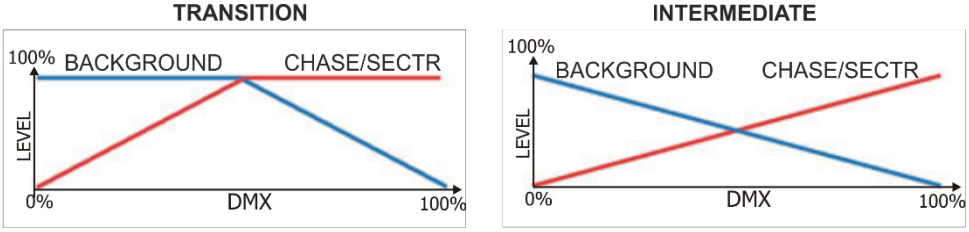
MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
	PERS. COLOUR	1 - 16		16 customizable Colour Macros. RGBW values selectable by user **(Default = 255)**.
	RAINBOW	SPEED		Rainbow colours effect. Speed time value (in seconds) selectable by user **(Default = 10)**.
	FIXED COLOUR	1 - 28		28 Colour Macros as on DMX channel “MACRO COLOR”. **Default = 1.**
	CCT	2700 - 8000		12 White color temperature from 2700K to 8000K as on DMX channel “CCT”. **Default = 2700K.**
	DIMMER	0 - 255		Dimmer level selectable by user as on DMX channel “DIMMER” **Default = 255.**
	SHUTTER	0 - 255		Shutter level selectable by user as on DMX channel “SHUTTER” **Default = 15.**
	ESC			Esc from automatic mode.
REC	10 CH	R001		In DMX Recorder mode it is possible to create and store the scenes of the PROGRAM 1-16 menu by using an external DMX controller. The unit must be set to 10 DMX channels mode. Refer to “REC MODE” for details.
		M001 – M016		
SLAVE	SURE	SLAVE		Slave mode. The unit is forced to DMX address 1 and 10 DMX channels mode receiving signal from the unit set in Auto mode.
		ESC		Esc from slave mode
WIRELESS Only for **X BRICK Wireless** and **X BRICK PI Wireless**	STATUS	DISABLED		Allows to control the unit via Wireless DMX. **Default = Disabled.**
		ENABLED		
	DIRECTION	RECEIVER		**The unit receives signal via Wireless DMX and transmit the signal to the DMX Output connector (Default).**
		TRANSMITTER		The unit works as Wireless DMX Transmitter. The unit receives signal from DMX Input connector and transmit the signal via Wireless.
	UNLINK			<u>Operation as Receiver:</u> To log off the unit from paired wireless transmitter device. <u>Operation as Transmitter:</u> To log off all the paired wireless receiver devices.
	ONLY FOR TRANSMITTERLINK			To log on all the free wireless receiver devices.

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
LED	SMOOTH	OFF - 20		Allows to select the value of delay (in ms) for DIMMER channel reaction to DMX dimming command. OFF = Instant response. **4 = 100 ms smooth response (Default).** 20 = 500 ms smooth response.
	COMP	QUADRATIC		**Allows to set quadratic current output for LED (Default).**
		GAMMA 2.2		Allows to set gamma curve 2.2
		S-CURVE		Allows to set S-curve to emulates light intensity characteristics of the tungsten halogen lamps.
		LINEAR		Allows to set linear light output.
	SYNC	610 - 5000 HZ		Allows to adjust the PWM frequency value (Hz) in order to reduce flickering in the process of your camera recordings. Range = 610 Hz – 5000 Hz **Default = 1000 Hz**
	BKG-CHS CROSSFADE	TRANSITION		**Allows to set Crossfade Transition from background to chase/sector of DMX modes 2 and 3. (Default).**
		INTERMEDIATE		Allows to set Crossfade Intermediate from background to chase/sector of DMX modes 2 and 3.
	LED PIXEL INVERT	NORMAL		Standard pixel/sectors sequence. **Normal = Default.**
		REVERSE		To invert pixel/sectors sequence. Refer to page 35 for details.

“COMP” GRAPHICS:



“CROSSFADE” GRAPHICS:



MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
FAN	STANDARD			**Fans standard speed (Default).** If temperature <15°C: fans OFF. If temperature >15°C: fans speed is increased within the factory values range.
	SILENT			Reduced fans speed for a low noise operation. If temperature <15°C: fans OFF. If temperature >15°C: fans speed is increased within the factory values range.
	ULTRA SILENT			Low fans speed for a very low noise operation. If temperature <15°C: fans OFF. If temperature >15°C: fans speed is increased within the factory values range.
	AUTO			Automatic fans speed. If temperature <40°C: fans OFF. If temperature >40°C: fans speed is increased related to system working conditions.
DEFAULT SET	SURE			To restore factory settings.
SYSTEM INFO	TEMPERATURE	DRV1 41.4 40.8 DRV2 40.5 41.0 LED 48.2 PSU 43.4 MICRO 1 46.6 MICRO 2 45.5		DRV-1: LED Driver Master board temperature monitoring. DRV-2: LED Driver Slave board temperature monitoring. LED: LED temperature monitoring. PSU: Power supply temperature monitoring. MICRO 1: Micro controller of LED Driver Master board temperature monitoring. MICRO 2: Micro controller of LED Driver Slave board temperature monitoring.
	SOFTWARE	MASTER DRV1 V.1.00 SLAVE DRV2 V.1.00		LED Driver Master and Slave board firmware release.
	TIME COUNTERS	S1 (R G B W) S2 (R G B W) S3 (R G B W) S4 (R G B W) UNIT LIFE		RGBW LEDs life time for each sector and unit life time.
	LEDS STATUS	S1 (R G B W) S2 (R G B W) S3 (R G B W) S4 (R G B W)		RGBW LEDs status monitoring for each sector: NA = Not available. OK = LEDs properly working. SH = LEDs in short circuit. OP = LEDs in open circuit.

14.1 Enable/Disable Wireless

*Only for **X BRICK Wireless** and **X BRICK PI Wireless***

X BRICK features a built-in Lumen Radio Wireless DMX transmitter/receiver

Operation as Receiver (default)

Enable Wireless DMX control under WIRELESS -> STATUS menu.

On the main display will appear “WIRELESS RX” (Default) above the DMX address.

To log on the unit to Lumen Radio or Wireless Solution compatible transmitter devices, press the connect button on the wireless transmitter device. To optimize the wireless communication, maintain TX to RX line of sight. The maximum distance should not exceed 100 meters.

Select UNLINK menu to log off the unit from paired wireless TX device.

Operation as Transmitter

Enable Wireless DMX control under WIRELESS -> STATUS menu.

Set the unit as Transmitter under DIRECTION -> TRANSMITTER menu.

On the main display will appear “WIRELESS TX” above the DMX address.

Connect the unit via DMX Input connector and pair the free wireless receiver devices by selecting LINK menu.

To optimize the wireless communication, maintain TX to RX line of sight. The maximum distance should not exceed 100 meters.

Select UNLINK menu to log off all the paired wireless receiver devices.

15 REC Mode

For the programming of “ChPr” through a DMX controller, you will need three DMX channels available in addition to those already occupied by the selected DMX personality

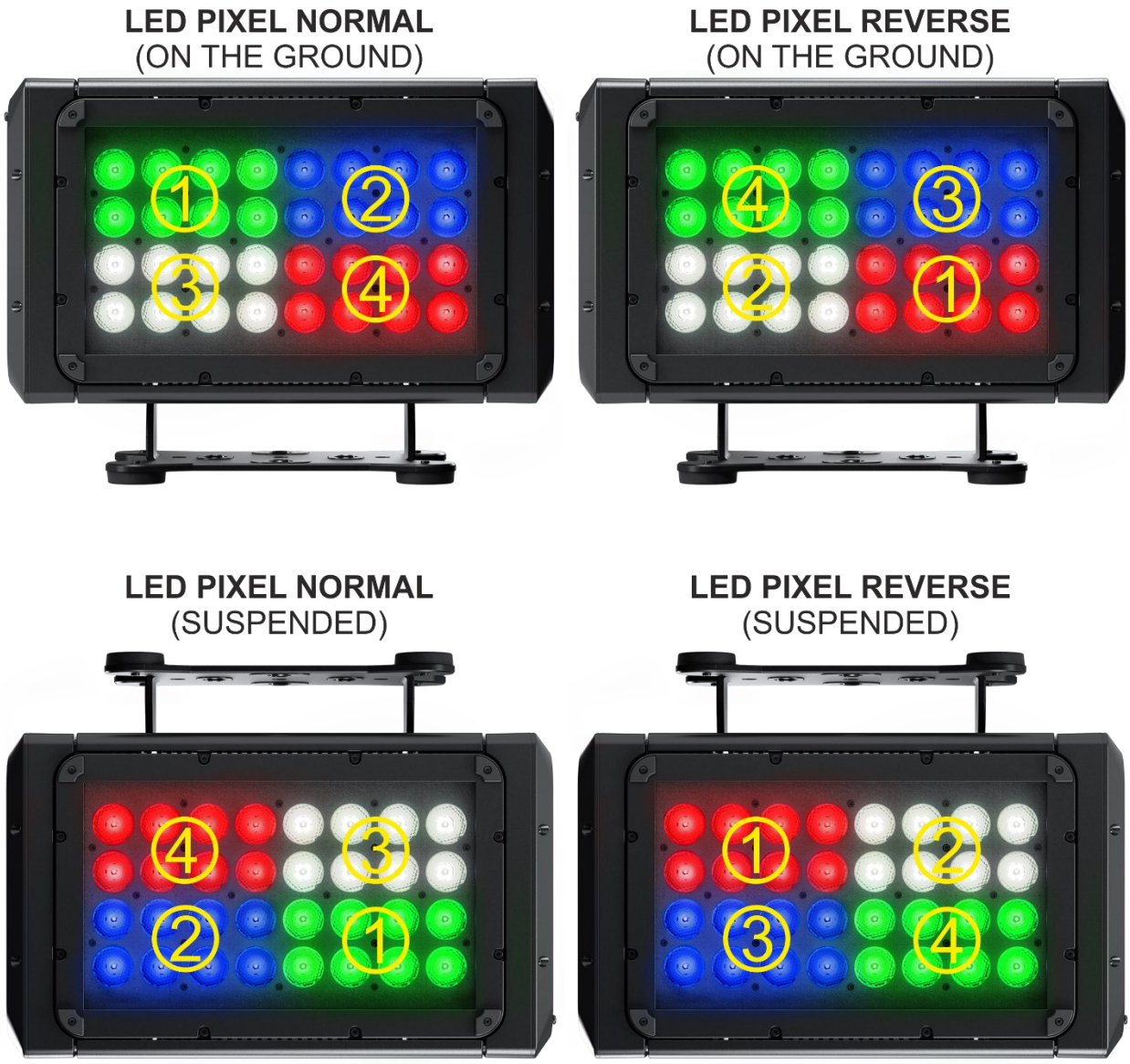
E.g., if using “Standard (10 ch)” mode, a total of thirteen DMX channels will be needed for programming

CH	NAME	DMX LEVELS	
1 thru 10	-	-	See DMX personality “10 channels” for further information
11	SCENES	0..10	No Function (r001)
		11..255	Display of pre-programmed scenes (max. 16 scenes from M001 to M016)
12	EDIT	0..19	No Function
		20..234	The unit runs the configuration given by the received input DMX values. With the channel SCENES it is possible to scroll through scenes, while with RECORDING it is possible to store the selected scene.
		235..255	The unit runs the configuration given by the received input DMX values closing the sequence as last scene. With the channel RECORDING it is possible to record the selected scene as last scene
13	RECORDING	-	Stores the set scene with a variation between 0 and 255 (the display flashes indicating that the scene has been recorded). It is advised that you keep the RECORDING channel set to 0 and to run through 255 only once you have decided to store the scene. If ChPr is not closed, by indicating the last scene (“EDIT” channel, DMX 235 to 255) in playback mode, all 16 scenes will be played through even if not programmed.

16 Error Messages

ERROR SHOWED ON DISPLAY	APPEARS WHEN
LED SENSOR ERROR	LED thermal sensor damaged (open or in short circuit). Unit immediately goes in black-out.
LED OVERTEMP	LED temperature detected over 100°C. Unit immediately goes in black-out.
DRV1 MICRO SENSOR ERROR	Micro controller thermal sensor on LED Driver Master board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV1 MICRO OVERTEMP	Temperature of Micro controller on LED Driver Master board detected over 100°C. Unit immediately goes in black-out.
DRV2 MICRO SENSOR ERROR	Micro controller thermal sensor on LED Driver Slave board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV2 MICRO OVERTEMP	Temperature of Micro controller on LED Driver Slave board detected over 100°C. Unit immediately goes in black-out.
DRV1 NTC1 SENSOR ERROR	Thermal sensor on outputs 6 and 7 of LED Driver Master board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV1 NTC1 OVERTEMP	Temperature detected over 100°C on outputs 6 and 7 of LED Driver Master board. Unit immediately goes in black-out.
DRV1 NTC3 SENSOR ERROR	Thermal sensor on outputs 2 and 3 of LED Driver Master board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV1 NTC3 OVERTEMP	Temperature detected over 100°C on outputs 2 and 3 of LED Driver Master board. Unit immediately goes in black-out.
DRV2 NTC1 SENSOR ERROR	Thermal sensor on outputs 6 and 7 of LED Driver Slave board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV2 NTC1 OVERTEMP	Temperature detected over 100°C on outputs 6 and 7 of LED Driver Slave board. Unit immediately goes in black-out.
DRV2 NTC3 SENSOR ERROR	Thermal sensor on outputs 2 and 3 of LED Driver Slave board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV2 NTC3 OVERTEMP	Temperature detected over 100°C on outputs 2 and 3 of LED Driver Slave board. Unit immediately goes in black-out.
PSU SENSOR ERROR	PSU thermal sensor damaged (open or in short circuit). Unit immediately goes in black-out.
PSU OVERTEMP	PSU temperature detected over 100°C. Unit immediately goes in black-out.
DRV2 COMMUNICATION ERROR	Communication problem between LED Driver Master board and LED Driver Slave board.
DRV1 LOW SUPPLY VOLTAGE	LED Driver Master board input voltage <36Vdc.
DRV1 HIGH SUPPLY VOLTAGE	LED Driver Master board input voltage >50Vdc.
DRV2 LOW SUPPLY VOLTAGE	LED Driver Slave board input voltage <36Vdc.
DRV2 HIGH SUPPLY VOLTAGE	LED Driver Slave board input voltage >50Vdc.

17 LED Pixel Invert - Function



18 Product Disposal

DOCTUS are electrical devices and therefore, at the end of their lifetime, must be disposed according to local regulations and for no reason can they be dispersed in the environment.

NOTES

ISO 9001:2015
DTS quality system is certified to the ISO 9001:2015 standard.

ITALIAN
PROFESSIONAL
LIGHTING

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