

400 LED 3IN1 MOVE HEAD LIGHT

USER MANUAL



Please read over this manual before operation the light

1. Product Instruction

Input voltage: AC110V-240V/50-60HZ

Light source specification: led 400W

Light source life: 50000 hours

Lumen illuminance: 4 meters 80,000 lm

Rated power: 500W CRI: 75

Channel mode: 22 channels & 26 channels

Horizontal scan: 540 degrees (16bit precision scan) electronic error correction

Vertical scanning: 270 degrees (16bit precision scanning) electronic error correction

Dimming system: 0-100% linear adjustment

Focusing system: linear adjustment from 4 meters to 50 meters

Atomization system: 1 independent atomization effect, soft and natural light spot

Magnification angle: 4-35 degrees

High-speed strobe: 0-30 times/sec. Adjustable speed strobe effect. Strobe macro function

Color: 12 colors + white light. Color half-color function

Color mixing system: linear CMY+CTO color mixing system. Fixed patterns: 12 fixed patterns + white light

Rotating pattern: 7 glass patterns, each glass pattern can be independently forward and reverse

Prism system: standard single 6-row prism and 8+8 prism, each prism can be independently

forward and reverse Macro function: console reset function, self-propelled mode, master-slave mode

Display mode: LCD display, key + touch dual operation mode Control signal: International standard DMX512. With RDM function, online software upgrade is

available, dial address code Cooling method: Adopt axial fan to enhance cooling Safety device: with electronic temperature control overheating protection, electronic temperature control automatic power-off protection when the overheating system fails

Appearance material: high temperature resistant plastic

Working environment: -20 degrees - 40 degrees

Protection level: IP20

Product net weight: 22.5KG Product size: 38*27*65CM (L*W*H)

2. RDM Note

- RDM is an extended version of DMX512-A protocol. It is a remote device management protocol. Traditional DMX512 protocol communication is one-way communication. The protocol is based on RS-485 bus. RS-485 is a time-sharing multi-point, half-duplex protocol. Only one port is allowed to output at the same time. So, when using RDM, we should pay attention to it.

Figure 3 Panel diagram

3. Operation

1. Operate fixture with touch or encoder/button

- The left area is TFT Displayer and touch(product which support touch), click item or value with finger will to complete operation of set light setting(parameters) or view light state.
- The area on the right hand side is rotary encoder with button or key, As auxiliary input interface, if fixture disable touch function, the encoder/key can be choose to set or view the item, and then press the encoder button/key to confirm the selection, rotary encoder or push key again set the parameter value, finally, Press encoder button/key one again to save value or setting.

2. Parameter value setting

When the selected item is value need to been modified, the dialog shown in Figure 4 will popup.

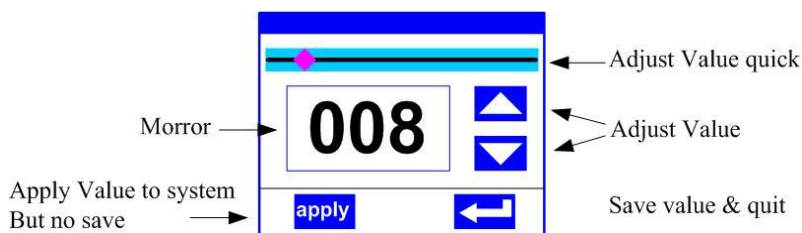


Figure 4 Dialog of value setting

- **Modify value:** Can quickly modify value via pull the slider to the desired position, or click the button of 'up' or 'down' with finger on the right side to set the exact desired value, another way is roll encoder on the right hand side of panel.
- **Apply value:** When Value had been modified, Then press the bottom of 'apply' in the left corner to apply to the light, but hav't saved;
- **Save Value:** Any time, click on the lower right corner of the "OK" button, the setting will be saved into internal memory.

3. Boolean parameter setting

- when the selected parameters is a Boolean value (such as ON or OFF), can directly modify setting by click corresponding item, the setting will be saved right now.
- When the parameter is a key item, click corresponding item, a dialog shown in Figure 5 will be popup ask for the confirm. Click 'sure' to confirm.

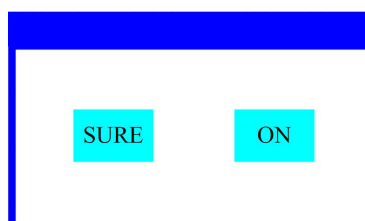
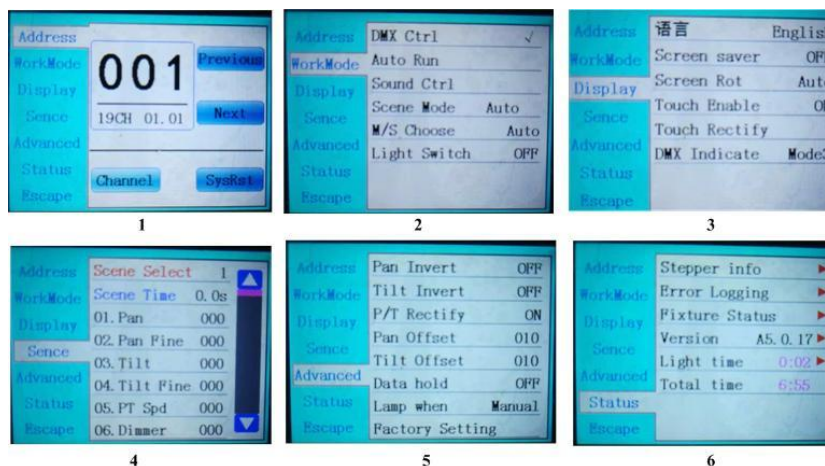


Figure 5 Dialog of confirm

4. Sub Menu (Parameter)



5. Fixture operating mode setting

operating mode

DMX Ctrl	DMX mode, receive DMX signal, RDM signal	
Auto Run	Fixture run automatically according to built-in programs	
Sound Ctrl	When the fixture detects a strong sound, the fixture automatically runs a scene according to the built-in program, otherwise it will stay the last scene	
Scene Mode 01	runs in a set scebe, which supports most of the custom editing of 10 scenes.	
	1~10	outputs the specified scene
	Auto	Automatically loops the output scene in the set scene time (non-zero) order, and the scene with time 0 automatically ignore
M/S Choose	Master and slave selection, non-DMX mode takes effect, select the mode of data output, fixture detect DMX cable state automatic switch output, prevent data conflicts	
	Mast	fixture runs built-in program. If DMX has no signal, it outputs data er (synchronization), otherwise it does not output data.
	Slave	ixture runs built-in program and do not output data
	Auto	If DMX has no signal, the fixture will runs built-in program. Otherwise, the fixture will run in DMX Mode(follow DMX).
Lamp switch	(Lamp light source) pop-up confirmation dialog box, select "SURE" to confirm the current operation, turn on or off the lamp, switch time interval limited to 30 seconds	
	Off	the current lamp output is off
	On	The current lamp output is turned on

6. Set display

DISPLAY SETTING

Language	display language settings	
	English	English display
	Chinese	Chinese display
Screen saver	Set screen 30 seconds without operation, the screen's display content or method.	

	OFF	Keep the last operation page
	Mode1	Black
	Mode2	Black screen, showing the address code of the current fixture in the lower left corner.
	Mode3	Display trademark information, address code and operation mode.
Screen Rot	Set the display direction of the screen.	
	OFF	No reverse display
	ON	Reverse display
	AUTO	Automatically detect the direction of lamps and automatically switch direction.
DMX Indicate	Set the indication mode of DMX signal indicator.	
	Mode1	When signal is bright, no signal is off.
	Mode2	When signal is off, no signal is bright.
	Mode3	When signal is flash, no signal is off.
Signal Bright	Set the brightness of the signal indicator	
	1~10	10
Screen Lihgt	Set the screen backlight for 10 seconds without operation	
	1~10	10
Touch switch	Choose whether to disable the touch function. When the screen touch is accidentally damaged, you can disable the touch function and use auxiliary input to set the fixture.	
Touch	When the screen touch function work anomaly, you can enter the corrected page correction screen touch	

7. Scene

SCENE MODE

Scene Select	Select the current operation scenario.	
	1~10	The 10 scenes sets the format
Scene Time	Sets the retention time of the current scene when it is automatic, unit in 0.1 seconds.	
	0	The current scene is not output in automatic scene output.
	1-255	0..1s-25.5s
1. PAN	0-255	Set up the data of each channel, and the contents and order of the display are one-to-one correspondence with the channel list of fixture.
.....	0-255	
.....	0-255	
N. Function	0-255	

8. Set light run parameter

Enter the page shown in Figure 6-5, adjust the field parameters of fixture, facilitate the installation of fixture, etc.

ADVANCED SETTING

Pan Invert	Set the rotation direction of PAN	
	OFF	
	ON	
Tilt Invert	Set the rotation direction of TILT	
	OFF	

	ON	
P/T Rectify	Setting up fixture to detect XY lost step and correct	
	OFF	Uncorrected position after out of step
	ON	After losing step, the position is automatically corrected and the out of step fault is recorded.
Pan Offset	Setting the zero point of the PAN of the fixture	
	4-150	
Tilt Offset	Setting the zero point of the TILT of the fixture	
	4-48	
Data hold	When the fixture is not equipped with DMX signal, the output state of the fixture	
	OFF	No signal, so the motor and light source return to the position and state when reset is completed.
	ON	No signal, keep the last frame DMX data output.
Lamp mode	Set the way to first open the lamp after power up	
	Power on	Turn on the lamp at power up and reset the lamp after 30 seconds.
	After reset	Reset the fixture after 3 seconds when power-on, and turn on the lamp after reset.
	Manual	After reset, manually turn on the lamp through the menu or console.
Factory Setting	Pop up the confirmation box, select "SURE", and return the lamp parameters to the factory settings.	

When choosing power-on mode, the lamp will wait for 30 seconds after power-on, let the lamp fully start, internal voltage is stable enough, then start the reset program, if the field capacity is stable, recommend power-on mode.

When the fixture can not calibrate the position, please check whether the "P/T Rectify" is turned off.

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

When setting the XY offset, after setting up, please control XY with the maximum stroke first to check that XY will not bump into the positioning rod or shell.

9. Status and information

Stepper info	Display information status of all motors and signals in fixture.	
	Hall	No display, indicating that the motor has no Hall, 0 indicating that the motor leaves the correction position point, 1 indicating that the motor is in the correction position point
	Status	Display motor reset status
	PAN	Display real-time position value of PAN optocoupler feedback
	TILT	Display real-time position value of TILT optocoupler feedback
	PAN OP	Displays the PAN TILT optocoupler two signal level state, binary
Error Logging	Show the latest 8 error records when the fixture is reset and running. The error records are not saved after power failure. The current power cycle is valid.	
	Error Logging	Total number of failures detected after power on
	12: :03	The time of power failure when the fault occurs is in minutes.

	Hall error	The effective hall signal is not detected when the motor is reset
	Hall short	When the motor is reset, the hall signal of the motor is always effective
	Opti error	No effective optocoupler signal is detected when the motor is reset.
	Lose stop	The corresponding motor is out of step during its operation.
	Hit	Striking the positioning rod when the motor is reset
	Lamp error	Lamp explosion accident
	NTC error	The temperature sensor signal is abnormal
	Fan error	The main fan is not working properly.
Fixture status	Displays the critical state data of the current fixture for reference.	
	Communication prec	0~100%, Communication quality of internal data link of lamps and lanterns
	Error cnt	The number of erroneous frames was detected after power on, and the total number of erroneous frames was detected.
	Light Temperature	Show the temperature of the current light source, "---" means no detection.
	Panel Temperatrue	Displays the temperature of the current display panel or the ambient temperature.
	Sensor1 Temperatrue	Display the ambient temperature of the motherboard temperature or the motherboard installation position.
Version	Display the information and version of the current fixtrue, important reference for after sales maintenance.	
	Device	The name of the fixture is the same as the equipment information of RDM.
	Model	The type of fixture is the same as the model information of RDM.
	Panel	Firmware version and serial number of display panel
	Main Board	Firmware version and serial number of mother board 1
Light time	Record the total cumulative time of light source opening, unit minute, user manual cleaning, as a reference for regular maintenance of light source time	
Total time	The total accumulated time for recording the opening of fixture is not allowed to be removed.	

1. Channel table

CHANN EL1	CHAN NEL2	NAME	VALUE	DEFIE
CH1	CH1	PAN	0-255	0-540
CH2	CH2	PAN Fine	0-255	
CH3	CH3	TILT	0-255	0-270
CH4	CH4	TILT Fine	0-255	
CH5		XY speed	0-255	fast to slow
CH6	CH5	Dimmer	0-255	0-100% Dimmer

CH7	CH6	Strobe	0-3	Drak
			4-103	Slow strobe to fast strobe
			104-107	White
			108-155	Slow strobe to open strobe
			156-207	Slow strobe to close open strobe
			208-212	White
			213-251	Free strobe
			252-255	White
CH8	CH7	Color	0-9	White
			10-19	Red
			20-29	Yellow
			30-39	Blue
			40-49	Green
			50-59	Amber
			60-69	Light blue
			70-79	Pink
			80-89	UV
			90-99	Red/White
			100-109	Red/Yellow
			110-119	Blue/Yellow
			120-129	Green/Blue
			130-139	Amber/Green
			140-149	Light Blue/Amber
			150-159	Pink/Light
			160-169	Blue UV/Pink
			170-179	CTO/UV
			180-215	CW Rotate
			216-220	STOP
			221-255	CCW Rotate
CH9	CH8	C	0-255	Cyan
CH10	CH9	M	0-255	Magenta
CH11	CH10	Y	0-255	Yellow
CH12	CH11	CTO	0-255	Color Temperature
CH13	CH12	Gobo wheel 1	0-4	Med Circle
			5-9	Small Circle
			10-14	5 Petals
			15-19	Circles
			20-24	8 X
			25-29	Squiggle Star
			30-34	Dots Lots
			35-39	4 Dots
			40-44	5 Dots
			45-49	6 Petals
			50-54	Circle Dots

			55-59	Yin Yang
			120-127	OPEN
			128-190	Rotate CW
			191-192	Stop
			193-255	Rotate CCW
CH14	CH13	Gobo wheel 2	0-9	White
			10-19	Stars
			20-29	Vortex
			30-39	Wheel
			40-49	Nature
			50-59	Flower Lace
			60-69	Dots
			70-79	Dots Lots
			150-200	Rotate CW
			201-205	Stop
			206-255	Rotate CCW
CH15	CH14	Gobo rot	0-127	0-400 degrees
			128-190	Rotate forward (fast to slow)
			191-192	Stop
			193-255	Rotate reverse (slow to fast)
CH16		Gobo fine	0-255	
CH17	CH15	Prism1	0-127	Close prism
			128-255	Five-Facet(Center)Prism
CH18	CH16	Prism1 Rot	0-127	Prism Indexing 1
			128-190	Clockwise Rotation
			191-192	Stop
			193-255	Counterclockwise Rotation
CH19	CH17	Prism2	0-63	Close prism
			64-127	Three-Facet Linear Prism
CH20	CH18	Prism2 Rot	0-127	0-400 degrees
			128-190	Clockwise Rotation
			191-192	Stop
			193-255	Counterclockwise Rotation
CH21	CH19	Frost	0-127	Off
			128-255	On
CH22		Autofocus		None
CH23	CH20	Zoom	0-255	small to large
CH24	CH21	Focus	0-255	far to near
CH25		Focus fine		
CH26	CH22	Function	210-215	Reset XY(over 6 seconds)
			220-235	Reset effect moto(over 6 seconds)
			240-255	Reset all(over 6 seconds)