




LED Nest Moving Head

User Manual

LM280

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Attention

1. Don't direct sight when opening the lamp;
2. According to the operating instructions, please don't disassemble the units without authorization , pls contact with the professionals if it break down .
3. Must be installed by professional and technical personnel.
4. Please place the products far away from the class of strobe lights .
5. the unit must keep dry, don't use in the rain , damp or dusty environments , need to use the waterproof equipment for protection when used in outdoors.
6. Don't touch the product or pull the power cord when your hand is wet .
7. Please don't switch frequently and avoid long time opening for fear of affecting the service life .
8. Fixed installing to prevent the strong vibration or impact of units
9. To prevent the foreign body into the units to avoid the breakdown
10. The distance of units and light object should be kept in more than 50 cm.
11. Pls don't plug or turn on the units before the installation ;
12. To check the plug and power cord head was connected well before power on ,
13. To use the original packaging and pay attention to **Anti-vibration before** transporting again,
14.  This symbol pointed out that the classified collection of relative electron and electronic equipment to collect.
15. Pls don't select the "restore factory settings" option during use other wise will lose all data and need to be modulated again before normal use .

Technical parameters

Model Parameters	LM280
Power	
Power supply	100-240V/50-60HZ
Power consumption	300W
Light Source	
Light Sources	RGBW4-in-1 LED 15W *19
Average Lifespan	10000 hours
Color/Pattern	
Color	R O Y G C B P W
Gobo	57 static gobo+49 Dynamic gobo
Lens	high precision optical lens, with zoom
Focus	linear adjustment
Dimmer	0-100% linear dimmer
Scanning Angle	
Horizontal	540°
vertical	205°
Operation	
Control Mode	Auto / Sound/ DMX / Master-slave
DMX CH	18 CH
Security & Package	
Work environment	Indoor:0°C-40°C
Functions	Over-current Protection Circuit; excellent ventilation and cooling effect by vertical axis fan; Fixture and lamp usage time
Package Size	405*320*460MM
N.W./G.W	7.0/8.5KGS

Cleaning

The lens need to clean frequently to keep the better lighting effects , the frequency of cleaning depends on the environment , damp , smog or dirty environment is easy for dirt retention.

* with a soft linen and specialized glass abrasive cleaner ;

* wiping the units carefully ;

* wiping the outside of lens every 30 days at least .

Declare

The product is with good performance and complete package when it is delivered. The end-user of this product should follow all the above instructions and warnings. Any damage caused by misuse, malfunction and problem caused by ignoring the instructions are not included in the repair guarantees of the manufacturer or dealers.

Inspection

In order to use the product securely and properly, please read the manual before using and follow the instructions strictly to prevent personal safety trouble and product damage caused by misuse.

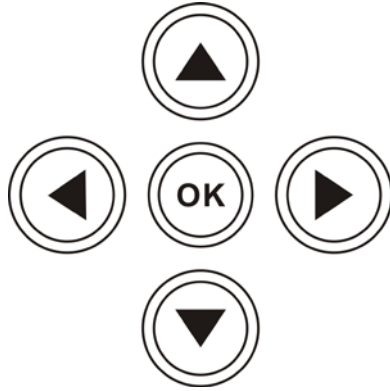
Take care of the product, check the possibility of the product damage caused by transportation and check all the listed items are present upon receipt of the product:

LM280	1	Use Manual	1
Power cable	1	Hook:	1 Set

Warning:

Forbid to turn on the machine when the lamp without masks or the housing was broken .

Buttons Operation Instruction



“◀”、“▶” : Similar functions

To return to the previous interface.

“▲”、“▼”Button:

To select、edit.

“OK”Button:

Operating function、 go to edit、 exit editing mode.

How to modify DMX Address:

- 1.Press "◀" button one or several times to go back to previous or main page.
- 2.Press "▲"/"▼" button to highlight "Setting" button.
- 3.Press "OK" button to modify "Setting".
- 4.Press "▲"/"▼" button to highlight "DMX address".
- 5.Press "OK" button to go into "DMX address".
- 6.Press "▲"/"▼" button to modify "DMX address".
- 7.Press "OK" button to exit "DMX address" editing mode.

Combina tion No.	DMX From	DMX To	Content	Remark
			Blue Flowers bloom	The gobo at this table will be effective when the CH6 value push to 10
29	150	154		
30	155	159	Blue Pointer	
31	160	164	White Pointer	
32	165	169	Green Pointer	
33	170	174	Red Pointer	
34	175	179	B+G Pointer	
35	180	184	R+W Pendulum bob	
36	185	189	White Pendulum bob	
37	190	194	B+G Pendulum bob	
38	195	199	7 colors/Colorful	
39	200	204	Rotating rainbow	
40	205	214	R+W Outer ring rotate a circle	
41	215	219	9 colors flower	
42	220	224	Blue Gluttonous Snake	
43	225	229	White Gluttonous Snake	
44	230	234	Green Gluttonous Snake	
45	235	239	Red Gluttonous Snake	
46	240	244	Cyan Gluttonous Snake	
47	245	249	Pale red Gluttonous Snake	
48	250	254	BGWR replace	
49	255	255	Blooming Colorful flowers	

Attached list 2 (dynamic effect : CH15)

Combinati on No.	DMX From	DMX To	Content	Remark
0	0	4	Nothing	The gobo at this table will be effective when the CH6 value push to 10
1	5	9	White Staggered strobe	
2	10	14	Red Staggered strobe	
3	15	19	Green Staggered strobe	
4	20	24	G+B Staggered strobe	
5	25	29	R+W Staggered strobe	
6	30	34	Red windmill	
7	35	39	Green windmill	
8	40	44	Blue windmill	
9	45	49	White windmill	
10	50	54	Cyan windmill	
11	55	59	Pale red windmill	
12	60	64	RB windmill	
13	65	69	W+B windmill 1	
14	70	74	W+B windmill 2	
15	75	79	B+R windmill	
16	80	84	B+G windmill	
17	85	89	R+B+W windmill	
18	90	94	RGB whole white Inner ring	
19	95	104	R+B+W	
20	105	109	G+B+W	
21	110	114	GR+BW+BG	
22	115	119	GW+BW+RW	
23	120	124	RG+RB+RW	
24	125	129	RG+GW+GB	
25	130	134	BR+BW+GB	
26	135	139	RW Supreme Ultimate1	
27	140	144	RW Supreme Ultimate 2	
28	145	149	R+W Circling	

Touch Screen

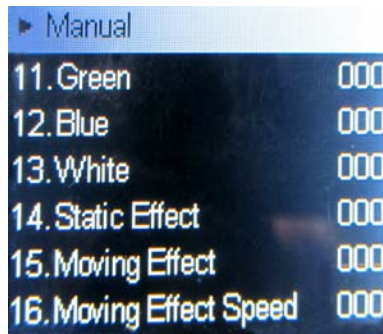


- The 2 buttons on top right corner used for Chinese/English Language shift and Screen Rotation button.
- 4 buttons at the bottom of screen: Setting、Information、Manual control button、Advanced button.

Settings Button:

Option	Description	
Running mode	DMX	Slave status: Receive DMX Singal from control or master
	Sound- Control Random Auto1 Auto2 Auto3 Auto 4	Master Status: Operate automatically and send out DMX signal to slaves
DMX address	1~512	Press "OK" button to go into edit mode. Then press the button, the channel value is incremented by the 1-512, press the key channel value is decremented by the 512-1.Press "OK" button to exit edit mode.
Channel mode	18CH	(refer to the channel table)
X inverse	Off	
	On	
Y inverse	Off	
	On	
XY inverse	Off	
	On	Exchange function of X & Y (fine adjustment include)
XY decoder	On	Rectify location by optical couple
	Off	No rectification
No DMX Signal	Maintain	Runs by default status
	Clear to Zero	Motor reset. stops running
Screen saver	On	Backlight turns off in 330 seconds
	Off	Backlight always on
	Off	
Default Settings		Press "OK" button to see the confirmation box, press "OK" button again to restore default settings.

Manual Control Button:



This function is for lamp control. There is no DMX signal in or out.

Option	Value	Description
1.X-axis	0~255	Press "OK" button to enter the edit mode. Then press the button, the channel value is incremented by the 0-255, press the key channel value is decremented by the 255-0.
2.X-axis fine-tuning	0~255	16bit adjustable
3.Y-axis	0~255	0-205°
4.Y-axis fine-tuning	0~255	16bit adjustable
5.XY speed	0~255	From fast to slow
6.Z-axis	0~11	light beam focusing
	12~127	0~60°
	128~255	non-polar rotating from slow to fast (forward direction)
7.Z-axis speed	0~255	From slow to fast
8.Master dimmer	0~255	Linear dimming from dark to bright
9.Blackout /strobe	0~255	Synchronous strobe speed from slow to fast (1HZ-25HZ)
10 Red	0~255	Linear dimming from dark to bright (This option will be effective when the value of above option 8 be edited to 255)
11 Green	0~255	
12 Blue	0~255	
13 White	0~255	

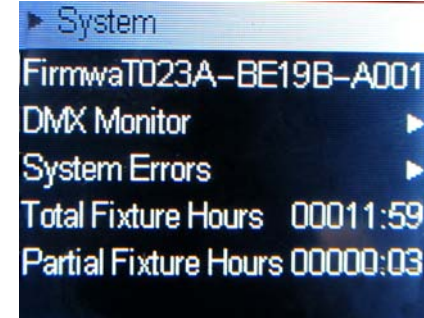
Gobo No.	DMX From	DMX To	Content	Remark
32	99	101	Azure Aster novi-belgii	The gobo at this table will be effective when the CH6 value push to 10
33	102	104	Purple Aster novi-belgii	
34	105	128	1 Diamond R-O-Y-G-C-B-P-W	
35	129	161	6 Square circle R-O-Y-G-C-B-P-W	
36	162	194	12 Square circle R-O-Y-G-C-B-P-W	
37	195	197	Outer ring B+ inter ring R	
38	198	200	OR W+IR R	
39	201	203	OR B+IR G	
40	204	206	OR W+IR G	
41	207	209	OR R+IR B	
42	210	212	OR G+IR B	
43	213	215	OR W+IR B	
44	216	218	OR R+IR W	
45	219	221	OR G+IR W	
46	222	224	OR B+IR W	
47	225	227	R+G full brightness	
48	228	230	R+B full brightness	
49	231	233	R+W full brightness	
50	234	236	B+G full brightness	
51	237	239	W+G full brightness	
52	240	242	B+B full brightness	
53	243	245	Red full brightness	
54	246	248	Green full brightness	
55	249	251	Blue full brightness	
56	252	254	White full brightness	
57	255	255	R+G+B+W full brightness	

Attached list 1 (static effect : CH14)

Gobo No.	DMX From	DMX To	Content	Remark
0	0	4	Nothing	The gobo at this table will be effective when the CH6 value push to 10
1	6	8	Figure 1	
2	9	11	Letter S	
3	12	14	Figure 3	
4	15	17	Figure 2	
5	18	20	Figure 4	
6	21	23	Figure 8	
7	24	26	Figure 4	
8	27	29	Figure 6	
9	30	32	Letter D	
10	33	35	Letter C	
11	36	38	Letter E	
12	39	41	Letter T	
13	42	44	Letter I	
14	45	47	Figure 3	
15	48	50	Letter S	
16	51	53	Letter E	
17	54	56	Letter Z	
18	57	59	Letter X	
19	60	62	Letter D	
20	63	65	Letter Z	
21	66	68	Outer R+ Inner panchromatic	
22	69	71	Outer Y+ Inner W	
23	72	74	Purple Aster novi-belgii	
24	75	77	Pink Aster novi-belgii	
25	78	80	Trollflower:pistil Y+petal R+two leaves	
26	81	83	Rainbow	
27	84	86	Lotus: Centre Y+Inner ring W+Outer ring Pink	
28	87	89	Smiley Face	

Option	Value	Introductions
14.Static Effect	0~255	Refer to attached list 1 (this option will be effective when the value of above option 6 Z axis be edited to:10)
15.Dynamic Effect	0~255	Refer to attached list 2 (same as above)
16.Dynamic Effect Speed	0~255	From slow to fast (coordinate with CH15)
17.Macro function	0~255	56~255 light+Motion Combinations Function
18.Reset	Confirm	Press“confirm button” to see the the confirm dialog box , press“confirm button” again , to enter the reset interface , all motors will be reseted .
	Cancel	

System Interface



Option	Introductions
Software version	current version
DMX CH Value Monitor	To enter the contained interface , to check with the value and percentage of displayed CH Value
System Error Logging	The light was operating wrong if the red ERR pilot lamp brighten , to enter the contained interface to check the details, to press “confirm” button after checking to empty the error logging. Notice: Sometimes is not the installation problem of hall and optocoupler but the motor wire was opposite connected .
Total use time	accumulated use time (correct to minutes)
This use time	The use time from starting up (correct to minutes)

Advanced Screen



To set up the password level , to prevent the laypeople do the misoperation , the default password is “UP DOWN UP DOWN” .

Option		Introductions
Reset Calibration	X-Axis Calibration	Can adjust the reset position of X-axis motors etc.
	Y-Axis Calibration	Can adjust the reset position of Y-axis motors etc.
	Z-Axis Calibration	Can adjust the reset position of Z-axis motors etc.
Sensor Monitor		Real-time monitoring the status of all kinds of sensors like optoelectronic switch , hall etc.

- Long press the touch screen 5s or “OK” button while reset in-process to interrupt .
- To press the touch screen or “OK” button while power on in-process to interrupt the reset mode and enter to test mode .
- To set the DMX address as 512 to back to the main interface , long press the “512” at touch screen or “OK” button 5s can set “display” or “hide” LOGO.
- Signal pilot lamp :
 - ERR red pilot lamp twinkling means error messages , enter to “message”->”system error messages” to check .
 - DMX green pilot lamp are bum steady means received the DMX signal , dusky express DMX signal .
 -

18CH List			
CH	Function	DMX Value	Functions
1	X Axis	0-255	0-540°
2	X Axis fine tuning	0-255	16bit adjustable
3	Y Axis	0-255	0-205°
4	Y Axis fine tuning	0-255	16bit adjustable
5	XY Speed	0-255	From fast to slow
6	Z Axis	0-5	light beam focusing
		6-155	0~60°
		156-205	non-polar rotating from slow to fast (forward direction)
		206-255	From slow to fast
7	Z Axis Speed	0-255	From slow to fast
8	Master dimmer	0-255	Linear dimming from dark to bright
9	Strobe	0-3	non-function
		4-255	Synchronous strobe speed from slow to fast
10	R Dimming	0-255	Linear dimming from dark to bright
11	G Dimming	0-255	
12	B Dimming	0-255	
13	W Dimming	0-255	
14	Static Effect	0-255	
15	Dynamic Effect	0-255	Refer to attached list 2
16	Dynamic Effect Speed	0-255	From slow to fast (coordinate with CH15)
17	Macro function	0-55	Non-function
		56-75	LED Auto-play 1 (static patterns displayed)
		76-95	LED Auto-play 2(dynamic effect displayed)
		96-115	Z Axis & LED Auto-play3
		116-135	X/Y Auto-play
		136-155	Auto-play 1
		156-175	Auto-play 2
		176-195	Auto-play 3
		196-215	Auto-play 4
		216-235	Random Auto-play
		236-255	Sound control of the light
18	Reset	0-250	Non-function
		251-255	Reset of the light , 5s effective