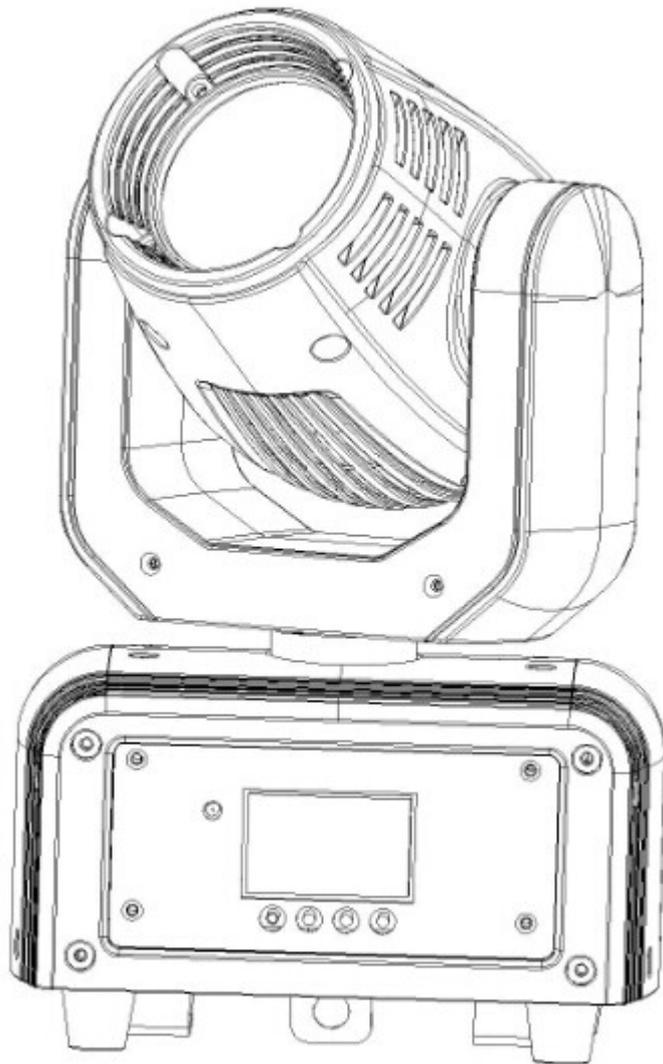


# **EXL-M Beam RGBW 36W User Guide**



# Professional Entertainment Technology

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### 1. Safety Instruction

● Please read carefully the instruction, which includes important information about the installation, usage and maintenance.

● Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.

● Unpack and check carefully there is no transportation damage before using the unit. before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.

● It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

● The unit is for indoor use only. Use only in a dry location.

● The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.

● Disconnect main power before replacement or servicing.

● Make sure there is no flammable materials close to the unit while operating as it is fire hazard.

● Use safety cable when fixing this unit. Don't handle the unit by taking its head only, but always by taking its base.

● Maximum ambient temperature is  $t_a: 40^{\circ}\text{C}$ . Don't operate at a temperature higher than this.

● Unit surface temperature may reach up to  $85^{\circ}\text{C}$ . DON'T touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or servicing.

● In the event of a serious operating problem, stop using the unit immediately. never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. please contact the nearest authorized technical assistance center. always use the same type spare parts.

- Do not touch any wire during operation as high voltage might be causing electric shock.

### **Warning**

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- Do not open the unit within five minutes after switching off.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

### **Caution:**

There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

### **Installation**

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

## **2. Technical specification**

- Extremely small, fast and powerful led moving beam.
- DMX channels:13.
- Pan/Tilt:540° /240° .speed adjustable
- Smooth electronic dimming:0-100%
- Electronic strobe with pulse and random effects
- Optional easy controller CA-8 or CA-9 RTX for instant lighting shows at your fingertips
- High efficiency, low power consumption
- Super compact, low weight

Voltage:220V~240V, 50/60HZ

Fuse:1A

Power consumption:70W

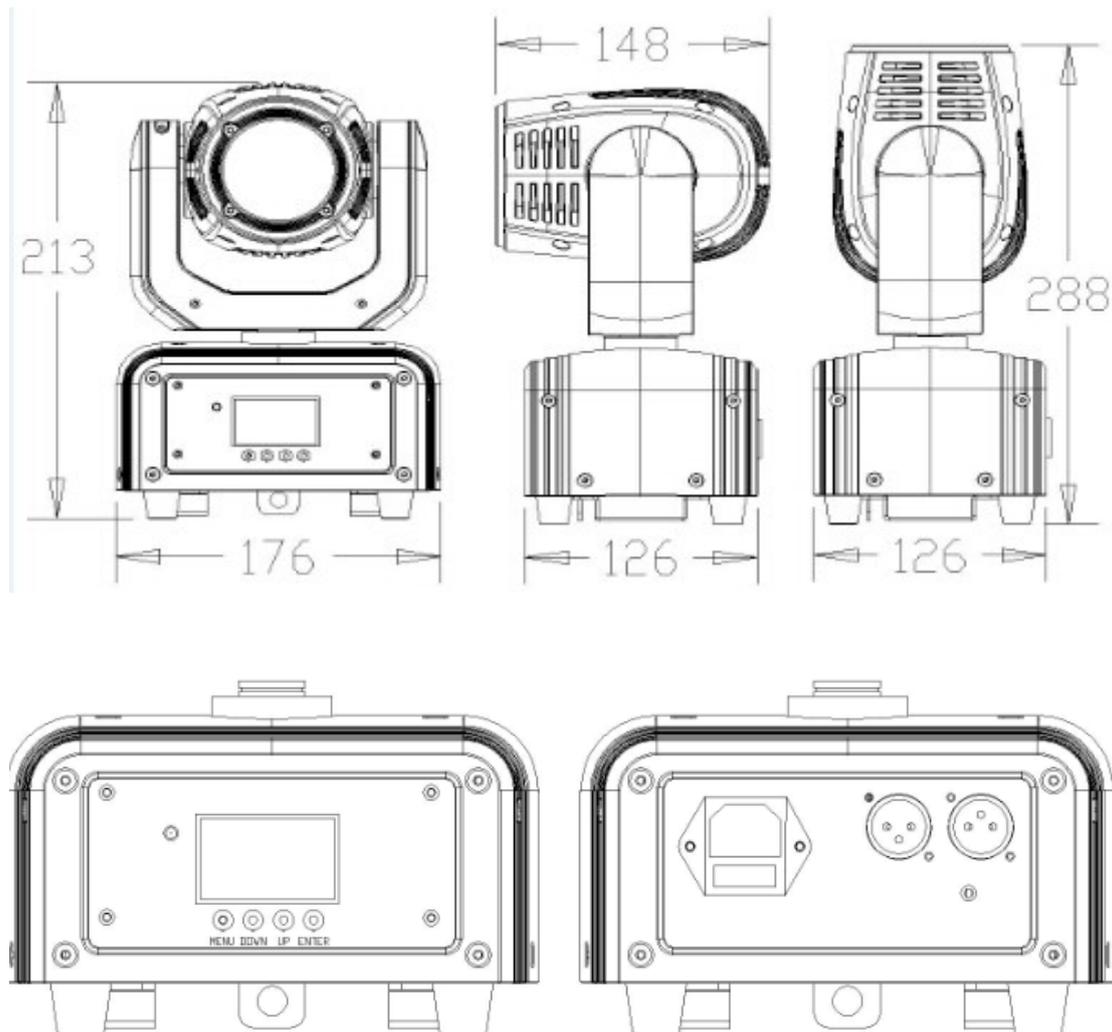
Light source:36W (R G B W)

Dimension:176\*126\*288mm

Weight:3.5Kg

### 3.How To Set The Unit

#### 3.1 Control panel



#### Display

To show the various menus and the selected functions

#### Led LAMP:

DMX	ON	DMX input present
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#### Button

MENU	To select the programming functions
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DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

Only for remote control

Connecting with CA-8/CA-9/CA-9RTX to control the unit for Stand by, Function and Mode function.

Mains input

Connect to power supply.

Mains output

Connect to supply power to the next unit

DMX input/output

For dmx512 link,use 35-pin xlr cable to link the unit together.

### 3.2 main function

To select any of the given functions,press the MENU button up to when the required one is showing on the display.Select the function by ENTER button and the display will blink. Use DOWN and UP button to change the mode. Once the required mode has been selected, press the enter button to setup.to go back to the functions without any change press the MENU button again.Hold and press the MENU button about one second or wait for one minute to exit the menu mode.

The main functions are showing below:

### MENU:

1	DmxAddr	Address	
	Address	000-512	
2	WorkMod	Dmx512	
		Auto	
		Sound	
3	PT Sett	Xrevise	
		Yrevise	
		XYfbsti	YES
			NO
4	Control Chunl 01	Chunl01	0-255
		... ..	... ..
		Chunl 15	0-255
5	REST	YES	

		NO	
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### **DMX Address**

Select DMX Address ,press the enter button to confirm,the present address will blink on the display. Use the UP and DOWN button to adjust the address from 1 to 512.Once the address has been selected,press the ENTER button TO setup ,to go back to the functions without any change press the MENU button again. Button again. Hold and press the MENU button about one second or wait for one minute to exit the menu mode.

#### Show mode

Select Show Mode,press the ENTER button to confirm ,present mode will blink on the display.Use the DOWN and up button to select the 13CH or 9CH or 8CH mode. Once the mode has been selected ,press the enter button to setup,to go back to the functions without any change press the MENU button button again.Hold and press the MENU button about one second or wait for one minute to exit the menu mode.

### **Black Out**

Select Slave Mode ,press the ENTER button to confirm,present mode will blink on the display .Use the DOWN and UP button toselect the AUTO (yes blackout)or No (no blackout)mode.Once the mode has been selected,press the ENTER button to setup,to go back to the functions without any change press the MENU button again.Hold and press the MENU button about one second or wait for one minute to exit the menu mode..

#### Sound Sense

Select Sound Sense,press the ENTER button to confirm,present mode will blink on the display.Use the DOWN and UP button to select sound mode.Once the mode has been selected,press the ENTER button to setup ,to go back to the functions without any change press the MENU button again. Hold and press the MENU button about one second or wait for one minute to exit the menu mode.

#### PAN inverse

Select Pan Inverse,press the ENTER button to confirm,present mode will blink on the display. Use the DOWN and UP button to select the Yes(pan inversion)or No (normal) mode. ONCE the mode has been selected press the ENTER butoon to setup,to go back to the functions without any change press the MENU button again.Hold and press the MENU button about one second or wait for one minute to exit the menu mode.

#### Tilt inverse

Select Pan Inverse,press the enter button to conform,present mode will blink on the display.Use the DOWN and UP button to select the Yes (tilt inversion) or No(normal)mode.

Once the mode has been selected,press the ENTER button to setup,to go back to the functions without any change press the MENU button again.Hold and press the MENU button about one second or wait for one minute to exit the menu mode.

## Auto Test

Press the MENU button up to when the Auto-Test is blinking on the display. Pressing ENTER button and the unit will run self-test by built-in program. To go back to the functions press the MENU button again. Hold and press the MENU button about one second or wait for one minute to exit the menu mode.

## Defaults Setting

AUTO Defaults: Mostly automatic mode, for non professional users, detailed explanation as followings:

- Slave Mode : Auto
- Sound State : off
- Pan inverse : No
- Tilt inverse : No

(Notice: other settings are NOT changed while choosing Defaults Setting!)

Press the ENTER and the corresponding functions will set to default setting, to go back to the functions without any change press MENU button again. Hold and press the MENU button about one second or wait for one minute to exit the menu mode.

## Reset

Press the MENU button up to when the Reset is blinking on the display. Pressing ENTER button and all channels of the unit will return to their standard position.

### 3. How To Control The Unit

#### 4. You can operate the unit in three ways:

- Master/slave built-in preprogram function
- Universal dmx controller

No need to turn the unit off when you change the DMX address, as new DMX address setting will be effect at once.

#### 4.1 Master/Slave Built In Preprogrammed Function

By linking the units in master/slave connection, the first unit will control the other units to give an automatic, sound activated, synchronized light show. This function is good when you want an instant show. You have to set the first unit in master mode show mode and select AUTO or sound mode. its DMX input jack will have nothing plugged into it, and its master led will be constantly on and sound led will flash to the music. The other units will have to set in slave mode and select Slave mode, Their DMX cables plugged into the dmx input jacks (daisy chain) and the slave led lights will constantly on.

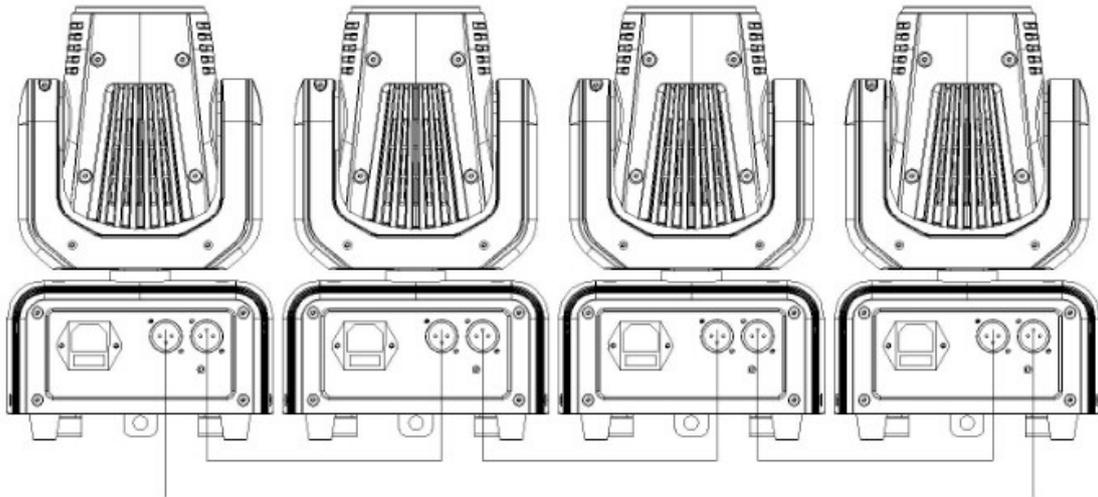
#### 4.2 DMX Controller

By using a universal DMX controller to control the units, you will need to set DMX address from 1 to 512 so that the units can receive DMX signal.

Press the MENU button up to when the DMX address is showing on the display .pressing

ENTER button and the display will blink. Use DOWN and UP buttons to change the dm512 address. Once the address has been selected, press the ENTER button to setup, to go back to the functions without any change press the MENU button again. Hold and press the MENU button about one second or wait for one minute to exit the menu mode.

		<b>Electronic shutter effect</b>
	0 - 19	Shutter closed
	20 - 49	Shutter open
	50 - 64	Strobe 1 (fast → slow)
	65 - 69	Shutter open
	70 - 84	Strobe 2: opening pulse (fast → slow)
	85 - 89	Shutter open
	90 - 104	Strobe 3: closing pulse (fast → slow)
	105 - 109	Shutter open
channel 1	110 - 124	Strobe 4: random strobe (fast → slow)
	125 - 129	Shutter open
	130 - 144	Strobe 5: random opening pulse (fast → slow)
	145 - 149	Shutter open
	150 - 164	Strobe 6: random closing pulse (fast → slow)
	165 - 169	Shutter open
	170 - 184	Strobe 7: burst pulse (fast → slow)
	185 - 189	Shutter open
	190 - 204	Strobe 8: random burst pulse (fast → slow)
	205 - 209	Shutter open
	210 - 224	Strobe 9: sine wave (fast → slow)
	225 - 229	No faction
	230 - 244	Strobe 10: burst (fast → slow)
	245 - 255	Shutter open
Channel 2	0-255	Dimmer 0 → 100% intensity
Channel 3	0-255	Pan 0 - 540°
Channel 4	0-255	Pan fine Pan fine (Least Significant Byte)
Channel 5	0-255	Tilt 0 - 240°
Channel 6	0 - 255	Tilt fine Tilt fine (Least Significant Byte)
Channel 7	0-255	0-100%Pan/Tilt Speed
Channel 8	0-255	color macro
Channel 9	0 - 255	Macro speed 0 → 100%
Channel 10	0 - 255	Red 0 → 100%
Channel 11	0 - 255	Green 0 → 100%
Channel 12	0 - 255	Blue 0 → 100%
Channel 13	0 - 255	White 0→100%



1. if you using a controller with 5 pins DMX out put,you need to use a 5 to 3 pin adapter-cable.
2. At last unit,the dmx cable has to be terminated with a terminator.Solder a 120 ohm 1/4w resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-out put of the last unit.
3. Connect the unit together in a 'daisy chain' soldered joints or corroded connectors can easily distort the signal and shut down the system.
4. The DMX output and input connectors are pass-through to maintain the DMX circuit,when one of the units' power is disconnected.
5. Each lighting unit needs to have an address set to receive the data sent by the controller.The address number is between 0-511(usually 0 & 1 are equal to 1).
6. The end of the DMX 512 system should be terminated to reduce signal errors.
7. 3 pin xlr connectors are more popular than 5 pin XLR.  
 3 pin XLR:Pin 1:GND,Pin2:Negative signal(-),Pin 3:Positive signal(+)  
 5 pin XLR:Pin1:GND,Pin 2:negative signal(-),Pin 3:Positive signal(+),Pin 4/pin 5 ;Not used.

## 5 Troubleshooting

Following are a few common problems that may occur during operation.Here are some suggestions for easy troubleshooting:

1. The unit does not work,no light and the fan does not work
  - a. check the connection of power and main fuse.
  - b. Measure the mains voltage on the main connector.
  - c. Check the power on Led.
2. Not responding to dmx controller
  - a. DMX LED should be on.If not ,check DMX connectors,cables to see if link properly.
  - b. If the DMX1 LED is on and no response to the channel,check the address settings and DMX polarity.
  - c. If you have intermittent DMX signal problems,check the pins on connectors or on PCB of the unit or the previous one.
  - d. Try to use another DMX controller.
  - e. Check if the DMX cables run near or run alongside to high voltage cables that may cause

damage or interference to Dmx interface circuit.

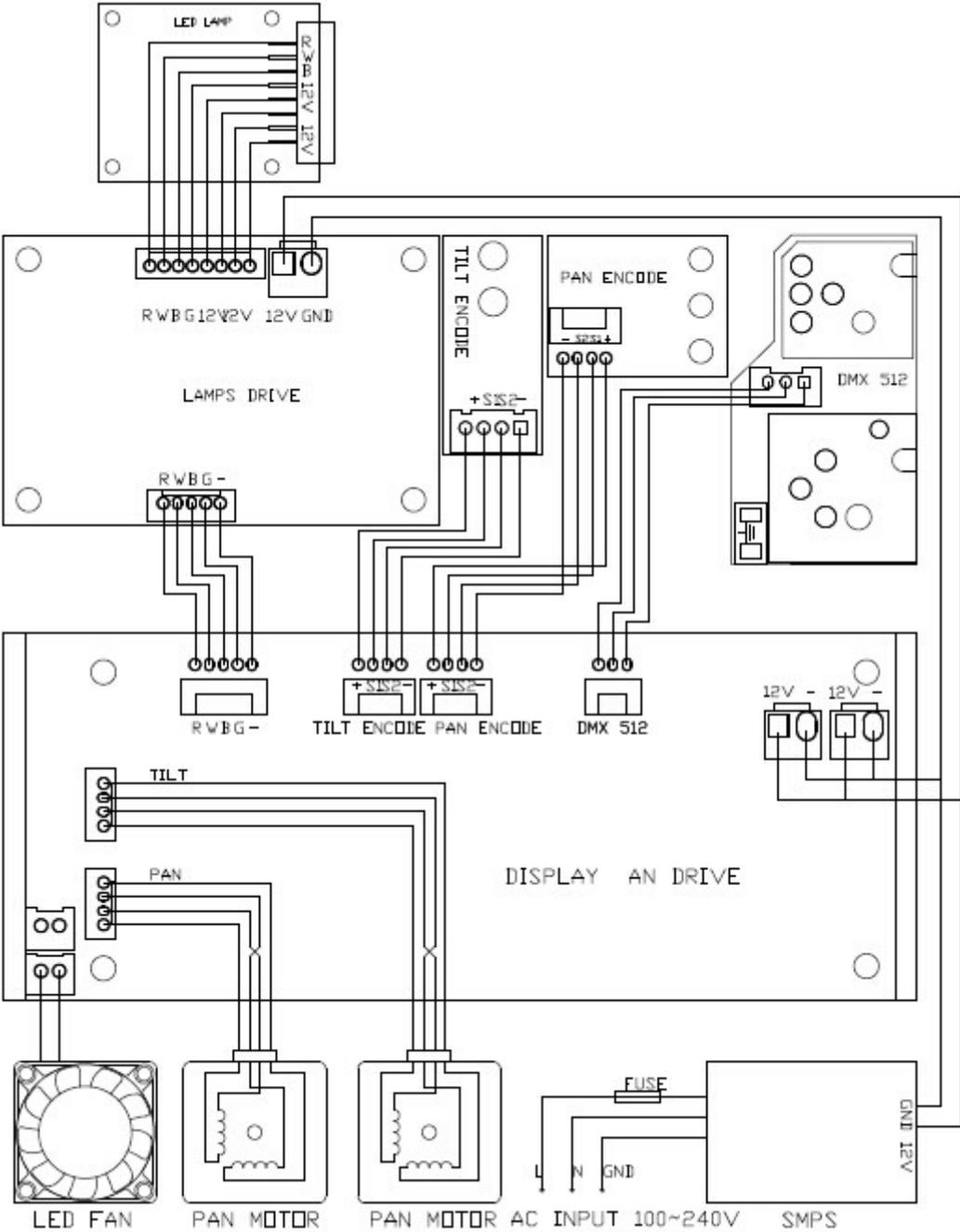
3. Some units don't respond to the easy controller
  - a. You may have a break in the DMX cabling. Check the LED for the response of the master/slave mode signal.
  - b. Wrong DMX address in the unit .Set the proper address.
4. One of the channels is not working well
  - a. The stepper motor might be damaged or the cable connected to the PCB is broken.
  - b. The motor's drive IC on the PCB might be out of condition

5. Fixture Cleaning

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 surrounding can cause greater accumulation of dirt on the unit's optics.

- a. Clean with soft cloth using normal glass cleaning fluid.
- b. Always dry the parts carefully.
- c. Clean the external optics at least every 20 days. clean the internal optics at least every 30/60 days.

### 6:Electrical diagram



PRODANCE, s.r.o.  
 Osadní 799/26, 170 00 Praha 7  
 T: 220 806 054 E: info@prodance.cz  
 www.prodance.cz