LAMP SOURCE

Lamp type: Beam 400 / Beam 300
Reflector: Lamp and reflector together in one unit
Color temp : 8000K
Beam angle: 0 - 2°
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

1 Gobo wheel with 13 metal gobos + 4 glass gobos

EFFECT EQUIPMENT

2 rotating prisms with moving effect,
1 frost effect, 1 rainbow effect

MOVING PARAMETER

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

Menu instructions:

Since the product model is numerous, the function is different, and often upgrades, causes the menu content to change frequently, this manual instruction is hard to update in time, therefore only lists part of the important menu items here.

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

Motor power off: Select "Y" to turn off the motors power, and select "N" to turn on the motors power, it will reset automatically. You can plug the motor and reset it without turn off main power supply via this menu.

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

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Run: Use the menu to select operational mode

Following is the instructions of the menu options(Note: the "test" mode option may be different according to product model):

- DMX: Controlled by DMX512 signal。
- Test(factory): Controlled by built-in program which is for factory test.
- 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

CHN1: Set the DMX value of CHN 1.

CHN2: Set the DMX value of CHN 2.

*	18		Color time
		0	Max speed
		1-255	Time from 0.1 sec to 25.5 sec
*	19		Beam time
		0	Max speed
		1-255	Time from 0.1 sec to 25.5 sec
*	20		Gobo time
		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.

		128-191	Forward prism rotation from fast to slow
		192-255	Backward prism rotation from slow to fast
8	8		**Frost and Rainbow**
		0-19	invalid
		20-137	Frost
		138-255	Rainbow
9	9		**Focus**
		0-255	Continuous adjustment from far to near
10	10		**Pan**
		0-255	Pan movement
11	11		**Pan Fine**
		0-255	Fine control of pan movement
12	12		**Tilt**
		0-255	Tilt movement
13	13		**Tilt Fine**
		0-255	Fine control of tilt movement
14	14		**Pan/Tilt speed**
		0	Max speed
			Speed mode
		1-255	Speed from max. to min.
			Time mode
		1-255	Time from 0.1 sec to 25.5 sec
15	15		**Reset**
		0-25	Empty
			To activate following functions, stop in DMX value for at least 4s
		26-76	Effects reset
		77-127	Pan/Tilt reset
		128-255	Total reset
16	16		**Lamp**
			To activate following functions, stop in DMX value for at least 4s
		0-25	Empty
		26-100	Lamp off
		101-255	Lamp on
*	17		**Pan/Tilt time**
		0	Max speed
		1-255	Time from 0.1 sec to 25.5 sec

DMX Protocol

Mode channel		DMX value	Function
16	20		
1	1		**Color wheel**
		0-127	Half step positiong
		128-255	Rainbow effect from slow to fast
2	2		**Shutter/Strobe**
		0-3	Shutter closed
		4-103	Strobe effect from slow to fast
		104-107	Shutter open
		108-207	Open pulse in sequences from slow to fast
		208-212	Shutter open
		213-251	Random strobe effect from slow to fast
		252-255	Shutter open
3	3		**Dimmer intensity**
		0-255	Dimmer intensity from 0% to 100%
4	4		**Static gobo wheel**
		0-3	Open
		4-54	Gobos with no shake
		55-190	Shaking gobos from slow to fast
		191-201	Open
		202-227	Forward gobo wheel rotation from fast to slow
		228-229	Stop
		230-255	backward gobo wheel rotation from slow to fast
5	5		**Prisms**
		0-19	Prism excluded
		20-75	Prism1 inserted
		76-127	Prism2 inserted
		128-255	Prism1 and Prism2 inserted
6	6		**Prism1 rotation and indexing**
		0-127	Prism1 indexing
		128-190	Backward prism rotation from fast to slow
		191-192	No rotation
		193-255	Forward prism rotation from slow to fast
7	7		**Prism2 rotation and indexing**
		0-127	Prism2 indexing

CHN3: Set the DMX value of CHN 3.

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Running Cnfg: configuration of Running.

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

Maunual Pan/Tilt: Select "Y" to Manual Pan/Tilt.

Pan Reverse cnfg:

Reverse: The item allows to invert Tilt movement

Tilt Reverse cnfg:

Reverse: The item allows to invert Tilt movement

Pan Cnfg:

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)

Tilt Cnfg:

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)

Color linear: You can set the color wheel rotate by "half color" or "linear".

Dim Curves: Select the dim curve (For LED light only).

DMX Lost:

Advanced:

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

DMX Lost: Use the menu to select run mode when external DMX cannot be connected.

Start Up: 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.
- Test (factory/gobo/color) : Controlled by built-in program. Refer to the menu "Run" for more information.
- Program: Program: Controlled by User's program。User the menu [Running Cnfg]- [Mixed Scene] and [Scene Edit] to set up or edit the scenes.

Running: Whenever the DMX is lost:

- Keep: Keep the last state when reset finished..
- Shutter Off:.shutter off.

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.

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

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)

Storage: This message will appear when Flash goes bad.

Sensor Err: The states of all of the sensors

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

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Lamp: 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.

Bus: 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 Driver: 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.

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

Fan Stalling: Fan stop.

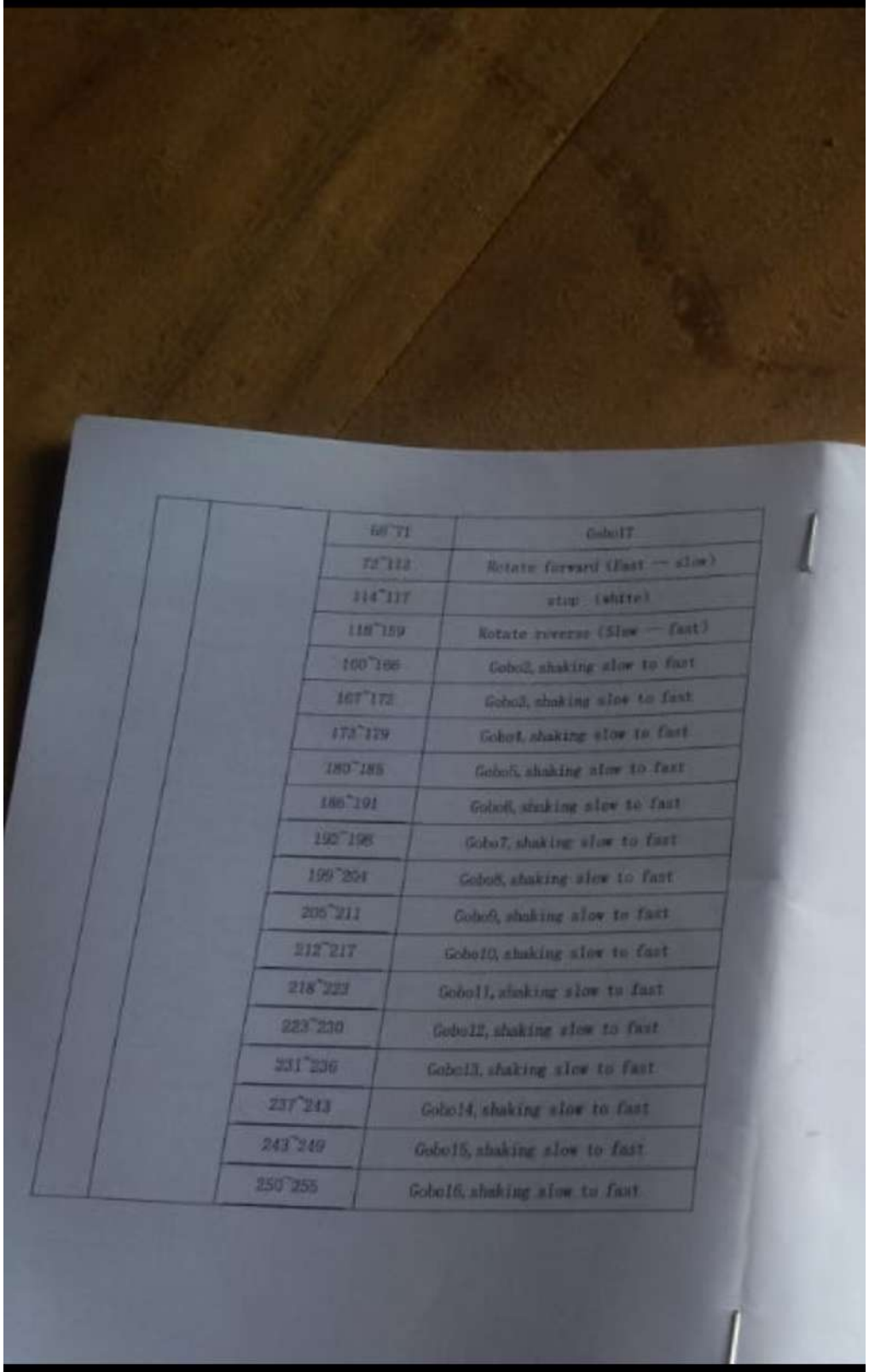
Lamp Service time: Lamp service time

ThisTime (m): The menu shows the total number of the operation hours with the lamp on since the last operation of clear.

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.

Test mode: for factory test, users do not need to pay attention to it

Product Code: the internal code of the product, which is only for product production and maintenance reference.



68~71	Gobo17
72~113	Rotate forward (fast — slow)
114~117	stop (white)
118~159	Rotate reverse (Slow — fast)
160~166	Gobo2, shaking slow to fast
167~172	Gobo3, shaking slow to fast
173~179	Gobo4, shaking slow to fast
180~185	Gobo5, shaking slow to fast
186~191	Gobo6, shaking slow to fast
192~198	Gobo7, shaking slow to fast
199~204	Gobo8, shaking slow to fast
205~211	Gobo9, shaking slow to fast
212~217	Gobo10, shaking slow to fast
218~223	Gobo11, shaking slow to fast
223~230	Gobo12, shaking slow to fast
231~236	Gobo13, shaking slow to fast
237~243	Gobo14, shaking slow to fast
243~249	Gobo15, shaking slow to fast
250~255	Gobo16, shaking slow to fast

		69-72	COLOR8
		73-76	COLOR8 + COLOR9
		77-81	COLOR9
		82-85	COLOR9 + COLOR10
		86-89	COLOR10
		90-93	COLOR10 + COLOR11
		94-98	COLOR11
		99-102	COLOR11 + COLOR12
		103-106	COLOR12
		107-110	COLOR12 + COLOR13
		111-115	COLOR13
		116-119	COLOR13 + COLOR14
		120-123	COLOR14
		124-127	COLOR14 + WHITE
		128-255	Rotate forward (Fast — slow)

3.2.2 GOBO

CH NO.	NAME	VALUE	FUNCTION
CH4	GOBO	0~3	WITE
		4~7	Gobo1
		8~11	Gobo2
		12~15	Gobo3
		16~19	Gobo4
		20~23	Gobo5
		24~27	Gobo6
		28~31	Gobo7
		32~35	Gobo8
		36~39	Gobo9
		40~43	Gobo10
		44~47	Gobo11
		48~51	Gobo12
		52~55	Gobo13
		56~59	Gobo14
		60~63	Gobo15
		64~67	Gobo16

3.2 Channel Detail

3.2.1 COLOR

CH NO.	NAME	VALUE	FUNCTION
CH1	COLOR	0-4	WHITE
		5-8	WHITE+COLOR1
		9-12	COLOR1
		13-17	COLOR1 + COLOR2
		18-21	COLOR2
		22-25	COLOR2 + COLOR3
		26-29	COLOR3
		30-34	COLOR3 + COLOR4
		35-38	COLOR4
		39-42	COLOR4 + COLOR5
		43-46	COLOR5
		47-51	COLOR5 + COLOR6
		52-55	COLOR6
		56-59	COLOR6 + COLOR7
		60-63	COLOR7
		64-68	COLOR7 + COLOR8