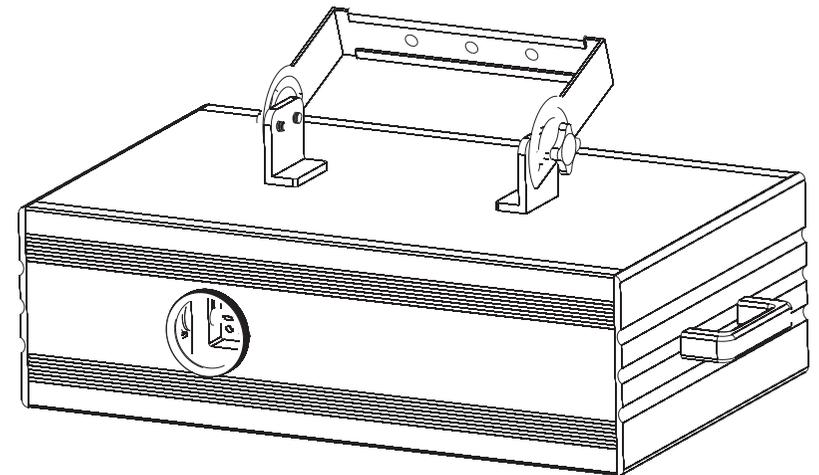


Club Laser 7



Operation Manual EN

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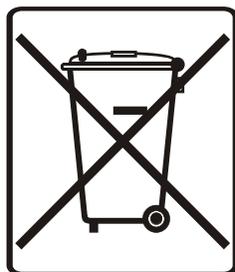
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Version: 1.0





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.
- A superb seven color clublaser equipped with 3 powerful, temperature controlled lasers:
 - 300mW Red laser (650nm)
 - 60mW Green laser (532nm)
 - 50mW Blue laser (473nm)
- Thanks to 20kHz scanners the "club laser 7" projects rock steady sharp images containing up to 7colors!
- 100% ILDA compatible for full flexibility!
- Comes with adapted flight case included!
- The 5 user modes make this laser very easy to use:
 - MUSIC CONTROL: 100% plug & play → just connect the laser to the mains to start an incredible, music controlled, laser show based on the 128 internal programs! Perfect for hiring companies!!!
 - MASTER/SLAVE mode: Several units can be used in completely synchronized music mode: amazing and very simple to use!
 - AUTOMATIC mode: all internal programs will be shown automatically, no music needed
 - DMX mode: just set a DMX address and take full control of all internal programs!
 - 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.
- Laser projections can be adapted to the size of the venue with X/Y image zoom controls
- Graphics can be mirrored for projections behind a transparent screen
- Blanking technology for nice separate beams
- Perfect for use in clubs, discotheques, publicity, exhibitions, and many more ...
- Complies to EN/IEC 60825-1 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 carton contains the following items:

- CLUB LASER 7
- dB25/dB25 ILDA cable
- Flight case
- 2 keys (for key switch)
- Mains cable
- Operating instructions

SAFETY INSTRUCTIONS:



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 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 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.
- 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 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 60825-1:1994 + A1:2002 + A2:2002 regulations, this laser falls under the classification 3B. Direct eye exposure can be dangerous.



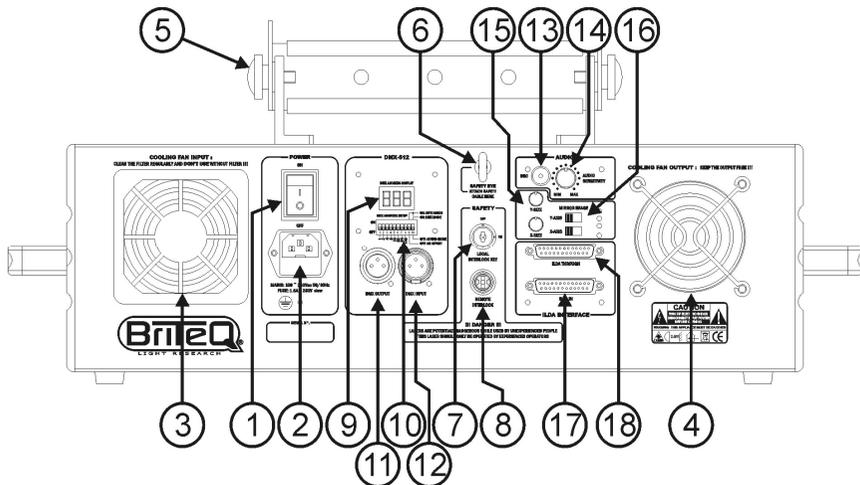
DANGER: LASER RADIATION !
Avoid direct eye exposure! Laser radiation can cause eye damage and/or skin damage. All protective measures for a safe operation of this laser must be applied.



- 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.
- Due to the construction of this laser, the beam is moved so fast, that it can only hit the eye very short. This is why the use of this laser for a Laser-Light-Show can be regarded as safe.
- 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.

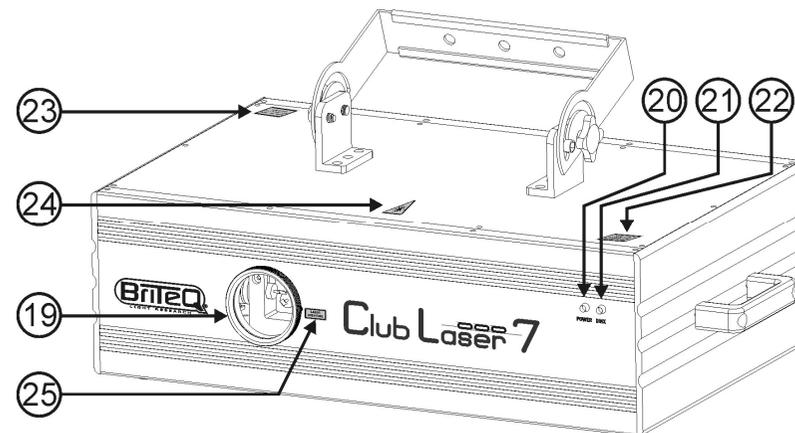
Please note that **BRITEQ** cannot be made liable for damages caused by incorrect installations and unskilled operation!

DESCRIPTION:



- MAIN ON/OFF SWITCH:** used to switch the unit on/off.
- MAINS INPUT:** with IEC socket and integrated fuse holder, connect the supplied mains cable here.
- COOLING FAN (input):** used to cool the components inside the enclosure. Make sure that the filter inside the fan is always in place before you turn the laser on! The filter should be cleaned on a regular base! Just tear off the plastic cover and clean the filter with a vacuum cleaner.
- COOLING FAN (output):** used to cool the components inside the enclosure. Make sure to never cover this fan outlet!
- HANGING BRACKET:** with 2 knobs on both sides to fasten the unit and a mounting hole to fix a mounting hook.

- SAFETY EYE:** used to attach a safety cable when the unit is rigged (see paragraph "overhead rigging")
- ON/OFF KEY ACTIVATED SWITCH:** used to switch the laser beam on/off. Use the keys to make sure only a skilled operator is able to switch the laser on.
- 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!
- 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.
- DIP-SWITCHES:** switches 1~8 are used to set the DMX address between 000 and 255. Switches 9 and 10 are used to select the desired user mode.
- DMX OUTPUT:** 3pin female XLR-connector used to connect the laser with the next unit in the DMX chain.
- DMX INPUT:** 3pin male XLR-connector used to connect universal DMX-cables. This input receives instructions from a DMX-controller.
- INTERNAL MICROPHONE:** The built-in microphone is used to synchronize the laser show to the beat of the music.
- MUSIC INPUT SENSITIVITY:** This potentiometer is used to adjust the music input sensitivity. Turn the potentiometer until the laser works in sync with the music.
- X/Y SIZE CONTROL:** use these controls to adapt the size of the projected graphics to the dimensions of the venue. You can change the vertical and horizontal size independently.
- X/Y MIRROR CONTROL:** use these controls to mirror (reverse) the projections. This is for example useful when you project graphics from behind a transparent screen.
- ILDA INPUT:** used to connect the laser to an ILDA certified interface of a computer, see further for more information.
- ILDA THROUGH:** to link the ILDA signal to the next "Club laser 7" unit.



- LASER OUTPUT:** Here the laser beam leaves the enclosure, make sure to NEVER look inside the unit through this opening while the laser effect is switched on!
- POWER LED:** indicates that the unit is switched on.
- DMX LED:** indicator is lit when the laser detects a DMX-signal.
- WARNING LABEL:** "Caution – Class 3B laser. Laser Radiation when open. Avoid exposure to beam."
- WARNING LABEL:** "Laser Radiation. Avoid exposure to beam. Class 3B laser product"
- LASER WARNING SIGN:** warns against a potentially dangerous laser when not used by skilled operators.
- WARNING LABEL:** "Laser Aperture"

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 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.



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

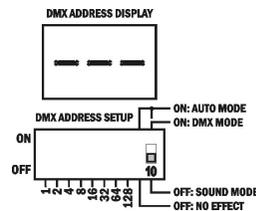
- Regular breaks during operation are essential to maximize the life of this device as it is not designed for continual use.
- Do not switch the unit on and off in short time intervals as this reduces the lifetime of the lasers.
- Always unplug the unit when it is not used for a longer time.
- In the event of serious operating problems, stop using the fixture and contact your dealer immediately.
- **Important:** Never look directly into the laser beam! Don't use the effect in the presence of persons suffering from epilepsy.

Good to know: the first 10 seconds after the laser is switched on, none of the controls can be used!
You can operate the unit in 5 ways:

1) MUSIC CONTROLLED MODE:

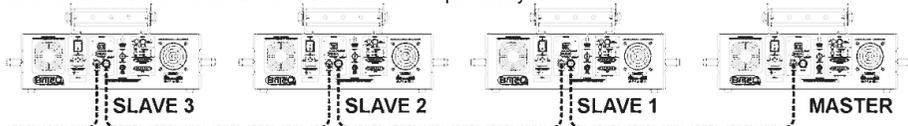
The laser runs a preprogrammed sequence to the rhythm of the music. Select this mode when only 1 laser is used (standalone) or when the laser is placed as the first (master) unit in a chain with several "Club Laser 7" units.

- Refer to the drawing on the right: put DIP-switch n°10 in OFF position (setting of the other DIP-switches is not important)

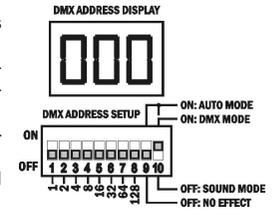


2) MASTER/SLAVE MODE:

You can connect several lasers together. Please put the first unit of the chain in "Music mode" and all other units in "Slave mode" to make them all work in perfect sync!



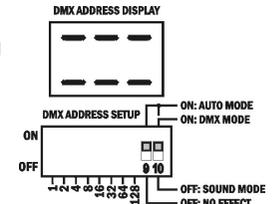
- Link the DMX in/outputs of all lasers together with proper DMX-cables (see drawing)
- The unit with no cable at the DMX-input will be the master: put DIP-switch n°10 of the master in OFF position (setting of the other DIP-switches is not important)
- On all slave units DIP-switch n°10 must be put in ON-position while DIP-switches 1 to 9 are set to OFF (refer to the drawing)
- Put on some music and adjust the MUSIC SENSITIVITY-knob (14) until the laser works nicely to the rhythm of the music.



3) FULL AUTOMATIC MODE:

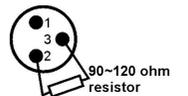
The laser automatically runs a preprogrammed sequence.

- Refer to the drawing on the right: put DIP-switches n°9 and 10 in ON position (setting of the other DIP-switches is not important)



4) DMX512 MODE:

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 light effects with a good quality XLR M/F balanced cable. 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!



Each effect in the chain needs to have its proper starting address so it knows which commands from the controller it has to decode.

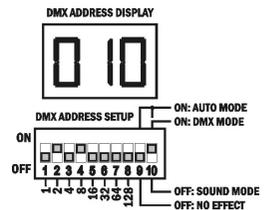
This is how you must setup and use the CLUB LASER 7:

- Connect the unit to a DMX-controller using a suitable DMX-cable.
- Determine which DMX address the laser needs.
- Set DIP-switch n° 10 in "ON" position.
- Set DIP-switch n°9 in "OFF" position.
- You will have to set the DMX starting address with the DIP-switches 1 to 8. Each of these switches has a corresponding DMX-value written under it. You can combine the values of these switches to obtain any starting address between 001 and 255:

Dip	#1	#2	#3	#4	#5	#6	#7	#8
Value	1	2	4	8	16	32	64	128

- Begin address = 01 → switch 1=ON values: 1
- Begin address = 05 → switch 1+3=ON values: 1+4 = 5
- Begin address = 09 → switch 1+4=ON values: 1+8 = 9
- Begin address = 13 → switch 1+3+4=ON values: 1+4+8 = 13
- ...
- Begin address = 62 → switch 2+3+4+5+6=ON values: 2+4+8+16+32 = 62

- The display helps you to check if the desired starting address is correct.
- Once the address is set you can switch the unit on with the mains on/off switch (1).



DMX-CONFIGURATION:

1	0-51	Switched off 	
	52-103	Auto Running Line	
	104-155	Auto Running Dot	
	156-207	Sound Mode Line	
	208-255	Sound Mode Dot	
2	0-255	125 preprogrammed graphics	
3	0-128	Rotation (rotation by Z axis) 	
	129-255	Adjust the speed of the rotation 	
4	0-128	Rolling by Y Axis 	
	129-255	Adjust the speed of rolling 	
5	0-128	Rolling by X Axis 	
	129-255	Adjust the speed of rolling 	
6	0-128	Graphics move along the X-axis 	
	129-255	Speed of moving 	
7	0-128	Graphics move along the Y-axis 	
	129-255	Speed of moving 	
8	0-255	Drawing speed: slow to fast 	
9	0-255	Scanning speed: slow to fast 	
10	0-31	Original color 	
	32-63	Yellow 	
	64-95	Purple 	
	96-127	Cyan 	
	128-159	White 	
	160-191	Green 	
	120-223	Red 	
224-255	Blue 		

5) ILDA CONTROL:

This laser can be controlled by any PC equipped with ILDA compatible software + hardware. As soon as the ILDA-input (17) of the laser is connected with an ILDA compatible controller, it will automatically switch to ILDA control mode. From this moment on the laser will be completely controlled by the ILDA software: the possibilities of the ILDA software will determine what you can do or not...

ILDA soft- and hardware are available from several independent suppliers. Some possible choices are:

- PHOENIX software (www.bocatec.de)
- PANGOLIN software (www.pangolin.com)
- And many other, up to you and your finances to see what is best for your needs ...

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 and ventilation openings should be cleaned monthly.
- The interior of the device should be cleaned annually by experienced service people.

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

SPECIFICATIONS

Mains Input:	AC 100~240V, 50/60Hz
Fuse:	250V 1.5A slow blow (20mm glass)
Total Power consumption:	80W
Sound Control:	Internal microphone
DMX connections:	3pin XLR male / female
DMX channels:	10 channels
DMX starting address:	001 → 256
Laser Power:	60mW Green CW laser (λ = 532nm) 300mW Red CW laser (λ = 650nm) 50mW Blue CW laser (λ = 473nm) high speed 20kHz type
Laser scanners:	3B
Laser radiation class:	EN60825-1:1994 + A1:2002 + A2:2002
Size (WxHxD):	58cm x 16cm (30cm with bracket) x 34cm
Weight:	11,9kg

Every information is subject to change without prior notice
You can download the latest version of this user manual on our website: www.briteq-lighting.com