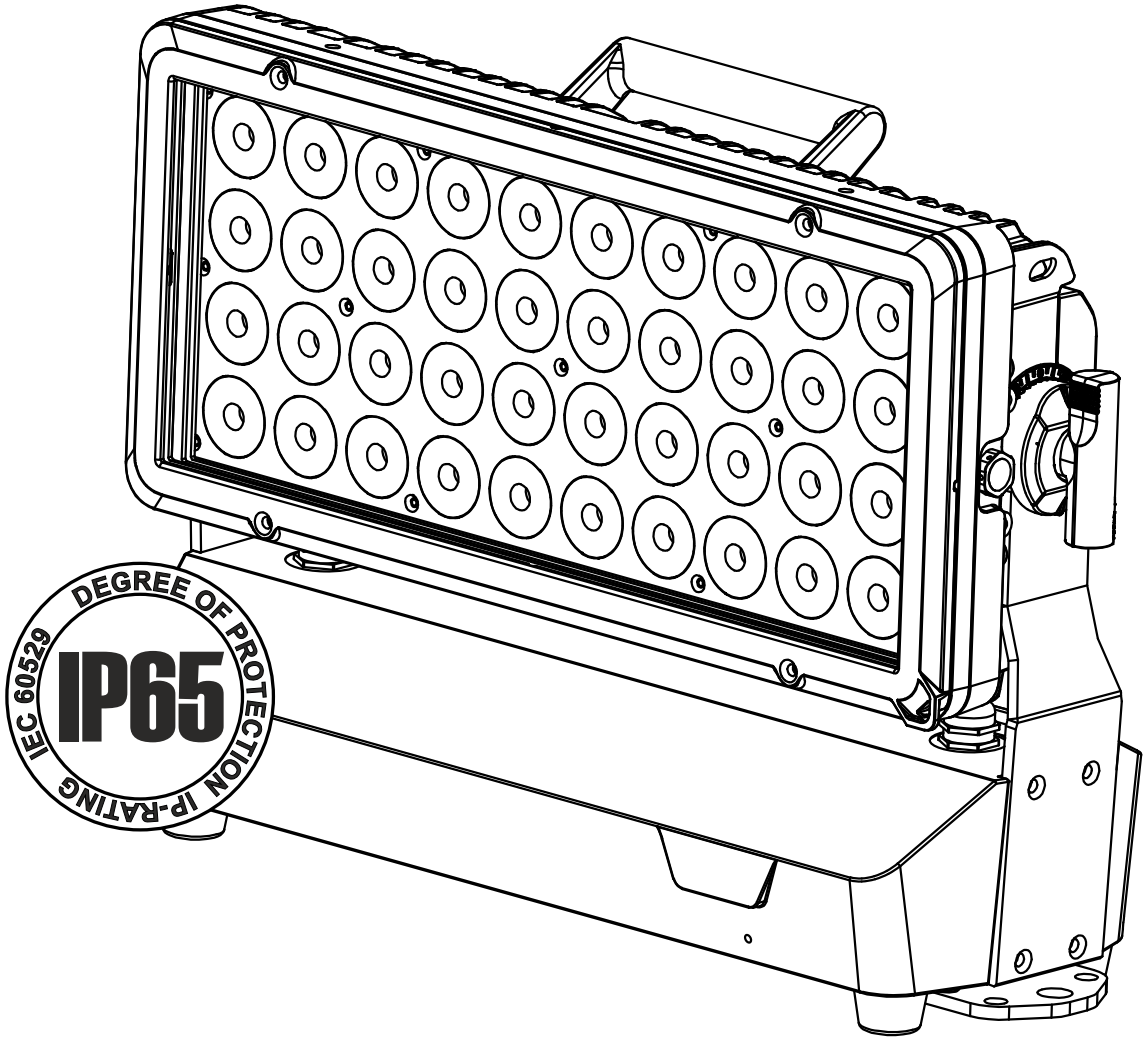
BT-CHROMA800



ENGLISH

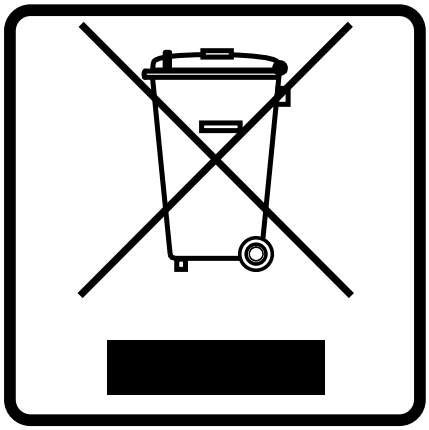
Operation Manual

Other languages can be downloaded from:
WWW.BRITEQ-LIGHTING.COM

CE

BriTeQ®
LIGHT RESEARCH

Version: 1.1 (from FW V1,02)



EN - DISPOSAL OF THE DEVICE
Dispose of the unit and used batteries in an environment friendly manner according to your country regulations.

FR - DÉCLASSER L'APPAREIL
Débarrassez-vous de l'appareil et des piles usagées de manière écologique Conformément aux dispositions légales de votre pays.

NL - VERWIJDEREN VAN HET APPARAAT
Verwijder het toestel en de gebruikte batterijen op een milieuvriendelijke manier conform de in uw land geldende voorschriften.

DU - ENTSORGUNG DES GERÄTS
Entsorgen Sie das Gerät und die Batterien auf umweltfreundliche Art und Weise gemäß den Vorschriften Ihres Landes.

ES - DESHACERSE DEL APARATO
Reciclar el aparato y pilas usadas de forma ecologica conforme a las disposiciones legales de su pais.

PT - COMO DESFAZER-SE DA UNIDADE
Tente reciclar a unidade e as pilhas usadas respeitando o ambiente e em conformidade com as normas vigentes no seu país.

OPERATION MANUAL

Thank you for buying this Briteq® product. To take full advantage of all possibilities and for your own safety, please read these operating instructions very carefully before you start using this unit.

FEATURES

- Powerful indoor / outdoor IP65 LED projector engineered for maximum flexibility in different applications.
- Can be used for rental jobs, entertainment industry and fixed installations.
- 40pcs 20W RGBL-leds assure very high light output with perfect color mixing and excellent white light!
- RGB, RGBL and HSI-color control, both 8 & 16 bit resolution.
- Extremely multifunctional cabling options:
    - **RENTAL / ENTERTAINMENT applications:** standard equipped with 3pin XLR and lockable IP65-Power connector in/outputs for easy daisy chaining.
    - **FIXED installations:** with an optional set called "**BT-CHROMA 800 - FIX install set"** (POWER & DMX in/output modules with stainless-steel cable glands + 2 stainless-steel bolts for fixed TILT-positioning) the projector can very easily be transformed for permanent outdoor installation.
- Standard equipped with 15° optics and magnetic aluminum filter frame with frost filter.
- Different operation modes with 1, 2, 5 or 10 pixel combinations for nice special effects.
- Full DMX-control with RDM-support: from easy 3CH to sophisticated 81CH control
- Built-in antenna and **Wireless Solution® G4 / G4S DMX-receiver** (@ 2.4GHz) for easy setup and use.
- Standalone operation with static color & white presets, color fade and over 20 multi-pixel programs.
- Different accessories optionally available to obtain perfect results:
    - **Barndoor:** adjust the beam easily on stage
    - **Glare shield:** static beam limiter hides the LEDs and eliminates unwanted stray light
    - **Different beam shapers:** 60° - 60°x 10° - 10°x 60° - 40°x 1° - 1°x 40° to get the perfect beam!
    - **Empty magnetic filter frame:** to easily install the different beam shapers
- Elegant, extruded aluminum housing finished with tempered glass cover.
- Solid and multifunctional base:
    - **Truss installation:** easy truss mounting, using 1 or 2 optional OMEGA brackets
    - **Fixed installation:** easy and secure mounting on any surface, using standard anchor bolts.
- Optimal thermal management for long lifespan and easy maintenance
- Very silent operation, thanks to temperature controlled waterproof cooling fans.
- Alphanumeric OLED-display and waterproof touch keys to select different options of the setup menu.
- Adaptable lamp behavior thanks to seamless dimmer speed control.
- Four dimmer curves: linear, square, inverse square, S-curve
- In case of DMX failure, you can choose between blackout, freeze mode and automatic stand-alone mode.
- Lock function to avoid unwanted altering of the settings.
- Equipped with a special GORE® vent to prevent moisture and condensation inside the projector.

BEFORE USE

- Before you start using this unit, please check if there's no transportation damage. Should there be any, do not use the device and consult your dealer first.
- **Important:** This device left our factory in perfect condition and well packaged. It is absolutely necessary for the user to strictly follow the safety instructions and warnings in this user manual. Any damage caused by mishandling is not subject to warranty. The dealer will not accept responsibility for any resulting defects or problems caused by disregarding this user manual.
- Keep this booklet in a safe place for future consultation. If you sell the fixture, be sure to add this user manual.

Check the contents:

Check that the packing contains the following items:

- BT-CHROMA800
- English operating instructions, other languages can be downloaded from our website.
- Magnetic filter frame with frost filter installed
- Small security cable for the filter frame
- Mains power cable

SAFETY INSTRUCTIONS:

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: To reduce the risk of electric shock, do not remove the top cover. No user-serviceable parts inside. Refer servicing to qualified service personnel only.

The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the use or the presence of un-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this appliance.

This symbol means: indoor use only

This symbol means: Read instructions

This symbol determines: the minimum distance from lighted objects. The minimum distance between light-output and the illuminated surface must be more than 1 meters

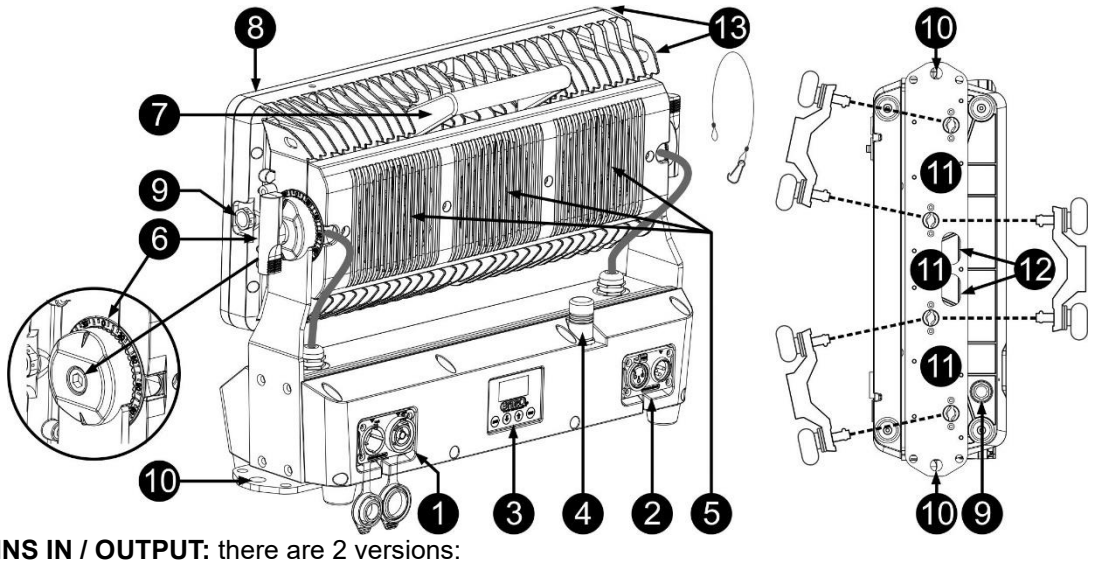
RISK GROUP 2
CAUTION:
Do not stare at operating lamp

CAUTION: Do not stare at operating lamp.
May be harmful to the eyes.

- To protect the environment, please try to recycle the packing material as much as possible.
- To avoid condensation to be formed inside, allow the unit to adapt to the surrounding temperatures when bringing it into a warm room after transport. Condense sometimes prevents the unit from working at full performance or may even cause damages.
- Don’t place metal objects or spill liquid inside the unit. Electric shock or malfunction may result. If a foreign object enters the unit, immediately disconnect the mains power.
- Locate the fixture in a well ventilated spot, away from any flammable materials and/or liquids. The fixture must be fixed at least 50cm from surrounding walls.
- Don’t cover any ventilation openings as this may result in overheating.
- Prevent use in dusty environments and clean the unit regularly.
- Keep the unit away from children.
- Inexperienced persons should not operate this device.
- Maximum safe ambient temperature is 40°C. Don’t use this unit at higher ambient temperatures.
- Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
- Allow the device about 10 minutes to cool down before to start servicing.
- Always unplug the unit when it is not used for a longer time or before to start servicing.
- The electrical installation should be carried out by qualified personal only, according to the regulations for electrical and mechanical safety in your country.
- Check that the available voltage is not higher than the one stated on the unit.
- The power cord should always be in perfect condition. Switch the unit immediately off when the power cord is squashed or damaged. It must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Never let the power-cord come into contact with other cables!
- This fixture must be earthed in order to comply with safety regulations.
- Don’t connect the unit to any dimmer pack.
- Always use an appropriate and certified safety cable when installing the unit.
- In order to prevent electric shock, do not open the cover. There are no user serviceable parts inside.
- **Never** repair a fuse or bypass the fuse holder. **Always** replace a damaged fuse with a fuse of the same type and electrical specifications!
- In the event of serious operating problems, stop using the fixture and contact your dealer immediately.
- The housing and the lenses must be replaced if they are visibly damaged.
- Please use the original packing when the device is to be transported.
- Due to safety reasons it is prohibited to make unauthorized modifications to the unit.

Important: Never look directly into the light source! Don’t use the effect in the presence of persons suffering from epilepsy.

DESCRIPTION:



1. **MAINS IN / OUTPUT:** there are 2 versions:
   - **Standard version (for stage/rental use):** Equipped with connectors, connect the supplied mains cable here, you can daisy chain up to max. 3 units. Input and output are connected to each other without any fuse.
   - **Fixed installation version:** This is an optional module with waterproof cable glands. You can easily install a power cable with loose, stripped wire ends. (see electrical installation)

   Hint: *Please check our website for special cable assemblies that contain both power (3x1.5mm² with Neutrik PowerCON® TRUE1) and balanced signal (XLR 3pin) in one cable. Different lengths are available: 1.3m, 3m, 5m and 10m, very convenient!*
2. **DMX IN/OUTPUTS:** there are 2 versions:
   - **Fixed installation version:** This is an optional module with waterproof cable glands. You can easily install a DMX-cable with loose, stripped wire ends. (see electrical installation)
   - **Standard version (for stage/rental use):** Equipped with connectors, connect good quality balanced signal cables with 3pin or 5pin XLR-connectors.
3. **DISPLAY & BUTTONS:** alphanumeric OLED-display and waterproof touch keys to select different options of the setup menu:
   - **MENU-button:** used to browse the different menu options or to exit a menu option.
   - **▼-button:** used to go to the next menu option or to decrease a parameter value.
   - **▲-button:** used to go to the previous menu option or to increase a parameter value.
   - **ENTER-button:** used to select a menu option or confirm a setting.
4. **ANTENNA:** antenna needed for wireless DMX-signal reception.
5. **COOLING FANS:** due to the high power it is very important to make sure that the temperature-controlled fans and ventilation openings always remain free to maintain optimal cooling!
6. **LOCKING TILT MECHANISM:** serrated 180° mechanism with tilt angle display, there are 2 versions:
   - **Standard version (for stage/rental use):** a metal knob is used to adjust the tilt position easily, without using tools.
   - **Fixed installation version:** a stainless-steel hex socket bolt (included in the optional "**BT-CHROMA 800 - FIX install set**") is used to assure that the tilt position cannot be altered easily.
7. **HANDLE:** to carry and adjust the projector easily.
8. **FILTER FRAME:** thanks to the use of strong magnets the frame can be exchanged easily, without the need for tools. Also check point 13! For fixed installation the frame can be fixed using screws to avoid theft. You can easily install different optional filters and beam shapers in the frame.
9. **AIR PRESSURE VENT:** for improved performance and service life, this special vent equalizes the pressure inside the projector while blocking water and preventing condense from being formed.
10. **FIXING HOLES:** these Ø13mm holes on both sides of the base are used to fix the projector firmly while used for permanent installation.
11. **OMEGA BRACKET HOLES:** for rental use, these holes with 106mm spacing are adapted to install 1 or 2 OMEGA brackets (small model).
12. **SAFETY HOLE:** used to attach a safety cable when the unit is rigged, see paragraph "overhead rigging".
13. **FILTERFRAME SAFETY CABLE:** A small safety cable is included to secure the filter frame when it is used with the magnetic holders.

OVERHEAD RIGGING

- **<u>Important:</u> The installation must be carried out by qualified service personal only. Improper installation can result in serious injuries and/or damage to property. Overhead rigging requires extensive experience! Working load limits should be respected, certified installation materials should be used, the installed device should be inspected regularly for safety.**
- Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
- Locate the fixture in a well-ventilated spot, far away from any flammable materials and/or liquids. The fixture must be fixed **at least 50cm** from surrounding walls.
- The device should be installed out of reach of people and outside areas where persons may walk by or be seated.
- Before rigging make sure that the installation area can hold a minimum point load of 10times the device's weight.

- Always use a certified safety cable that can hold 12times the weight of the device when installing the unit. This secondary safety attachment should be installed in a way that no part of the installation can drop more than 20cm if the main attachment fails.
- The device should be well fixed; a free-swinging mounting is dangerous and may not be considered!
- Don't cover any ventilation openings as this may result in overheating.
- The operator has to make sure that the safety-relating and machine-technical installations are approved by an expert before using them for the first time. The installations should be inspected every year by a skilled person to be sure that safety is still optimal.

SETUP MENU:

- Press the MENU button to ENTER the setup menu.
- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Select the function with the ENTER button.
- Use ▼/▲ buttons to change the values.
- Press the ENTER button to confirm the selected value.

DMX FUNCTIONS menu

DMX ADDRESS

Used to set the desired DMX-address.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to select the desired DMX512 address. The last occupied DMX-address is also shown: makes it easier to set the address of the next unit in the chain.
- Once the correct address shows on the display, press the ENTER button to save it.

Note: *on RDM-compatible controllers this option can also be remotely set.*

CHANNEL MODE

Used to set the desired channel mode.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to select the desired mode:
  - **RGB 8bit (3CH)** 3 colors set in 8bit resolution, no lime color, no master dimmer.
  - **RGB 16bit (6CH)** 3 colors set in 16bit resolution, no lime color, no master dimmer.
  - **RGBL 8bit (3CH)** 4 colors set in 8bit resolution, no master dimmer.
  - **RGBL 16bit (6CH)** 4 colors set in 16bit resolution, no master dimmer.
  - **HSI 8bit (3CH)** 8 bit HSI (Hue, Saturation, Intensity) color model (lime color not used)
  - **HSI 16bit (6CH)** 16 bit HSI (Hue, Saturation, Intensity) color model (lime color not used)
  - **RGBL D+STR (6CH)** 4 colors set in 8bit resolution + master dimmer and strobe.
  - **RGBL FX (11CH)** 4 colors set in 8bit resolution + built-in pixel effects (multifunctional mode).
  - **RGBL 2px 8bit** 4 colors set in 8bit resolution + 2-pixel control
  - **RGBL 5px 8bit** 4 colors set in 8bit resolution + 5-pixel control
  - **RGBL 10px 8bit** 4 colors set in 8bit resolution + 10-pixel control
  - **RGBL 10px 16bit** 4 colors set in 16bit resolution + 10-pixel control

- Once the correct option shows on the display, press the ENTER button to save it.

Remark: *on RDM-compatible controllers this option can also be remotely set.*

Level 1	Level 2	
SETUP MENU DMX functions	DMX Address	XXX - YYY
	CHANNEL Mode	********
	W-DMX ON/OFF	ON /OFF
	W-DMX Unlink	YES/NO
SETUP MENU Functions	NO DMX Mode	Blackout
		Freeze
		Stand-Alone
	Display FLASH	on/off
	Display AUTOLOCK	on/off/DMX-controlled
	Temp Units: C/F	°C / F
	Pixel Order	Standard (0°)
		Flipped (180°)
	Dimmer Speed	XXX (Y.Y s)
	Dimmer Curve	Linear
		Square
		Inverse Square
		S-Curve
	Fan Speed	Auto
		Low
		High
SETUP MENU Stand-Alone	Working Mode	SLAVE Mode
		MASTER: Full on
		MASTER: Program 01→22
	Program Speed	000→255
	Afterglow	000→255
	Master Dimmer	000→255
	Color Effects	Set Custom Color
		Red
		Orange
		Yellow
		Green
		Cyan
		Blue
		Purple
		WHITE 3000K
		WHITE 4000K
		WHITE 5600K
		Color Fade 01
		↓
		Color Fade 99
SETUP MENU Default Settings	Factory Reset	LOAD ?
	USER Defaults	LOAD / SAVE ?
SETUP MENU Information	DMX CH. Values	
	LED Temperature	xxx °C
	TOTAL Usage Time	xxxx Hrs
	JOB Usage Time	xxxx Hrs
	Error Messages	**********
	Firmware Version	V x.xx

W-DMX ON/OFF

Used to switch the internal wireless DMX receiver on/off.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Use ▼/▲ buttons to toggle between ON & OFF.

W-DMX Unlink

The projector can only be linked to the wireless DMX transmitter when no wireless links already exist. This function is used to break (unlink) any wireless links that might still exist.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Use ▼/▲ buttons to toggle between YES & NO.

FUNCTIONS menu

NO DMX Mode

Used to set how the projector reacts when the DMX-signal suddenly disappears.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to select the desired mode:
  - **BLACKOUT:** output turns black while no DMX is detected.
  - **FREEZE:** output based on the last valid DMX-signal is kept on the projector.
  - **STAND-ALONE:** the internally selected “stand-alone” mode starts automatically.
- Once the correct option shows on the display, press the ENTER button to save it.

Note: *as soon as the input detects a DMX-signal, blackout or freeze mode will be cancelled.*

Display FLASH

Used to select if the display should flash or not while no DMX-signal is detected.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Use ▼/▲ buttons to toggle between ON & OFF.

DISPLAY AUTOLOCK

Used to lock the setup menu against unwanted altering of the settings.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to select the desired mode:
  - **OFF** The setup menu can be used at any time.
  - **ON** After a short time the setup menu locks automatically, the display shows **LOCKED *******. Unlock the display by pressing the buttons in this order: **▲, ▼, ▲, ▼, ENTER**.
  - **DMX-controlled: this mode is only for use in fixed installations.** You can disable/enable both the buttons and display using a specific DMX-command: for more information, see chapter “ELECTRICAL INSTALLATION + USE” → subheading “Fixed Installations”
- Once the correct option shows on the display, press the ENTER button to save it.

Temp Units C/F

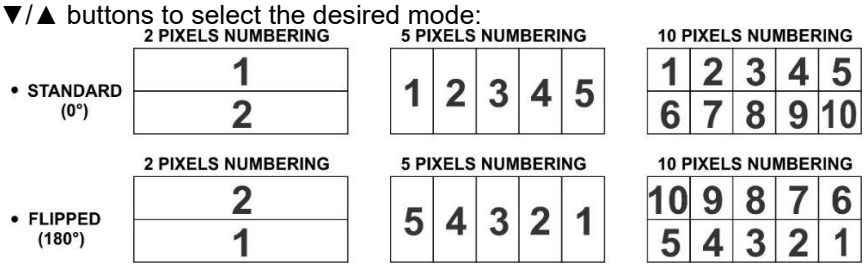
Used to select if the LED-temperature is shown in degrees Celsius °C or Fahrenheit F.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to select the desired mode:
  - **°C:** temperature shown in degrees Celsius.
  - **F:** temperature shown in Fahrenheit.
- Once the correct option shows on the display, press the ENTER button to save it.

Pixel Order

To keep uniformity, you can flip the pixel order when some projectors are mounted normally and others upside-down (suspended).

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to select the desired mode:



- Once the correct option shows on the display, press the ENTER button to save it.

DIMMER SPEED

Used to set the speed (smoothness) of the dimmer continuously.

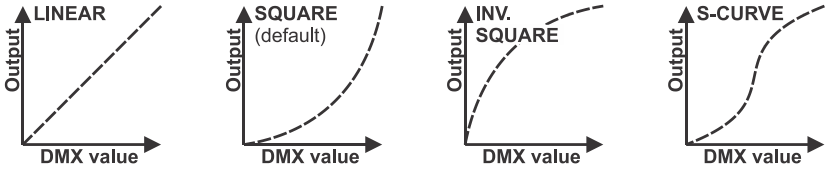
- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▲/▼ buttons to select the desired speed:
  - **000 (0ms):** The projector follows the instructions instantly, no delay (also called LED behavior).
    …
  - **255 (2000ms):** The projector imitates the behavior of a halogen lamp (slower reaction time).
- Once the desired value shows on the display, press the ENTER button to confirm.

Remark: *The default value (100 or 440ms) is the most realistic value to imitate "halogen lamp" behavior. At the same time the light output will be instantaneous while pushing a flash button on your DMX-controller.*

DIMMER CURVE

Used to set the dimmer curve of the master dimmer.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to selected the desired curve:



- Once you have the desired curve, press the ENTER button to save it.

FAN SPEED

Used to adapt the speed of the cooling fans.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▲/▼ buttons to select the desired speed:
  - **AUTO:** The fan speed is temperature controlled for the best possible balance between performance and LED temperature (default mode).
  - **LOW:** The fan speed is temperature controlled for the best possible balance between performance and low noise. The fan speed is limited so the output will be reduced when the temperature is high.
  - **HIGH:** The fan speed is temperature controlled for the best possible performance. The fan speed is higher so it will produce more fan noises.
- Once the desired value shows on the display, press the ENTER button to confirm.

STAND-ALONE menu

WORKING MODE

Used to select the desired working mode while the projector is in stand-alone mode

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to select the desired mode:
  - **SLAVE Mode:** The projector copies the light output of the master (working in stand-alone mode)
  - **MASTER: Full on:** The projector works in MASTER Mode with no running program, you can choose a color with the Color Effects option.
  - **MASTER: Program 01-22:** The projector works in MASTER Mode, you can select one of the internal pixel programs (also select program speed)
- Once the desired value shows on the display, press the ENTER button to confirm.

PROGRAM SPEED

Used to select the desired speed of the selected pixel program

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to select the desired speed: 000 (slow) → 255 (fast)
- Once the desired value shows on the display, press the ENTER button to confirm.

Remark: *the program speed depends on the amount of Afterglow: reduce the afterglow value if the program speed is not high enough.*

AFTERGLOW

Used to select the desired "afterglow" effect while pixel programs are running.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to select the desired speed: 000 (no afterglow) → 255 (long afterglow)
- Once the desired value shows on the display, press the ENTER button to confirm.

Remark: *the program speed depends on the amount of Afterglow: reduce the afterglow value if the program speed is not high enough.*

MASTER DIM

Used to set the master dimmer while used as (stand-alone) master.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to select the desired level for the master dimmer.
- Once you have the desired level, press the ENTER button to save it.

Note: *the setting of this option has NO effect while the projector is used as SLAVE or in DMX-mode.*

COLOR EFFECTS

Used to set the desired color while used as master: 10 preset colors + 1 custom color + Color fades.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to selected the desired color:
  - **RED**
  - **ORANGE**
  - **YELLOW**
  - **GREEN**
  - **CYAN**
  - **BLUE**
  - **PURPLE**
  - **WHITE 3000K** (pleasant warm white light for all kinds of situations)
  - **WHITE 4000K** (the preferred color temperature for exhibition booths)
  - **WHITE 5600K** (preferred daylight color temperature, good for camera work)
  - **SET CUSTOM COLOR** is a custom color that can be set by the user. Follow these steps:
- Press the ENTER button: the display shows the value (000-255) for RED. (change with ▼/▲ buttons)
- Press the ENTER button: the display shows the value (000-255) for GREEN. (change with ▼/▲ buttons)
- Press the ENTER button: the display shows the value (000-255) for BLUE. (change with ▼/▲ buttons)
- Press the ENTER button: the display shows the value (000-255) for LIME. (change with ▼/▲ buttons)
- Repeat these steps until you have the desired values. The settings will be automatically saved.

DEFAULT SETTINGS → FACTORY RESET + USER DEFAULTS

This is your emergency exit if you really messed up the settings: just return to factory settings.
Also 2 user settings can be saved/loaded.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the values can be changed
- Use ▼/▲ buttons to selected the desired settings:
  - **Factory Reset**
  - **USER Defaults**
- Press the ENTER button:
  - **Factory Reset** was selected: the display shows LOAD?
    - Press the ENTER button: the display shows CONFIRM
    - Use ▼/▲ buttons to select YES / NO
    - Press the ENTER button to confirm.
  - **USER Defaults** was selected: the display shows LOAD?
    - Use ▼/▲ buttons to select LOAD / SAVE
    - Press the ENTER button to confirm: the display shows USER1 / USER2
    - Use ▼/▲ buttons to select YES / NO

- Press the ENTER button to confirm.
  - **SAVE** was selected: the current settings of the setup menu are saved to memory.
  - **LOAD** was selected: the previously saved settings are loaded.

Default values:

PARAMETER name	FACTORY defaults	USER1 defaults	USER2 defaults
CHANNEL Mode	RGBL + FX (11CH)	Current setting in the menu	Current setting in the menu
W-DMX ON/OFF	ON	Current setting in the menu	Current setting in the menu
NO DMX Mode	Freeze	Current setting in the menu	Current setting in the menu
Display FLASH	ON	Current setting in the menu	Current setting in the menu
Display AUTOLOCK	OFF	Current setting in the menu	Current setting in the menu
Pixel Order	Standard 0°	Current setting in the menu	Current setting in the menu
DIMMER Speed	100	Current setting in the menu	Current setting in the menu
DIMMER Curve	Square	Current setting in the menu	Current setting in the menu
FAN Speed	AUTO	Current setting in the menu	Current setting in the menu
Working Mode	All Pixels ON	Current setting in the menu	Current setting in the menu
Program Speed	128	Current setting in the menu	Current setting in the menu
Master Dimmer	255	Current setting in the menu	Current setting in the menu
Color Effects	Color Fade 75	Current setting in the menu	Current setting in the menu
Custom Color RGBL	NO factory default	Current setting in the menu	Current setting in the menu
Afterglow	80	Current setting in the menu	Current setting in the menu
LED Calibration	NO factory default	LED calibrations are saved	LED calibrations are saved
Temp Units C/F	Celsius	Current setting in the menu	Current setting in the menu

INFORMATION menu

DMX CH. Values

Used to monitor the incoming DMX-signals, handy for fault debugging.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: you can monitor the incoming DMX-signal, functions and values are displayed.

LED Temperature

Shows the current LED Temperature.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the current LED temperature is shown.

TOTAL Usage Time

Shows the Total time the projector was switched on, starting from the 1st day it was used.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the TOTAL usage time is shown, this value cannot be reset.

JOB Usage Time

Shows the Total time the projector was switched on since the last JOB Time reset. Can be used to check how long a customer used the projector on a job.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the job usage time is shown, this value can be reset in a hidden menu.

ERROR Messages

Shows eventual ERROR messages if they exist.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: under normal conditions the display shows “None”

Firmware Version

Shows actual firmware version information.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the current firmware version of the 1U processor is shown.
- Press the ▼/▲ buttons to browse the firmware versions of the other processors.

Note: The firmware of this unit can be upgraded using our special "Firmware Updater 2+" (separately available from Briteq). More information about this can be found in the user manual of the firmware updater or our website: ***https://briteq-lighting.com/firmware-updater-2-plus***

HIDDEN menu

In the hidden menu you can reset the JOB Usage Time counter and adjust the white balance.
To access the hidden menu, simply press the ENTER-button for about 3 seconds.
Press the MENU-button to leave the hidden menu again.

Reset JOB Usage Time

Used to reset the timer that shows how long the unit was used on the last job.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the display shows NO
- Use ▼/▲ buttons to toggle between YES & NO.
- Press the ENTER button to confirm.

LED Calibration

Used to set the white balance or to perfectly match the colors of several projectors or after changing one of the LEDs of the projector.

- Press the ▼/▲ buttons to browse the menu until the required function shows up.
- Press the ENTER button: the display shows the selected color for LEDs 1 to 10. (change with ▼/▲ buttons)
- Press the ENTER button: the display shows the value (050-255) for the selected color / led.
- Use ▼/▲ buttons to adapt the value between 050 and 255 and confirm with ENTER
- Repeat these steps until you have the desired values. The settings will be automatically saved.

There's also a shortcut to reset all calibration values back to 255:

- Press the ▼/▲ buttons until the display shows: ALL LEDs = 255
- Press the ENTER button: the display shows NO
- Use ▼/▲ buttons to toggle between YES & NO.
- Press the ENTER button to confirm.

Note: *Use this function with caution as it overwrites all manual calibrations, no recovery possible.*

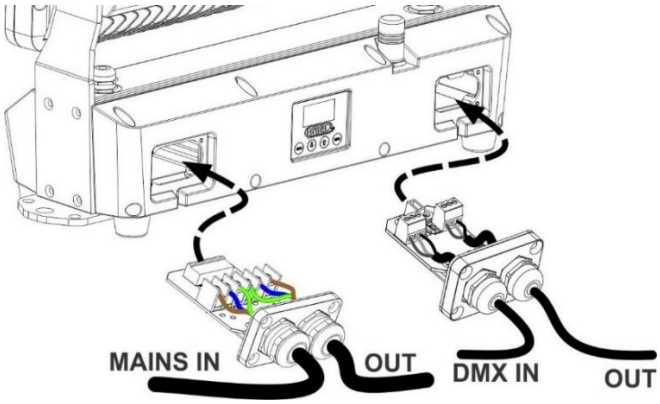
ELECTRICAL INSTALLATION + USE

⚠ **Important: The electrical installation should be carried out by qualified personal only, according to the regulations for electrical and mechanical safety in your country.**

Electrical installation:

FIXED installations

Optional DMX and POWER in/output modules are available with stainless-steel cable glands for fixed installation: can be purchased separately as "**BT-CHROMA 800 - FIX install set**"
The set consists of 2 modules that can be easily installed instead of the standard connectors and 2 stainless-steel hex socket bolts to secure the TILT-mechanism in the right position. (see points n° 1+ 2 in the description)



- Remove the original connectors on both sides: gently remove the connection wire from the connector.
- On the new modules: install cables with outer diameter which are adapted to the cable glands on the modules (Power cable Ø = 10 mm * DMX cable Ø = 7 mm)
- Install the wires firmly on the wire terminals of both modules, pay attention to the inscriptions for correct wiring (power cable: "L"= brown wire * "N"= blue wire * "PE"= green/yellow wire)
- Gently fix the connection wire to the module
- Put the module in place and make sure that the rubber sealing is in place!
- Firmly fix the module using the 4 screws.
- Done!

De-activation of the display + buttons for permanent FIXED installations

When the projector is installed in a fixed installation, it is important that the display + touch buttons can be turned off to prevent unwanted tampering or unintentional changes in settings due to rainfall on the touch buttons.

Attention: only when the menu option "Display AUTOLOCK" is set to "DMX-controlled" (see chapter "function menu"), the display + buttons can be enabled or disabled by DMX, please follow the instructions carefully:

De-activate display + buttons:

- Connect the projector to a DMX-console and make sure that ALL DMX-channels are set to 000.
- Set channels 1+2+3 exactly to value 100 during at least 10 seconds

➔Display and buttons are now turned off: the display will show **DISPLAY BLOCKED**

Activate display + buttons again:

- Connect the projector to a DMX-console and make sure that ALL DMX-channels are set to 000.
- Set channels 1+2+3 exactly to value 101 during at least 10 seconds

➔Display and buttons are turned on again.

RENTAL / ENTERTAINMENT applications:

Standard equipped with 3pin XLR and lockable IP65-Power connector in/outputs for easy daisy-chaining. Simply connect the projectors together, using good quality power and DMX cables. The best option is to use our COMBI CABLES → check our website for details and different lengths.

Some general information on DMX:

- *The DMX-protocol is a widely used high speed signal to control intelligent light equipment. You need to "daisy chain" your DMX controller and all the connected units with a good quality balanced DMX-cable. Both XLR-3pin and XLR-5pin connectors are used, however XLR-3pin is more popular.*
- *Pin layout XLR-3pin: Pin1= GND ~ Pin2= Negative signal (-) ~ Pin3= Positive signal (+)*
- *Pin layout XLR-5pin: Pin1= GND ~ Pin2= Negative signal (-) ~ Pin3= Positive signal (+) ~ Pins4+5 not used.*
- *To prevent strange behavior of the light effects, due to interferences, you must use a 90Ω to 120Ω terminator at the end of the chain. Never use Y-splitter cables, this simply won't work!*
- *Make sure that all units are connected to the mains.*
- *Each unit in the chain has its proper starting address so it knows which commands from the controller it has to decode.*

Settings for different uses:

STANDALONE WITH BUILT-IN PIXEL PROGRAM OR STATIC COLOR:

Use this function when you want an instant show on only 1 projector.

- Connect the projector to the mains and turn it on.
- Make the following settings in the setup menu:
  - **NO DMX Mode:** set to Stand-alone
  - **Show a static or changing color:**
    - **Working Mode:** select the option All Pixels ON
    - **Color Effects:** select one of the colors, make a custom color or chose a color fade with the desired speed.
    - **Master Dimmer:** set the desired level for the light output
  - **Show a Pixel Program with static or changing color:**
    - **Working Mode:** select one of the 22 internal Programs and adjust the speed and afterglow parameters.

- **Color Effects:** select one of the colors, make a customs color or chose a color fade with the desired speed.
- **Master Dimmer:** set the desired level for the light output

Note: *No DMX-controller should be connected, otherwise the DMX-signal will have priority.*

STANDALONE MASTER/SLAVE WITH BUILT-IN PIXEL PROGRAM OR STATIC COLOR:

Use this function when you want an instant show on several, linked projectors.
By linking the units in master/slave connection, the first unit will control the other units to show a synchronized automatic or sound activated light show.

- Connect the projectors together, no DMX-controller connected to the master. You can put as many slaves as you like on condition that the overall power consumption on the power line stays under 13A (+/-3000W @ 230Vac).
- **Setup of the master:** exactly the same procedure as the “STANDALONE” setup.
- **Setup of the slaves:** all slaves should be set to **Working Mode = SLAVE Mode**, see the section “setup menu” for more information.

TWO OR MORE UNITS IN DMX-MODE:

Use this function when you want to control the projectors by any DMX controller.

- First put the projectors in the desired DMX-mode: see the different DMX-charts and choose the one that suits you best.
- Give all projectors a start address: each projector shows its start + end address, make sure that the addresses do not overlap!

CONNECT TO WIRELESS DMX

This projector is compatible with the “Wireless Solution” G4 / G4S industry standard, working at 2.4GHz.

A. First choose the desired DMX-channel mode + DMX-address
B. The internal W-DMX receiver must be switched on → see setup menu, DMX Functions, W-DMX ON/OFF
C. Before you can pair the projector with a new W-DMX transmitter, the current connection (if any) should be removed (unlinked) first → see setup menu, DMX functions, W-DMX Unlink
D. On the external DMX-transmitter: press the pair / link button → the projector should now pair automatically to the W-DMX transmitter.

DMX CHARTS

There are 12 different DMX-modes for maximum compatibility under different conditions:

RGB 8bit (3CH)	RGB 16bit (6CH)	RGBL 8bit (4CH)	RGBL 16bit (8CH)	HSI 8bit (3CH)	HSI 16bit (6CH)	RGBL D+STR (6CH)	RGBL + FX (11CH)	RGBL 2px 8b(9CH)	RGBL 5px 8b 21CH	RGBL 10px 8bit	RGBL 10px 16bit	FUNCTION
3	6	4	8	3	6	6	11	9	21	41	81	← CH count
						1	1					MASTER DIMMER
						2	2					STROBE CHANNEL
							3					PROGRAM SELECT
							4					PROGRAM SPEED
							5					PROGRAM FADE SPEED
							6					COLOR EFFECTS
				1	1							HUE
					2							HUE FINE
				2	3							SATURATION
					4							SATURATION FINE
				3	5							INTENSITY
					6							INTENSITY FINE
1	1	1	1			3	7					RED
	2		2									RED FINE
2	3	2	3			4	8					GREEN
	4		4									GREEN FINE
3	5	3	5			5	9					BLUE
	6		6									BLUE FINE
		4	7			6	10					LIME
			8									LIME FINE
								1	1	1	1	PIXEL 01 - RED
											2	PIXEL 01 - RED FINE
								2	2	2	3	PIXEL 01 - GREEN
											4	PIXEL 01 - GREEN FINE
								3	3	3	5	PIXEL 01 - BLUE
											6	PIXEL 01 - BLUE FINE
								4	4	4	7	PIXEL 01 - LIME
											8	PIXEL 01 - LIME FINE
										...	...	...
										37	73	PIXEL 10 - RED
											74	PIXEL 10 - RED FINE
										38	75	PIXEL 10 - GREEN
											76	PIXEL 10 - GREEN FINE
										39	77	PIXEL 10 - BLUE
											78	PIXEL 10 - BLUE FINE
										40	79	PIXEL 10 - LIME
											80	PIXEL 10 - LIME FINE
							11	9	21	41	81	FUNCTION CHANNEL

GB 8bit (3CH)	RGB 16bit (6CH)	RGBL 8bit (4CH)	RGBL 16bit (8CH)	HSI 8bit (3CH)	HSI 16bit (6CH)	RGBL D+STR (6CH)	RGBL + FX (11CH)	RGBL 2px 8b(9CH)	RGBL 5px 8b 21CH	RGBL 10px 8bit	RGBL 10px 16bit	DMX VALUES	FUNCTION
3	6	4	8	3	6	6	11	9	21	41	81	← CH count	
						1	1					000-255	**MASTER DIMMER**
													STROBE CHANNEL
												000-007	*Open (no strobe)*
												008-126	*Random strobe (slow→fast)*
						2	2					127-131	*Open (no strobe)*
												132-250	*Normal strobe (slow→fast)*
												251-255	*Closed (no output)*
													PROGRAM SELECT
												000-013	*No function (RGBL are used)*
												014-024	*Program1*
												025-035	*Program2*
												036-046	*Program3*
												047-057	*Program4*
												058-068	*Program5*
												069-079	*Program6*
												080-090	*Program7*
												091-101	*Program8*
												102-112	*Program9*
												113-123	*Program10*
							3					124-134	*Program11*
												135-145	*Program12*
												146-156	*Program13*
												157-167	*Program14*
												168-178	*Program15*
												179-189	*Program16*
												190-200	*Program17*
												201-211	*Program18*
												212-222	*Program19*
												223-233	*Program20*
												234-244	*Program21*
												245-255	*Program22*
							4					000-255	**PROGRAM SPEED**
							5					000-255	**PROGRAM FADE SPEED**
													COLOR EFFECTS
												000-004	*No function (RGBL are used)*
												005-010	*3000K (warm white)*
												011-016	*4000K (neutral white)*
												017-022	*5600K (daylight)*
												023-028	*Orange*
							6					029-034	*Yellow*
												035-040	*Cyan*
												041-046	*Purple*
												047-082	*Red/Blue switching (slow → fast)*
												083-118	*Red/Green switching (slow → fast)*
												119-154	*Blue/Green switching (slow → fast)*
												155-255	*COLORFADE (very slow → fast)*

				1	1							000-255	**HUE**
					2							000-255	**HUE FINE**
				2	3							000-255	**SATURATION**
					4							000-255	**SATURATION FINE**
				3	5							000-255	**INTENSITY**
					6							000-255	**INTENSITY FINE**
1	1	1	1			3	7					000-255	**RED**
	2		2									000-255	**RED FINE**
2	3	2	3			4	8					000-255	**GREEN**
	4		4									000-255	**GREEN FINE**
3	5	3	5			5	9					000-255	**BLUE**
	6		6									000-255	**BLUE FINE**
		4	7			6	10					000-255	**LIME**
			8									000-255	**LIME FINE**
								1	1	1	1	000-255	**PIXEL 01 - RED**
											2	000-255	**PIXEL 01 - RED FINE**
								2	2	2	3	000-255	**PIXEL 01 - GREEN**
											4	000-255	**PIXEL 01 - GREEN FINE**
								3	3	3	5	000-255	**PIXEL 01 - BLUE**
											6	000-255	**PIXEL 01 - BLUE FINE**
								4	4	4	7	000-255	**PIXEL 01 - LIME**
											8	000-255	**PIXEL 01 - LIME FINE**
								5	5	5	9	000-255	**PIXEL 02 - RED**
											10	000-255	**PIXEL 02 - RED FINE**
								6	6	6	11	000-255	**PIXEL 02 - GREEN**
											12	000-255	**PIXEL 02 - GREEN FINE**
								7	7	7	13	000-255	**PIXEL 02 - BLUE**
											14	000-255	**PIXEL 02 - BLUE FINE**
								8	8	8	15	000-255	**PIXEL 02 - LIME**
											16	000-255	**PIXEL 02 - LIME FINE**
									…	**…**	**…**	…	**…**
									…	**…**	**…**	…	**…**
									17	17	33	000-255	**PIXEL 05 - RED**
											34	000-255	**PIXEL 05 - RED FINE**
									18	18	35	000-255	**PIXEL 05 - GREEN**
											36	000-255	**PIXEL 05 - GREEN FINE**
									19	19	37	000-255	**PIXEL 05 - BLUE**
											38	000-255	**PIXEL 05 - BLUE FINE**
									20	20	39	000-255	**PIXEL 05 - LIME**
											40	000-255	**PIXEL 05 - LIME FINE**
										…	**…**	…	**…**
										…	**…**	…	**…**
										37	73	000-255	**PIXEL 10 - RED**
											74	000-255	**PIXEL 10 - RED FINE**
										38	75	000-255	**PIXEL 10 - GREEN**
											76	000-255	**PIXEL 10 - GREEN FINE**
										39	77	000-255	**PIXEL 10 - BLUE**
											78	000-255	**PIXEL 10 - BLUE FINE**
										40	79	000-255	**PIXEL 10 - LIME**
											80	000-255	**PIXEL 10 - LIME FINE**
													FUNCTION CHANNEL
							11	9	21	41	81	000-007	*No function*
												008-108	*DIMMER SPEED (fast → slow)*

												109-114	*No function*
												115-120	*PIXEL ORDER: A (standard 0°)*
												121-126	*PIXEL ORDER: B (rotated over 180°)*
												127-132	*No function*
												133-138	*FAN AUTO: temperature controlled*
												139-144	*FAN FULL: always on*
												145-150	*No function*
												151-156	*LINEAR dimmer curve*
												157-162	*SQUARE dimmer curve*
												163-168	*INVERSE SQUARE dimmer curve*
												169-174	*S-CURVE dimmer curve*
												175-180	*No function*
												199-204	*LOAD FACTORY settings to SETUP MENU*
												205-255	*No function*

Remark: *All functions in the control channel become active after 3 seconds.*

RDM FUNCTIONS / REMOTE SETUP

RDM means "**R**emote **D**evice **M**anagement" (control the unit from a distance). This projector works with a brief set of RDM-functions which means that it can setup a bi-directional communication with an RDM-compatible DMX-controller. Some of these functions are briefly explained below, others will be added in the future.

- The DMX-controller sends out a "discovery command", all RDM devices respond and send their unique device ID.
- The DMX-controller asks each RDM device for some basic data so it knows which devices are connected. The projector will respond:
  - **Device name:** the actual name of the unit
  - **Manufacturer:** Briteq®
  - **Category:** LED Dimmer
  - **Firmware:** x.x.x.x (firmware version of the projector)
  - **DMX address:** xxx (current DMX start address of the projector)
  - **DMX footprint:** xx (number of DMX-channels used by the projector)
  - **Personality:** xx (current personality or DMX-working mode used by the projectors)
- The DMX-controller can send certain commands to each RDM device which allow remote setup of the units. Thanks to this the projectors can be setup remotely.

The following functions can be managed remotely:

No more need to take a ladder and set all units one by one!

- **DMX START ADDRESS:** The start address can be set remotely from 001 to xxx.
- **PERSONALITY:** The DMX working mode (DMX-chart) can be set remotely.

These 2 functions make it possible to prepare a complete DMX-patch of all projectors on the DMX-controller and send these data to all projectors at once. More functions will be added later.

MAINTENANCE

- Make sure the area below the installation place is free from unwanted persons during servicing.
- Switch off the unit, unplug the mains cable and wait until the unit has been cooled down.

During inspection the following points should be checked:

- All screws used for installing the device and any of its parts should be tightly fastened and may not be corroded.
- Housings, fixations and installations spots (ceiling, truss, suspensions) should be totally free from any deformation.
- When an optical lens is visibly damaged due to cracks or deep scratches, it must be replaced.
- The mains cables must be in impeccable condition and should be replaced immediately when even a small problem is detected.
- In order to protect the device from overheat the cooling fans (if any) and ventilation openings should be cleaned monthly.

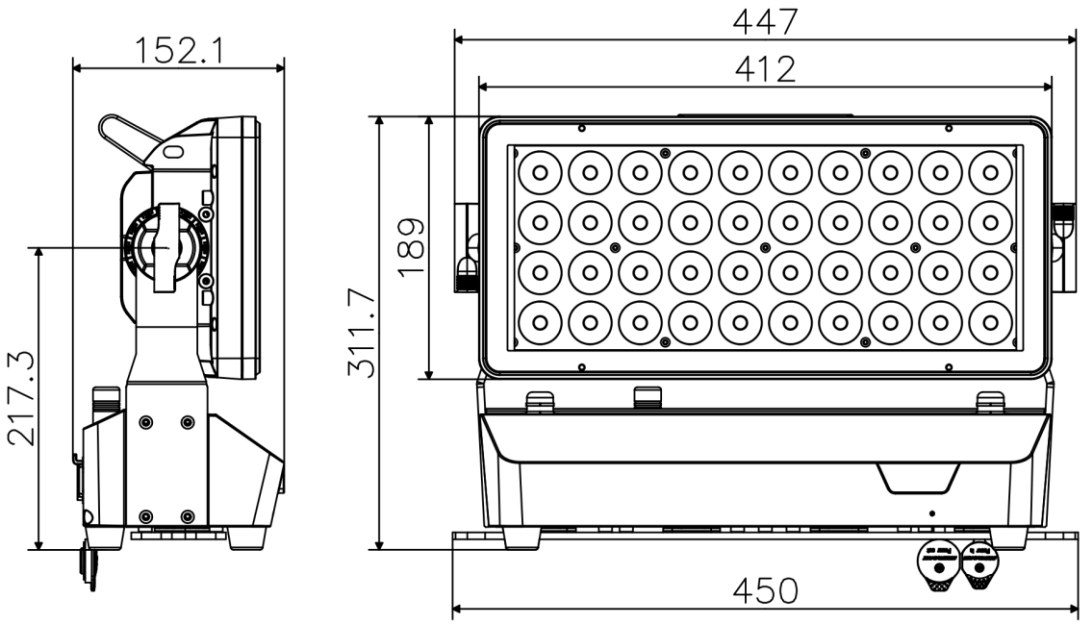
- The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics.
    - Clean with a soft cloth using normal glass cleaning products.
    - Always dry the parts carefully.

Attention: We strongly recommend internal cleaning to be carried out by qualified technician!

SPECIFICATIONS

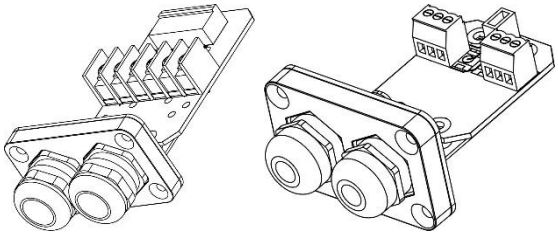
This unit is radio-interference suppressed. This product meets the requirements of the current European and national guidelines. Conformity has been established and the relevant statements and documents have been deposited by the manufacturer.

Power supply	*AC 100-240V, 50/60Hz*
Power consumption (RGB = max)	*750Watt max (all colors @ 100%)*
Power factor (PF)	*0,95*
Power in/out linking capacity	*9A @ 240Vac * 5A @ 100Vac*
Fuse	*T10A / 250V*
Power connections – standard version	*Lockable IP Power connector (PowerCON TRUE1 compatible)*
Power connections – FIXED install	*2 metal cable glands + wire terminals* *For use with power cable Ø: 10mm , 3G 1.5mm²)*
DMX connections – standard version	*3pin XLR male + 3pin XLR female*
DMX connections – FIXED install	*2 metal cable glands + wire terminals* *For use with: shielded DMX-grade cable Ø: 7 mm*
DMX channel modes	*12 modes: 3, 4, 6, 8, 9, 11, 21, 41, 81 channels*
Wireless DMX standard	*Wireless Solution® G4 / G4S (frequency : 2.4GHz)*
Lamp type	*40pcs 20W RGBL led*
Beam angle	*15° + included 30° frost filter*
LED refresh rate	*3,6 kHz*
Enclosure temperature (T_a: 40°C)	*Surface: 65°C max.*
Dimensions LxWxH (mm)	*450x152x312 (see drawing)*
Weight (kg)	*12,3*

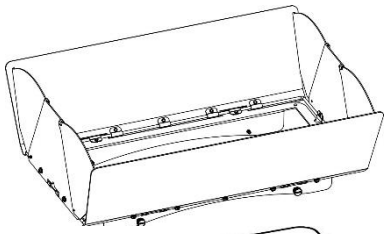


Optional parts

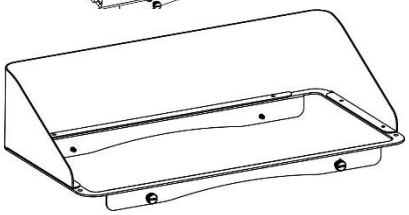
BT-CHROMA 800 - FIX install set (order code: B05546)
Set with waterproof Power & DMX in/output glands



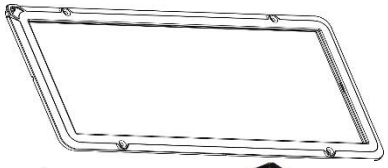
BT-CHROMA 800 – Barndoor (order code: B05547)
8-leaf barndoor for stage applications



BT-CHROMA 800 - Glare Shield (order code: B05548)
Fixed glare shield for fixed installations



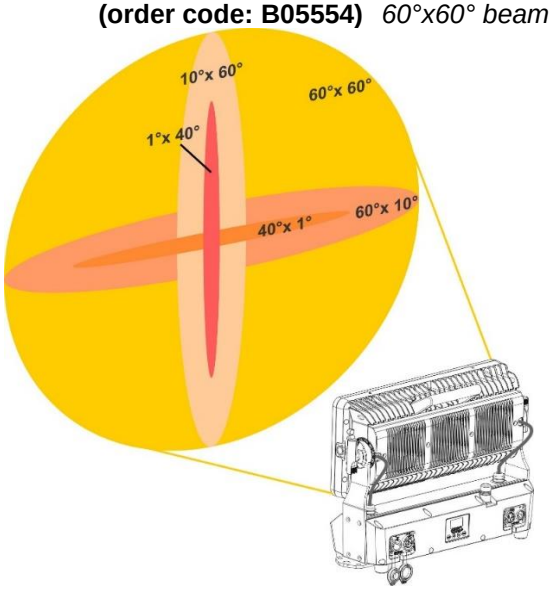
BT-CHROMA 800 - Filter frame (order code: B05549)
Empty magnetic filter frame to install beam shaper filters



BT-CHROMA 800 – Anti Glare Frame (order code: B05559)
Fixed anti-glare frame for fixed installations

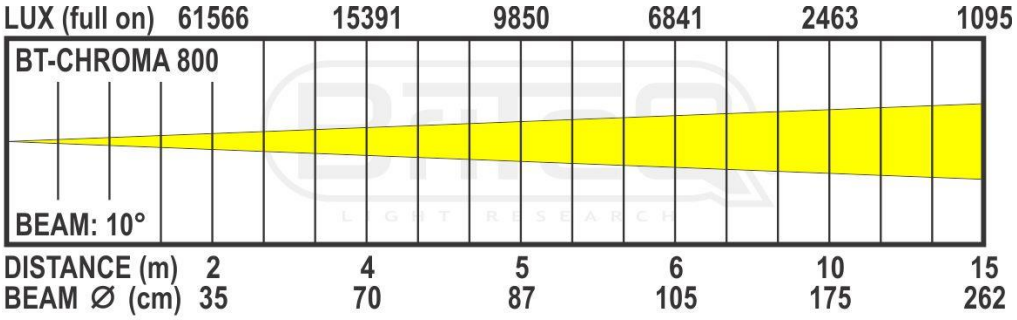
Different BEAM SHAPERS

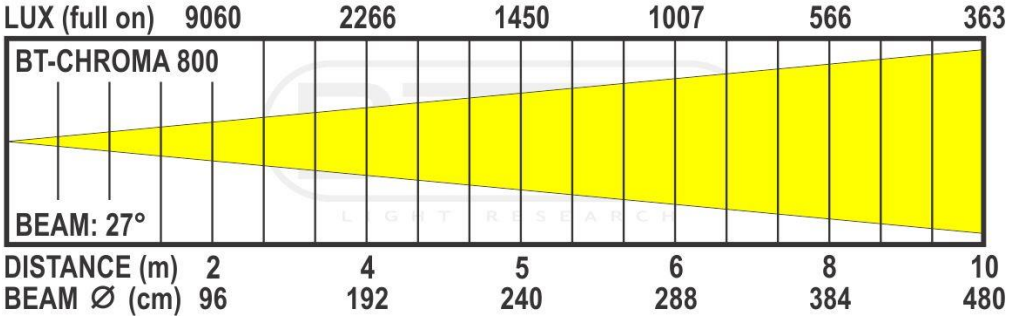
BT-CHROMA 800 - 60x10 beam	**(order code: B05550)**	*60°x10° beam shaper (without frame)*
BT-CHROMA 800 - 10x60 beam	**(order code: B05551)**	*10°x60° beam shaper (without frame)*
BT-CHROMA 800 - 40x1 beam	**(order code: B05552)**	*40°x1° beam shaper (without frame)*
BT-CHROMA 800 - 1x40 beam	**(order code: B05553)**	*1°x40° beam shaper (without frame)*
BT-CHROMA 800 - 60° beam	**(order code: B05554)**	*60°x60° beam shaper (without frame)*



LUX CHARTS

These charts are only available for the standard optics that come with the projector.
IES-files available on our website.





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