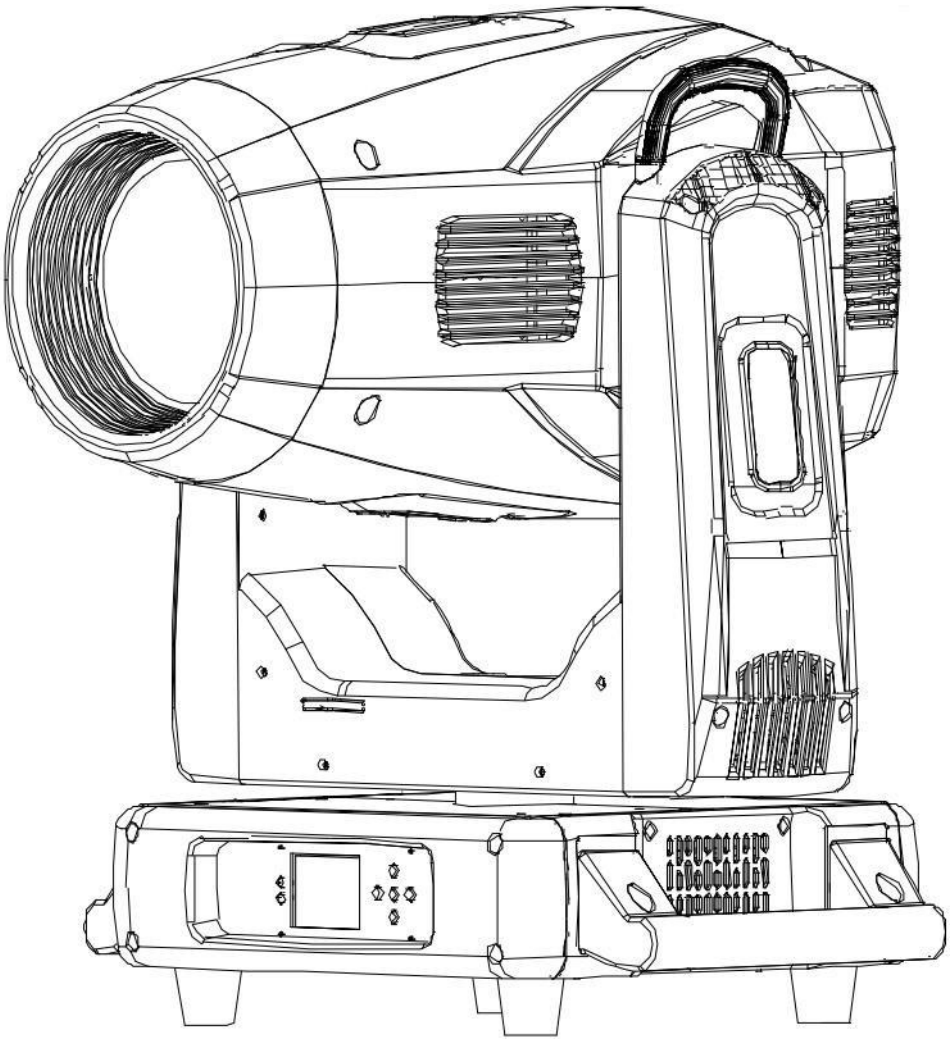
FIRE 1200



USER MANUAL

KEEP THIS USER MANUAL FOR FUTURE NEEDS

Thank you for your patronage!
We are confident that our excellent products and service can satisfy you.
For your own safety, please read this user manual carefully before installing the device.
In order to install, operate, and maintain the lighting safety correctly.
We suggest that the installation and operation should be done by the verified technician and follow the instruction strictly.

CAUTION!
Keep this device away from rain and moisture!

CAUTION!
Unplug mains lead before opening the housing!

Every person involved with the installation, operation and maintenance of this device has to:
-be qualified
-follow carefully the instructions of this manual

INTRODUCTION:

Thank you for having chosen this professional moving head.
You will see you have acquired a powerful and versatile device.
Unpack the device. Inside the carton box you should find:

1. One power in cable
2. One 3-Pin DMX cable
3. Two folding clamps
4. One safety cable
5. One English user manual

（Flight case is optional, please contact your dealer）
Please check carefully that there is no damage caused by transportation. Should there be any questions, please consult your dealer and don't install this device.

GENERAL GUIDELINES

This device is a lighting effect for a professional use on stages, TV, in discotheques, theaters, etc.

This fixture is only allowed to be operated with the max alternating current which stated in the technical specifications in 6th page of this manual.
Lighting effects are not designed for permanent operation. Consistent operation breaks may ensure that the device will serve you for a long time without defects.

Do not shake the device. Avoid brute force when installing or operating the device.

While choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. Please don't project the beam onto combustible substances. The minimum distance between light-output from the projector and the illuminated surface must be more than 0,5 meter.
If you use the quick lock cam in hanging up the fixture, please make sure the quick lock fasteners turned in the quick lock holes correctly.
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.
For safety reasons, please be aware that all modifications on the device are forbidden. 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 short-circuit, burns, electric shock, crash, etc.

SAFETY INSTRUCTIONS

CAUTION!

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

This device has left the factory in 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 user manual.
1. In order to guarantee the product's life, please don't put it in the damp places or even the environment over 60degress.
2. Always mount this unit in safe and stable matter.
The qualified professionals are allowed to carry out the lamp installation, operation and maintenance, but they must guarantee to operate in strict accordance with the instructions referred to.

▲ **Important:**
Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperatures.
This device falls under protection-class Ⅰ. Therefore it is essential that the device be earthed.
The electric connection must carry out by qualified person.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.
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 power cord.
During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.
Please don't project the beam onto combustible substances.
If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

CAUTION!
Never touch the device during operation!
The housing may heat up!

CAUTION!
Never look directly into the light source,
As sensitive persons may suffer an epileptic shock.

Please be aware that damages caused by manual modifications to be the device are not subject to warranty. Keep away from children and non-professionals.

CLEANING AND MAINTENANCE

1. To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
2. Do not spill water or other liquids into or on to your unit.
3. During long periods of non-use, disconnect the unit's main power.
4. It should be installed in a well-ventilated place, at a distance of 50 centimeters or more with the walls. At the same time, please check if the fan and ventilation holes are unobstructed.

The following points have to be considered during the inspection

1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
2) There must not be any deformations on the housing. Fixations and installations spots(ceiling, suspension, trussing).
3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
4) The electric power supply cables must not show any damage, material fatigue or sediments. Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

CAUTION!

Disconnect from mains before starting maintenance operation!

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
2) Clean the fan each week.
3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents.

TECHNICAL PARAMETERS

Power supply

AC100~240V, 50/60Hz

Power consumption: 1200W

Light source

High power 1200W white LED engine/Flicker-Free Source

Rated life: 20,000 hrs

Color temperature: 6500K

Standard mode Ra:≥74,High CRI mode: Ra≥90

Luminous flux: 25000LM

OPTIC

Focus:Motorized focusing, ultra-smooth focus adjustment

Iris: Motorized, linear

Strobe: 25Hz with random pulse strobe

Dimming:0~100% linear dimming

Frost: 0~100% linear frost

Zoom angle: 6 degree to 50 degree linear zoom

Effect SECTION

CMY color mixing system

Independent CTO filter from 2800k to 5600k linear adjust

Color wheel: 6 fixed colors + white, half-color with rainbow effect

Rotating gobo wheel:7 replaceable rotating gobos + white with gobo shaking

(Diameter 16.5MM, External diameter 26.9MM, Thickness 1.1MM)

Fixed gobo wheel: 11 fixed gobos + white with gobo shaking(24.5MM)

Prism wheel: Rotating 3-faced prism+6-faced linear prism, two prisms can be overlaid

Animation wheel with water, wave and flame effects, rotatable and replaceable

FRAMING SYSTEM

Framing shutters: 4x framing shutters, each individually controllable
Each shutter blade can block out light completely
Framing module can be rotated at 90°
Movement is fast, smooth and precise, with adjustable speed
6%-100% iris system

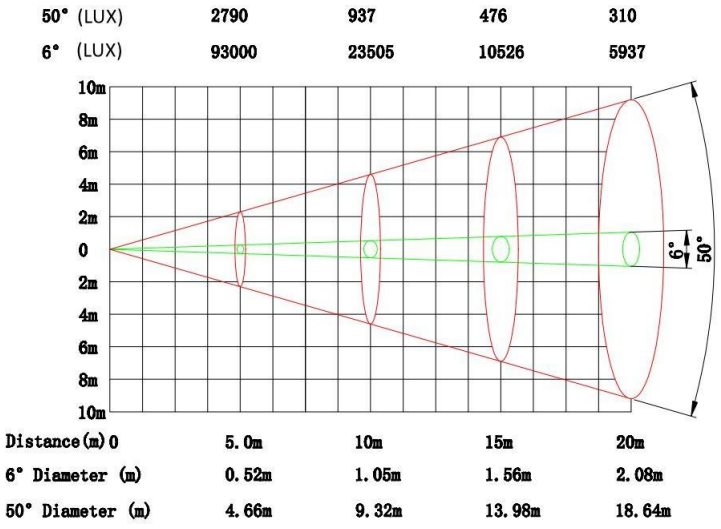
CONTROL AND PROGRAMMING

Pan/Tilt: 540/270° 16bit solution
Control mode: DMX512/RDM/Auto run/Artnet(Optional)
DMX channels: 36CH
Powercon true1 in+out/3pin DMX in+out
2.5 Inch touch screen LCD display, with display flip

BODY

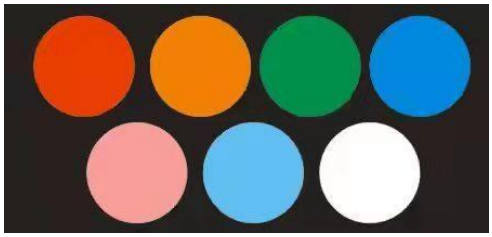
IP20 Dust-proof and oil-proof design with Folding clamp
Net weight: 41kgs/Gross weight: 44kgs
1in1 fly case size optional

PHOTOMETRICS:



CMY+CTO

COLOR WHEEL



FIXED GOBO WHEEL:

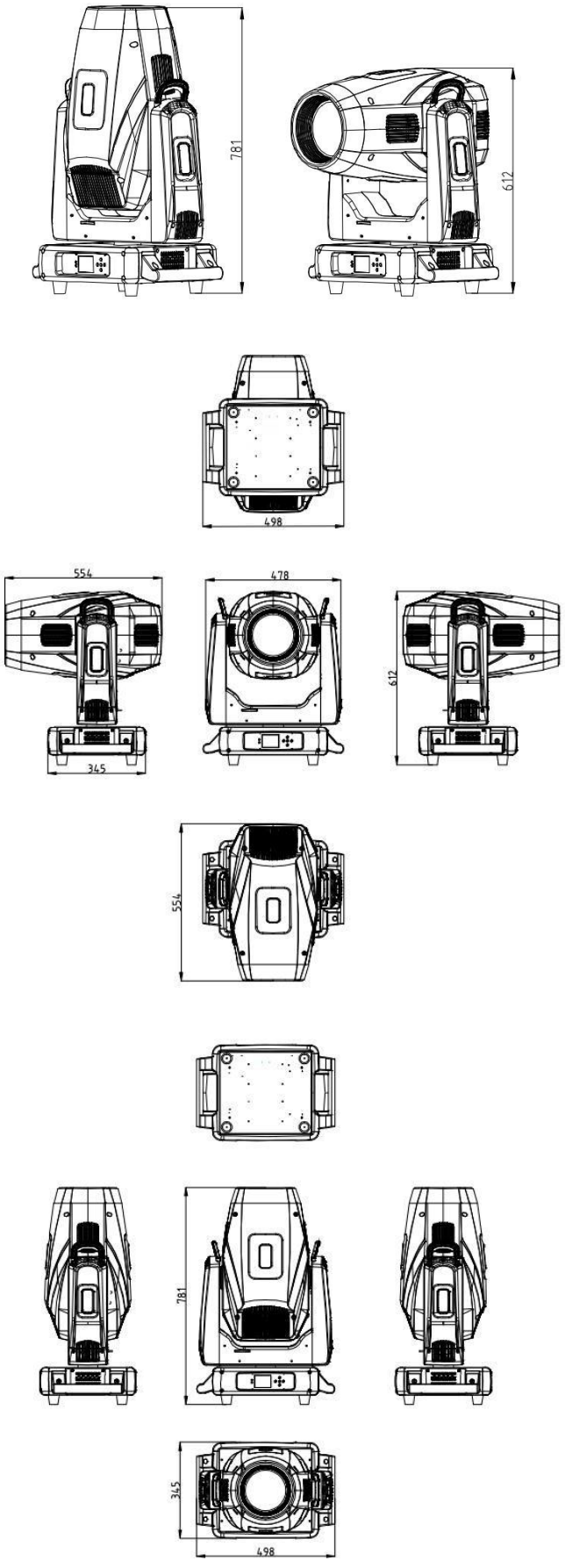
ROTATING GOBO WHEEL

AMIMATION DISC

FOCUS

IRIS

FIXTURE SIZE(MM)



MENU OPERATION

1) Summary

The schematic diagram of the lamp panel is shown in Figure 3. The title above shows the name of the lamp, and the status bar below shows the signal of the current lamp, the status of the lamp, and the fault (when there is no fault information, "ERR" is displayed, otherwise "NOR").

This lamp supports DMX / RDM protocol. When the lamp is searched by the RDM host, three letters “RDM” will appear on the panel, indicating that the lamp is enumerated normally. The display and operation are similar to the "Android operating system", and you canoperate it by clicking the corresponding item with your fingertips or blunt hard objects.

Note: Do not use sharp or sharp objects to click on the display to prevent damage Figure 3 Schematic diagram of the display panel Operating.

Use intuitive touch or auxiliary input to operate lamps (products that support touch function.The left area is the TFT display area and touch area. Click the content of the panel with your finger or blunt hardware to complete the operation of parameter setting or viewing status. The area on the right is the auxiliary input. If you do not use the touch function of the TFT, you can use the auxiliary input to select the items to be set or viewed to complete the operation.

Parameter value input

When the selected parameter item needs to enter a value, the window shown in Figure 4 will open:

Figure 4 Value setting page

- Set value: You can directly pull the slider to quickly set the required value, or you can click the "Up" or "Down" button on the right to set the required value- 5 - precisely or use the auxiliary input to set.
- Application value: When the data is set by pressing the "Up" or "Down" buttons.
- Save the value: Click the "OK" button in the lower right corner to save the current value to the internal memory, and apply the saved value to the light fixture the next time you turn it on.
- Set boolean parameters
- When the set parameter is a Boolean value (such as ON or OFF), you can directly click the corresponding item to switch the parameter value, and this type of parameter will be saved to the internal memory after modification. Press the parameter option on the right, the corresponding option will be grayed out. When you release your hand, the corresponding parameters will be changed and saved. If pressing the parameter option is not the parameter you want to change, you can move your finger to other places on the screen, and the corresponding parameter won’t change.
- The determination of important Boolean parameters will be set through the determination window, as shown in Figure 5 below:

Figure 5 Confirm input window

Subpage (Parameter)

Function operation and parameter setting

Enter the setting interface, as shown in Figure 6-1:

In the main interface, you can enter the corresponding parameter setting interface by selecting six buttons.

In the parameter setting interface, you can press the blue option on the left to quickly switch to other setting interfaces.

2) Set DMX address code

Through the page shown in Figure 6-1, the DMX address and channel mode of the fixture can be set. The menu setting of the lamps and lanterns optimizes the setting of the address. Several operations for setting the address code are as follows:

Select "Previous" or "Next", the fixture will automatically calculate the address code of the next or previous one according to the current address code and channel data, which can be set quickly

Click the value of the address code to enter the value editing window, where you can set any valid address code, the fixture automatically obtains the current channel number of the fixture, and automatically filters the unusable address code (512-current channel number).

The lamp supports RDM protocol, and the address code of the lamp can be set remotely through RDM.

Two buttons are provided:

Channel mode: different channel modes can be selected cyclically;

Lamp reset: reset all motors.

3) Set the lamp working mode

Through the page shown in Figure 6-2, you can set the operation mode of the lamp and control the lamp. The lamp supports four operating modes (DMX mode, self-propelled mode, voice control mode and scene mode). For detailed parameter value settings, please refer to the previous section. The specific parameter descriptions are shown in the following table:

Operating mode

DMX Mode	Console mode, receive DMX signal, RDM signal	
Autorun Mode	Automatically run according to the built-in program	
Voice control mode	When the lamp detects a strong sound, the lamp automatically runs a scene according to the built-in program, otherwise the last scene is maintained	
Scene Mode 01	Run in the set scene mode, support up to 10 scenes of custom editing	
	1~10	Output the specified scene
	Automatic	Automatically output scenes in sequence with the set scene time (non-zero), and scenes with time 0 are automatically skipped and ignored
Master-slave choice	Effective in non-DMX mode, select the data output mode, the lamp automatically detects the DMX state and automatically switches the output to prevent data conflicts	
	Host	The lamps and lanterns operate as built-in, if DMX has no signal, output data (synchronization), otherwise do not output
	Slave	Fixtures run as built-in and do not output data (do not synchronize other fixtures)
	Automatic	If the DMX has no signal, the lamp operates as built-in, otherwise, the lamp operates according to the DMX signal

The scene mode is suitable for a single or a small number of lamps, only need to output a fixed scene, or need to run a simple program, you can edit the scene page without connecting to the console.

Panel display settings

The lamps support Chinese and English bilingual, upside down display, etc., enter the corresponding parameter settings as shown in Figure 6-3, the specific menu content is shown in the following table:

Display setting

Language	Set the display language	
	English	English display
	Chinese	Chinese display
screen protector	Set the screen display content or method after no operation within 30 seconds	
	shut down	Keep the last operation page, screen on
	Mode 1	Screen off
	Mode 2	Screen off, Show the address code of the current fixture in the lower left corner
	Mode 3	Display trademark information, address code and operating mode
Screen rotation	Set the display orientation of the screen	
	shut down	Non-inverted display
	Open	Reverse display
	Automatic	Automatically detect the hanging direction of lamps and automatically switch the display direction

DMX instructions	Set the indication method of DMX signal indicator	
	Mode 1	Lights when there is a signal, and turns off when there is no signal
	Mode 2	Off when there is a signal, on when there is no signal
	Mode 3	Flashes when there is a signal, and turns off when there is no signal
Signal indicating brightness	Set the brightness of the signal indicator	
	1~10	10 levels
Screen backlight	Set the brightness of the screen backlight after 10 seconds of no operation, all bright during operation	
	1~10	10 levels
Touch screen switch	Choose whether to disable the touch screen, when the screen touch is accidentally damaged, you can disable the touch function and use the auxiliary input to set the lamp	
Touch correction	When the screen touch is not accurate, you can enter the correction page to correct the screen	

For lamps that support touch operation, if there is bad touch, you can enter the calibration page to recalibrate the touch accuracy of the touch screen. Under normal circumstances, please do not enter this page. If the touch is damaged, choose to disable the touch switch.

Scene mode

Enter the page shown in Figure 6-4, the fixture enters the scene editing mode, under this page, the fixture does not receive DMX console data, and the edited data is immediately reflected on fixture. The content of the page depends on the currently selected channel, and the displayed channel content and sequence are consistent with the lamp channel table. Through this page, 10 scenes can be edited, as shown in the following table:

Scene mode

Scene selection	Selectthecurrentoperationscene	
	1~10	10 scene setting formats
	Settheretentiontimeofthecurrentsceneinautomaticmode, the unitis0.1second	
	0	Thecurrentscenedoes notparticipatein automaticsceneoutput
	1-255	0.1 second to 25.5 seconds
1. Pan	0-255	Setthedataofeach channel, thedisplay contentandsequence correspondtothechannel tableofthefixture
.....	0-255	
.....	0-255	
N. Function	0-255	

If the effective reset data is edited in the reset channel in the scene, the lamp will be reset, but after reset, the corresponding reset channel value will be automatically cleared to prevent multiple consecutive resets.

View this page, you can get the current channel table order of the fixtures. For specific channel data, please refer to the detailed channel description.

Set lamp working parameters

Enter the page shown in Figure 6-5, adjust the on-site parameters of the lamps and lanterns to facilitate the on-site installation of lamps and lanterns, etc.:

advanced settings

Pan reverse	Set Pan rotation direction	
	shut down	Not reverse
	Open	reverse
Tilt reverse	Set Tilt rotation direction	
	shut down	Not reverse
	Open	reverse
Hall Correction	Set whether the fixture detects XY out-of-step and corrects	
	shut down	Does not correct position after step out
	Open	Automatically correct position after out-of-step and record out-of-step fault
Pan Offset	Set the Pan zero position of the fixture	
	4-150	
Tilt Offset	Set the Tilt zero position of the fixture	
	4-48	
Data retention	When the fixture has no DMX signal, the output status of the fixture	
	shut down	No signal, so the motor and the light source return to the position and state when the reset is completed
	Open	No signal, keep the last frame of DMX data output

When the power on mode is selected, the lamp will wait for 30 seconds after the power is turned on to allow the light bulb to fully start. After the internal voltage is stable enough, the reset procedure will be started. If the on-site power capacity is stable, it is recommended to turn on the light bulb mode .

When the luminaire cannot calibrate the position, please first check whether the "optocoupler calibration" is turned off.

When the signal is unplugged, if the position of the lamp is not output as expected, please check the "Data Hold" setting first.

When setting the XY offset, after completing the setting, please control the XY with the maximum stroke to check the setting, X Y will not hit the positioning rod or the housing.

View the current status of the fixture

Enter the page shown in Figure 6-6, you can view the information and real-time status of the lamp to know the status of the lamp. If the lamp needs to be sold, please provide the status information displayed on this page as a basis for judgment, as shown in the following table:

Status information

Motor	Show the information of all motors and signal in unit	
information	Hall	No information, Indicates that the motor has no Hall correction, 0 indicates that the motor leaves the correction position, and 1 indicates that the motor is at the correction position
	status	Display the motor reset completion status
	Pan	Display real-time position value of Pan optocoupler feedback
	Tilt	Display real-time position value of Tilt optocoupler feedback
	Hall	Display the level status of the two signals of the Pan and Tilt optocouplers, binary
Fault / status recording	Display the last 8 fault records during lamp reset and operation. The fault records are not saved after power off, and the current power-on cycle is valid	
	Fault data	The total number of faults detected after power on
	12：:03	The power-on time when the fault occurs, in minutes
	Hall fault	When the corresponding motor is reset, the motor does not detect a valid Hall signal
	Hall short circuit	Corresponding to the motor reset, the detected Hall signal of the motor is always valid
	Optocoupler failure	No valid optocoupler signal detected when the corresponding motor is reset
	Out of step	Corresponding motor out of step during operation
	Bumper	Corresponding to hitting the positioning rod when the motor is reset
	Lamp failure	Bulb unexpectedly extinguished
	Sensor failure	The temperature sensor signal is abnormal,
	Fan failure	The main fan is not working properly
Lamp status	Display the key status data of the current fixture for reference	
	Communication	0 ~ 100%, the communication quality of the internal data link of the lamp
	Error count	The total number of error frames detected after power on, accumulated
	Light source temperature	Display the current light source temperature, "---" means no detection
	Display panel temperature	Display the current temperature of the display panel or the surrounding temperature
	Sensor 1 temperature	Display the current motherboard temperature or the ambient temperature of the motherboard installation location

Version Information	Display the current lamp information and version, an important reference for after-sales maintenance	
	device	The name of the lamp, the same as the RDM equipment information
	model	The model number of the lamp is the same as the model information of RDM
	display board	Display board firmware version and serial number
	board 1	board 1 firmware version and serial number
Light source time	Records the total accumulated time for turning on the light source, in minutes, the user manually clears it as a time reference for regular maintenance of the light source	
Lamp time	Record the total accumulated time for turning on the lamp, in minutes, which cannot be cleared	

CHANNEL LIST

CH	FUNCTION
1	Pan
2	Pan Fine
3	Tilt
4	Tilt Fine
5	Pan/Tilt Speed
6	Strobe
7	Dimmer
8	Cyan
9	Magenta
10	Yellow
11	CTO
12	Color Wheel
13	CRI
14	Fixed Gobo Wheel
15	Rotating Gobo Wheel
16	Gobo Rotation
17	Animation Wheel Insert
18	Animation Wheel
19	Focus
20	Focus Fine
21	Zoom
22	Prism Select
23	Prism 1 Rotation
24	Prism 2 Rotation
25	Frost
26	Framing Blade-1
27	Framing Blade-2
28	Framing Blade-3
29	Framing Blade-4
30	Framing Blade-5
31	Framing Blade-6
32	Framing Blade-7
33	Framing Blade-8
34	Framing Shutter
35	Iris
36	Function

DMX CHANNELS

Channel	Value	Function	Description
CH1	0-255	Pan	0-540 degree
CH2	0-255	Pan fine	0-2 degree
CH3	0-255	Tilt	0-270 degree
CH4	0-255	Tilt fine	0-1 degree
CH5	0-255	Pan/tilt Speed	From fast to slow
CH6	0-3	Strobe	OFF
	4-127		Pulse strobe from slow to fast
	128-191		Gradual strobe from slow to fast
	192-251		Random strobe from slow to fast
	252-255		ON
CH7	0-255	Dimmer	0-100% linear dimmer
CH8	0-255	C	
CH9	0-255	M	
CH10	0-255	Y	
CH11	0-255	CTO	
CH12	0-127	COLOR	Linear color
	128-141		Color 1
	141-150		Color 2
	151-160		Color 3
	161-170		Color 4
	171-180		Color 5
	181-191		Color 6
	192-222		Clockwise flowing water effect from fast to slow
	223-224		Stop
	225-255		Anti Clockwise flowing water effect from fast to slow
CH13	0-255	CRI	Insert
CH14	0-4	Fixed Gobo	White
	5-9		Gobo 1
	10-14		Gobo 2
	15-19		Gobo 3
	20-24		Gobo 4
	25-29		Gobo 5

	30-34		Gobo 6
	35-39		Gobo 7
	40-44		Gobo 8
	45-49		Gobo 9
	50-54		Gobo 10
	55-59		Gobo 11
	60-69		Shaking Gobo 1 from slow to fast
	70-79		Shaking Gobo 2 from slow to fast
	80-89		Shaking Gobo 3 from slow to fast
	90-99		Shaking Gobo 4 from slow to fast
	100-109		Shaking Gobo 5 from slow to fast
	110-119		Shaking Gobo 6 from slow to fast
	120-129		Shaking Gobo 7 from slow to fast
	130-139		Shaking Gobo 8 from slow to fast
	140-149		Shaking Gobo 9 from slow to fast
	150-159		Shaking Gobo 10 from slow to fast
	160-169		Shaking Gobo 11 from slow to fast
	170-212		Clockwise flowing water effect from fast to slow
	213-215		Stop
	216-255		Anti Clockwise flowing water effect from fast to slow
CH15	0-9	Rotating Gobo	White
	10-19		Gobo 1
	20-29		Gobo 2
	30-39		Gobo 3
	40-49		Gobo 4
	50-59		Gobo 5
	60-69		Gobo 6

	70-79		Gobo 7
	80-89		Shaking Gobo 1 from slow to fast
	90-99		Shaking Gobo 2 from slow to fast
	100-109		Shaking Gobo 3 from slow to fast
	110-119		Shaking Gobo 4 from slow to fast
	120-129		Shaking Gobo 5 from slow to fast
	130-139		Shaking Gobo 6 from slow to fast
	140-149		Shaking Gobo 7 from slow to fast
	150-190		Clockwise flowing water effect from fast to slow
	191-192		Stop
	193-255		Anti Clockwise flowing water effect from fast to slow
CH16	0-127	Gobo Rrotation	Rotaion
	128-190		From fast to slow
	191-192		Stop
	193-255		From slow to fast
CH17	0-9	Effect wheel insert	Mover away
	10-255		Linear Insert
CH18	0-2	Effect wheel Rotation	Stop
	3-128		Clockwise flowing water effect from fast to slow
	129-255		Anti Clockwise flowing water effect from fast to slow
CH19	0-255	Focus	From far to near
CH20	0-255	Focus fine	
CH21	0-255	Zoom	From small to big
CH22	0-63	Prism	Move prism away
	64-127		Prism 1
	128-191		Prism 2
	192-255		Prism 1+Prism 2
CH23	0-127	Prism 1 ROTATION	0-400 degree

	128-187		Clockwise flowing water effect from fast to slow
	188-195		Stop
	196-255		Anti Clockwise flowing water effect from fast to slow
CH24	0-127	Prism 2 ROTATION	0-400 degree
	128-187		Clockwise flowing water effect from fast to slow
	188-195		Stop
	196-255		Anti Clockwise flowing water effect from fast to slow
CH25	0-127	Frost	No
	128-255		Frost
CH26	0-255	Blade 1	Linear Insert
CH27	0-255	Blade 2	Linear Insert
CH28	0-255	Blade 3	Linear Insert
CH29	0-255	Blade 4	Linear Insert
CH30	0-255	Blade 5	Linear Insert
CH31	0-255	Blade 6	Linear Insert
CH32	0-255	Blade 7	Linear Insert
CH33	0-255	Blade 8	Linear Insert
CH34	0-255	Blade wheel	Blade degree 0-90
CH35	0-127	Iris	From big to small
	128-255		contraction function
CH36	210-215	Function	Reset XY after 6s
	220-235		Reset effect motor after 6s
	240-255		Reset whole unit after 6s

IMPORTANT
To prevent accidental breakage of the effects, which could collide with each others during transport, before switching the projector OFF, check that all the fixture Channels have been excluded (DMX level = 0 bit.).
Remember to ‘’Switch-Off’’ the led, before to ‘’Switch-Off’’ the fixture.

REMARK

The product has perfect performance and integrity packaging. All users should be strictly comply with the warning and operating instructions as stated. Or we aren't in charge of any result by misusing.

Any damage resulting by misuse is not within the Company's warranty.

Any fault or problem caused by neglecting the manual is also not in the charge of dealers. Errors and omissions for every information given in this manual excepted.

All information is subject to change without prior notice.