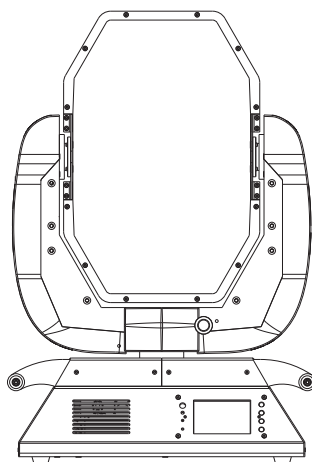


# K<sup>c</sup> USER MANUAL

52X30MM 掏空  
4-R10



## Moving head

- Professional stage lighting equipment





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## 1.Open–Package guidelines

Congratulations on choosing our products! Please carefully read this instruction manual in its entirety and keep it well for using reference. This manual contained about the installation and the relative using information of this products. Please according to this manual's relative speaking when using this equipment.

This equipment was made of new style, high intensity plastic. It fully shows the modern times light characteristic with beauty structure. And it was made according to CE standard. Fully up to the international standard of DMX512 agreement. Master or slave in phase control. Can be used in large entertainment theater, performing and playing hall etc.

When receive the product, please be careful to take and put, check if the product has damage or not because of transportation, and check the following parts:

- |                     |                      |
|---------------------|----------------------|
| 1. Signal cable-1PC | 2. Safety cable-1PC  |
| 3. User Manual-1PC  | 4. Omega holder-2PCS |
| 5. Power cable-1PC  | 5. Service card-1PC  |

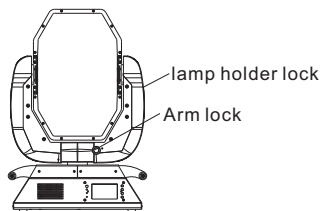
### 1.1 Package

Unpacking the fixture

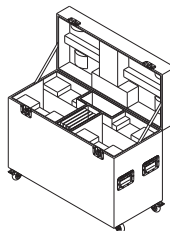
1. Open the flight case cover
2. With one person on each side, lift the fixture out of the flight case.
3. Unlock pan and tilt before operating fixture

Packing the fixture

1. Disconnect the fixture from power and allow it to cool.
2. Lock head and arms as figure.
3. Place the fixture in the bottom of the flight case, and cover the case without forcing.



Level vertical transportation lock



Aviation box

## 2.Safety instructions

Every person involved with installation and maintenance of this device have to:

- be qualified
- follow the instructions of this manual entertainment theater, performing and playing hall etc.

### **CAUTION!**

***Be careful with your operations.  
With a high voltage you can suffer  
a dangerous electric shock when touching the wires!***

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

### **Important:**

- The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.
- Please consider that damages caused by manual modifications to the device are not subject to warranty.
- Never let the power-cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!
- Make sure that the available voltage is not higher than stated on the rear panel.
- Always plug in the power plug least. Make sure that the power-switch is set to off-position before you connect with the mains with particular caution!
- Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.
- Always disconnect from the mains, when the device is not in use or before cleaning it.
- Only handle the power-cord by the plug. Never pull out the plug by tugging the powercord.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- The electric connection, repairs and servicing must be carried out by a qualified employee.
- Do not connect this device to a dimmer pack.

### **> Installation**

Make sure all parts for fixing the projector are in a good state of repair.  
Make sure the point of anchorage is stable before positioning the projector.  
The safety chain must be properly hooked onto the fitting and secured to the framework, so that, if the primary support system fails, the fitting falls as little as possible. If the safety chain gets used, it needs to be replaced with a genuine spare.

### **> Minimum distance of illuminated objects**

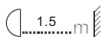
The projector needs to be positioned so that the objects hit by the beam of light are at least 1.5 metres from the lens of the projector.

### **> Minimum distance from flammable materials**

The projector must be positioned so that any flammable materials are at least 0.20 metres (8") from every point on the surface of the fitting.

### **> Mounting surfaces**

It is permissible to mount the fitting on normally flammable surfaces.





➤ **Protection against electrical shock**

Connection must be made to a power supply system fitted with efficient earthing (Class I appliance according to standard EN 60598-1). It is, moreover, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

➤ **Hooking up to the supply mains**

Connection to the electricity mains must be carried out by a qualified electrical installer.

Check that the mains frequency and voltage correspond to those for which the projector is designed as given on the electrical data label.

This label also gives the input power to which you need to refer to evaluate the maximum number of fittings to connect to the electricity line, in order to avoid overloading.



➤ **Maintenance**

Before starting any maintenance work or cleaning the projector, cut off power from the mains supply.

### 3. Operating determinations

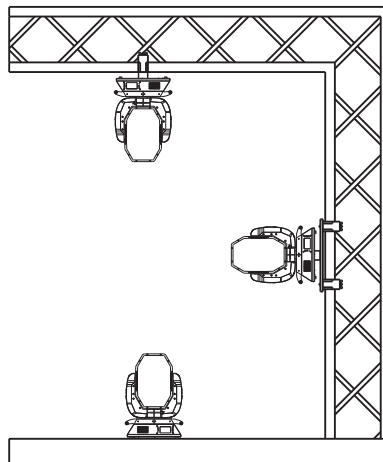
- This device is a moving-head for creating decorative effects and was designed for indoor use only.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- Never run the device without lamp!
- Do not shake the device. Avoid brute force when installing or operating the device.
- Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged. Always hold the fixture at the transport handles.
- When choosing the installation-spot, please make sure that the device is not exposed to heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!
- The minimum distance between light output and the illuminated surface must be more than 1.5 meters.
- Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fix-ture.

- Always fix the fixture with an appropriate safety rope. Fix the safety rope at the correct holes only.
- Operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!
- Please use the original packaging if the device is to be transported.
- Please consider that unauthorized modifications on the device are forbidden due to safety reasons!
- If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, burns due to ultraviolet radiation, lamp explosion, crash etc.

## 4. Rigging the fixture

### 4. 1 Mounting

- The FIXTURE can be installed in any position.







Pay attention to the regulations of CE

**The installation shall be done by qualified staff only**

- ☞ For the various mounting positions of the FIXTURE (standing on the floor, sideways or hanging) different accessories kits are available.
- ☞ Through this a safe and firm installation is assured.
- ☞ You'll find special connectors on the bottom side of the system which are put to use here.
- ☞ In addition the front side of the system is marked with (FRONT) as this is important for a even orientation during installation.

## 4. 2 Installing the Clamps

– **DANGER TO LIFE** Please consider the respective national norms during the Installation! The installation must only be carried out by an authorized dealer!

– The installation of the projector has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

– 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 in if the main attachment fails.

– When rigging, derigging or servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.

– 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 an expert after every four year in the course of an acceptance test.

– The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

– The projector should not be installed outside areas where persons may walk by or be seated.

– Important! Overhead rigging requires extensive experience, including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury and or damage to property.

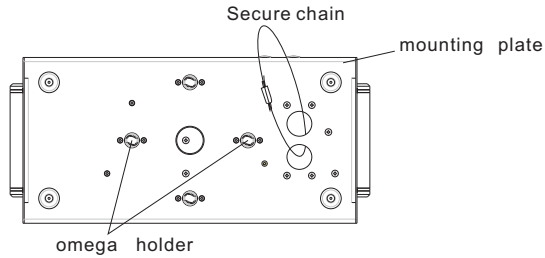
– The projector has to be installed out of the reach of people.

– If the projector shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The projector must never be fixed swinging freely in the room.

– **Caution** Projectors may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do NOT install the projector!

– The projector can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics.

– For overhead use, always install a safety-rope that can hold at least 10 times the weight of the fixture. You must only use safety-ropes with screw on carabines. Pull the safety-rope through the two apertures on the bottom of the base and over the trussing system etc.



### 4.3 POWER Connection

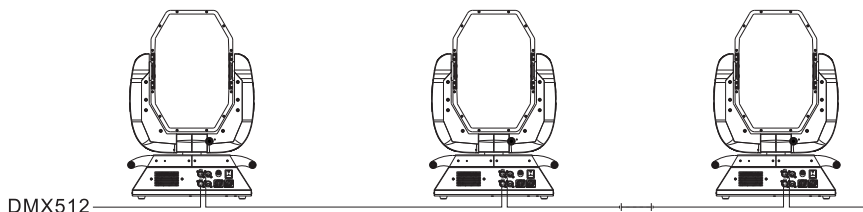
If you wish to change the power supply settings, see the chapter Appendix. Connect the fixture to the mains with the enclosed power cable and plug. The earth has to be connected!

Cable (EU)	Cable (US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⊕

#### DMX-512 Connection

DMX-512 connection/connection between fixtures

Only use stereo shielded cable and 3-pin XLR-plugs and connectors in order to connect.



#### Caution

At the last fixture, the DMX-cable has to be terminated with a terminator. solder a 120 resistor between signal(-) and Signal(+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

DMX output  
3-Pin XLR Socket



- 1: Ground
- 2: Signal (-)
- 3: Signal (+)

DMX input  
3-Pin XLR Socket



DMX output  
5-Pin XLR Socket

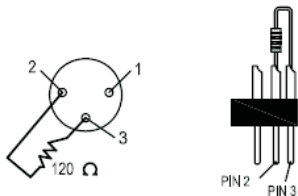


- 1: Ground
- 2: Signal (-)
- 3: Signal (+)
- 4: N. A.
- 5: N. A.

DMX input  
5-Pin XLR Socket

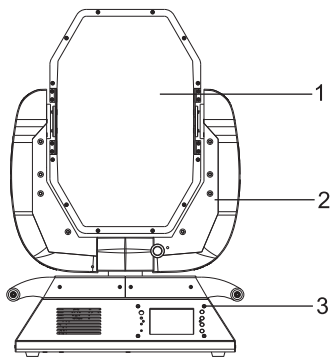


**DMX Terminator Diagram**



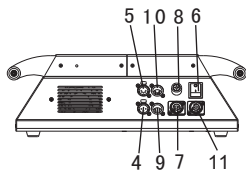
- For installations where the DMX cable has to run a long distance or is in an electrically noisy environment it is recommended to use a DMX terminator. This helps in preventing corruption of the signal by electrical noise. The DMX terminator is simply an XLR plug with a 120Ω resistor connected between pins 2 and pins 3, which is then plugged into the output XLR socket of the last fixture in the chain.

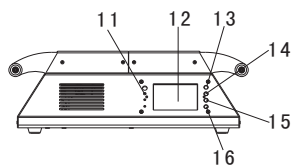
**5. Description of the device**



- 1. HEAD
- 2. ARM
- 3. BASE

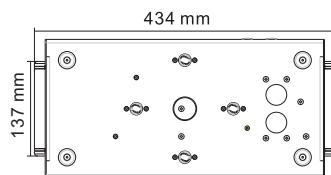
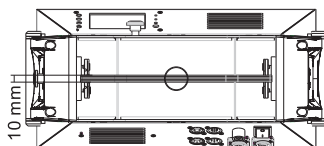
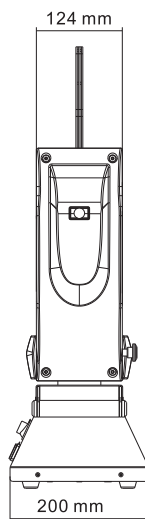
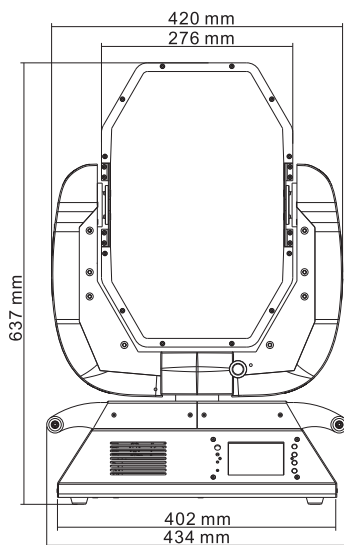
- 4. 3-pin XLR female
- 5. 5-pin XLR female
- 6. power switch
- 7. power-in
- 8. Insurance seat
- 9. 3-pin XLR male
- 10. 5-pin XLR male
- 11. power-out





- 11.MIC pilot hole
- 12. display
- 13.MODE button
- 14.UP button
- 15.DOWN button
- 16.ENTER button

## 6.Dimension



## 7.Display control

### 7.1 Navigation in the Menu

The Control Board offers several features: you can simply set the starting address, switch on and off the lamp, run the preprogrammed program or make a reset. The main menu is accessed by pressing the Mode-button until the display starts flashing. Browse through the menu by Up and Down button.

Press the Enter-button in order to select the desired menu.

You can change the selection by pressing the Enter-button. Confirm every selection by pressing the Enter-button. You can leave every mode by pressing the Mode-button.

The functions provided are described in the sections 7.3.

### 7.2 Display Operation

#### 7.2.1 Function Mode

##### Set DMX address

With this function, you can adjust the desired DMX-address via the Control Board.

- Select "Set DMX address" via the Up and Down button.
- Press the Enter-button, adjust the DMX address by the Up and Down button.
- Press the Mode-button to confirm.
- Press the Mode-button in order return to the main menu.

##### Value Display

With this function, you can display the DMX 512 value of each channel. The display automatically shows the channel with a value changing.

##### Auto Program

With this function, you can run the internal Programs.

##### Music control

With this function, you can run the internal program sound-controlled.

#### 7.2.2 Information

##### Time information

With this function, you can display the Current Time the Total Run Time and you can clear last run time of the fixture

##### Temp. Info

With this function, you can display the temperature of the base and the Head.

##### Product Info

With this function, you can display the software version of the device and the unit model.

#### 7.2.3 Personality

##### Status setting

##### -Address via DMX

With this function, you can adjust the desired DMX-address via an external controller.

##### -No DMX Status

With this function, when the drive is not DMX signal, it runs a automatism, close, hold and music, the default is hold.

##### -Pan Reverse

With this function you can reverse the Pan-movement.

##### -Mic Sensitivity

With this function, the default is 70%, you can select the desired microphone sensitivity from 0 % to 99 %.

#### DMX Mode

With this mode 1 or mode 2

#### Reset default

With this function, you can set the Reset on or o.

#### Display settings

With this function you can shut o the LCD display after 2 to 59 minutes.

Turn the encoder in order to select the desired shut o time.

#### Temperature C/F

With this function, Display the temperature for Celsius or Fahrenheit.

#### 7.24 Reset Function

With this function you can reset the device via the Control Board.

You can select the different reset functions by Up and Down button.

#### 7.25 Eect Adjust

With this function you can test each channel on its (correct) function.

## 7.3 Menu Maps

Function Mode	Set Dmx Address	A001-AXXX	
	Value Display	PAN Moving...	
	Auto Program	Master	
		Alone	
		OFF	
	Music Control	Master	
		Alone	
OFF			
	Time Info	Current time	ON/OFF
		Total Run Time	ON/OFF
		Clear Fixture Time	ON/OFF
	Temp. Info	Base Temp	ON/OFF
Information	product Info	Logo	
		Unit Model.VerXX	
		Company WEB	
Personality	Status Settings	Addr.Via DMX	ON/OFF
		No DMX Status	Close
			Hold
			Auto
			Music
		Pan Reverse	ON/OFF
		Mic Sen sitivity	70%,0-99%
		DMX Mode	Mode1/Mode2
	Display Set	Dis Close Time	05M,02-59M
	Tem perature C/F	Celsius/Fahrenheit	
	Reset Default	ON/OFF	
Reset Function	Reset All		
Effect Adjust	Test Channel	PAN Moving.....	
	Regulate Value	--Password--	Password=XXX
		PAN	PAN=XXX

## 8.DMX protocol

DMX channel's functions and their values (Mode1=5DMX Mode2=4DMX)				
Mode1	Mode2	Name	Function	DMX Value
1	1	PAN	PAN	0-255
2		PAN Fine	PAN Fine	0-255
3	2	Mirror	Mirror Rindexing	0-127
			Forwards Mirror rotation from fast to slow	128-189
			No rotation	190-193
			Backwards Mirror rotation from slow to fast	194-255
4	3	PAN speed	max to min speed	0-255
5	4	Func, Reset, program	No Function	0-20
			No Function	20-39
			No Function	40-79
			All motor reset	80-84
			No Function	85-99
			Internal program1	100-119
			Internal program2	120-139
			Internal program3	140-159
			Internal program4	160-179
			Internal program5	180-199
			Internal program6	200-219
			Internal program7	220-239
			Internal program8	240-255

## 9.Maintenance and cleaning

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not build up on or within the fixture. Otherwise, the fixtures light-output will be significantly reduced. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliably through out its life. A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!

**DANGER** : Disconnect from the mains before starting any maintenance work

The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly

The gobos may be cleaned with a soft brush. The interior of the fixture should be cleaned at least annually using vacuum-cleaner or an air-jet.

The dichroic colour-filters, the gobo-wheel and the internal lenses should be cleaned monthly.

To ensure a proper function of the gobo-wheel, we recommend lubrication in six month intervals. The quantity of oil must not be excessive in order to avoid that oil runs out when the gobo-wheel rotates.

There are no serviceable parts inside the device except for the lamp and the fuse.

Replacing the fuse

If the lamp burns out, the fine-wire fuse of the device might fuse, too. Only replace the fuse by a fuse of same type and rating. Before replacing the fuse, unplug mains lead.

## **10.Electric equipment specification**

### **10.1 Electrical paramters**

POWER REQUIREME NT: AC220V/50Hz or AC120V/60Hz

POWER ABSORBED: 80W

FUSED: 1Pz - 250mA T

WEIGHT:15KG





