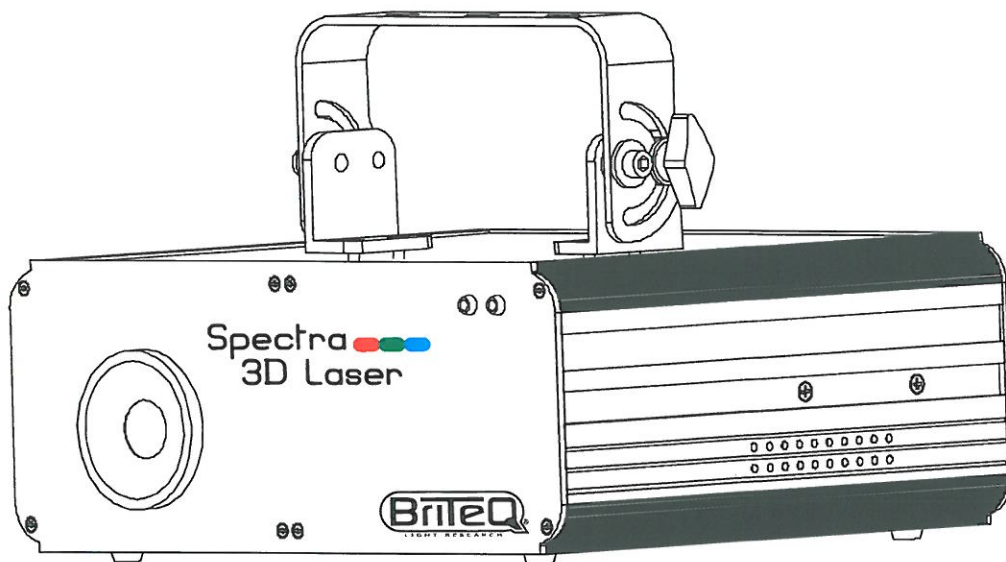


# Spectra 3D Laser

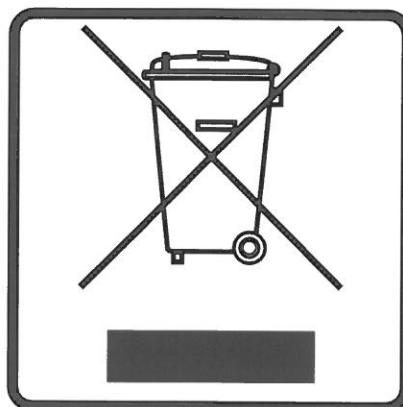


Operation Manual EN  
Mode d'emploi FR  
Gebruiksaanwijzing NL  
Bedienungsanleitung DE  
Manual de instrucciones ES

CE

Version: 1.0

**BriteQ**<sup>®</sup>  
LIGHT RESEARCH



### **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

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.

- This device was designed to produce decorative effect lighting and is used in light show systems.
- This is the perfect laser for those that can't choose and simply want it ALL, even 3D-effects and ILDA-control! ...
- This eye-catching multicolor laser uses high quality 25kHz scanners, combined with 4 effect wheels to create the most stunning effects:
  - 80 very smooth and soft moving RGB-patterns and beams to create laser curtains and many more
  - Amazing 3D effect patterns and shows
  - Incredible multicolor Polar effect shows
  - The burst effect points multicolor laser beams in all directions for a stunning, room filling laser show
- Fabulous preprogrammed laser shows for all kinds of applications: clubs, discotheques, lounge bar, mobile DJ, ...
- Class-III 480mW RGB-laser based on 80mW Green CW laser ( $\lambda = 532\text{nm}$ ), 300mW Blue CW laser ( $\lambda = 450\text{nm}$ ) and 100mW Red CW laser ( $\lambda = 638\text{nm}$ ).
- Several working modes:
  - DMX-control: 1ch or 2ch for easy operation or 19 channels for full control
  - ILDA mode: connect the laser to any PC with ILDA-compatible interface and use any professional laser software to create stunning laser shows, create logos, etc.
  - Standalone: sound activated (internal mic) or automatic
  - Master/slave: wonderful synchronized shows
- Built-in microphone
- 3-digit LED display for easy menu navigation
- Key actuated on/off switch and emergency switch (interlock) input for additional safety
- Complies to EN/IEC 60825-1 Ed2, 2007-03 for Laser Safety

## 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 cardboard box contains the following items:

- Spectra 3D laser
- Remote control connector
- 2 keys (for key switch)
- Mains cable
- Operating instructions

## 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 user to 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 meter.

- To protect the environment, please try to recycle the packing material as much as possible.
- A new light effect sometimes causes some unwanted smoke and/or smell. This is normal and disappears after some minutes.
- To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
- 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.
- This unit is for indoor use only.
- 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.
- The save ambient temperature is between 15° & 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.
- Always unplug the unit when it is not used for a longer time or before replacing the bulb or 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 rear panel of 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 to in order 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. Apart from the lamp and mains fuse 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.



## LASER SAFETY INSTRUCTIONS:

- According to the EN/IEC 60825-1 Ed2, 2007-03 regulations, this laser falls under the classification 3B. Direct eye exposure can be dangerous.

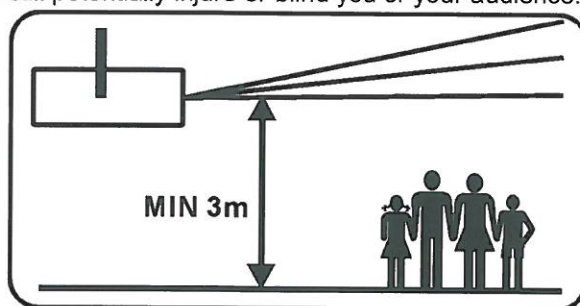


### DANGER: LASER RADIATION !

Avoid direct eye exposure! Laser radiation can cause eye damage and/or skin damage. All protective measures for a safe operation of this laser must be applied.

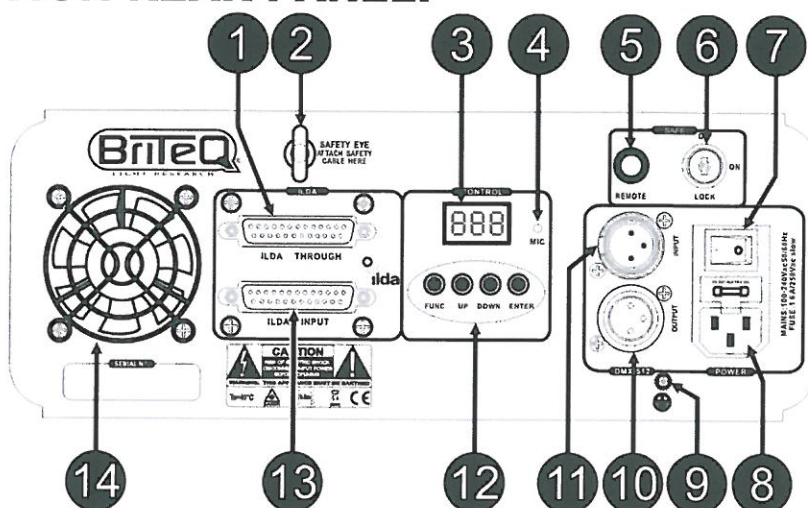


- This product is a so-called show laser, emitting radiation with a wavelength spectrum between 400 and 700 nm and producing lighting effects for shows.
- Laser Light is different from any other light source with which you may be familiar. The light from this product can potentially cause eye injury if not set up and used properly. Laser light is thousands of times more concentrated than light from any other kind of light source. This concentration of light power can cause instant eye injuries, primarily by burning the retina (the light sensitive portion at the back of the eye). Even if you cannot feel "heat" from a laser beam, it can still potentially injure or blind you or your audience.
- Even very small amounts of laser light are potentially hazardous even at long distances.
- Never look into the laser aperture or laser beams
- Never direct the laser beam to people or animals and never leave this device running unattended.
- This laser may only be used for shows. The operation of a class 3B show laser is only allowed if the operation is controlled by a skilled and well-trained operator.
- Depending on the classification, operating a laser product can produce laser radiation that may cause permanent eye damage and/or skin damage. The legal instructions for using a laser product vary from country to country. The user must always inform himself on the legal instructions valid in his country and apply them to his situation.
- The parent document and cornerstone of laser safety standards ANSI Z136.1 (2007) provides guidance for the safe use of lasers and laser systems by defining control measures for each of the four laser classes. This valuable document can be obtained from [www.laserinstitute.org](http://www.laserinstitute.org)



Please note that **BRITEQ** cannot be made liable for damages caused by incorrect installations and unskilled operation!

## DESCRIPTION REAR PANEL:



1. **ILDA THROUGH:** to link the ILDA signal to the next "Spectra-3D Laser" unit.
2. **SAFETY EYEBOLT:** used to attach a safety cable when the unit is rigged (see paragraph "overhead rigging")

- 3. **DISPLAY:** shows the selected DMX address when the unit is in DMX-mode. Apart from DMX-mode you can also select 4 other working modes, see further to learn more about these modes.
- 4. **INTERNAL MICROPHONE:** The built-in microphone is used to synchronize the laser show to the beat of the music.
- 5. **INTERLOCK input:** used to connect the optional emergency stop switch (see picture). When you push this switch the laser beam will disappear immediately.



**IMPORTANT! For your own safety we strongly recommend to connect this optional switch!  
THERE WILL BE NO LASER OUTPUT WHEN THE INTERLOCK INPUT IS NOT USED!**

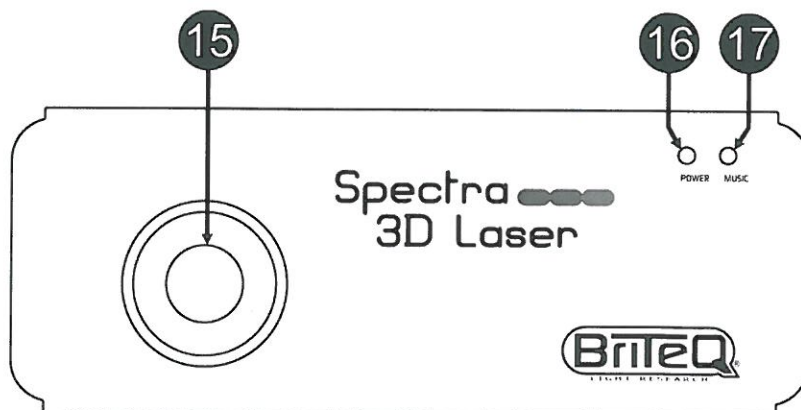
Temporary solution: install the spare connector on the laser. (see picture)



- 6. **ON/OFF KEY ACTIVATED SWITCH:** used to switch the unit on/off. Use the keys to make sure only a skilled operator is able to switch the laser on.
- 7. **MAIN ON/OFF SWITCH:** used to switch the unit on/off.
- 8. **MAINS INPUT:** with IEC socket and integrated fuse holder, connect the supplied mains cable here.
- 9. **EARTH CONNECTION**
- 10. **DMX OUTPUT:** 3pin female XLR-connector used to connect the LASER with the next unit in the DMX chain.
- 11. **DMX INPUT:** 3pin male XLR-connector used to connect universal DMX-cables. This input receives instructions from a DMX-controller.
- 12. **CONTROL PANEL:** Used to select the different functions of the laser, see further to learn how to operate the unit.
  - **FUNC:** used to browse the different functions and working modes in the menu
  - **UP:** used to go to the upper option or to increase a parameter of a function or working mode
  - **DOWN:** used to go to a lower option or to decrease a parameter of a function or working mode
  - **ENTER:** used to confirm your setting/selection
- 13. **ILDA INPUT:** used to connect the laser to an ILDA certified interface of a computer, see further for more information.
- 14. **COOLING FAN:** used to cool the components inside the enclosure. Make sure to never cover this fan outlet + never cover the small air inlets that are situated on the left and right side of the unit! Take care to clean the air inlets and fan when needed.

**DESCRIPTION FRONT PANEL:**

- 15. **LASER OUTPUT:** the laser beam exits the enclosure, make sure to **NEVER** look inside the unit through this opening while the laser effect is switched on!
- 16. **POWER LED:** indicates that the unit is switched on.
- 17. **MUSIC LED:** flashes to the sound of the music detected by the internal microphone.





## OVERHEAD RIGGING

- **Important:** 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 12 times 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.



**CAUTION EYEDAMAGE:** Always position the laser in a way that prevents the audience from looking directly into the laser beams. The installation should assure that the beam will not strike the audience.

## HOW TO SET UP AND CONTROL THE UNIT

### FUNCTION MENU:

