

# IM-LB120

## LED LIFTING BALL

### USER MANUAL



**Congratulations on purchasing this led lifting ball.**

**Thank you for extending your trust in our technology!**

**Product name: LED lifting ball**

**Voltage: AC100v ~ 240 v/50-60 hz**

**Total power: 120 W**

**Light source: 3W\*12pcs LED**

**Color: R, G, B linear infinite color options, can be linear transformation and colorful rainbow effect**

**Dimming: 0 ~ 100% linear dimming, has 16 bit precision fine-tuning**

**Stroboscopic: pulse strobes, asynchronous stroboscopic synchronization. Stroboscopic speed 1-25 times per second**

**Hanging weight: 3 kg**

**Line length: 6 m (longest)**

**Speed: 1 meter per second (maximum)**

**Communication design: DMX512, sound control, Auto run(led ball)**

**DMX512 channel modes: 10 ch**

**Size/weight:**

**Lifting host: 35 x 29 x 16 cm, weight: 6.35 kg;**

**Ball: 25 cm in diameter, weight: 0.9 kg**

### **The functional specification**

1. LED type lifting ball has indoor use and waterproof type, widely used in the venue above do special effects with three-dimensional map, nightclubs, KTV.
2. The bottom ball body semi-transparent special plastic material, not easy to fracture, uv protection.
3. The ball USES high brightness LED lamp bead (R.G.B), wide Angle transmission, 360 ° full downy colour light.
4. The lifting system to the ball up and down, through DMX signal controller programming, according to the requirement to do different effect.
5. Lifts and ball independent packing, convenient installation.

For reasons of safety and approval(CE) the personal reconstruction and/or modification of this product is prohibited. Please observe that damage caused by modifications performed manually to this device is not covered by the warranty.

This product leaves our works in a perfect condition. Please observe all notes in these operating instructions to warrant this condition and the safe operation of the product!

Any damage caused as a result of the non-compliance with these operating instructions leads to the expiration of any warranty claim. The manufacturer does not accept liability for any damage to property or for personal injury resulting from the improper handling of the product, or non-observance of the operating instructions.

Store these operating instructions in a safe place for later reference and pass them to any new holder when selling or lending or leaving this device in the hands of any other party.

### **Application According to Purpose**

This product is a lighting effect which creates special light effects with one lamp. To generate these effects, the product must be connected to mains and a DMX-512 compatible controller.

This product is designed for AC110~240V/50~60Hz operation and exclusively for indoor use.

If used for any purpose other than described in these operating instructions, the device may suffer damage and the warranty expires. Also, any other use is linked with risks such as short circuits, fire, electrical shock, etc.

The manufacturer's serial number must never be removed as otherwise the warranty expires.

### **Notes on safety**

#### **1. Before Operation**



Prior to the initial operation of this product, please do the followings

- Read these operating instructions with great care;
- Study and observe all instructions carefully;
- Ensure that everybody and anybody involved in the installation, operation, transport and storage of this product is suitably qualified;
- Verify whether any visible damage was caused during transport. If the power cord, housing or the light are damaged, do not operate the device; contact your specialized dealer immediately.

## 2. Supply Voltage, Mains Cord and Connection to Mains

The handling of supply voltage, mains cords and connections to mains calls for particular care considering the risk from a life-threatening electric shock, the risk of fire and the risk of short circuits please observe the following notes in particular:

Products operating on supply voltage should be kept out of the reach of children. Therefore ensure the permanent supervision if children are in the immediate vicinity of the product!

For commercial facilities the regulations on the prevention of accidents of the respective trade association must be observed. The operation of this equipment at schools, training facilities, and hobby or self-help workshops must be supervised responsibly by trained personnel.

Check the product regularly for any damage to the mains cord! Should you discover any damage to the mains cord, do not operate or disconnect this product! Secure the product against accidental operation and contact your specialized dealer.

Always separate the product from mains by holding the mains plug by the handling surface. Never disconnect by holding the line cord! Be sure to connect the product exclusively to AC110~127V/59~60Hz!

Always insure during installation, operation, transport and when storing the product that the mains cord is not exposed to possible mechanical damage, or damage caused by humidity, fluids, heat or cold!

The product's cable entry must not be exposed to stress from pull! Create the mains connection once the product has been installed only. Always connect the mains plug last!

The product must only be connected to a proper outlet of the public supply grid. Connect the mains cord to suitable outlets only! Use extension cords in compliance with specifications only! Do not allow the mains cord to come into contact with other cords!

Ensure during installation, operation, transport and storage that none of the cables are freely exposed! Never touch the mains cord, mains plug and outlet with wet or damp hands!

When not using the product, and prior to cleaning always disconnect the product from mains! To do so, hold the mains plug by the handling surface and never pull the mains cord!

Never connect the device to a dimmer packer!

## 3. Housing



Always insure during installation, operation, transport and when storing the product that no shocks or other forces impact the housing!

The housing must not touch onto any other devices or objects during operation!

Easily flammable materials, e.g. decoration material and other surfaces and objects, must maintain a minimum distance of 3m to the housing! Walls must maintain a minimum distance of 50cm to the housing! The device must be installed on a fireproof surface only (no carpet)!

Always ensure a proper circulation of air. Do not touch the housing during operation it will heat up. The housing is safe to touch approx. 5 minutes following the end of operation!

The device must never be carried via the projector arms. Use the carrying handles only!

Fluids must not enter the housing as this could reduce the protective insulation and may trigger short circuits which may lead to fatal electro shocks! If fluids have entered, disconnect the mains plug immediately and secure the product against unintentional operation and contact your specialized dealer! Damage caused as a result of fluids entering the housing is exempt from warranty.

No metal parts or other items must enter the housing as this may reduce the protective insulation or trigger short circuits which may lead to fatal electric shocks! If metal parts or other items have entered, disconnect the mains plug immediately, secure the product against unintentional operation and contact your specialized dealer! Damage caused by metal parts or other items in the housing is exempt warrantably.

## 4. Operating Environment



**ATTENTION:  
DANGER OF LIFE! RISK OF FIRE!  
RISK OF SHORT CIRCUIT!**

The product must be operated and stored in a dry environment only !  
Splash water ,rain,humidity,fog may reduce the protective insulation which may lead to fatal electric shocks!The limit value for relative humidity is 50% at 45°C.A minimum distance of 1.5m to a fog machine must be observed ,fog saturation in the room must not reduce the visibility to below 10m .

The product must be operated at a temperature range of between -5°C and 45°C only.Protect the product against direct exposure to sunlight or other heat,such as from radiators! If the product is taken from a cold environment into a warm environment it must only be taken into operation once it has reached ambient temperature,since the condensation created by the difference in temperature may destroy the device!

Protect the product against dust!Dust may reduce the protective insulation,which may cause fatal electric shocks!

The product must be operated at altitudes ranging between 20m below and 3000m above sea level only!

The product must not be operated during thunder storms;risk of destruction from surge voltages!

The product must be operated at a minimum distance of 1.5m to lit objects only!

## **5. Installation**



**ATTENTION:  
RISK OF SHORT CIRCUIT!**

This product can be operated suspended or as stand-alone system.

Should your lighting effect show any signs of damage,do not install the device!In this case,have your lighting effect repaired by your specialized dealer.The manufacturer does not accept responsibility or liability for damage to property or personal injury resulting from an improperly installation!

As a stand-alone system the device must be installed vertically on an absolute planar,firm,fireproof,shock and vibration-free surface.The installation of this lighting effect must be carried out by trained and professional staff!The installation of this lighting must only be carried out with the appropriate materials!

The suspended installation of this lighting effect necessitates a suitable suspension system!The lighting effect must never be fixed swinging freely in the room.No individuals should linger underneath the lighting effect during suspended installation!

It is a must to install this device with a second independent fixture.Such second fixture must guarantee in the event of failure of the main fixture that no assembly parts will fall down.Use the fixture on the undersurface only.

The light effect unit must be attached via two certified hooks and omega bracket to a tie-bar system.Use the screw threads on the undersurface only.

It must be ensured that an expert inspects the mechanical and safety-relevant installation prior to the initial operation and following major modifications,prior to the renewed operation.It must be ensured that an expert inspects the mechanical and safety-relevant installation at least once a year.It must be ensured that an expert inspects the mechanical installation and the installation of relevance to safety within the framework of an acceptance test at least every four years.

The installation fixture must be as such that it can withstand for a period of 60minutes 10 times the load capacity without harmful deformation.

It is prohibited for any individual to unnecessarily stay or pass beneath the installation during any type of assembly work

The light effect unit must be secured by a safety arrester cable if fly-mounted.The cable must withstand 12 times the weigh of the light effect unit Use arrester cables equipped with quick closing links.The dropping distance must not exceed 20 cm.Defect arrester cables or arrester cables that have already been exposed to stress must not be used.

## **6. Operation**



**ATTENTION:  
RISK OF SHORT CIRCUIT!**

## **Controls**



Link all DMX devices with a DMX-512 controller by using a standard,3-pin DMX cable.Connect the output of the first device with the input of the second device and the output of the second device with the input of the third device and so on.

Connect the mains plug to an outlet.

Operating the product for the first time may generate smoke and odour,this is not a defect.Avoid dis/connecting the product repeatedly and quickly from/with mains!Always wait 15 minutes prior to the next dis/connection!

The device starts not until a self-testing and starting time.If the moving head is ready to start,push and roll the function wheel.The LCD display shows the options,as below:

## 7. Lamps



During operation,the lamps will reach temperatures of up to 600°C.Touching the lamps may cause serious burns!Objects coming into contact with the lamps during and shortly after operation may catch fire!

Disconnect the product from mains prior to installing or before changing a lamp!Allow a lamp to cool for approx.15minutes before exchanging it!

Never touch a lamp with bare hands!!If damaged or deformed,a lamp must be exchanged!

When exchanging the lamp be sure to use suitable lamps only.Lamps with greater performance generate excessive heat for the product;risk of fire!Damage resulting from the use of an unsuitable lamp is exempt from warranty!

Never connect the lighting effect to the mains prior with opened housing.

## 8. Fuse



Disconnect the product from the mains prior before changing a fuse.

Only replace the fuse by a fuse of same type and rating! An incorrect fuse could damage or destruct the lighting effect.

Replace a fuse by levering the fuse holder cover with an appropriate screwdriver.Remove the old fuse and place the fuse inside the holder.Replace the fuse holder and insert it.

Never connect the lighting effect to the mains prior with opened housing.

## 9. Cleaning



The product must be freed regularly from dust,other deposits and contamination as this may reduce the protective insulation,which may lead to a fatal electric shock!

Before cleaning,always disconnect the product from mains!

This product should be cleaned with a moist cloth only;never use aggressive cleaning agents,solvents or benzine for cleaning.

Ensure that the product is completely dry before operating it again again after cleaning!



To avoid damage caused during transport,wrap the product in its original packaging only and handle it with great care during transport!

## 10. DMX Operation instruction

### 1. DMX Settings

This selection is used for setting DMX address and channel mode,press "Enter" to set address,then press"UP" to increase the address number,on the contrary,press "DOWN"to decrease the address number.After set the address, press"Enter" to save and exit.

### 2. Run Mode

This selection is used for setting the led ball light working mode,press"Enter" to set,then press "UP"or"DOWN" to set the working mode,modes are:"DMX512,Slow,Fast,Sound and Manual",after set the mode, press"Enter" to save and exit.

**DMX512: Controller operation mode.**

**Slow: Slow auto-run mode**

**Fast: Fast auto-run mode**

**Sound: Sound control mode**

**Manual: Manual mode,could be set scenes and on line.**

### 3. Invert PAN/TILT

This selection is invert X axis to set,firstly press"Enter to set,then press "UP" or "DOWN" to invert X axis to select.If select"Yes",it means X axis inversion,if select"NO",it means not X axis inversion,after selection,press"Enter" to save and exit.

### 4. Display Set

This selection is setting for display invert word,Chinese-English display and backlight.Firstly press"Enter" to set, LCD backlight press"UP" or "DOWN" to on/off.If select"Yes",it means backlight will bright all the time,if select"NO",it means no keys operation,after 20 seconds it'll turn off.It will restart until there is key operation.After finish setting,press"Enter" to save and exit.

**Invert Word**

**Invert word**

**English/Chinese:**

**English/Chinese transform**

**LCD Backlight on**

**LCD backlight on setting**

### 5. Manual Set

This selection is for scene parameters setting,firstly press "Enter" to save,it could be link online to operation with premise of fixture working mode(Run mode) to set as Manual.That would be working only Manual.After outage,it will recover the former starting up status next time

**PAN X axis**

**SPEED X speed**

**DIM Dimming**

**DIM\_R Red dimming**

**DIM\_G Green dimming**

**DIM\_B Blue dimming**

**STROBE Strobe**

**MACRO\_CH                    Macro color control**

**6. Sound Sence**

This selection is for sound sensitivity switching system, firstly press "Enter" to set, then "press "UP or "DOWN" to select 0-100, after setting, finally press "Enter" to save and exit.

**7. System Set**

**System Information**

The version: V1

**Default Settings**

**Code Settings**

When set code setting, users need to input password firstly, then could check and set XY fine adjustment and LED color balance. The code is 4 numbers, press "UP" or "DOWN" to input, The factory code is "DOWNDOWN UPUP".

**SET\_R:**

**SET\_G:**

**SET\_B:**

**8. Reset**

After user select reset, then wait for 3 seconds, the fixture will reset.

**11. DMX Chart**

10 Channel	Function	DMX value	Description
1	X	0-255	0-540 degrees
2	X speed	0-255	From fast to slow
3	X fine	0-255	16bit can adjustment
4	Dimmer	0-255	Liner dimmer from dark to bright
5	R dimmer	0-255	R dimmer from dark to bright
6	G dimmer	0-255	G dimmer from dark to bright
7	B dimmer	0-255	B dimmer from dark to bright
8	Strobe	0-55	No function
		56-155	Strobe speed from slow to fast (1Hz-25Hz)
		156-205	Random strobe
		206-255	Thunder strobe
9	Color Macro	0-7	No function
		8-39	Red to yellow changed
		40-71	Yellow to green changed
		72-103	Green to cyan changed
		104-135	Cyan to blue changed
		136-167	Blue to magenta changed
		168-199	Magenta to red changed
		200-231	Red to white changed
232-255	Color move from slow to fast		
10	Reset	0-250	No function
		251-255	3S reset

