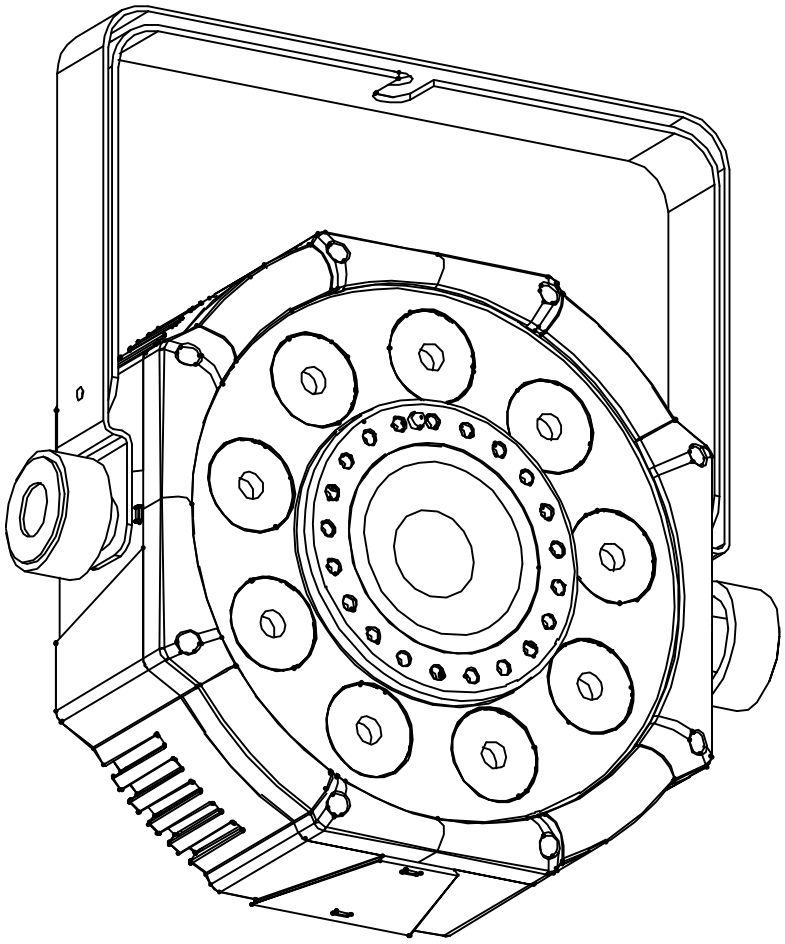
RAVE SPOT



ENGLISH

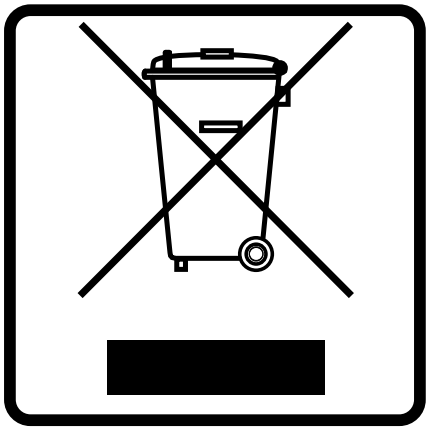
Operation Manual

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

- 3 effects in one single unit !
  - 9x8W Red-Green-Blue-UV Leds for colored beams + UV/Blacklight effect
  - 1 central COB 30W RGB led
  - Led Strobe: 21x 0.5W White Leds
- Use the unit in any way you like it !
  - Standalone: sound activated (internal mic) or automatic shows. IR remote controller included.
  - Master/slave function for wonderful synchronized shows when several units are used.
  - DMX-control: via 1, 2, 4, 6, 9 or 22 Channels.
- 4-digit LED display for easy menu navigation
- Prepared for wireless DMX: just plug-in an optional WTR-DMX DONGLE ! (optional, Briteq® code 4645)
- IEC mains input + output for easy linking (check out our combi cables)

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:

- RAVE SPOT unit
- Mains cable
- IR Remote controller
- 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 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.

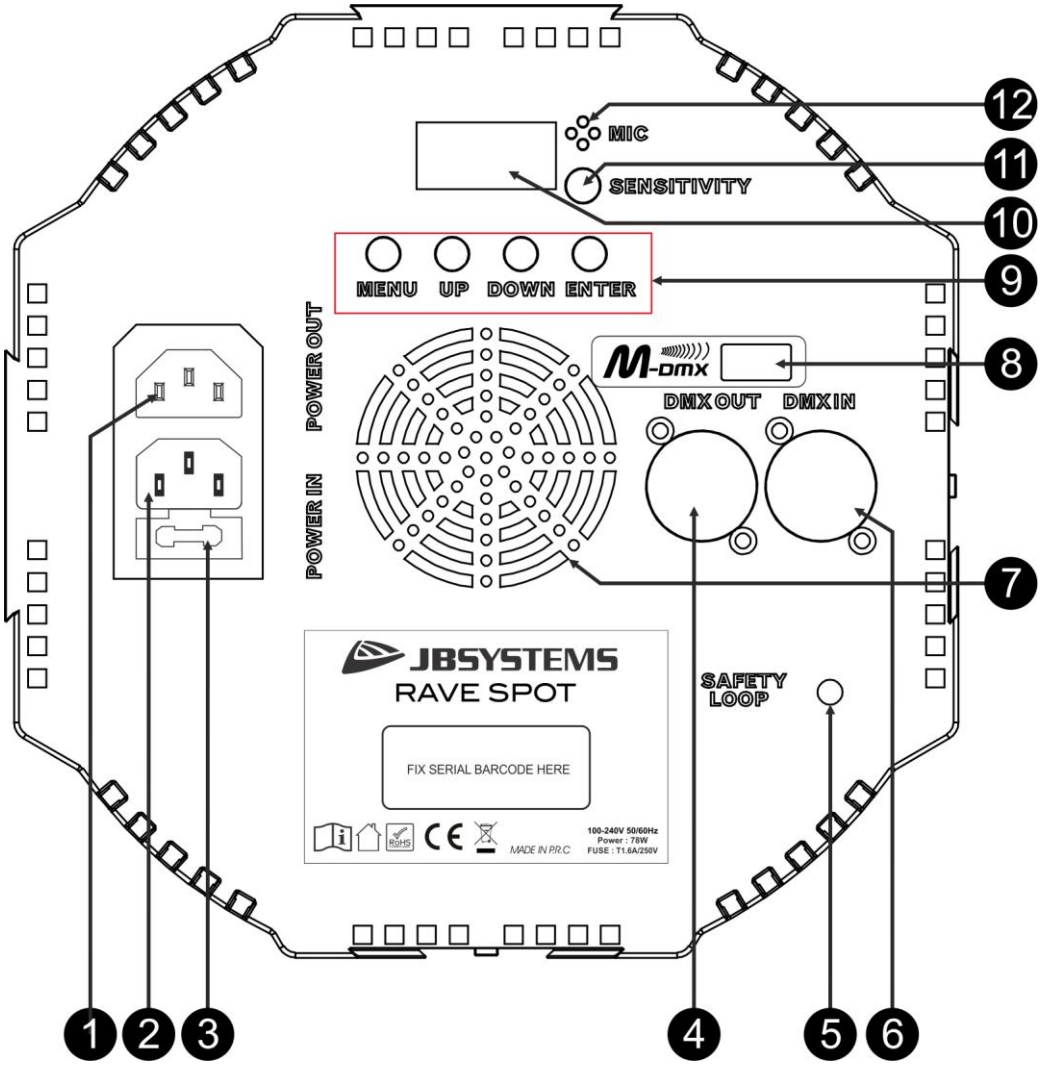
This symbol means: Read instructions.

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

DESCRIPTION:



1. **MAINS OUTPUT:** you can use our “combi cables” and this IEC output to easily daisy-chain the next unit.
2. **MAINS INPUT:** with IEC socket and integrated fuse holder; connect the supplied mains cable here.
3. **FUSE HOLDER:** holds a slow blow 1.6A/250V glass fuse to protect the internal electronic circuits.
4. **DMX INPUT:** 3pin male XLR-connector used to connect universal DMX-cables. This input receives instructions from a DMX-controller or the Master unit in Master/slave mode.
5. **SAFETY EYEBOLT:** used to attach a safety cable when the unit is rigged (see “overhead rigging”)
6. **M-DMX INPUT:** 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: 4645)
7. **VENTILATION OPENING:** used for the cooling of the unit. Do not cover the opening !
8. **USB CONNECTOR**: used for connecting the WTR-DMX DONGLE (order code 04645) for wireless DMX in combination with our M-DMX TRANSCEIVER (order code 04646). Don’t use this connector for connection with a PC!

9. BUTTONS:

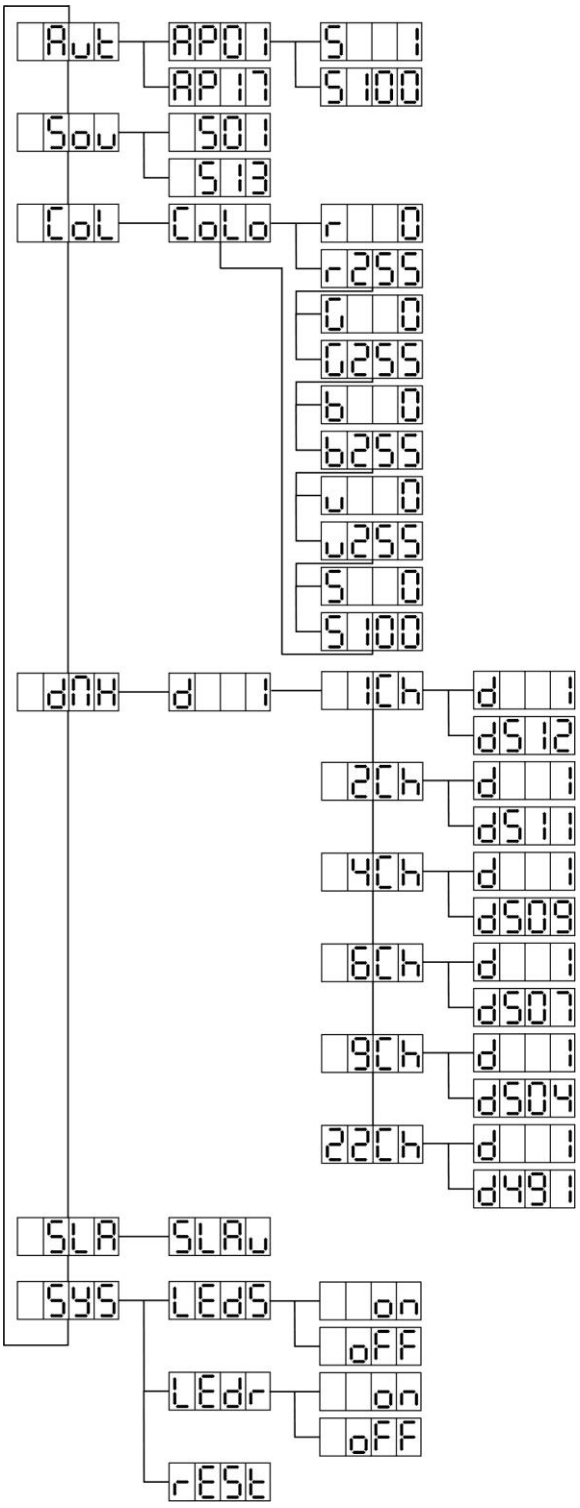
[MENU]	To browse the different menu options
[UP]	To go forward in the selected functions or to increase a value
[DOWN]	To go backward in the selected functions or to decrease a value
[ENTER]	To confirm the selected functions

10. DISPLAY: shows the various menus and the selected functions.
11. SENSITIVITY KNOB: The unit works to rhythm of the beat when used in standalone or master/slave mode. With this knob you can set the input sensitivity of the build-in microphone.
12. INTERNAL MICROPHONE: The built-in microphone is used to synchronize the show to the beat of the music.

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.

HOW TO SET UP AND CONTROL THE UNIT



You can operate the unit in 4 ways:

1) MUSIC CONTROLLED MODE:

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

- Press the [MENU] button until the display shows: [Sou]
- Now use the [UP] or [DOWN] to browse the different sound modes.
- Press the [ENTER] button to select the desired sound mode:
- With the [UP] & [DOWN] buttons, you can choose different programs for the selected sound mode. (see above)
- Press the [ENTER] button to confirm your choice.
- Put on some music and set the sensitivity of the microphone by using the sensitivity knob (11) so that the effect reacts perfectly to the sound level of your music.

You can connect several units together: just put the first unit of the chain in one of the sound activated effect modes and all other units in “Slave mode” (display shows “SLA”) to make them all work in perfect sync!

Note: When no music is detected, the output of the unit will be shut off (blackout).

2) FULL AUTOMATIC MODE:

The unit automatically runs a preprogrammed sequence. Select this mode when only 1 unit is used (standalone) or when the unit is placed as the first (master) unit in a chain with several units.

- Press the [MENU] button until the display shows [Aut]
- Now use the [UP] or [DOWN] to browse the different automatic modes.
- Press the [ENTER] button to select the desired automatic mode:
- With the [UP] & [DOWN] buttons, you can choose different programs for the selected sound mode. (see above)
- Press the [ENTER] button to confirm your choice.
- Now use the [UP] or [DOWN] buttons to select the speed:
    - S 1 = Slowest speed
    - S 100 = Fastest speed
- Press the [ENTER] button to confirm your choice.

You can connect several units together: just put the first unit of the chain in one of the automatic effect modes and all other units in “Slave mode” (display shows “SLA”) to make them all work in perfect sync!

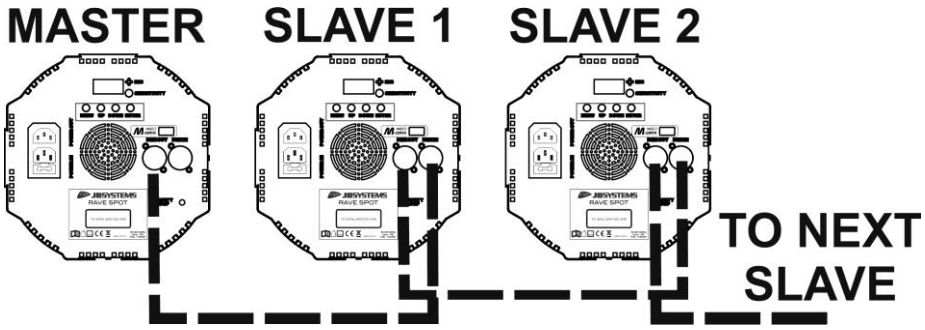
3) SLAVE MODE:

The unit follows the instructions given by the first unit (master) in the chain. Like this you can obtain nice synchronized shows.

- Connect the DMX input of the unit to the DMX output of the previous unit in the chain.

- Press the FUNC-button until the display shows [SLA]
- Press the ENTER-button to confirm your choice.

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

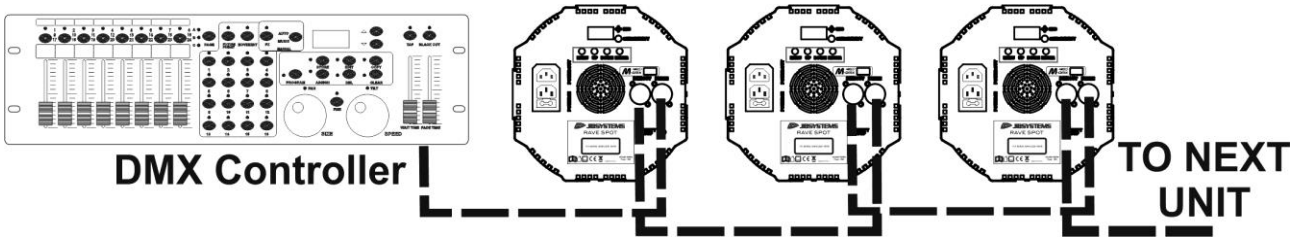


4) DMX512 MODE:

The projector can be controlled by any standard DMX-controller in 6 different DMX-modes.

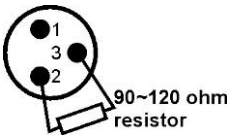
- Press the [MENU] button until the display shows [dMH]
- Press the [ENTER] button
- The display will show the actual DMX address
- Press [ENTER] to enter the setup
- Use the [UP] or [DOWN] buttons to select the DMX mode you want to use. [1Ch], [2Ch], [4Ch], [6Ch], [9Ch] or [22Ch]
- Press the [ENTER] button to confirm your choice.
- Use the [UP] or [DOWN] buttons to select the desired DMX address
- Press the [ENTER] button to confirm the DMX address

Note: the display blinks when the unit is in DMX-mode and no DMX-signal is detected.



Some more information on DMX512:

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.

1CH Mode :

DMX Channel	DMX-value	function	remarks
1	000-015	Blackout	
	016-023	Program 1	**Speed slow-fast**
	024-031	Program 2	"
	032-039	Program 3	"
	040-047	Program 4	"
	048-055	Program 5	"
	056-063	Program 6	"
	064-071	Program 7	"
	072-079	Program 8	"
	080-087	Program 9	"
	088-095	Program 10	"
	096-103	Program 11	"
	104-111	Program 12	"
	112-119	Program 13	"
	120-127	Program 14	"
	128-135	Program 15	"
	136-143	Program 16	"
	144-151	Program 17	"
	152-159	Program sound 1	**Sound activated**
	160-167	Program sound 2	"
	168-175	Program sound 3	"
	176-183	Program sound 4	"
	184-191	Program sound 5	"
	192-199	Program sound 6	"
	200-207	Program sound 7	"
	208-215	Program sound 8	"
	216-223	Program sound 9	"
	224-231	Program sound 10	"
	232-239	Program sound 11	"
	240-247	Program sound 12	"
	248-255	Program sound 13	"

2CH Mode :

DMX Channel	DMX-value	function	remarks
1	000-015	Blackout	
	016-023	Program 1	**Speed slow-fast**
	024-031	Program 2	"
	032-039	Program 3	"

	040-047	Program 4	"
	048-055	Program 5	"
	056-063	Program 6	"
	064-071	Program 7	"
	072-079	Program 8	"
	080-087	Program 9	"
	088-095	Program 10	"
	096-103	Program 11	"
	104-111	Program 12	"
	112-119	Program 13	"
	120-127	Program 14	"
	128-135	Program 15	"
	136-143	Program 16	"
	144-151	Program 17	"
	152-159	Program sound 1	**Sound activated**
	160-167	Program sound 2	"
	168-175	Program sound 3	"
	176-183	Program sound 4	"
	184-191	Program sound 5	"
	192-199	Program sound 6	"
	200-207	Program sound 7	"
	208-215	Program sound 8	"
	216-223	Program sound 9	"
	224-231	Program sound 10	"
	232-239	Program sound 11	"
	240-247	Program sound 12	"
	248-255	Program sound 13	"
2	000-255	Dimmer 0-100%	

4CH Mode : (Ledcon 02 Mk2)

DMX Channel	DMX-value	function	remarks
1	000-255	Red color dimmer	
2	000-255	Green color dimmer	
3	000-255	Blue color dimmer	
4	000-190	Master Dimmer 0% - 100%	
	191-200	Sound	
	201-247	Strobe Slow to fast	
	248-255	Master Dimmer 100% (full on)	

6CH Mode :

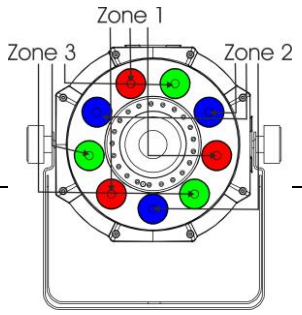
DMX Channel	DMX-value	function	remarks
1	000-255	Red color dimmer	
2	000-255	Green color dimmer	
3	000-255	Blue color dimmer	
4	000-255	White color dimmer	
5	000-255	Amber color dimmer	
6	000-255	UV color dimmer	

9CH Mode :

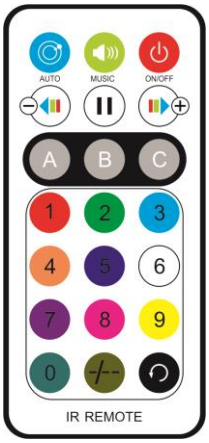
DMX Channel	DMX-value	function	remarks
1	000-255	Master Dimmer 0% - 100%	
2	000-007	Full on	
	008-037	Random strobe	
	038-067	Sound strobe	
	068-255	Strobe speed : Slow to fast	
3	000-007	No function	
	008-247	Color fade : Slow to fast	
	248-255	Sound Chase	
4	000-255	Red color dimmer	
5	000-255	Green color dimmer	
6	000-255	Blue color dimmer	
7	000-255	No function	
8	000-255	No function	
9	000-255	UV color dimmer	

22CH Mode :

DMX Channel	DMX-value	function	remarks
1	000-255	Red color dimmer	**Zone 1**
2	000-255	Green color dimmer	
3	000-255	Blue color dimmer	
4	000-255	UV color dimmer	
5	000-005	No function	
	006-250	Strobe Slow to fast	
	251-255	Sound	
6	000-255	Red color dimmer	**Zone 2**
7	000-255	Green color dimmer	
8	000-255	Blue color dimmer	

9	000-255	UV color dimmer	
10	000-005	No function	
	006-250	Strobe Slow to fast	
	251-255	Sound	
11	000-255	Red color dimmer	**Zone 3**
12	000-255	Green color dimmer	
13	000-255	Blue color dimmer	
14	000-255	UV color dimmer	
15	000-005	No function	
	006-250	Strobe Slow to fast	
	251-255	Sound	
16	000-255	Red color dimmer	**Center**
17	000-255	Green color dimmer	
18	000-255	Blue color dimmer	
19	000-005	No function	
	006-250	Strobe Slow to fast	
	251-255	Sound	
20	000-005	No function	**White strobe leds**
	006-020	Full on	
	021-250	Strobe Slow to fast	
	251-255	Sound activated strobe	
21	000-005	No function	
	006-019	Program 1	
	020-034	Program 2	
	035-048	Program 3	
	049-063	Program 4	
	064-077	Program 5	
	078-092	Program 6	
	093-106	Program 7	
	107-121	Program 8	
	122-135	Program 9	
	136-150	Program 10	
	151-164	Program 11	
	165-179	Program 12	
	180-193	Program 13	
	194-208	Program 14	
	209-222	Program 15	
	223-237	Program 16	
	238-255	Program 17	
22	000-250	Program speed	**Slow to fast**
	251-255	Sound activated program	

IR REMOTE CONTROLLER



Button	Function	Description
	ON/OFF	To switch the effect On or Off
	AUTO	To select programs 1-17
	SOUND	To select sound activated programs 1-13
A	No function	
B	No function	
C	No function	
	AUTO / SOUND	To toggle between automatic and sound mode
	PAUSE	To pause the program
	COLOR SELECT	To select colors 1 - 24
0~9	SPEED	Select the speed for the automatic programs

EXTRA MENU OPTIONS

Press the [MENU] button till [SYS] appears on the display
Press [ENTER] and use the [UP] & [DOWN] buttons to browse the different options:

- **[LEdS]:** use this option to select if the display needs to go out when it is not used or if it has to be lit all the time
- **[LEdr]:** use this option to reverse the display. This can be useful when the unit is positioned upside-down.
- **[rESt]:** use this option to restore the initial factory settings.

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:

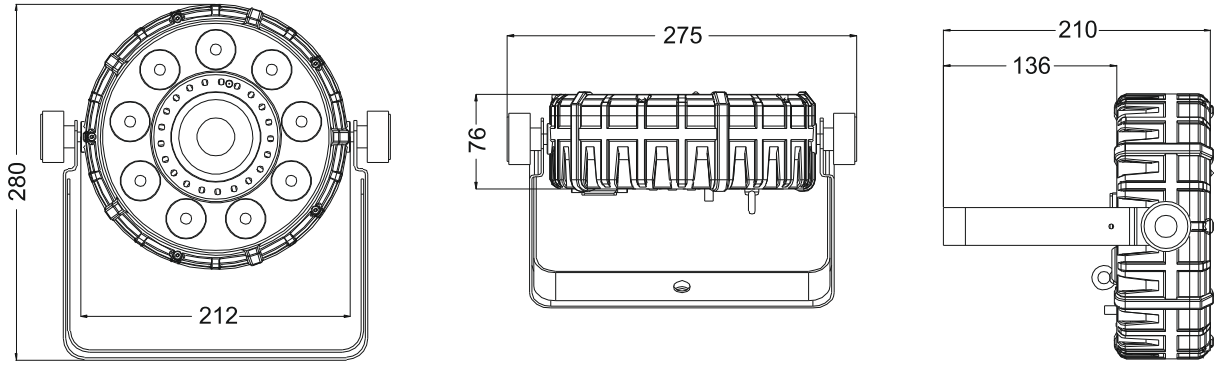
- All screws used for installing the device and any of its parts should be tightly fastened and may not be corroded.
- Housings, fixations and installations spots (ceiling, truss, suspensions) should be totally free from any deformation.
- When an optical lens is visibly damaged due to cracks or deep 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.
    - Clean the external optics at least once every 30 days.
    - Clean the internal optics at least every 90 days.

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

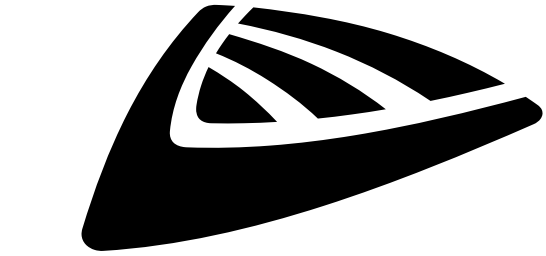
SPECIFICATIONS

This device was designed to produce decorative effect lighting and is used in light show systems.
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 100~240V, 50/60Hz
Fuse:	250V 1.6A slow blow (20mm glass)
Max. Power consumption:	78W
Sound Control:	Internal microphone
DMX connections:	3pin XLR male / female
DMX channels:	1 / 2 / 4 / 6 / 9 / 22 channels
Par LEDs:	9x8Watt Red-Green-Blue-UV Led's
Center LED:	1x30Watt RGB Led
Strobe LEDs:	21x 0.5Watt LEDs
Working temperature:	10°C to 40°C
Size:	280x275x76mm
Weight:	1,81 kg



All the information is subject to change without prior notice You can download the latest version of this user manual on our website: www.jb-systems.eu



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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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