



## beamZ 153.682 V1.0 MULTIBOX LED Effect User Manual

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beamZ 153.682 V1.0 MULTIBOX LED Effect



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## SAFETY INSTRUCTION



**WARNING** Before carrying out any operations with the unit, carefully read this instruction manual and

keep it with care for future reference. It contains important information about the installation, usage and maintenance of the unit.

- Unpack and check carefully that there is no transportation damage before using the unit
- Please read these instructions carefully and follow the instructions.
- Observe all safety warnings. Never remove safety warnings or other information from the equipment.
- Be sure that no ventilation slots are blocked; otherwise the unit will overheat.



**WARNING** Before connecting the equipment to the power outlet, first verify that the mains voltage and frequency match the values specified on the equipment. If the equipment has a voltage selection switch, connect the equipment to the power outlet only if the equipment values and the mains power values match. If the included power cord or power adapter does not fit in your wall outlet, contact your electrician.

- After connecting the unit, check all cables in order to prevent damage or accidents, e.g., due to tripping hazards.
- Make sure that the power cord is never crimped or damaged. Check the unit and the power cord from time to time.
- Always disconnect power from the mains, when unit is not used or before cleaning! Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
- Unplug the power cord and power adapter from the power outlet if there is a risk of a lightning strike or before extended periods of disuse.
- Do not switch the unit on and off in short intervals.
- Do not connect the unit to a dimmerpack.
- Install the unit in a well ventilated place.
- Never place any material over the lens.
- Never let the sunlight lights directly to the front lens , even when the unit is not working.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- Make sure that the area below the installation place is blocked when rigging, derigging or servicing the unit.
- For mounting height >100 cm, always fix the unit with an appropriate safety rope. Fix the safety-rope at the correct fixation points only. The safety-rope must never be fixed at the transport handles!
- Never look directly at the light beam. Please note that fast changes in lighting, e. g. flashing light, may trigger epileptic seizures in photosensitive persons or persons with epilepsy.
- This unit is not designed for permanent operation. Consistent operation breaks will ensure that the unit will serve you for a long time without defects



**WARNING** If the power cord of the unit is equipped with an earthing contact, then it must be connected to an outlet with a protective ground. Never deactivate the protective ground of a power cord.

- Make sure that the unit is not exposed to extreme heat, moisture or dust.
- Clean the unit using a dry cloth.
- Do not touch the unit bare-handed during its operation (housing becomes very hot). Allow the unit to cool for at least 5 minutes before handling.



- This unit is designed exclusively for indoor use, do not use this equipment in the immediate vicinity of fluid (does not apply to special outdoor equipment – in this case, observe the special instructions noted below). Do not expose this unit to flammable materials, fluids or gases.
- If the unit has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your unit. Leave the unit switched off until it has reached room temperature.
- Never attempt to bypass the thermostatic switch or fuses.
- Do not dismantle or modify the unit.
- For replacement use fuses/bulb of same type and rating only.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- The ambient temperature must always be between 10°C and 35°C.
- If this unit is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
- Plastic bags must be kept out of reach of children.
- Unit must be installed out of the reach of children. Never leave the unit running unattended.



■ This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

## LASER SAFETY

	<p>READ FOR THE COMMISSIONING OF THE LASER ALL SAFETY INSTRUCTIONS AND TECHNICAL DATA OF THIS MANUAL CAREFULLY AND THOROUGHLY.</p>	
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Laser Light is different from any other light source with which you may be familiar. The light from this product can potentially cause eye injury if not set up and used properly. Laser light is thousands of times more concentrated than light from any other kind of light source. This concentration of light power can cause instant eye injuries, primarily by burning the retina (the light sensitive portion at the back of the eye). Even if you cannot feel “heat” from a laser beam, it can still potentially injure or blind you or your audience. Even very small amounts of laser light are potentially hazardous even at long distances. Laser eye injuries can happen quicker than you can blink.

It is wrong to assume that a single beam or a bundle of hundreds of the laser beams made, it cannot cause injury.

It is also incorrect to assume that it is safe to look at a moving beam. In the laser safety regulation, it is not legal to aim Class 3B/4 lasers in areas which people can get exposed also on a dance floor.



## CAUTION

- Do not point lasers at people or animals.
- Never look into the laser aperture or laser beams, this can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.
- Do not point lasers in areas in which people can potentially get exposed, such as uncontrolled balconies, etc.
- Install the laser units such that laser beams above the audience move See section later in this manual.
- Test the laser units always first before the public is present.
- Do not point lasers into the public or at highly reflective surfaces such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.
- Never point a laser at aircraft or into the sky, this is a federal offense.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Do not expose the output optic (aperture) to cleaning chemicals.
- The operation of a laser is only allowed if the show is controlled by a skilled and well-trained operator familiar with the requirements that are needed.
- Do not use laser if housing is damaged or open, or if optics appear damaged in any way.
- Never leave this device running unattended.
- Always use appropriate lighting safety cables when hanging lights and effects overhead.

The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.



This unit contains laser components with high power, live parts and parts that emit radiation. Therefore, DO NOT OPEN the housing, THIS CAN BE FATAL It can also cause blindness, skin burns and fires.



EYE DAMAGE OCCURS FASTER THAN YOU CAN BLINK YOUR EYES

Further guidelines and safety programs for safe use of lasers can be found in the ANSI Z136.1 Standard “For Safe Use of Lasers”, available from “[www.laserinstitute.org](http://www.laserinstitute.org)”. Many local governments, corporations, agencies, military and others, require all lasers to be used under the guidelines of ANSI Z136.1. Laser Display guidance can be obtained via the International Laser Display Association, [www.laserist.org](http://www.laserist.org).



ATTENTION The use in France is only allowed to the professional user and not to the end user. See decision: [www.legifrance.gouv.fr](http://www.legifrance.gouv.fr)



## UNPAKING INSTRUCTION



**CAUTION** Immediately upon receiving the product, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the package itself shows signs of mishandling. Save the package and all packing materials. In the event that the product must be returned to the factory, it is important that the product be returned in the original factory box and packing. If the unit has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your unit. Leave the unit switched off until it has reached room temperature.

## **POWERSUPPLY**

On the label on the backside of the unit is indicated on this type of power supply must be connected. Check that the mains voltage corresponds to this, all other voltages than specified, the light effect can be irreparably damaged. The product must also be directly connected to the mains and may be used. No dimmer or adjustable power supply.

The unit has a power connector output on board. Depending on the local conditions several units can be linked by power connector in- and output. Connect a maximum of four (when using 230V/16A) units in a row. Use an approved three-core cable with a cross-section of at least 1.5 mm<sup>2</sup>. The installation instructions of the manufacturer and the color coding of the cable must be observed. Do not turn off the unit by turning the power connector but use the power on/off switch or schuko!

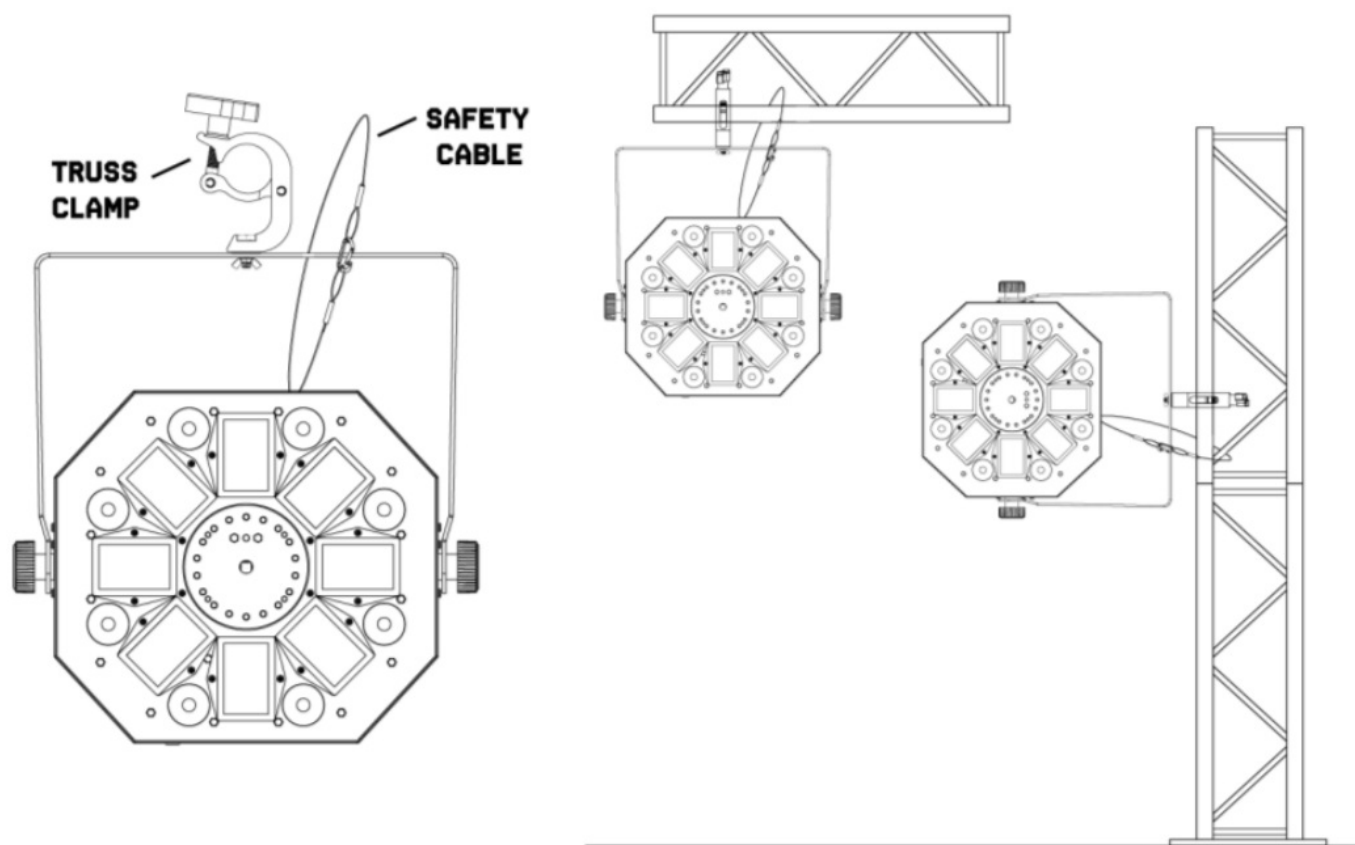


**WARNING** Always connect the unit to a protected circuit (circuit breaker or fuse). Make sure the unit has an appropriate electrical ground to avoid the risk of electrocution or fire.

## **RIGGING**

The unit may be set up on a stable and even surface. By means of the fixing facilities of the baseplate, the unit can also be mounted upside down to a truss, see below picture. For fixing, certified clamps with correct safe working load are required. According to the figure, the quick lock bolts of the omega brackets are placed into the openings provided in the base plate and turned clockwise until they lock (to the stop). The mounting place must be of sufficient stability and be able to support a weight of 10 times of the unit's weight. Secure the unit with a safety cable so that it cannot fall down.

When carrying out any installation, always comply European and national guidelines concerning rigging, truss and all other safety issues. Always let the installation checked out by an authorized dealer !



## INSTALLATION



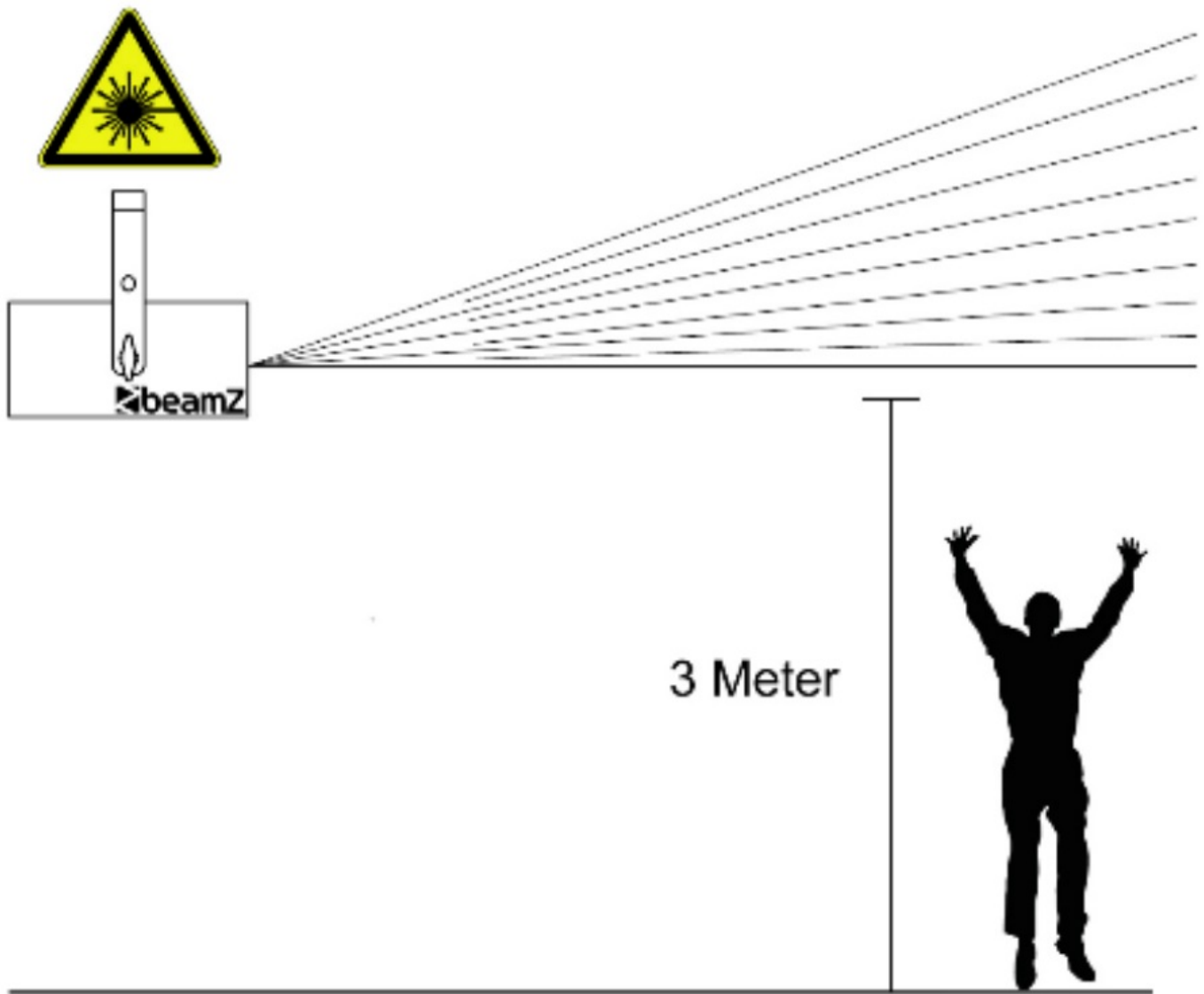
**CAUTION** Please consider the respective national norms during the installation! The installation must only be carried out by an authorized employee or dealers

This fixture has been designed to be hung. It is recommended for safety purposes, your lighting effect are properly mounted using a suitable hanging clamp and safety cable. Items appropriate for safe and effective mounting are easily sourced from your lighting vendor.

International laser safety regulations require that lasers must be operated in the fashion illustrated below, with a minimum of 3 meters (9.8 ft) of vertical separation between the floor and the lowest laser light vertically.

Additionally, 2.5 meters of horizontal separation is required between laser light and audience or other public spaces.





Use of controls, adjustments, or performance of procedures other than what is specified herein may result in hazardous radiation exposure!

- The installation of the fixture has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.
- Always use the supplied mounting bracket to hang the fixture.
- The fixture should aid of a mounting bracket (not included) to the supplied mounting bracket to be confirmed.
- The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.
- Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
- The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.
- The operator has to make sure that safety-relating and machine-technical installations are approved by a



skilled person once a year.

- The fixture should be installed in the position where persons cannot reach.
- For your own safety and for others, we do strongly recommend you to use this laser emergency kill switch.  
(ref.no: 152.958)



#### CAUTION

When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in between a distance of min 0.5 meter.

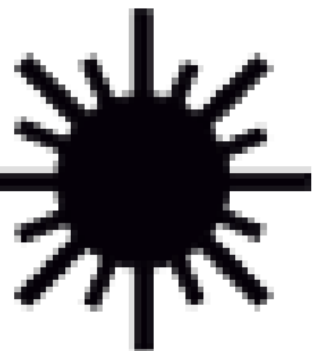
#### LASER LIFETIME

Follow below advice to enjoy a longer laser lifetime:

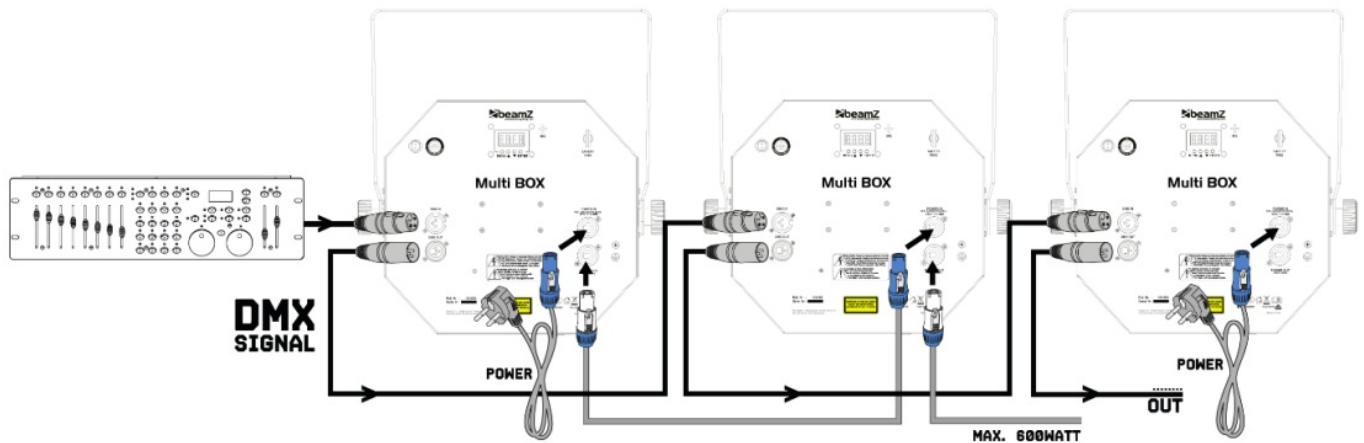
- Quick on/off switching of this device will reduce durability of the laser diode dramatically.
- Ensure that device does not get overheated:
  - Switch off device when it is not needed. Diodes are switched on and can wear out even if there is no visible laser output.
  - Switch off device after 1 hour and let the laser cooling down for 15 minutes.
  - Ensure that the fans and heat sinks are free of dust and dirt.

# LASER

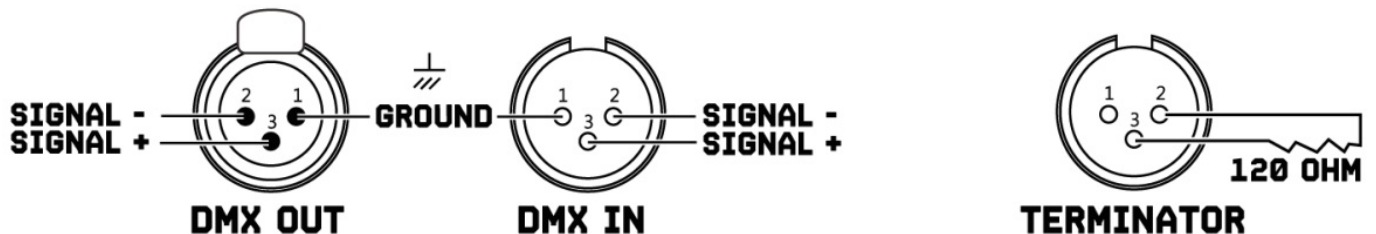
# LIFE TIME



If you are using a standard DMX controller, you can connect the DMX output of the controller directly to the DMX input of the first unit in a DMX chain. Always connect the output of one unit with the input of the next unit until all units are connected.



**CAUTION** At the last unit, you must close the DMX line with a terminating resistor. Take an XLR connector and solder a 120 Ohm resistor between signal (-) and signal (+) and connect it to the DMX output of the last unit in the line.



## REMOTE CONTROLLER

### BLACK OUT MODE

Press **[BLACK OUT]** off existing modes. Press **[BLACK OUT]** return the last modes.

### AUTO MODE

Automatic mode will enable you to run the automatic programs on the product.  
To turn on Automatic mode:

1. Press **AUTO** on the remote controller.
2. Press **[+]** or **[-]** to choose between the different auto programs.

Sound-Active mode will enable the product to respond to the music.

### SOUND MODE

To turn on Sound-Active mode:

1. Press **SOUND** on the remote controller.
2. Press **[+]** or **[-]** to choose between the different sound programs.

## STROBE MODE

To adjust the strobe speed of the automatic program and the sound active program.

1. Press **STROBE** on the remote controller.
2. Press **[+]** or **[-]** to either increase or decrease the speed of the program.
3. Press **STROBE** again to turn off the strobe.

## SPEED MODE

To adjust the speed of the automatic program and the sound active program.

1. Press **SPEED** on the remote controller.
2. Press **[+]** or **[-]** to either increase or decrease the speed of the program.

## SENSITIVITY MODE

To adjust sound sensitivity for in Sound-Active mode

1. Press **SENSITIVITY** on the remote controller.
2. Press **[+]** or **[-]** to either increase or decrease sound sensitivity.

## DMX / % MODE

To enable DMX or disallow DMX on the product.

Press **DMX** on the remote controller, the product work on the DMX controlling modes.

## MANUAL MODE

1. Press **MANUAL** on the remote controller.
2. Press **[R] [G] [B] [UV]** (red, green, blue or UV) to choose your colour.
3. Press again **[R] [G] [B] [UV]** (red, green, blue or UV) to close your colour.
4. Press **[+]** or **[-]** to either increase or decrease the percentage of each colour.

To control the laser.

## FADE/UNIT MODE

1. Press **FADE/UNIT** on the remote to activate function
2. Press **[1]** turn on or off laser.

## NUMBER 1-9

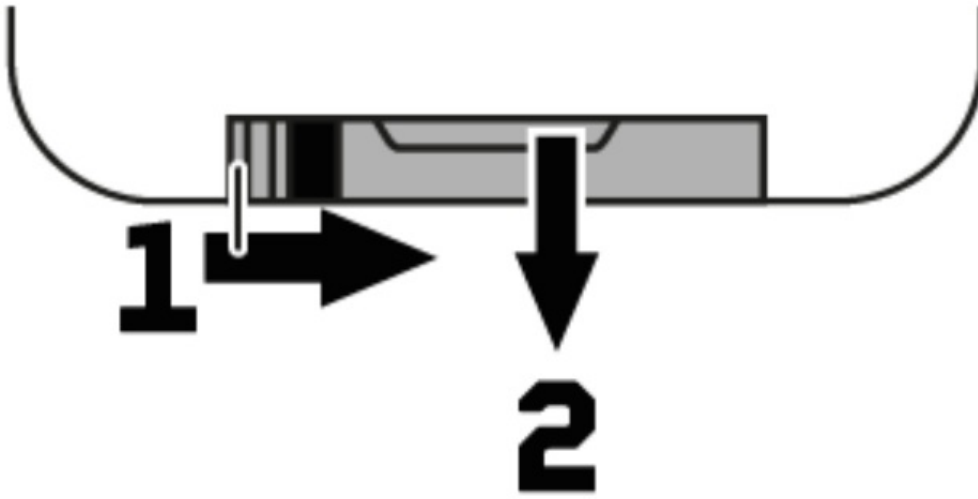
To adjust the brightness value of the automatic program, the Sound active program and Manual Mode.

Press digit **[1]** to **[9]** to change different brightness on the device.



**CAUTION** The remote control is supplied with a battery inserted. An insulating foil between the battery and the battery contacts prevents the battery from being discharged during storage. Prior to the first operation remove the foil from the battery support on the rear side of the remote control. Otherwise operation of the remote control is not possible.

If the range of the remote control decreases, replace the battery. For this purpose, on the rear side of the remote control press the small bar with the groove to the right (1) and at the same time remove the battery support (2). For operation, one 3 V button cell type CR 2025 is required. When inserting, pay attention that the positive pole of the button cell shows upwards in the support.



## CLEANING

The buildup of dust, dirt and other airborne particles will reduce the unit's light output. It will also prevent the unit from cooling correctly, and this will reduce the unit's lifetime. The rate of dirt buildup will vary depending on environmental factors such as airborne dust, use of smoke machines, airflow from ventilation systems, etc. The unit's cooling fans will accelerate buildup, and any smoke particles that are present in the atmosphere will increase the tendency for dirt to clog.

To get the best performance and lifetime from the unit, inspect it regularly and clean it as soon as you see signs of dirt buildup.

Assess the operating environment each time you begin to use the unit. In dusty or smoky conditions, inspect the unit after a few hours and check it frequently the unit may attract dirt faster than you expect. Draw up a cleaning schedule that will make sure that dirt is removed before it can build up.

### Use the following guidelines

- Disconnect the unit from power and allow it to cool completely before cleaning.
- Do not use solvents, abrasives or any other aggressive product to clean the unit.
- Vacuum or use low-pressure compressed air to remove dust and loose particles from surfaces and air vents. Prevent the blades of cooling fans from turning before you aim a vacuum or air jet at the fan, or you may spin the fan too fast and damage it.
- Clean glass components by wiping gently with a soft, clean, lint-free cloth moistened with a weak detergent solution. Put the solution on the cloth and not on the surface to be cleaned. Avoid rubbing glass surfaces.
- Dry the unit with a soft, clean, lint-free cloth or low-pressure compressed air before reapplying power.

## REPLACING THE FUSE

If the fuse is defective, replace the fuse with a fuse of the same type and value. Before replacing the fuse, unplug mains lead.

### Procedure:

**Step 1:** Open the fuse holder on the rear panel with a fitting screwdriver.

**Step 2:** Remove the old fuse from the fuse holder.

**Step 3:** Install the new fuse in the fuse holder.

**Step 4:** Replace the fuse holder in the housing.



**CONTROL MENU**

MENU			DESCRIPTION
ADDR	3HC	d001-512	Select DMX mode and adjust DMX channel
	11CH		
	19CH		
STAT	S 01-15		Static colours
AUTO	Au 1-6		Select auto program
SOUN	So 1-6		Select sound program
SPEE	SP 1-9		Adjust speed auto program
SENS	SE -1-9		Adjust microphone sensitivity
SILEN	on / oFF		Silent scene by Sound program
SLAV	Slave		Slave mode
INFR	On/oFF		Enable or Disenable IR remote

#### DMX CHANNELS

#### 3 CHANNELS



CHANNE LS	FUNCTION	VALUE	DESCRIPTION
1	Dimmer	000-255	Master dimming (0-100%)
2	Mode	000-009	No function
		010-019	Auto program 1
		020-029	Auto program 2
		030-039	Auto program 3
		040-049	Auto program 4
		050-059	Auto program 5
		060-069	Auto program 6
		070-079	Sound program 1
		080-089	Sound program 2
		090-099	Sound program 3
		100-109	Sound program 4
		110-119	Sound program 5
		120-255	Sound program 6
3	Speed	000-255	Auto and Sound program speed (Slow-fast)

## 11 CHANNELS

CHAN NELS	FUNCTION		VAL UE	DESCRIPTION
1	Dimmer		000-2 55	Master dimming (0-100%)
2	Strobe Wash		000-2 55	Washing Stroboscope (Rate 0-100%)
			130-1 39	Red + Blue + UV
			140-1 49	Green + Blue + UV
			150-1 59	All LED on
			160-2 55	LED rainbow effect ( From slow to fast )
4		Strobe Derby	000-2 55	Effect Stroboscope (Rate 0-100%)
			000-0 09	No function
			010-0 19	Red
			020-0 29	Green
			030-0 39	Blue
			040-0 49	White

5	Colour Derby	050-059	Amber
		060-069	Pink
		070-079	Red + Green
		080-089	Red + Blue
		090-099	Green + Blue
		100-109	Green + Amber
		110-119	Blue + Amber
		120-129	Green + Pink
		130-139	Red + Pink
		140-149	Red + Green + Blue
		150-159	All LED on
		160-255	LED rainbow effect ( From slow to fast )
6	Rotation Derby	000-009	No function
		010-129	Effect motor clockwise rotation ( From slow to fast )

		130-255	Effect motor un-clockwise rotation ( From slow to fast )
7	Laser	000-009	No function
		010-059	Laser Red
		060-109	Laser Green
		110-159	Laser Red + Green
		160-255	Laser rainbow effect From slow to fast
8	Rotation Laser	000-009	No function
		010-129	Laser motor clockwise rotation From slow to fast
		130-255	Laser motor un-clockwise rotation From slow to fast
9	Strobe SMD	000-009	No function
		010-255	SMD Stroboscope (Rate 0-100%)
		000-009	No function
		010-019	Auto program 1

10	Mode	020-0 29	Auto program 2
		030-0 39	Auto program 3
		040-0 49	Auto program 4
		050-0 59	Auto program 5
		060-0 69	Auto program 6
		070-0 79	Sound program 1
		080-0 89	Sound program 2
		090-0 99	Sound program 3
		100-1 09	Sound program 4
		110-1 19	Sound program 5
		120-2 55	Sound program 6
11	Program Speed	000-2 55	Auto and Sound program speed (Slow-fast)

19 CHANNELS

CHANNE LS	FUNCTION	VALUE	DESCRIPATION
1	Dimmer	000-255	Master dimming (0-100%)
2	Strobe Wash	000-255	Washing Stroboscope (Rate 0-100%)
3	Color Wash	000-255	Red (0-100%)
4		000-255	Green (0-100%)
5		000-255	Blue (0-100%)
6		000-255	UV (0-100%)
7	Strobe Derby	000-255	Effect Stroboscope (Rate 0-100%)
8	Color Derby	000-255	Red (0-100%)
9		000-255	Green (0-100%)
10		000-255	Blue (0-100%)
11		000-255	White (0-100%)
12		000-255	Amber (0-100%)
13		000-255	Pink (0-100%)

14	Rotation Derby	000-009	No function
		010-129	Effect motor clockwise rotation ( From slow to fast )
		130-255	Effect motor un-clockwise rotation ( From slow to fast )
15	Laser	000-009	No function
		010-059	Laser Red
		060-109	Laser Green
		110- 15 9	Laser Red + Green
		160-255	Laser rainbow effect From slow to fast
16	Rotation Laser	000-009	No function
		010-129	Laser motor clockwise rotation From slow to fast
		130-255	Laser motor un-clockwise rotation From slow to fast
17	Strobe SMD	000-009	No function
		010-255	SMD Stroboscope (Rate 0-100%)
		000-009	No function



18	Mode	010-019	Auto program1
		020-029	Auto program2
		030-039	Auto program3
		040-049	Auto program4
		050-059	Auto program5
		060-069	Auto program6
		070-079	Sound program1
		080-089	Sound program2
		090-099	Sound program3
		100-109	Sound program4
		110-119	Sound program5
		120-255	Sound program6
19	Program Speed	000-255	Auto and Sound program speed (Slow-fast)

## TECHNICAL SPECIFICATION

Rated voltage : 100-240VAC, 50-60Hz, 1.0-0.5A

LED : 6x3Watt RGBWAP / 8x4Watt RGBUV / 18x 0.5Watt Strobe

Flash rate : 1-24Hz  
Laser : 100mW Red + 30mW Green / Class 3B  
Fuse : T3A 250V  
DMX Channels : 3 / 11 / 19  
Functions : DMX, Automatic programs, Sound to light and Master-Slave.  
Dimensions per unit : 275 x 320 x 350mm  
Weight (per unit) : 4.6 kg

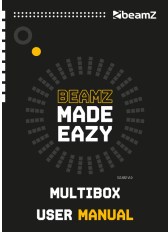
Design and product specifications are subject to change without prior notice

The products referred to in this manual conform to the European Community Directives to which they are subject

- Low Voltage (LVD) 2014/35/EU
- Electromagnetic Compatibility (EMC) 2014/30/EU
- Restriction of Hazardous Substances (RoHS) 2011/65/EU



## Documents / Resources

	<p><a href="#">beamZ 153.682 V1.0 MULTIBOX LED Effect</a> [pdf] User Manual 153.682 V1.0 MULTIBOX LED Effect, 153.682 V1.0, MULTIBOX LED Effect, LED Effect</p>
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## References

- [IIS7](#)
- [Home](#)
- [legifrance.gouv.fr](#)