280W Beam moving head light

User manual

Catalog

Chapter 1   considerations and installation

1.1 Maintaining

his lamp shall be kept dry to avoid work in wet conditions.

Intermittent use will effectively extend the life of this lamp.

In order to get good ventilation effects and lighting effects, need to clean fans , fan nets and lenses frequently. not use alcohol and other organic solvents to scrub the lamp shell to avoid damage.

1.2 Statement

The performance is good and the packaging is complete when the product is in the factory . All users shall strictly abide by the warning and operation stated above, any damage caused by misuse is not within the warranty of our company, and the failures and problems caused by neglect operation also are not the responsibility of dealers.

This manual is subject to technical change without prior notice.

No further notice if this manual has technical change.

1.3 Products consideration

ÿ ÿ In order to guarantee the life of product , pls do not put this in damp or leaking place, further more ,can't work in the environment over 60 degrees temperature

ÿ ÿ Do not place this product where easy to loose or easy to vibrate.Do not place this product where easy to loose or easy to vibrate.

ÿ ÿ In order to avoid the risk of electric shock, pls consult professional people for the product maintenance.

ÿ ÿ Power source voltage change shouldn't over ±10%, voltage too high,will shorten the life of bulb; too low,will affect the lighting effect of blub.

ÿ ÿ Need 20 minutes for lamp to cooled sufficiently when off the power ,then to reuse.

ÿ ÿ In order to guarantee the normal use of this product please read the instructions carefully.

1.4 Products introduce

Bulb：Philips MSD Platinum 10R (life:2200 hour ,color temperature: 8000K)；

Pan scanning：540°(16bit precision scanning) electronic error correction；

Tilt scanning：270° (16bit precision)   electronic error correction ;

Color plate:1 color plate，14 color sheet per color plate；

Gobo wheel:1 Gobo wheel,17 Gobo

Effect wheel: bi-prism self-rotatione; effect moving,Atomization function；

0—100% machine dimming, support mechanical flash and adjustable speed flash effect, support flash macro function

lens optics system,power-driven focus,beam angle 0-4 degree

Over-heat protection；

Voltage：100-240V，50/60HZ；

Power：400 W

IP protection rate:IP20；

Inductance ballast and AC/DC switch source

1.5 signal line connection（DMX）

Use standard RS-485 cable：With screening, 120 ohm characteristic impedance, 22 and 24 AWG, low capacitive reactance.Don't use the microphone cable or cable with different type characteristics .Terminal connection must use 3 or 5 needle type male/female XLR connectors. Between Terminal plug terminal 2 and 3 must be inserted into a 120 ohm impedance matching resistance (lowest 1/4 W).

Important tips: lines can not touch with each other or contact with metal shell.
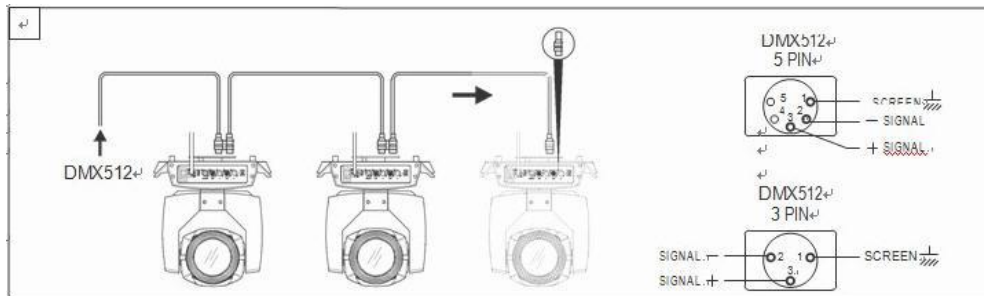
Picture 1   DMX signal line connection sketch map

1.6 Lamp install

Lamps can be placed horizontally, hang on and hanging upside down. Always pay attention to the installation when hang on and hanging upside down.

As shown in picture 2, before positing the lamps ,need to ensure the stability of the installation place, when for the reverse hanging installation , ensure the lamp don't fell from the brace ,

need to use safety rope through the brace and handle of lamp for insisting hanging to make sure safety of prevent fall and slide of lamps.

In the installation and debugging,of the lamp, pedestrians are prohibited from passing through, and regularly check if   the safety ropes are worn or if   the hook screws are loose.

We are not liable for any consequences arising from the fall of the lamp due to the unstable install.
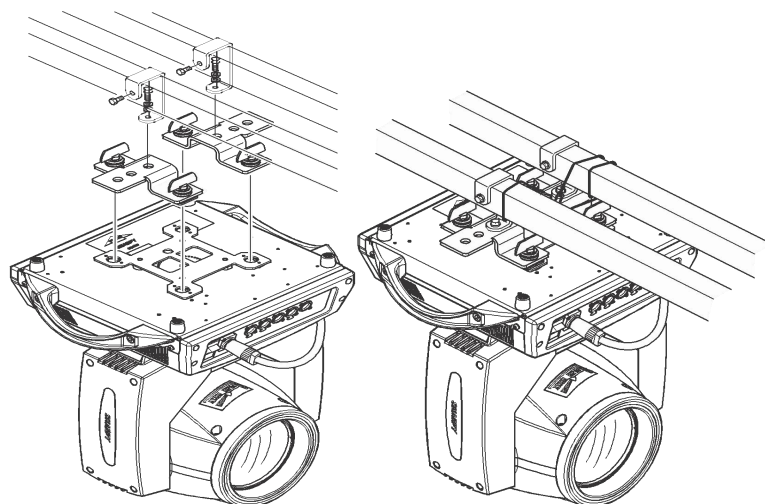
Picture 2   lamp hang upside down sketch map

Chapter 2　Panel operation

2.1 Overview

Lamp Panel sketch map as picture 3 showing, left side is TFT display，support touch operation,right side is key,can operate lamp directly or setting system parameters.

Display and operation is similar to "Android cooperation system 　"，Click on the corresponding item with your fingertips or blunt hard objects.

Notice：Do not use sharp objects to click on the display to avoid damage。

Picture 3　Display panel sketch map

2.2 Operation

2.2.1 Use intuitive touch or key to operate lamp

The left district is the TFT display and the touch district. Click on the panel contents with the finger or the blunt objection to complete the operation of parameter setting or status Viewing.

The right district is as for assist input function, if do not use TFT self-touch function,can operate it by key.

2.2.2 Parameters value input

It will open the window like picture 4 showing when select parameter item need to input some values.
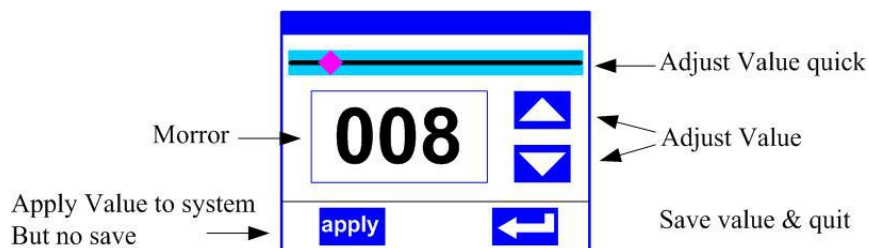
Picture 4 Values setting page

Value setting ：can be fastly setting the require values by pulling slider，also can be click "up"or "down" key for precisely setting or use the keys on right side .

Application value ： when finish setting values by "up"or "down" key ,and press "apply" application key in the bottom left corner, value will be sent to lamp immediately,but not be save.

Save value: At any time,Click "confirm" key in the bottom right corner, current value will be save to the internal storage, and this saved values will be applied to the lamp for the next time starting up.

2.2.3 Setting Boolean parameter

When the setting parameter is a Boolean value (such as ON or OFF), you can directly click the corresponding item to switch value, which will be saved to the internal storage. Press the parameter option on the right, and the corresponding options will become gray. When the hand is released, the corresponding parameters will change and save. If the parameter option is not the parameter you want, you can move your finger to the rest of the screen, and the corresponding parameters will not change.

The confirmation of important Boolean parameters will be set by the confirmation window, as shown in picture 5 below:
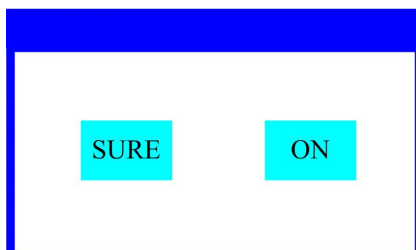
Picture 5   confirm input window

2.2.4   Sub-page(parameter)

Click main menu to enter page of sub-menu,like picture 6 showing,total page is 6 page ,including different kinds of parameters and state like below：

Picture 6   page picture

（**ADDRESS**）： set up DMX address of lamp；

WORKMODE）：Set up work-mode、 master-slave mode of lamp；

DISPLAY： set up parameter of display interface,like language, screen-saver mode and so on.

TEST MODE：mainly use in test lamp, imitate the value of the corresponding DMX channel, and corresponding functions of channel value can refer to channel function chart.

ADVANCED： set up operate parameter of lamp；

STATUS ：Checking current status of lamp

2.3 Function operation and parameters setting

Enter setting interface ,like picture 6 showing

In main interface ,can enter setting interface of corresponding parameter by touch/press 6 buttons

In setting interface of parameter,can press blue button in the left to quickly switch to other setting interface.

2.3.1 Address setting : set up DMX address code

Click selection"address（ADDR）"， can enter setting page of DMX address code, address code value range 1~512,address code can't greater than （ 512-channel number ） otherwise, lamp will be uncontrollable, specific setting operation as below:

Enter DMX Settings interface, as shown in picture 7, click the white area on the right, It will pop-up

parameter Settings window as shown in picture 4 , you can directly pull the red diamond in the progress

bar to set up value of DMX address code , or press the "up" or "down" button to precisely setting DMX

address code you want , then press "Enter" key to save ,and to finish operation of address code setting.

地址设置	
运行模式	
显示设置	
测试模式	**001**
高级设置	
状态信息	
退出	
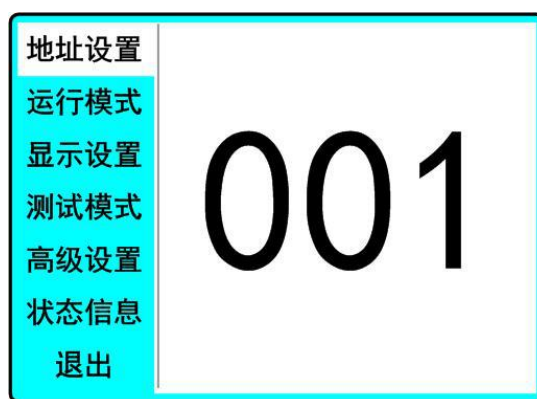
Picture 7　　address code setting page

2.3.2　operation mode:set up working mode of lamp

It is the page for set up operation mode 、 bulb control and channel mode of lamp through picture 8 page , lamp support 3 operation mode(DMX mode、 self-repelled and sound), detailed parameter value setting pls refer to last chapter, specific parameter description as below:

Picture 8 operation mode setting page

ÿ ÿ **DMX mode** ：lamp will receive data from console,and running according to this date.

ÿ ÿ **Self-repelled** ：lamp do not receive data from console, and self -running with its internal fixed program.

ÿ ÿ **Sound**：lamp do not receive data from console, when having stronger sound , lamp will operate 1 scene, ,otherwise will keep the last scene.

ÿ ÿ **Master-salve selection**："Master-slave" selection only working in "self-repelled" or "sound" mode.

Closed--Internal program data of lamp operation will not sent to other lamp by DMX data line (default setting）

Open--> data sending to other lamp in real time, other lamp(slave) will follow this lamp(master) operate synchronously.

ÿ ÿ Bulb switch: can be control bulb's open and close by this item setting.

Notice：Lamp can't not switch more often which will shorten bulb's life , bulb's internal installation has set up time interval is 30 minutes, so multiple open、close will be neglected,and will save the last time operation.

ÿ ÿ Channel mode: lamp support 2 channel modes.

simplify--> 16 channel（default setting）

extend--> 20 channel

2.3.3 display setting:setting panel display setting

Lamp support Chinese-English bilingual,， reversal lamp display,ect. enter parameter setting like picture 9 for setting corresponding parameter.

Picture 9 display setting page

language（Language）：select to display in Chinese or English , immediate effect after selection.

Screen-saver：will enter screen-saver status after 10 seconds of no any setting on lamp

Close ---> no screen-saver, will display main interface all the time.

Mode1--> close the screen，Screen Blackout，saving mode.

Mode2--> display current DMX address code and operation mode.

Mode 3-->Display beam light icon and current operation mode （default setting）

Screen rotation: To select whether screen is display with 180 degree rotation, when lamp hang upside down, this setting will make the content more clear.

Open---> normal display(default setting)

Close ---> 180 degree reversal display.

Touch switch ：select "close", touch function of display screen will be close, can used the encoder knobs   can only.

Open ---> touch function available (default setting)

Close ---> touch function unavailable, can use key or knob to operate only.。（choos**e**）

 Touch screen calibration： **C**lick this item ,Entering the calibration page to re-calibrate the touch accuracy of the touch screen. Normally, please do not enter this page.

2.3.4 Test mode: test lamp

Enter the page like picture 10, lamp will enter test mode,under this mode, lamp do not receive DMX console data, parameters on the page is corresponding to value of DMX channel， Can be change data s of corresponding parameter to control lamp cooperation.

地址设置	X轴电机	000
运行模式	Y轴电机	000
显示设置	调焦	000
测试模式	色盘	000
高级设置	图盘	000
状态信息	菱镜	000
退出	雾镜	000
	频闪	000

图 10　测试模式页面

X   axis motor：Value（0~255）；

Y axis motor：value（0~255）；

F**ocus：** value（0~255）；

Color plate：value（0~255）；

Gobo wheel：value （0~255）；

Prism：value（0~255），prism will self -rotation at the same time after insert prism；

Fog Fihers：values（0~255）；

Strobe：value（0~255）；

2.3.5 Advanced setting: set up working parameter of lamp

Enter the page as shown in picture 11, adjusting actual parameter of the lamps for conveniently actual installation

Picture 11　Advanced setting page

X axis reverse-rotation：The initial position of X axis motor exchange with terminal position of X axis, reverse-direction setting.

Close--> 　X axis motor is rotating in the forward direction(default setting)

Open--> 　X axis motor is rotating in the forward direction

Y axis：The initial position of Y axis motor exchange with terminal position of Y axis, ；

Close--> 　Y axis is rotating in the forward direction.(Default setting)

Open--> 　Y axis is rotating in the forward direction.

Optocoupler calibration：select whether to use optocoupler to automatically calibrate position of X 、Y

Open--> The lamp will automatically correct the position of the X or Y axis when the motor is offset by the missing step. (default Setting)

Close--> The lamp will automatically correct the position of the X or Y axis when the motor is offset by the missing step. (choose Settings)

X axis offset: setting the offset Angle of the initial position of the X axis motor, and the default value: 010.

Y axis offset：setting the offset Angle of the initial position of the Y axis motor, and the default value: 010.

Light mode：When setting up the power, the switch state of the bulb;

Set-up power light-up--> bulb will light when switch on.(default)

Hand-operated--> Need to hand-operated to light up the bulb after opening

Light up when reset --> blub Will light up after finish reset.

Data -hold：Setting the lamp's position when　turn off DMX signal(unplug console)

close--> lamp will return to the middle position when turn off the DMX signal (unplug console)（Default setting）

Open--> Lamp will keep the current position state with turn off the DMX signal (unplug console)

Factory setting: Parameter of Initialize lamp

2.3.6 State information:checking lamp's current status.

Enter page like picture 12 ：

Picture 12　　status information page

Operation mode: Display current working mode of lamp.

Address code： Display current DMX address of lamp.

Software version： display current software version of lamp.

Set-up time： display total set-up time for this time.

Operation time： display total operated time of lamp.

DMX清零 — When<advanced setting -data hold>set to <open>， DMX zero clearing, can made the lamp return to mmidle position.

灯具复位 — Make all motors reset of lamp.

Chapter 3   Channel Description

3.1 Channel chart

Channel chart of this lamp like chart 1 as below：

Channel	Name	Value	Description
CH1	**X axis**	0-255	0-540 degree
CH2	**Y axis**	0-255	0-270 degree
CH3	**X axis fine**	0-255	0-2 degree
CH4	**Y axis fine**	0-255	0-1 degree
CH5	**XY speed**	0-255	From fast to slow
CH6	**Atomization**	0-127	no
		128-255	insert atomization
CH7	**Strobe**	0-3	Close optical shutter
		4-103	From slow to fast pulse flash
		104-107	Open optical shutter
		108-207	From slow to fast gradual flash
		208-212	Open optical shutter
		213-251	From slow to fast random flash
		252-255	Open optical shutter
CH8	**dimmer**	0-255	0-100% dimming
CH9	**color**	0-4	White light
		5-9	White light + color 1
		10-14	Color 1
		15-19	Color 1 + color 2
		20-24	Color 2
		25-29	Color 2 + color 3

		30-34	Color 3
		35-39	Color 3 + color 4
		40-44	Color 4
		45-49	Color 4 + color 5
		50-54	Color 5
		55-59	Color 5 + color 6
		60-64	Color 6
		65-69	Color 6 + color 7
		70-74	Color 7
		75-79	Color 7 + color 8
		80-84	Color 8
		85-89	Color 8 + color 9
		90-94	Color 9
		95-99	Color 9 + Color 10
		100-104	Color 10
		105-109	Color 10 + Color 11
		110-114	Color 11
		115-119	Color 11 + Color12
		120-124	Color 12
		125-129	Color 12 + Color 13
		130-134	Color 13
		135-139	Color 13 + Color 14
		140-199	from fast to slow forward water-flow
		200-255	from slow to fast reversal water-flow
CH10	Gobo	0-4	White light
		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	Gobo7
		40-44	Gobo 8
		45-49	Gobo 9
		50-54	Gobo10
		55-59	Gobo 11
		60-64	Gobo12
		65-69	Gobo 13
		70-74	Gobo14
		75-79	Gobo 15

		80-125	from fast to slow forward water-flow
		126-130	stop
		131-180	from slow to fast reversal water-flow
		181-185	from slow to fast jitter Gobo 2
		186-190	from slow to fast jitter Gobo 3
		191-195	from slow to fast jitter Gobo 4
		196-200	from slow to fast jitter Gobo 5
		201-205	from slow to fast jitter Gobo 6
		206-210	from slow to fast jitter Gobo 7
		211-215	from slow to fast jitter Gobo 8
		216-220	from slow to fast jitter Gobo 9
		221-225	from slow to fast jitter Gobo 10
		226-230	from slow to fast jitter Gobo 11
		231-235	from slow to fast jitter Gobo 12
		236-240	from slow to fast jitter Gobo 13
		241-245	from slow to fast jitter Gobo 14
		246-250	from slow to fast jitter Gobo 15
		251-255	from slow to fast jitter Gobo 16
CH11	**Prism 1**	0-127	remove prism
		128-255	insert prim 1
CH12	**Prism rotation**	0-127	0-400 degree
		128-187	from fast to slow forward water-flow
		188-195	stop
		196-255	from slow to fast reverse water-flow
CH13	**Prism 2**	0-127	remove prism

		128-255	insert prism 2
CH14	**Prism 2 rotation**	0-127	0-400 degree
		128-187	from fast to slow forward water-flow
		188-195	stop
		196-255	from slow to fast reverse water-flow
CH15	**focus**	0-255	from far to near
CH16	**reset**	100-105	close bulb if over 3 sec.
		200-205	open bulb if over 3 sec.
		255	reset if over 3 sec.
CH17	**reset**	100-105	3 seconds lamp off
		255	3 seconds lamp on
			3 seconds reset

Chart 1   channel chart

Chapter 4   Common malfunction &use attention

4.1 Common malfunction treatment

The lamp have professional components such as microcomputer circuit board and high voltage power supply. For your safety and product life, non-professionals should not remove lamps and accessories without authorization

.

4.1.1 bulb does not light

Possible reason：Bulb not totally cooling ,or bulb has reached life, treatment as following:

ø ø Due to improper operation, the bulb has not been completely cooling. Leave the lamp be cooled for more than 10 minutes to made the bulb can fully recover to normal state, and then restart the power supply.

ø ø Checking whether the bulb has reached the service life and should replace the new bulb;

ø ø Check whether the bulb and the lamp lighter are leaking, shedding or lose contact;

ø ø Replace the new lamplighter.

4.1.2   Beam look dim

Possible reason: use time of lamp is long or light path is not clean ,treatment as following:

ø ø Check whether the bulb has reached the service life and should replace the new bulb;

ø ø Checking whether optical part or bulb is clean and checking whether bulbs and other optical devices have accumulated dust, and the lamps and components should be cleaned regularly.

4.1.3 Gobo projection is fuzzy

ÿ ÿ Checking whether the electron focus channel value is suitable for the current range of the projection.

4.1.4 The lamps work intermittently

Possible reasons: the internal circuit enters the protection state and treatment as following:

Checking whether the fan is working normally or dirty which made the internal temperature of the lamp rise.

Checking whether the internal temperature control switch is closed;

Checking weather the bulb has reached the service life and should replace the new bulb.

4.1.5 Not accept console control after Lamp normally reset

Possible reason: the signal line malfunction or the lamp's parameter setting is not normal, treatment as following:

Checking the connection of the address code and the DMX signal line (whether the cord cable is in good condition, and whether connection of Ka Nong head is loose);

Add signal amplifier, add120 ohm terminal resistor;

Checking the parameters of the lamp, make sure the lamps are in "DMX mode", and make sure that the "CH20 operation mode" channel of DMX channel is located in the "DMX mode" data segment "0 ~ 49".

4.1.6 Lamp can't start

Possible reason: bad power circuit, treatment as following:

Checking whether the insurance of power input socket is fusing ,replace insurance.

Line Contact bad as vibration after lamp is in the long distance transportation.

Check the input power, computer board, etc service.

4.2   Precautions for use

Checking whether the local power supply is reach the requirements of rated voltage, leakage protector、Load requirements of over-current protector for this products.

Do not use power lines with damaged insulation ,and power lines can not be overlapped on the other wire;

Lamps USES is strong wind cooling,so accumulate dirt easily, must clean it once a month, especially the cooling tuyere, otherwise,will be in a dust jam, which lead to bad heat dissipation,and the lamps will be abnormal.

When install lamps, fixed screw must be tightened, and adds the safety rope, and check regularly ;

When lamp is installing and positioning , any point on the surface of lamps keep the minimum distance of 10 meters with anything easy to burn the explosive, and

irradiation distance of 2.5 meters, please do not make the lamps directly install on the surface of something combustible;

Using switching valve, closed time should be not more than 5 minutes, if you need to close for a longer time ,pls use console(bulb control channel）to close bulb.

In order to ensure many sets of lamps follow scene effect better, lamps should not in the unfinished scene all the time,while to start the next scene action,and it is better not more than 3 minutes for this status to make sure many sets lamps can operate synchronously.

In the process of use, such as lamps has abnormal condition, should stop using lamps in time to prevent other malfunctions.