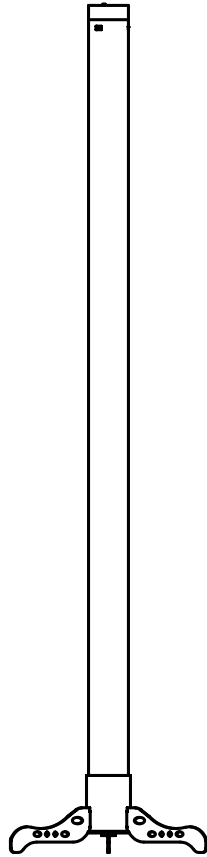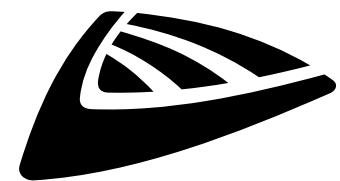# PIXEL PIPE

ENGLISH
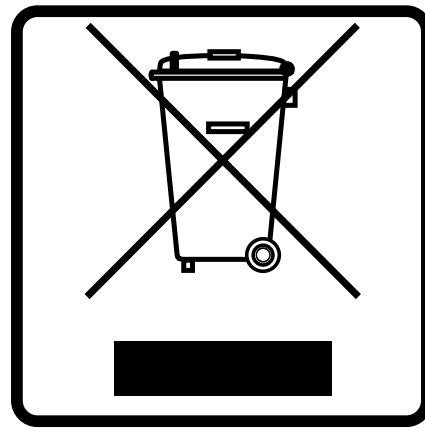## Operation Manual

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

- Perfect for use in: retail stores, commercial displays, architectural lighting, indoor decoration, clubs, pubs, mobile DJs, trussing, ...
- Equipped with 32 x RGB SMD5050 LEDs divided in 8 sections.
- IR-remote controller included
- Different working modes:
  - **Standalone with IR-remote:** automatic / beat synchronized color patterns.
  - **Master/slave mode:** several tubes can be used together for wonderful preprogrammed, music synchronized lightshows.
  - **DMX-controlled:** 3 different channel modes (3,7 and 24ch) with program selection and individual RGB control.
- Low power consumption : only 12W
- For indoor use only.
- 0-100% dimming and strobe function.
- 4digit LED-display for easy menu navigation
- Tripod stand

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 packing contains the following items:
- Operating instructions
- PIXEL PIPE + tripod
- IR Remote control
- Power Cable

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 x meters

The device is not suitable for direct mounting on normally flammable surfaces. (suitable only for mounting on non-combustible surfaces)

RISK GROUP 2
CAUTION:
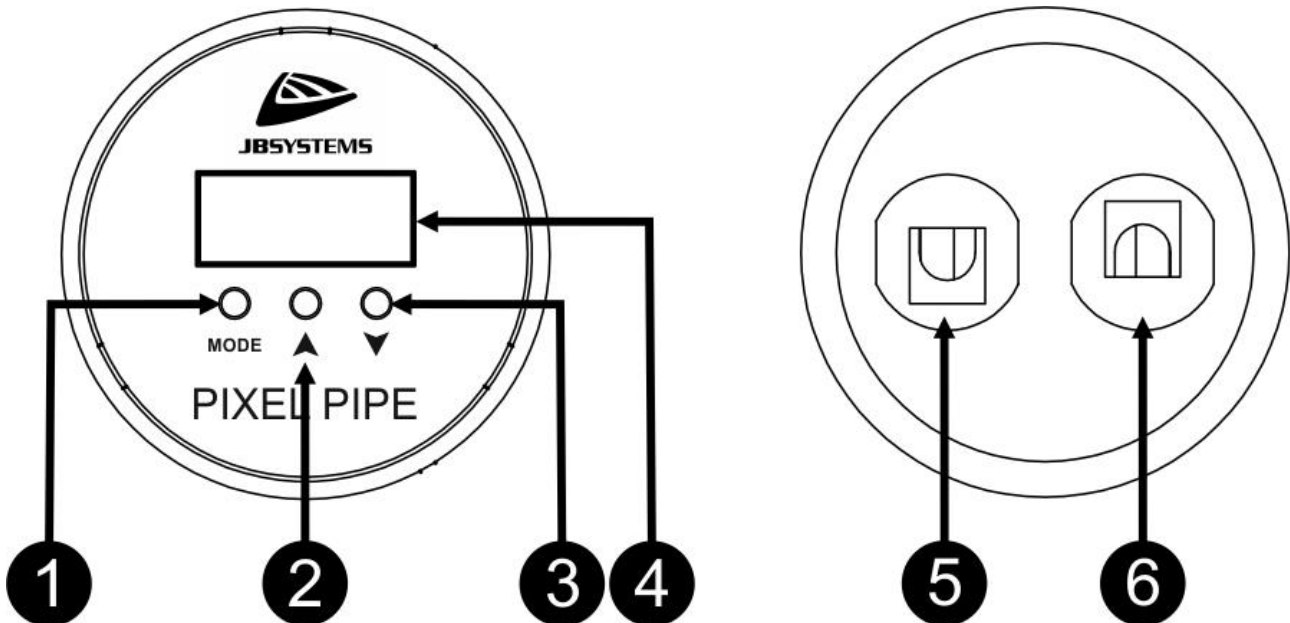**Do not stare at operating lamp**

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. 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. **[MODE] button:** used to browse the different functions in the menu
2. **▲ button:** to go up in the menu and/or increase the values shown on the display.
3. **▼ button:** to go down in the menu and/or lower the values shown on the display.
4. **DISPLAY** shows the various menus and the selected functions.
5. **Mains input/output:** cable with Male and Female IEC sockets, connect the supplied mains cable here. Connect the female output to the next fixture (max. 6A)
6. **DMX input/output:** cable with Male and Female 3pin XLR-connectors used to connect the tube with the previous or next unit in the DMX chain.

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.
- 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 the installation 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.
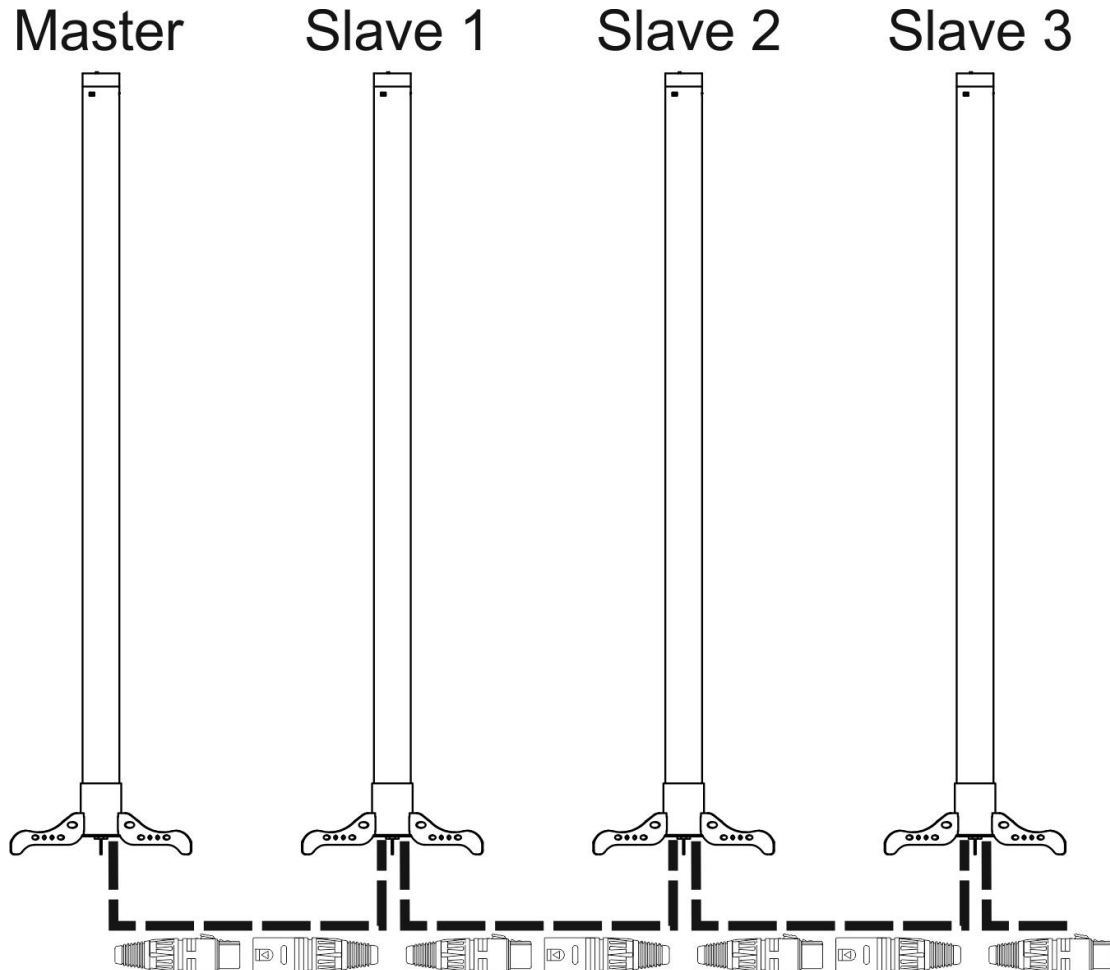
ELECTRICAL INSTALLATION

⚠️ **Important: The electrical installation should be carried out by qualified personal only, according to the regulations for electrical and mechanical safety in your country.**
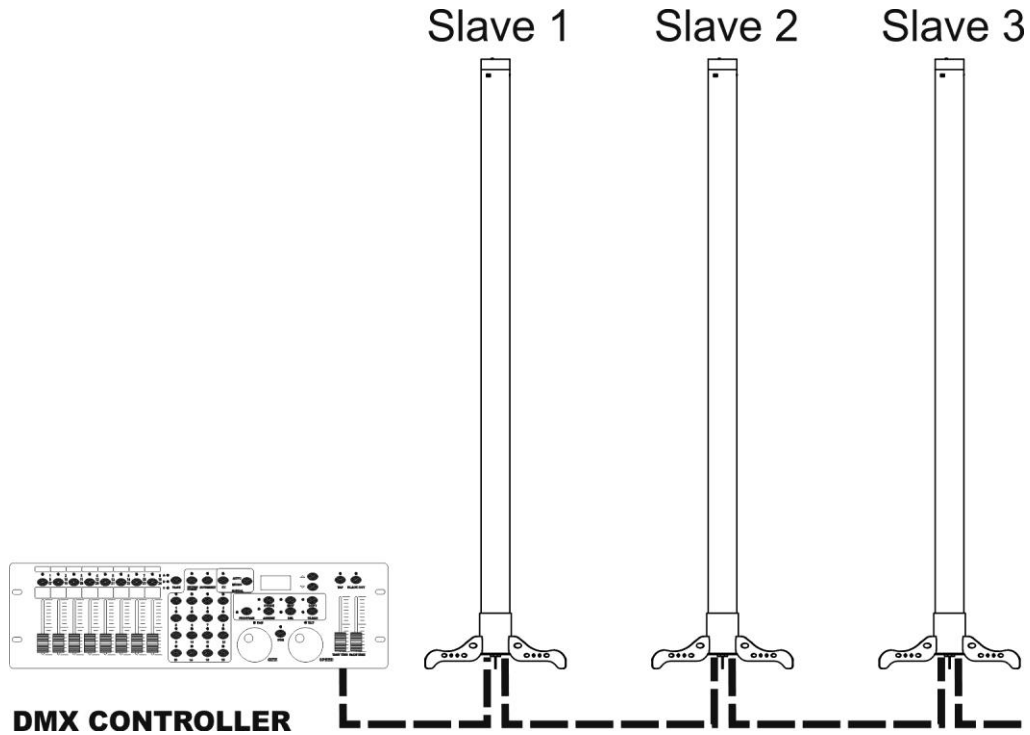
Electrical installation for 1 standalone unit:
- Insert the mains cable. The unit starts working immediately in the last selected mode.
- Refer to chapter HOW TO SETUP to learn how to switch between the different working modes.

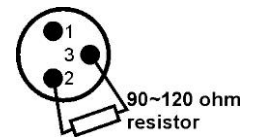**Electrical installation for two or more units in master/slave:**

- Connect several units together using good quality balanced microphone cables. The unit that has no cable connected to its DMX-input is the "master", the others are the slave units.
- Make sure that all units are connected to the mains.
- Refer to chapter HOW TO SETUP for more information.
- Done!

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 with a good quality 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!
- Make sure that all units are connected to the mains.
- Each light effect in the chain needs to have its proper start address so it knows which commands from the controller it has to decode. In the section HOW TO SETUP you will learn how to set the DMX addresses. If for example you use the 3 channel DMX mode, a possible address setup could be: unit1 = 001 ~ unit2 = 004 ~ unit3 = 007 ~ unit4 = 010 ~ etc.

HOW TO SETUP:

DMX/Channel Mode:
The unit has 3 different channel modes, refer to the DMX-chart to see the differences.
- Press the **[MODE]** button until [d001…d512] is shown on the display.
- Press the ▲ or ▼ button to set the desired DMX address.
- Press the **[MODE]** button to select the address and go to channel mode.
- Use ▲ and ▼ buttons to select one of the available channel modes. (3,7 or 24CH)
- Once the mode is selected, press the **[MODE]** button to confirm.

[SLAu] Slave Mode
The first projector in the chain should be set in sound or program mode , all the other projectors have to be in Slave mode.
- Press the **[MENU]** button.
- Press the ▲ or ▼ button until **[SLAu]** is shown on the display.

[r000-r255] Red
Use this function to put the fixture in fixed RED color.
Use the ▲ or ▼ buttons for dimming between 0% (000) and 100% (255).

[G000-G255] Green
Use this function to put the fixture in fixed GREEN color.
Use the ▲ or ▼ buttons for dimming between 0% (000) and 100% (255).

[b000-b255] Blue
Use this function to put the fixture in fixed BLUE color.
Use the ▲ or ▼ buttons for dimming between 0% (000) and 100% (255).

[FS00-FS15] Strobe
Use this function for strobe effect.
Use the ▲ or ▼ buttons for adjusting the speed between slow (FS00) and fast (FS15).

[Pr01-Pr20] Programs
Use this function to choose an internal program.
Use the ▲ or ▼ buttons to select the desired program from Pr01 to Pr20.

[SP01-SP99] Speed
Use this function to set the speed.
Use the ▲ or ▼ buttons to select the desired speed from slow (SP01) to fast (SP99).

[CL00-CL07] Fixed colors
Use this function to select one of the seven build in fixed colors. (CL00-CL07)
Use the ▲ or ▼ buttons to select the desired color.

[FS00-FS15] Strobe
Use this function for strobe effect.
Use the ▲ or ▼ buttons for adjusting the speed between slow (FS00) and fast (FS15).

[SU00-SU32] Sound mode
Use this function to activate the sound mode..
Use the ▲ or ▼ buttons for adjusting the sensitivity between not (SU00) and very sensitive (SU31).

[AUtO] Automatic mode
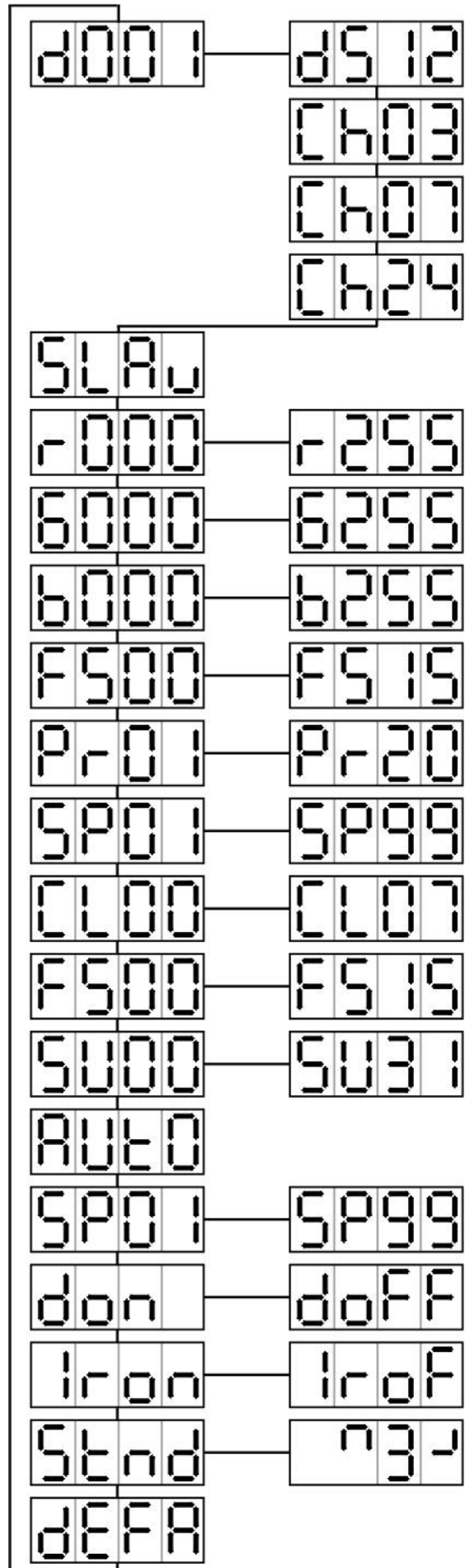Use this function to put the fixture in an automatic running mode.

[SP01-SP99] Speed
Use this function to set the speed.
Use the ▲ or ▼ buttons to select the desired speed from slow (SP01) to fast (SP99).

[don-doFF]
This function leaves the display on or off during use.
Use the ▲ or ▼ buttons to select the desired mode:
        [don] : display on.
        [doff] : display off.

[Iron-IroF]
This function is used to enable or disable the IR remote control.
Use the ▲ or ▼ buttons to select the desired mode:
        [don] : IR remote control enabled.
        [doff] : IR remote control disabled.

[Stnd-rev]
This function is used to inverse the display.
Use the ▲ or ▼ buttons to select the desired mode:
        [Stnd] : normal display.
        [rev] : inversed display.

[dEFA]
This function is used to reset the fixture to its default factory settings.
Select [dEFA], the display is blinking.
Press the ▲ or ▼ buttons at the same time to reset the fixture to the default factory settings.

OPERATING INSTRUCTIONS
A. **Standalone 1unit:**
   - Just connect the projector to the mains.
   - Select one of the automatic, sound or static color modes
   - Refer to chapter HOW TO SETUP to learn how to make the settings.

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.
   - Select one of the automatic, sound or static color modes on the master (the first projector in the DMX chain)
   - Set all the other projectors in SLAVE mode
   - The projectors will now follow the program of the master projector so they all work synchronously.
   NOTE: you can use the wireless remote controller to select the functions on the master unit. The slaves will follow.
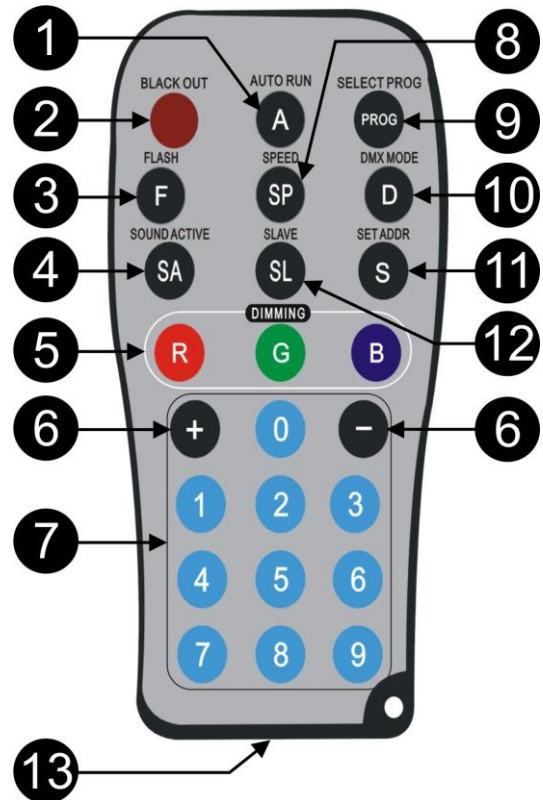
C.   Controlled by the wireless remote controller:
To be able to use the wireless remote control, you need to enable this option in the projector:
  • Press the **[MODE]** button until **[Iron]** or **[IroF]** is shown on the display.
  • Use the ▼ and ▲ buttons to enable or to disable the remote control option (**[Iron]** = remote control enabled, **[IroF]** = remote control disabled).

Functions:
1.   **[AUTO RUN]-button (A):** used to start the build in programs in automatic mode.
2.   **[BLACKOUT]-button:** used to switch the output ON/OFF
3.   **[FLASH]-button (F):** used to switch the strobe function ON/OFF. First press the F-button, followed by the ±buttons (6) to adjust the strobe speed.
4.   **[SOUND ACTIVE]-button (S):** used to start the sound activated programs. With the ±buttons (6) you can adjust the sensitivity.
5.   **[DIMMING]-buttons (RGB):** press one of these buttons to select the static custom color and adjust one of its color components:
  • **Press the R-button:** then use the ±buttons (6) to adjust the red component in the custom color.
  • **Press the G-button:** then use the ±buttons (6) to adjust the green component in the custom color.
  • **Press the B-button:** then use the ±buttons (6) to adjust the blue component in the custom color.
6.   **±-Buttons:** used to increase / decrease the value of the selected function.
7.   **Number buttons (0-9):** used to set the DMX-address.
8.   **[SPEED]-button (SP):** used to change the running speed of the build in programs.
9.   **[SELECT PROG]-button [(PROG)]:** used to select one of the effect program modes. With each press you go to the next effect:
  • Fixed colors (CL00-CL07)
  • Build in programs (PR01-PR20). The speed of these programs can be adjusted.
10. **[DMX MODE]-button (D):** used to set the desired DMX address and channel mode (3, 7 or 24 channels)
11. **[SET ADDR]-button (S):** used to enter the value of the desired DMX-address.
12. **[SLAVE]-button (SL):** used to put the fixture in slave mode.
13. **Battery compartment:** receives a CR2025 3V-battery (supplied).

D.   Controlled by a 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 uses 3, 7 or 24 DMX-channels, depending on the DMX-mode you have selected in the menu. See the different DMX charts below:

3CH DMX-Mode

Channel:	Value:	Function:
1	000-255	Red (0-100%)
2	000-255	Green (0-100%)
3	000-255	Blue (0-100%)

07CH DMX-Mode

Channel:	Value:		Function:
1	000-255		Red (0-100%)
2	000-255		Green (0-100%)
3	000-255		Blue (0-100%)
4	000-255		Master dimmer (0-100%)
5	000-015		No function
	016-255		Strobe speed (slow -> fast)
6	000-051		No function
	052-102		Static colors (CH7)
	103-255		Programs (CH7)
7	000-031	CH6 = 052-102	No function
	032-063		Red
	064-095		Green
	096-127		Blue
	128-159		Yellow
	160-191		Magenta
	192-223		Cyan
	224-255		White
7	000-011	CH6 = 103-255	Program 1
	012-023		Program 2
	024-035		Program 3
	036-047		Program 4
	048-059		Program 5
	060-071		Program 6
	072-083		Program 7
	084-095		Program 8
	096-107		Program 9
	108-119		Program 10
	120-131		Program 11
	132-143		Program 12
	144-155		Program 13
	156-167		Program 14
	158-179		Program 15
	180-191		Program 16

	192-203		Program 17
	204-215		Program 18
	216-227		Program 19
	228-255		Program 20

24CH DMX-Mode
The most advanced DMX-mode with RGB-control for every individual channel separately.

Channel:	Value:	Function:
1	000-255	Red1 (0-100%)
2	000-255	Green1 (0-100%)
3	000-255	Blue1 (0-100%)
4	000-255	Red2 (0-100%)
5	000-255	Green2 (0-100%)
6	000-255	Blue2 (0-100%)
7	000-255	Red3 (0-100%)
8	000-255	Green3 (0-100%)
9	000-255	Blue3 (0-100%)
10	000-255	Red4 (0-100%)
11	000-255	Green4 (0-100%)
12	000-255	Blue4 (0-100%)
13	000-255	Red5 (0-100%)
14	000-255	Green5 (0-100%)
15	000-255	Blue5 (0-100%)
16	000-255	Red6 (0-100%)
17	000-255	Green6 (0-100%)
18	000-255	Blue6 (0-100%)
19	000-255	Red7 (0-100%)
20	000-255	Green7 (0-100%)
21	000-255	Blue7 (0-100%)
22	000-255	Red8 (0-100%)
23	000-255	Green8 (0-100%)
24	000-255	Blue8 (0-100%)

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.

<u>**During inspection the following points should be checked:**</u>

- 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.

<u>**Attention:**</u> **We strongly recommend internal cleaning to be carried out by qualified personnel!**
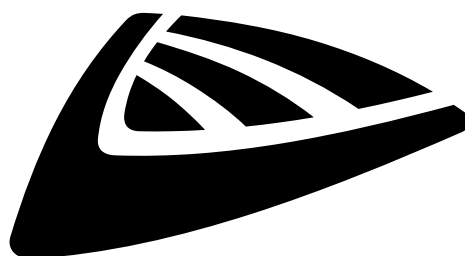
SPECIFICATIONS

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.

This device was designed to produce decorative effect lighting and is used in light show systems.

Mains Input:	100-240Vac, 50/60Hz
Power consumption:	12 Watt
Power linking (IEC in / out):	max. linking load = 6A
Sound Control:	Internal microphone
DMX connections:	XLR 3pin Female/Male
DMX modes:	3, 7, 24 DMX Channels
LED Source:	32 x RGB SMD5050 LED
Size:	105x20x22cm
Weight:	1.24 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

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!

WWW.JB-SYSTEMS.EU