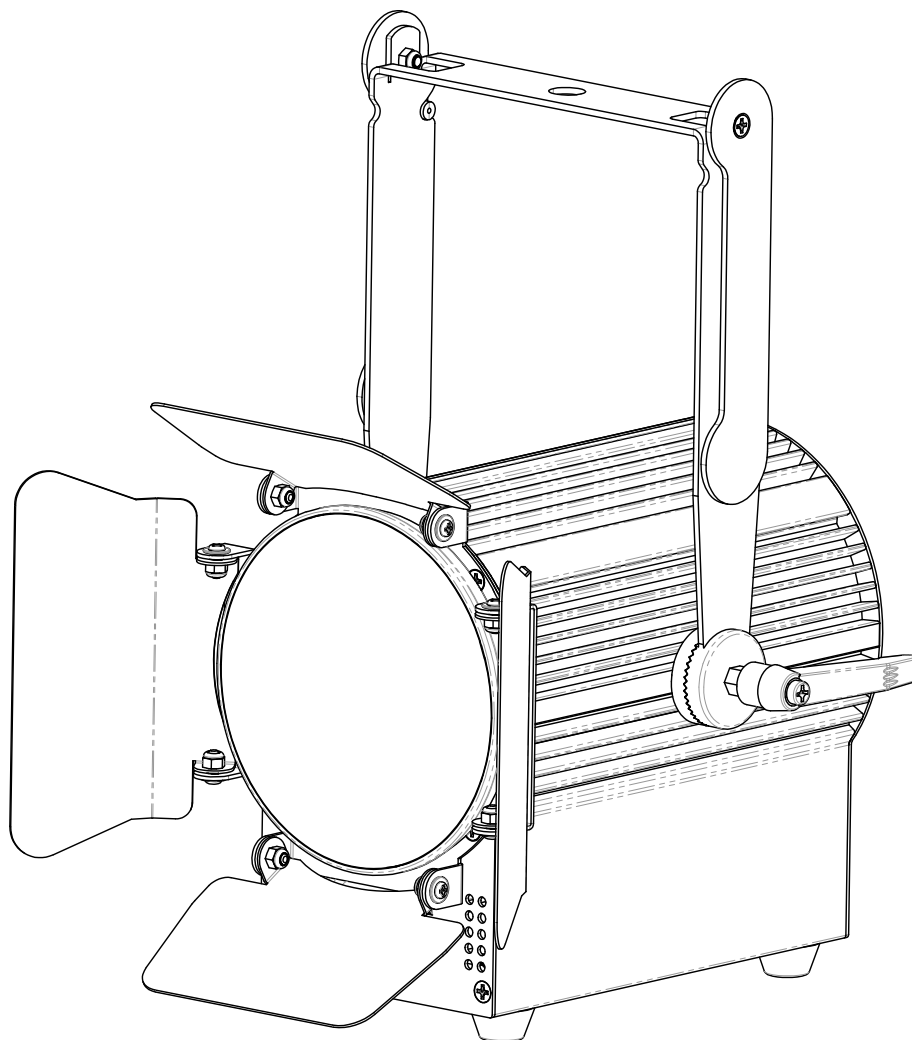# CAM-SPOT 50TW

ENGLISH
Operation Manual

Other languages can be downloaded from:
WWW.JB-SYSTEMS.EU

CE

Version: 1.0
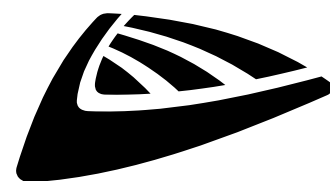
JBSYSTEMS

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 JB Systems® 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

- Stylish, compact and budget friendly LED theater spot with tunable white color.
- 50watt LED, tunable white between 2800K and 5600K
- Excellent CRI >90 for realistic color perception.
- Dimmer and color temperature controllable using 2 knobs on the back panel.
- Full DMX control with different modes: 2, 3, 4 channels
- Standard beam angle = 14° (20° with the included frost filter)
- Magnetic filter frame for color filters and four-leaf barndoor included
- The special suspension bracket can also be used as a table stand.
- Completely silent operation, no noisy cooling fans on board
- PowerCon® compatible powerinlet.

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.

<u>Check the contents:</u>
Check that the carton contains the following items:
- English operating instructions, other languages can be downloaded from our website.
- CAM-SPOT 50TW
- Magnetic filter frame
- 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 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 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. Apart from the 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.

DESCRIPTION:
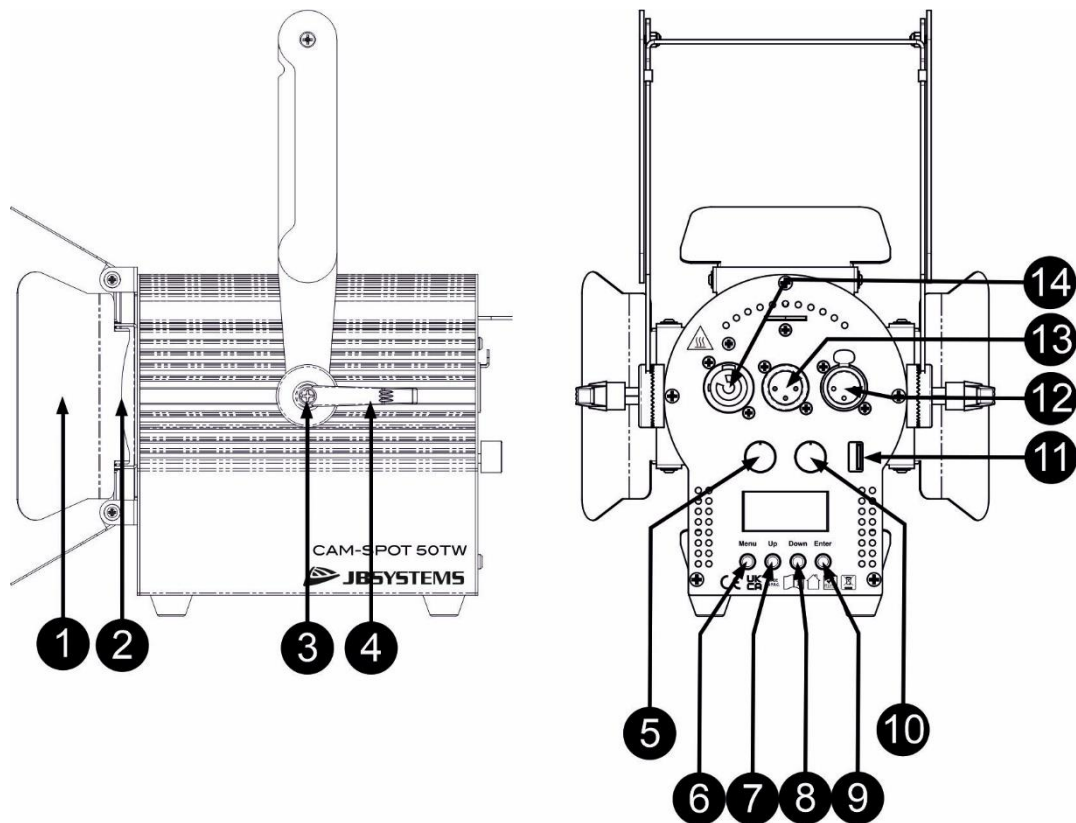
1. **BARN DOORS:** they facilitate shaping of the beam of light from the fixture, and prevent the distinctive scatter of light created by the lens from spilling into areas where it is not wanted, such as the eyes of audience members.
2. **MAGNETIC FILTERHOLDER:** to hold different kinds of filters with a diameter of 9cm.
3. **HANGING BRACKET:** used to hang or place the projector on a surface using the additional swivel handles.
4. **KNOB:** to fix hanging bracket in the desired position.
5. **DIMMER:** used to dim the output manually.
6. **MENU BUTTON:** to enter/leave the setup menu.
7. **UP BUTTON:** used to browse the menu / increase the selected value.
8. **DOWN BUTTON:** used to browse the menu / decrease the selected value.
9. **ENTER BUTTON:** used to confirm your actions
10. **COLOR TEMP:** change the color temperature from warm white (WW 3000K) to cold white (CW 6000K)
11. **USB SOCKET:** Please note that this USB-connector is NOT used for updates or to connect the unit to a PC! Instead this USB-connector makes it very easy to add wireless DMX to the unit! Just add the (optional) WTR-DMX DONGLE from BRITEQ® and you will get wireless DMX! Moreover, you will be able to connect other DMX-controlled equipment to the DMX-output so you can share the wireless DMX function with all connected units! No extra settings to be made in the setup menu, just follow the procedure in the user manual supplied with the WTR-DMX DONGLE from BRITEQ®. The separate WTR-DMX DONGLE is available from WWW.BRITEQ-LIGHTING.COM (order code: B04645)
12. **DMX OUT** connector 3p XLR Female.
13. **DMX IN** connector 3pin XLR Male.
14. **POWER IN:** Powercon® compatible power input.

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 / HOW TO SETUP

With the setup menu you can fully configure the projector. All settings are preserved when the unit is disconnected from the mains.

- To select any of the functions, press the MENU button until the required function is shown on the display or use the UP/DOWN buttons to browse the menu.
- Select the function with the ENTER button.
- Use UP/DOWN buttons to change the values.
- Once the required value is selected, press the ENTER button to confirm.

Display	Level 1	Function
DMX Addr	**<***> 001-512**	Display the DMX address
DMX Chan	**2.1CH**	Set the DMX Channel mode
	2.2CH	
	3CH	
	4CH	
Mas/Slav Mode	**Master**	Works standalone, without external controller
	Slave	Projector is controlled by master unit
Strobe	**<***> 000-100**	Set strobe effect
DMX Fail	**Hold**	Set how the fixture reacts to DMX loss
	Manual	
	Black-Out	
Temp	**<***>°C**	Display the current temperature inside the fixture
DimMode	**Off**	Set the dim speed of the LED
	Dim1	
	Dim2	
	Dim3	
	Dim4	
Factory	**ON**	Reset all parameters to factory defaults
	OFF	
Manual control		
Set Dimmer	**<***> 000-100**	Set the brightness of the fixture Store by press and hold until display shows "OK!"
Set CCT	**<***> 000-69**	69 predefined CCT colors Store by press and hold until display shows "OK!"

DMX Addr
Used to set the desired DMX-address.
- Press the [MENU] button or [UP]/[DOWN] buttons until the desired function is showing on the display.
- Press the [ENTER] button: the DMX value can now be changed
- Use UP/DOWN buttons to select the desired DMX512 address. The last occupied DMX-address is also shown: this 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.

DMX Chan
Used to set the desired channel mode.
- Press the [MENU] button or [UP]/[DOWN] buttons until the desired function is showing on the display.
- Press the [ENTER] button: the values can be changed
- Use [UP]/[DOWN] buttons to select the desired mode:
  - **[2.1CH]:** CW + WW.
  - **[2.2CH]:** Dimmer + CCT.
  - **[3CH]:** CW + WW+ Dimmer.
  - **[4CH]:** CW + WW+ Dimmer + Strobe.
- Once the correct option shows on the display, press the [ENTER] button to save it.

Mas/Slav
Used to set the projector as slave in a master/slave setup.
- Press the [MENU] button or [UP]/[DOWN] buttons until the desired function is showing on the display.
- Press the [ENTER] button: The values can be changed.

Strobe
Used to set the Strobe while used in manual mode.
- Press the [MENU] button or [UP]/[DOWN] buttons until the desired function is showing on the display.
- Press the [ENTER] button: the values can be changed
- Use [UP]/[DOWN] buttons to select the desired level for the master dimmer. (please note that the last selected static color will be used to set the value)
- Once you have the desired level, press the [ENTER] button to save it.

DMX Fail
Used to set the desired DMX loss setting
- Press the [MENU] button or [UP]/[DOWN] buttons until the desired function is showing on the display.
  - **[Hold]**   Projector keeps the last valid output before DMX loss
  - **[Manual]**   Projector goes to manual mode when DMX is lost
  - **[Black-Out]**   Projector output turns dark when DMX is lost
- 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, Hold, Manual or Black-Out mode will be cancelled.

Temp
Used to monitor the internal temperature of the fixture.
- Press the [MENU] button or [UP]/[DOWN] buttons until the desired function is showing on the display.
- Press the [ENTER] button: Display the internal temperature.

DimMode
Used to select the reaction time of the projector.
- Press the [MENU] button or UP/DOWN buttons until the desired function is showing on the display.
- Press the [ENTER] button: the values can be changed
- Use UP/DOWN buttons to select the desired mode:
  - **[Off]**   The projector follows the instructions instantly, no delay.
  - **[Dim1..4]**   The projector imitates the behavior of a halogen lamp (slower reaction time).
- Once the correct option shows on the display, press the [ENTER] button to save it.

Factory
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 [MENU] button or [UP]/[DOWN] buttons until the desired function is showing on the display.
- Press the ENTER button: the values can be changed

- Use [UP]/[DOWN] buttons to select [YES / NO]
- Press the [ENTER] button to confirm.

Default factory settings:

PARAMETER name	Defaults factory
DMX address	001
DMX Mode	2.2CH
Mas/Slav	Slave
Strobe	0
DMX Fail	[Hold]
DimMode	[OFF]
Manual Dimmer	100
CCT preset	69

ELECTRICAL INSTALLATION

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

Master / Slave mode:
Connect the projectors together as shown on the drawing. Please refer to the paragraph "SETUP MENU" to setup the master. All slaves must be set to SLAVE-mode.
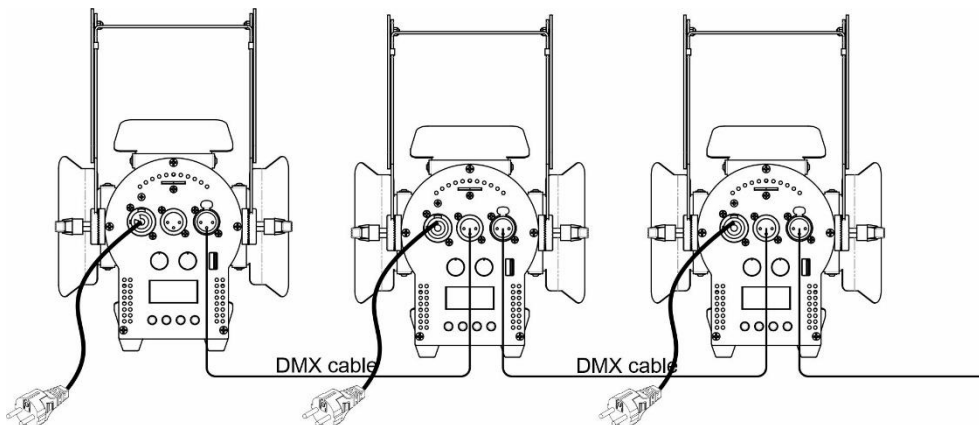
Electrical installation for two or more units in DMX-mode:
- The DMX-protocol is a widely used high speed signal to control intelligent light equipment. You need to "daisy chain" your DMX controller and all the connected units.
- Pin layout XLR-3pin: Pin1 = GND ~ Pin2 = Negative signal (-) ~ Pin3 = Positive signal (+)
- 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 needs to have its proper starting address so it knows which commands from the controller it has to decode.
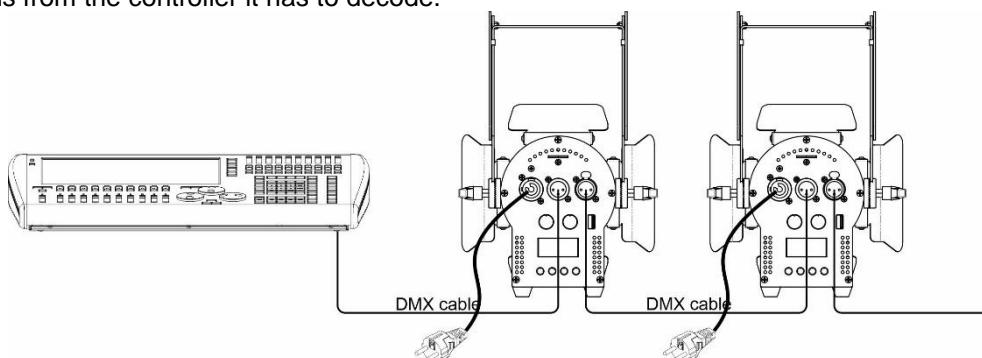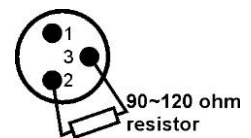
OPERATING INSTRUCTIONS

A.Standalone 1unit:
- Just connect the projector to the mains.
- Adjust the dimmer and color temperature [DIMMER] [COLOR TEMP] if necessary.
- You can easily add optional filters (color, frost) by means of the magnetic filter holder (diameter : 9cm).
- Refer to chapter HOW TO SETUP to learn how to set the menu options.

B.Two or more units in master/slave setup:
- Connect the units together. Refer to the chapter "electrical installation" to learn how to do this.
- Adjust the dimmer and CCT [DIMMER] [COLOR TEMP] on the first unit (master unit) in the DMX-line.
- Set all the other projectors in SLAVE mode
- The slave projectors will now follow the settings of the master projector so they all work synchronously.

C.Controlled by universal DMX-controller:
- Connect all units together. Refer to the chapter "Electrical installation for two or more units in DMX-mode" to learn how to do this (don't forget to address all units properly!)
- Connect all units to the mains and turn on the DMX controller.

Since each unit has its own DMX-address, you can control them individually. Remember that each unit can use a different number DMX-channels, depending on the DMX-mode you have selected in the menu. See the different DMX charts:

2.1Ch	2.2Ch	3Ch	4Ch	Function	Values
1		1	1	CW	000-255
2		2	2	WW	000-255
	1			Linear CCT	000-255
	2	3	3	Dimmer	000-255
			4	Strobe	000-255

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.

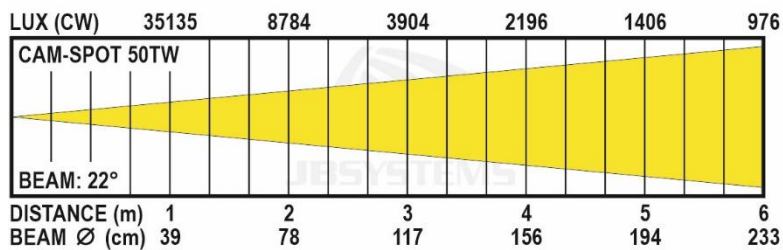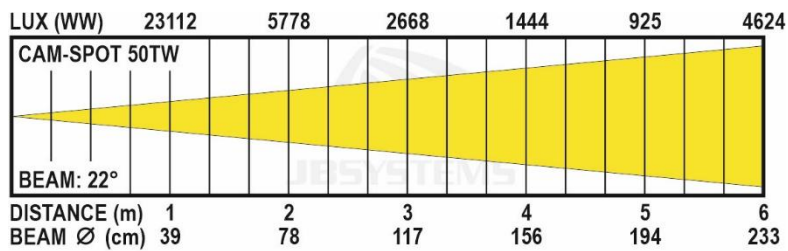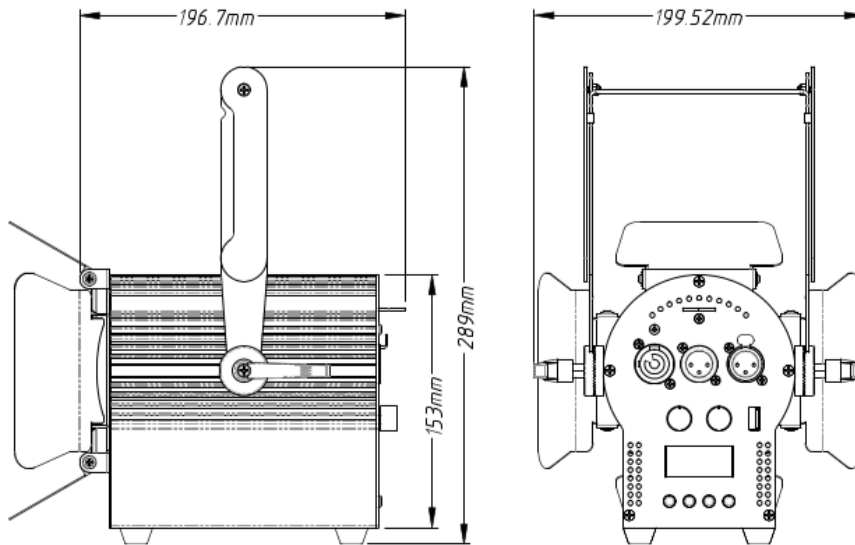**During inspection the following points should be checked:**

- 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 interior of the device should be cleaned annually using a vacuum cleaner or air-jet.
- 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 personnel!

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.

Mains Input:	AC 180 - 240V, 50Hz
Power consumption:	52 Watt
Power connections:	PowerCon
DMX connections:	3pin-XLR male / female
Lamp:	LED, 50W COB CW + WW
CRI:	**>**90
Beam Angle:	22°
IP-Rating:	IP20
Size:	see drawing
Weight:	2,7 kg

LUX (WW)	23112	5778	2668	1444	925	4624
CAM-SPOT 50TW						
BEAM: 22°						
DISTANCE (m)	1	2	3	4	5	6
BEAM Ø (cm)	39	78	117	156	194	233

LUX (CW)	35135	8784	3904	2196	1406	976
CAM-SPOT 50TW						
BEAM: 22°						
DISTANCE (m)	1	2	3	4	5	6
BEAM Ø (cm)	39	78	117	156	194	233

The information might be modified without prior notice
You can download the latest version of this user manual on our website: www.jb-systems.eu

JBSYSTEMS

MAILING LIST

EN: Subscribe today to our mailing list for the latest product news!
FR: Inscrivez-vous à notre liste de distribution si vous souhaitez suivre l'actualité de nos produits!
NL: Abonneer je vandaag nog op onze mailinglijst en ontvang ons laatste product nieuws!
DE: Abonnieren Sie unseren Newsletter und erhalten Sie aktuelle Produktinformationen!
ES: Suscríbete hoy a nuestra lista de correo para recibir las últimas noticias!
PT: Inscreva-se hoje na nossa mailing list para estar a par das últimas notícias!

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