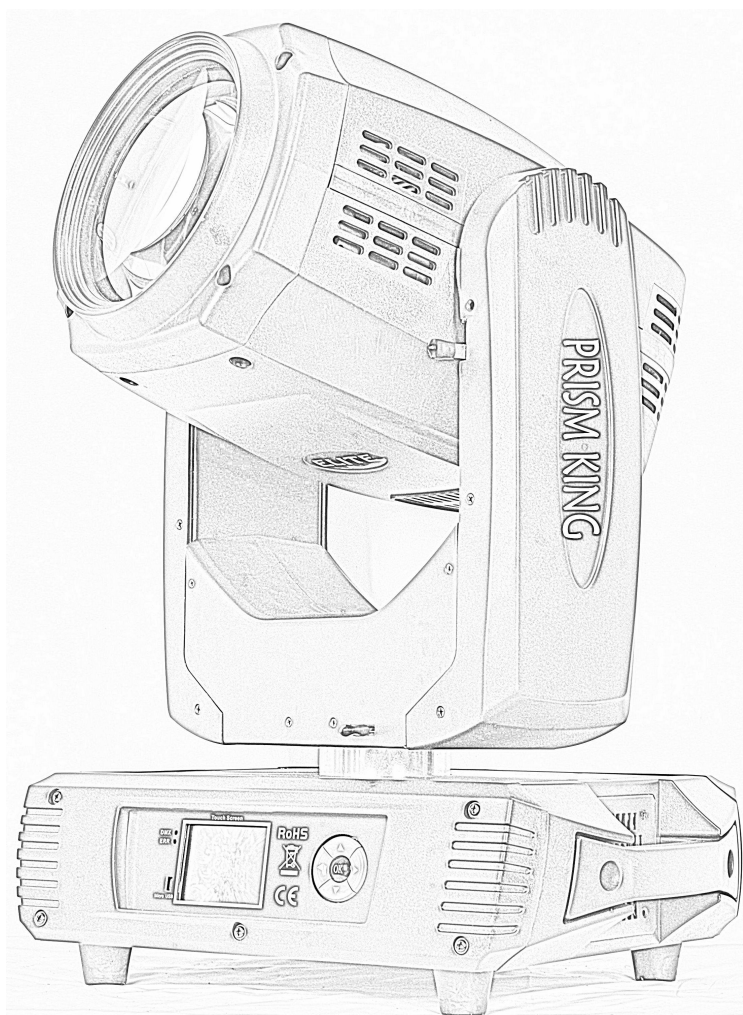


# PRISM KING LIGHT

## 17R 350W



## **User manual**

Thanks for choosing our goods please read this manual carefully before your operating

# Light profile

## LAMP SOURCE

Lamp type: YODN 17R 350w bulb,lifetime 2000 hours

Reflector: Lamp and reflector together in one unit

Color temp : 8000K

Beam angle: 2.8° / 6°

Lens: Glass optical 3 lens group

## COLOR SYSTEM

1 Fixed color wheel with 14 color filters + white  
two-way rotating and rainbow effect

## GOBO SYSTEM

13 fixed metal gobos+white+1 animation(effect)

## EFFECT EQUIPMENT

2 prism wheels:2prisms+3 prisms(bi-directionally,rotatable,speed adjutsable)

1 rainbow effect

## MOVING PARAMETER

Angle: PAN=540 degrees, TILT=270 degrees 16 bit precision scan,,3 Phases motor, fast movement.

# Safety Information



## WARNING!

Read the safety precautions in this section before installing, powering, operating or servicing this product.

The following symbols are used to identify important safety information on the product and in this manual:



**DANGER!**  
Safety hazard.  
Risk of severe injury or death.



**DANGER!**  
Hazardous voltage. Risk of lethal or severe electric shock.



Protection from burn and fire.



**WARNING!**  
High brightness light source, With risk of burned eyes.



**WARNING!**  
Burn hazard. Hot surface. Do not touch.



**WARNING!**  
Wear protective Eye wear.



**WARNING!**  
Refer to user manual.



Warning!

High brightness light source, don't look at the light directly so that keep the risk of burned eyes away.



This product is for professional use only. It is not for household use.

This product presents risks of severe injury or death due to fire and burn hazards, electric shock and falls.



Read this manual before installing, powering or servicing the fixture, follow the safety precautions listed below and observe all warnings in this manual and printed on the fixture.

If have any problem, please contact the supplier.

## PROTECTION FROM ELECTRIC SHOCK



- Disconnect the fixture from AC power before removing or installing any cover or part and when not in use.
- Always ground (earth) the fixture electrically.
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection.
- Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
- Power input and throughput cables must be rated 20 A minimum, have three conductors 1.5 mm<sup>2</sup>(16 AWG) minimum conductor size and an outer cable diameter of 5 - 15 mm (0.2 - 0.6 in.). Cables must be hard usage type (SJT or equivalent) and heat-resistant to 90° C (194° F) minimum. In the EU the Cable must be HAR approved or equivalent.
- Use only Neutrik Powercon NAC3FCA cable connectors to connect to power input sockets. Use only Neutrik Powercon NAC3FCB cable connectors to connect to power throughput sockets.
- Isolate the fixture from power immediately if the power plug or any seal, cover, cable, or other Component is damaged, defective, deformed, wet or showing signs of overheating. Do not reapply power until repairs have been completed.
- Do not expose the fixture to rain or moisture.

## PROTECTION FROM BURNS AND FIRE



- Do not operate the fixture if the ambient temperature (Ta) exceeds 40° C (104° F).
- The exterior of the fixture becomes hot during use. Avoid contact by persons and materials. Allow the fixture to cool for at least 10 minutes before handling.
- Keep all combustible materials (e.g. fabric, wood, paper) at least 100 mm (3.9 in.) away from the fixture.
- Keep flammable materials well away from the fixture.
- Ensure that there is free and unobstructed airflow around the fixture.
- Do not expose the front glass to sunlight or other strong light sources from any angle.
- Do not illuminate surfaces within 200 mm (7.9 ins.) of the 350BSW.
- Do not attempt to bypass thermostatic switches or fuses.
- Do not stick filters, masks or other materials onto any optical component.
- Do not modify the fixture in any way not described in this manual





## PROTECTION FROM INJURY

- When light up the fixture, please don't look at the optical lens with eyes directly. Besides, don't use the camera light to point at the optical lens.
- Fasten the fixture securely to a fixed surface or structure when in use. The fixture is not portable when installed.
- Ensure that any supporting structure and/or hardware used can hold at least 10 times the weight of all the devices they support.
- Allow enough clearance around the head to ensure that it cannot collide with an object or another fixture when it moves.
- Check that all external covers and rigging hardware are securely fastened.
- Block access below the work area and work from a stable platform whenever installing, servicing or moving the fixture.
- Do not operate the fixture with missing or damaged covers, shields or any optical component.



## Using for the first time



**Important!** After unpacking, please check the goods damage or not, which due to the transportation. If

you find damage, please do not use this item, then contact the dealer or manufacturer as soon as possible.

- Please read the "Safety Information" before using the fixture.
- Check that the local AC mains power source is within the fixture's power voltage and frequency ranges.
- Please make sure the fixture use in "Safety Information" term.

## AC power



Warning! Read "Safety Information" starting on page 5 before connecting the light to AC mains power.

Warning! For protection from electric shock, the light must be grounded (earthed). The power distribution circuit must be equipped with a fuse or circuit breaker and ground-fault (earth-fault) protection.

Warning! Socket outlets or external power switches used to supply the light with power must be located near the fixture and easily accessible so that the fixtures can easily be disconnected from power.

Important! Do not insert or remove live Neutrik PowerCon connectors to apply or cut power, as this may cause arcing at the terminals and damage the connectors.

Important! Do not use an external dimming system to supply power to the light as this may cause damage to the fixture that is not covered by the product warranty.



# Power voltage



Warning! Check that the voltage range specified on the fixture's serial number label matches the local AC mains power voltage before applying power to the fixture.

this fixtures accept AC mains power at 100-240 V nominal, 50/60 Hz. Do not apply AC mains power to the fixture at any other voltage than that specified on the fixture's serial number label.

## Data link

A DMX 512 data link is required in order to control via DMX.

The light has 5-pin XLR connectors for DMX data input and output. The pin-out on all connectors is pin 1 = shield, pin 2 = cold (-), and pin 3 = hot (+). Pins 4 and 5 in the 5-pin XLR connectors are not used in the light but are available for possible additional data signals as required by the DMX512-A standard.

Standard pin-out is pin 4 = data 2 cold (-) and pin 5 = data 2 hot (+).

The number of fixtures is either limited to 256 or limited by the number of DMX channels required by the fixtures in relation to the maximum 512 channels available in one DMX universe, whichever limit is lower. Note that if independent control of a fixture is required, it must have its own DMX channels.

Fixtures that are required to behave identically can share the same DMX channels.

To add more fixtures or groups

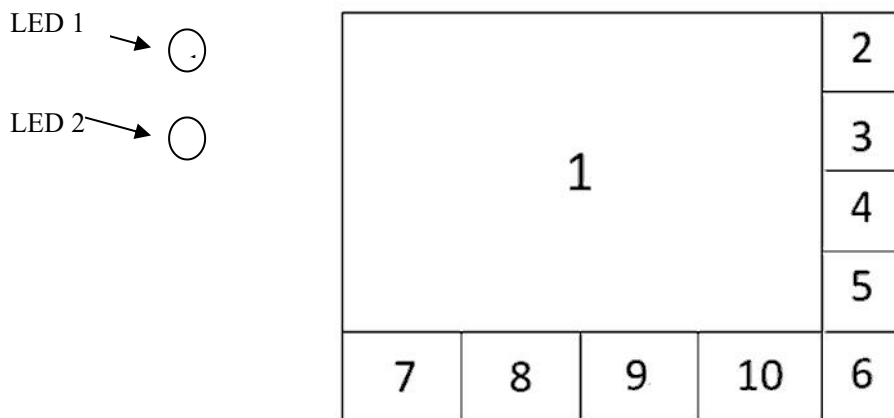
## Connecting the data link

Connecting the data link To connect the LIGHT to data:

1. Connect the DMX data output from the controller to the closest light male 5/3-pin XLR DMX input connector.
2. Connect the DMX output of the fixture closest to the controller to the DMX input of the next fixture and continue connecting fixtures output to input.
3. Terminate the last fixture on the link with a 120 Ohm resistor.

## Menu chart :

LCD display home page Introductions



- 1 — Shows current DMX address in big font size.
- 2 — click to open main menu.
- 3 — click to set the language.
- 4 — click to turn on or off the lamp.
- 5 — click to set the channels mode, and the figures shows current channels number.
- 6 — click to reverse the display.
- 7 — Show the DMX signal state. Click to toggle Master/Slave mode, and the figure's meaning is as follows:

Green down arrow: The device is receiving DMX signal from console.

Yellow "X" : The DMX signal is lost.

Blue up arrow: The device is working on master mode, and it is sending signal to outside now.

- 8 — click to set the running mode. If the figure is highlighted, that means the device is running in this mode as is shown.
- 9 — Show the running mode when the DMX signal is lost but the current running mode is still set as DMX. If the figure is highlighted, that means the device is running in this mode as is shown. It is active on power-on only, refer to description of menu "Running Cnfg" – "DMX Lost" .
- 10 — Error information. It shows a green "√" sign if has no error and a yellow "!" sign if has some errors when self-test. Click to open the error information menu for more details.

LED 1 – Blue LED. If it blinks, means the DMX signal is detective; If it keeps on, means the device is running on Master mode; If it shut down, means the DMX signal is lost. The LED can be shut down simultaneously with the LCD backlight if the menu "Display Config" – "LED Indicator" was set to "Auto".

LED 2 – Red LED. It blinks when run on “Sound(music)” mode, or keep on when some error state were detected. The LED can be shut down simultaneously with the LCD backlight if the menu “Display Config” – “LED Indicator” was set to “Auto” except errors detected.

Level 1	Level 2	Level 3	Level 4	Option/Value range
DMX Addr				<b>1 - 512</b>
Channel Mode				<b>0 - 255</b>
Reset Operating				
	Reset All			
	Pan/Tilt			
	Color			
	Gobo			
	Dim			
	Zoom/Prism etc.			
Run				<b>DMX/Test(Factory)/Test(Gobo)/Test (color)/Music/Program</b>
Lamp				<b>Off/On (Curr-On/Off)</b>
Manual Control				
	Pan			
	...			
	Auto return			10 sec/20 sec/never
Running Cnfg				
	Tilt Cnfg			
		Reverse		<b>N/Y</b>
		Origin		<b>0 - 255</b>
		End		<b>0 - 255</b>
	Pan Cnfg			
		Reverse		<b>N/Y</b>
		Origin		<b>0 - 255</b>
		End		<b>0 - 255</b>
	M/S Mode			<b>Slave/Master</b>
	Music Ctrl Cnfg			
		Ctrl Mode		<b>Dim/Color/Gobo</b>
		Other CHN		<b>DMX/Auto/Manual</b>
		Sensitivity		<b>0 - 10 - 20</b>
	Mixed Scene			
		Scenes Num.		<b>1 - 8</b>

	Scene Edit			
		Scene Index		0 - 7
		Step Index		0 - 29
		Step Edit		
			Time	0 - 255
			Chn	1 - Max channels
			Value	0 - 255
		Copy		
		Paste		
		Record		
	Lamp Power			Eco/Std
	Black Out			
		Pan/Tilt		N/Y
		Color		N/Y
		Gobo		N/Y
	Time/Speed Mode			
		Pan/Tilt		Speed/Time
		Rot.Gobo		Speed/Time
	Random Strobe Sync			N/Y
Display Config				
	Sleep			30 sec/2 min/5 min/10 min/Keep on
	Brightness			1 - 10
	Reverse			N/Y
	Indicator			Auto/KeepOn
Advanced				
	Fine Adj			
	Factory Settings			
	DMX Lost			Middle/Keep/Test(Factory)/Test(Gobo)/Test(color)/Music/Program
	Quick Position			
		Color		N/Y
		Static Gobo		N/Y
		ROT. Gobo		N/Y
	Auto Gobos			N/Y
	Fan Speed			Auto/Max
	Language			中文/Eng/Español
	Lamp Off			NoAct/Sleep



	Turn Off Bat			
	P/T Correction			N/Y
	Allow DMX save			N/Y
	Clear Lamp Time			
	Recover Setting			
Info				
	DMX Monitor			
		Chn		1 - Max channels
		Value		
	State Monitor			
		CPU1 TEMP °C		
		CPU2 TEMP °C		
		Lamp TEMP °C		
		Battery (%)		
	Lamp Servicetime			
		ThisTime(m)		
		Total(h)		
	Err State			
		EEPROM		Well/Err
		Sensor Err		
			Pan Raster	Well/Err
			Tilt Raster	Well/Err
			Pan Reset	Well/Err
			Tilt Reset	Well/Err
			Color wheel	Well/Err
			Sta.gobo	Well/Err
			RotGoboWheel	Well/Err
			Rot.gobo	Well/Err
			Focus	Well/Err
			Zoom	Well/Err
			Prism	Well/Err
		LampComm		Well/Err
		CPU2 Comm		Well/Err
		Lamp Overheat		N/Y
		CPU1 OverHeat		N/Y
		CPU2 OverHeat		N/Y

		Flash Err		N/Y
		RAM Err		N/Y
		License Expired		N/Y
	P/T Reference Speed			
		Pan(.01s)		
		Tilt(.01s)		
	Time Left(h)			
		Input SN.		
		ID		
	Product Code			

**DMX Addr:** Use the menu to set desired fixture address setting

**Channel Mode:** Use the menu to select desired DMX channel mode. The numbers on the menu represents the number of control channels.

**Reset Operating:** Reset Motors

**Reset All:** Use the menu to reset all motors

**Pan/Tilt:** Use the menu to reset Pan and Tilt

**Color:** Use the menu to reset color

**Gobo:** Use the menu to reset gobos

**Dim:** Use the menu to reset dimmer

**Zoom/Prism etc.:** Use the menu to reset focus, zoom, prism and frost. The 6 facet prism will reset automatically if it is inactive ( The reset process takes 6 seconds )

**Run:** Use the menu to select operational mode

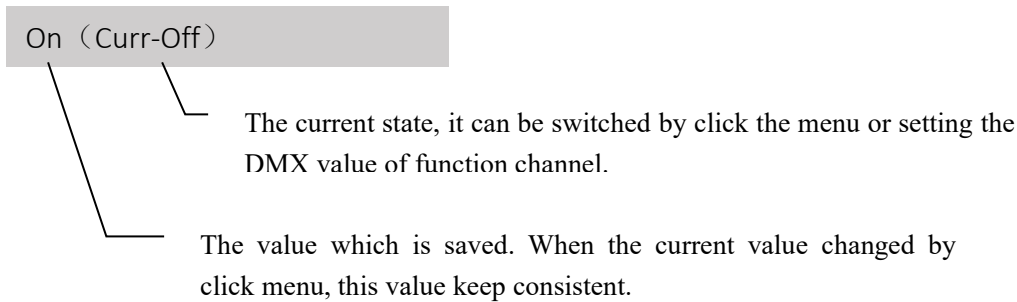
Following is the instructions of the menu options:

- DMX: Controlled by DMX512 signal.
- Test(factory): Controlled by built-in program which is for factory test.
- Test(gobo): Controlled by built-in program which display the rotating gobos and prisms.
- Test(color): Controlled by built-in program which display the static gobos , prisms and colors.
- Music : Controlled by the volume of the ambient sound 。 Use the menu [Running Cnfg]-[Music Ctrl Cnfg] to set up the running mode and microphone sensitivity.
- Program: Controlled by User's program。 User the menu [Running Cnfg]- [Mixed Scene] and [Scene Edit] to set up or edit the scenes。

**Lamp:** Use the menu to turn on or off the lamp. It will take effect after 3 seconds , if the value was switched back in 3 seconds, the operation will be canceled. If the lamp was turn off, it must wait for 1 to 2 minutes before it can turn on again。You can set the menu value to “on” and it will

turn on automatically after 1 to 2 minutes.

An example of the value is shown below :



**Manual Control:** Set DMX value manually

**Pan:** Set the DMX value of Pan.

.....

**Auto return:** Return to previous menu automatically if no any operation. Use the menu to select waiting times.

**Running Cnfg:** configuration of Running.

**Tilt Cnfg:**

**Reverse:** The item allows to invert Tilt movement

**Origin:** Set desired Origin value to change Tilt movement range (set the DMX value to 0 before changing this value, the tile motor will move when changing this value)

**End:** Set desired final stop value to change Tilt movement range (set the DMX value to 255 before changing this value, the tile motor will move when changing this value)

**Pan Cnfg:**

**Reverse:** The item allows to invert Pan Movement

**Origin:** Set desired Origin value to change Pan Movement range (set the DMX value to 0 before changing this value, the tile motor will move when changing this value)

**End:** Set desired final stop value to change Pan movement range (set the DMX value to 255 before changing this value, the tile motor will move when changing this value)

**M/S Mode:** Slave mode is for receiving external DMX signals and Master mode is for sending DMX signals to external slave fixtures

**Music Ctrl Cnfg:** Music Control configuration

**Ctrl Mode:** Use the menu to set desired sound control effect

Following is the instructions of the menu options:

- Dim: Dimmer by sound control.
- Color: Random color selection by sound control.
- Gobo: Random static gobo selection by sound control.

**Other CHN:** Use the menu to set the control mode for other channels except music

control channels

Following is the instructions of the menu options:

- DMX : Control by DMX signal. In this control mode, the shutter or dimmer channel must be operated by the DMX signal.
- Auto: Random running.
- Manual: Control by the menu [Manual Control].As the same of "DMX" control, the shutter or dimmer channel must be operated manually.

**Sensitivity:** Use the menu to set desired response sensitivity from music.

**Mixed Scene:** Use the menu to set up the playback order of the scenes. Refer to the document <User Program Guide> for more information.

**Scenes Num.:** Use the menu to set desired number of scenes for mixed playing

**Scene Edit:** Use the menu to edit scenes. Refer to the document <User Program Guide> for more information.

**Scene Index:** Use the menu to select desired scene

**Step Index:** Use the menu to select desired step for the selected scene

**Step Edit:** Press into the edit interface.

**Time:** Set desired duration for the selected step (Unit 0.1 seconds, e.g. the value of 123 is 12.3seconds )

**Chn:** Use the menu to select desired channel

**Value:** Set desired value of selected channel to meet selected step's needs.

**Copy:** Use the menu to copy the selected step in the selected scene

**Paste:** Use the menu to paste the copied step into the selected step in the selected scene. (Please note that this operation will overwrite the targeted data!)

**Record:** Use the menu to record current DMX value and paste it into the selected step in the selected scene.(Please note that this operation will overwrite the targeted data!)

**Lamp Power:** The item allows to set desired power of the lamp

Following is the instructions of the menu options:

- Eco: Economical mode. Lamp works in minimum rated power
- Std: Standard mode. Lamp works in maximum rated power.(If the shutter is closed, the power will work in minimum power automatically)

**Black Out:**

**Pan/Tilt:** Black-out while head moving

**Color:** Black-out while color changing

**Gobo:** Black-out while gobos changing

**Time/Speed Mode:**

**Pan/Tilt:** Use the menu to set the mode of pan/tilt movement

Following is the instructions of the menu options:

- Speed: Both Pan and tilt will move with the same speed as adjusted at the

channel "Pan/Tilt speed, Pan/Tilt time"

- Time: The Pan and Tilt will move with different speeds and they will come at the same time to the end point of their tracks(pan and tilt use their optimal speeds)

**Rot.Gobo:** Use the menu to set the mode of rotate gobo movement

Following is the instructions of the menu options:

- Speed: Rot.gobo move in speed mode.
- Time: Rot.gobo move in time mode.

**Random Strobe Sync:** This menu sets if synchronization between every device when strobe in random mode.

**Display Config:** LCD display configuration

**Sleep:** Use the menu to select waiting times before sleep.

**Brightness:** Use the menu to select desired brightness

**Reverse:** Use the menu to set Inverted orientation if the fixture is hanging on the truss

**Indicator:** Use the menu to set lighting of indicators.

Following is the instructions of the menu options:

- Auto: Sleep When screen sleep.
- KeepOn: Lighting forever

**Advanced:**

**Fine Adj:** This is the factory adjustment function locked with password.

**Factory Settings:** Used in factory only, it requires the password to enter..

**DMX Lost:** Use the menu to select run mode when external DMX cannot be connected. This is active on power-on only, if it detects DMX on power on, and then lost the signal, it keep on the last DMX state.

Following is the instructions of the menu options:

- Middle: The DMX of pan and tilt are set to 128, all other DMX are set to 0.
- Keep: Keep the last state when reset finished.
- Test (factory/gobo/color) : Controlled by built-in program. Refer to the menu "Run" for more information.
- Music: Controlled by the volume of the ambient sound. Use the menu [Running Cnfg]-[Music Ctrl Cnfg] to set up the running mode and microphone sensitivity.
- Program: Program: Controlled by User's program. User the menu [Running Cnfg]- [Mixed Scene] and [Scene Edit] to set up or edit the scenes.

**Quick Position:** Use the menu to Automatically calculate the shortest path of color and gobos to achieve rapid two-way positioning (that is, the Forward rotation over 180 degrees will Change to backward rotation less than 180 degrees) . When "N" is selected, color and gobos only rotate in one direction.

**Auto Gobos:** If "Y" is selected, following rules is enforced:

Static gobos automatically switch to the big hole when the rotating gobos is activated;

Static gobos and rotate gobos automatically switch to big hole when frost is activated.

**Fan Speed:** Set the fan speed mode. This function is only valid on some models, please refer to the specification for more information.

**Language:** Use the menu to select desired system language

**Lamp Off:** Use the menu to select what the motor should do when lamp is off. If ""No Act"" is selected, lamp doesn't lead to any changes of motors. If "Sleep" is selected, motors except Pan/Tilt will sleep when lamp is off.

**Turn Off Bat:** If the device is battery-powered (this function is valid only on some models),you can turn off the battery immediately.

**P/T Correction:** Use the menu to select if activate the position auto correction function. This function will optimizes performance, but if this function is out of action, the pan or tilt motor will fails to work normally. If pan or tilt works abnormally, try stop this function temporarily. Pan and tilt will run normally without this function but, it will increase the amount of reset time, and cause more impacts between the limit structures, and the positional errors will not be corrected automatically when the step motors lose step. This menu option only take effect when reboot the system.

**Allow DMX save:** If select "Yes", the setting values from functions DMX channel(6/4/6) will be saved to EEPROM, that is, The setting value will be retained for the next time when you reboot the system(This menu selection is valid for all the settings in the function channel except for the "Run mode").

**Clear Lamp Time:** Use the menu to reset the counter of operation hours with the lamp to 0, when a new lamp replaces the old one.

**Recover Setting:** Use the menu to reset factory settings. But the information like fine tuning of motor, lamp switch state, user programs, lamp on time, will not be resettled.

Please note that do not perform this Operation when the motors is rotating with high speed because it will tack relatively long time to write the EEPROM.

## **Info:**

**DMX Monitor:** Display the DMX value from controller

**Chn:** Use the menu to select desired channel which you need to watch.

**Value:** Show the current value of the selected channel

**State Monitor:** Display current running status

**CPU1 TEMP °C:**The menu shows the temperature of the CPU which is in the fixture base.

**CPU2 TEMP °C:**The menu shows the temperature of the CPU witch is in the fixture head.

**Lamp TEMP °C:**Shows the monitoring points temperature of the lamp. If the temperature is lower than 0°C or there is no temperature sensor for digital detection(temperature sensor is fitted on some models only),it will shows "Invalid".

**Battery (%):** Shows the battery capacity in percentage (notes that only some models are fitted with battery).

**Lamp Service time:** Lamp service time

**ThisTime (m):** The menu shows the total number of the operation minutes with the lamp on currently.

**Total(h):**The menu shows the total number of the operation hours with the lamp on since the last operation of clear.

**Err State:** Error information (If there is any error shown in this menu, a exclamatory mark will show at the top right corner of menu cover)

**EEPROM:** This message will appear when EEPROM goes bad.

**Sensor Err:** The states of all of the sensors

**Pan Raster:** Is the position sensor (raster) error.

**Tilt Raster:** Is the position sensor (raster) error.

**Pan Reset:** Is the original position sensor error.

**Tilt Reset:** Is the original position sensor error.

**Color wheel:** Is the original position sensor error.

**Sta.gobo:** Is the original position sensor error.

**RotGoboWheel:** Is the original position sensor error.

**Rot.gobo:** Is the original position sensor error.

**Focus:** Is the original position sensor error.

**Zoom:** Is the original position sensor error.

**Prism:** Is the original position sensor error.

**LampComm:** The communication between CPU and lamp driver. If this communication go out of work, the CPU cannot determine the lamp is on or off, and some functions may be affected.

**CPU2 Comm:** This message informs you that the communication between the display PCB in the fixture base and the motor driver PCB in the fixture head failed, and cables may be broken.

**Lamp Overheat:** The Lamp is overheating and it should be turn off. Note that the temperature digital detection only valid on some models. If there is no temperature digital detection device, the lamp thermal protection was realized by a mechanical Thermo Switch only.

**CPU1 Overheat:** This message informs you that the display PCB in the fixture base had been overheated and the fan in the fixture base may be broken. If the CPU if overheated, it will automatically restart or work abnormally.

**CPU2 Overheat:** This message informs you that the motor driver PCB in the fixture head had been overheated and the fan in the fixture head may be broken. If the CPU is overheated, it will automatically restart or work abnormally.

**Flash Err:** There is a read or write error of the MCU flash memory. Please contact your Dealer or Fabricator for repair assistance.

**RAM Err:** A memory allocation failure occurs. Please contact your Dealer or Fabricator for repair assistance.

**License Expired:** The license has expired, please click the menu "Info" - "Time Left" and input the serial number (SN) to continue using the device.

**P/T Reference Speed:** Shows the pan and tilt rotation time from start rotation to stop. This time is for reference only,

**Pan(.01s):** Shows the pan rotation time from start rotation to stop.

**Tilt (.01s):** Shows the tilt rotation time from start rotation to stop.

**Time Left(h):** This menu shows how much permitted time (hour) have left. click to input the serial number(SN) if needed.

**Input SN.:** Input the serial number to get the license for usage.

**ID:** Shows the ID of the device.

**Product Code:** This message informs you the product code of the firmware. It provide a reference in maintenance only and the user can ignore them usually.

**000-000-00-000-000-00:** The code of firmware. The code shown here is just an example, please refer to the machine for actual code.

**15-12-8-143:** Shows the EEPROM flag. The flag shown here is just an example, please refer to the machine for actual flag.

**Security settings:** This menu is operated in factory only, the user may ignore it.

**Test Mode:** This menu is operated in factory only, the user may ignore it.



# DMX Protocol

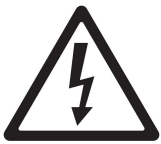
Mode		DMX value	Function
18	22		
1	1		<b>Color wheel</b>
		0-127	Half step positioning (or “continual positioning” , witch can be set up by menu)
		128-190	Rainbow effect from fast to slow
		191-192	Stop
		193-255	Rainbow effect from slow to fast
2	2		<b>Shutter/Strobe</b>
		0-3	Shutter closed
		4-103	Strobe effect from slow to fast
		104-107	Shutter open
		108-155	Open pulse in sequences from slow to fast
		156-207	Close pulse in sequences from fast to slow
		208-212	Shutter open
		213-251	Random strobe effect from slow to fast
		252-255	Shutter open
3	3		<b>Dimmer intensity</b>
		0-255	Dimmer intensity from 0% to 100%
4	4		<b>Static gobo wheel</b>
		0-3	Open
		4-54	Gobos with no shake
		55-190	Shaking gobos from slow to fast
		191-199	Empty
		200-201	Open
		202-227	Forward gobo wheel rotation from fast to slow
		228-229	No rotation

		230-255	backward gobo wheel rotation from slow to fast
<b>5</b>	<b>5</b>		<b>Prism wheel 1</b>
		0-63	Prism excluded
		64-127	Prism 1 of prism wheel 1 inserted
		128-191	Prism 2 of prism wheel 1 inserted
		192-255	Prism 3 of prism wheel 1 inserted
<b>6</b>	<b>6</b>		<b>Prisms of prism wheel 1 rotation and indexing</b>
		0-127	Indexing
		128-190	Backward rotation from fast to slow
		191-192	No rotation
		193-255	Forward rotation from slow to fast
<b>7</b>	<b>7</b>		<b>Prism wheel 2</b>
		0-63	Prism excluded
		64-127	Prism 1 of prism wheel 2 inserted
		128-255	Prism 2 of prism wheel 2 inserted
<b>8</b>	<b>8</b>		<b>Prisms of prism wheel 2 rotation and indexing</b>
		0-127	Indexing
		128-190	Backward rotation from fast to slow
		191-192	No rotation
		193-255	Forward rotation from slow to fast
<b>9</b>	<b>9</b>		<b>Focus</b>
		0-255	Continuous adjustment from far to near
<b>10</b>	<b>10</b>		<b>Pan</b>
		0-255	Pan movement
<b>11</b>	<b>11</b>		<b>Pan Fine</b>
		0-255	Fine control of pan movement
<b>12</b>	<b>12</b>		<b>Tilt</b>
		0-255	Tilt movement
<b>13</b>	<b>13</b>		<b>Tilt Fine</b>

		0-255	Fine control of tilt movement
<b>14</b>	<b>14</b>		<b>Pan/Tilt speed</b>
		0	Max speed
		1-255	Speed from max. to min.
<b>15</b>	<b>15</b>		<b>Zoom</b>
		0-63	Empty
		63-255	Zoom in
<b>16</b>	<b>16</b>		<b>Rainbow / Frost</b>
		0-63	invalid
		64-255	Rainbow / Frost 100%
<b>17</b>	<b>17</b>		<b>Reset</b>
			To activate following functions, stop in DMX value for at least 4s
		0-25	Empty
		26-76	Effects reset
		77-127	Pan/Tilt reset
		128-255	Total reset
<b>18</b>	<b>18</b>		<b>Lamp</b>
			To activate following functions, stop in DMX value for at least 4s
		0-25	Empty
		26-100	Lamp off
		101-255	Lamp on
<b>*</b>	<b>19</b>		<b>Pan/Tilt time</b>
		0	Max speed
		1-255	Time from 0.1 sec to 25.5 sec
<b>*</b>	<b>20</b>		<b>Color time</b>
		0	Max speed
		1-255	Time from 0.1 sec to 25.5 sec

*	21		<b>Beam time</b>
		0	Max speed
		1-255	Time from 0.1 sec to 25.5 sec
*	22		<b>Gobo time</b>
		0	Max speed
		1-255	Time from 0.1 sec to 25.5 sec

## Service and maintenance



Warning! Disconnect the fixture from AC mains power and allow to cool for at least 10 minutes before handling. Do not view the light output from less than 4 meters without shade 4-5 welding goggles. Be prepared for the fixture to light suddenly if connected to power.

Warning! Refer any service operation not described in this user manual to a qualified service technician.



Important! Excessive dust, smoke fluid, and particle buildup degrades performance, causes overheating and will damage the fixture. Damage caused by inadequate cleaning or maintenance is not covered by the product warranty.

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



### **A. The unit does not work, no light and the fan does not work**

1. Check the connect power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED to see if it can be light up or not.

### **B. Not responding to DMX controller**

1. DMX LED should be on. If not, check DMX connectors, cables to see if they are linked properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check to see if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.



### **C. One of the channels is not working well**

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

### **D. The lamp is cutting out intermittently**

1. The lamp is not working well. Check the mains voltage either too high or too low.
2. Internal temperature may be too high. Check if replacement of fan is needed on the head.

## Cleaning

Cleaning schedules for lighting fixtures vary greatly depending on the operating environment. Environmental factors that may result in a need for frequent cleaning include:

- Use of smoke or fog machines.
- High airflow rates (near air conditioning vents, for example).
- Presence of cigarette smoke.
- Airborne dust (from stage effects, building structures and fittings or the natural environment at outdoor events, for example).

If one or more of these factors is present, inspect fixtures within their first 100 hours of operation to see whether cleaning is necessary. Check again at frequent intervals. This procedure will allow you to assess cleaning requirements in your particular situation. If have any question, please contact dealer.

Use gentle pressure only when cleaning, and work in a clean, well-lit area. Do not use any product that contains solvents or abrasives, as these can cause surface damage.

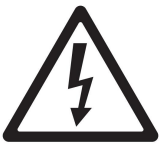
### ***Warning! Disconnect from power and allow to cool before cleaning.***

To clean the fixture:

1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
2. Vacuum or gently blow away dust and loose particles from the outside of the fixture and the air vents at the back and sides of the head and in the base with low-pressure compressed air.
3. Please use the professional cloth to clean the optical lens and soak with low concentration detergent liquid.

Do not rub the surface hard: lift particles off with a soft repeated press. Dry with a soft, clean, lint-free cloth or low-pressure compressed air. Remove stuck particles with an unscented tissue or cotton swab moistened with glass cleaner or distilled water.

4. Check that the fixture is dry before reapplying power.



Specifications subject to change without notice.

If have questions, please contact the dealer.