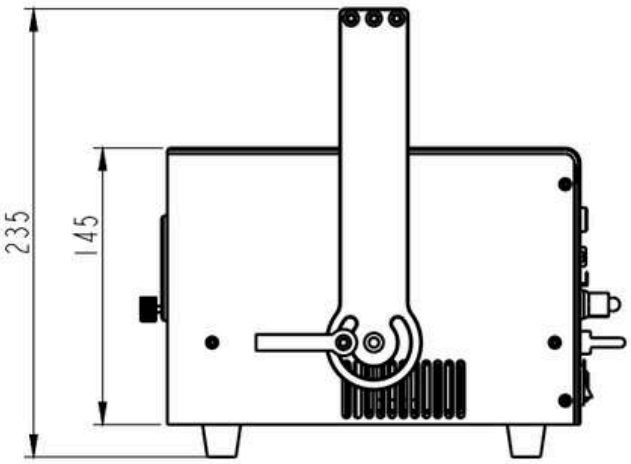
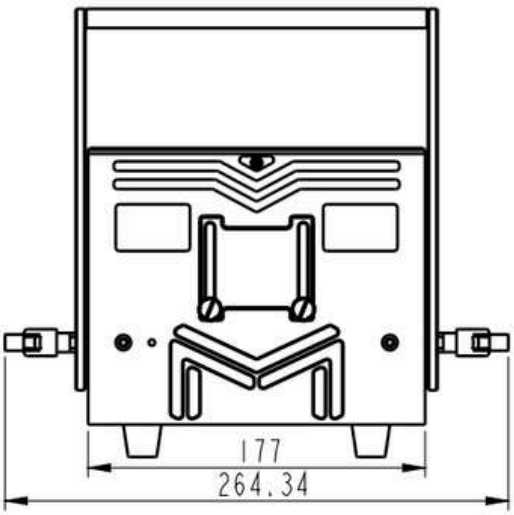
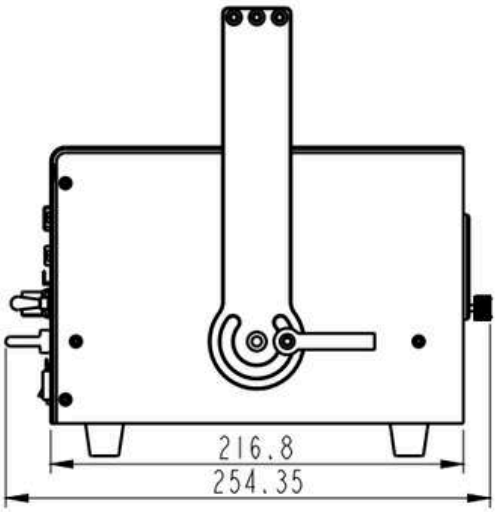
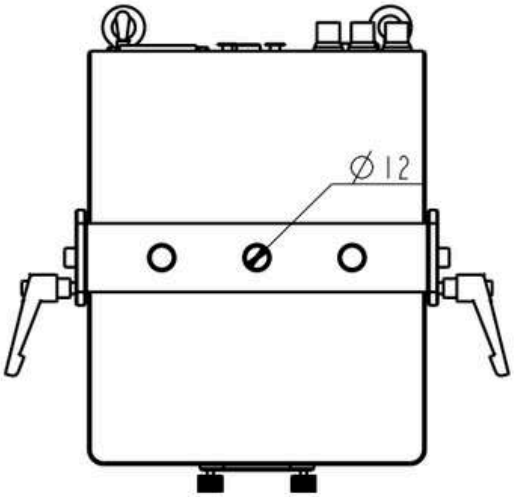
J10 LASER LIGHT
PRODUCT MANUAL

STARSHINE LIGHTS PRODUCT MANUAL



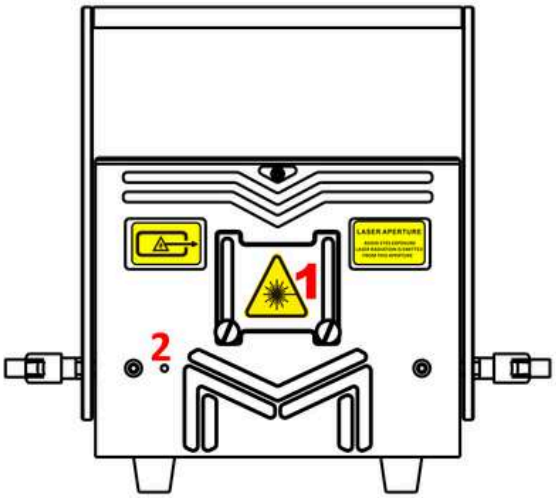


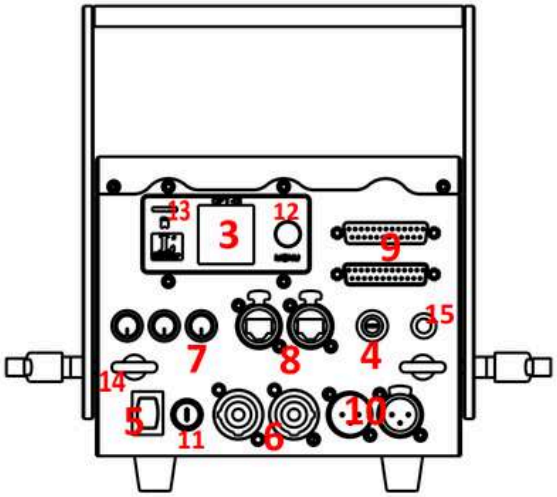




STARSHINE LIGHTS PRODUCT MANUAL

INTRODUCTIONS of J5 SERIES





1	**Laser aperture**	(covered by masking plate) DO NOT look directly into this aperture once the masking plate gets loosen
2	**Laser Emission**	When this indicator is lit up the laser system is ready to emit the laser radiation as soon as it receives instructions from control software.
3	**LCD Display**	Integrated with multi settings on the projector, please refer to detailed settings (on Page 11.) for the LCD
4	**Keyhole**	Safety key, laser output is available when the key is moved to position "on"
5	**Power Switch**	Power On/Off
6	**PowerCON Input & Output**	Power connectors input and output
7	**Color intensity knobs**	R/G/B power intensity adjustments, rotate or anti-rotate to adjust output power
8	**INTERLOCK (RJ45 jack)**	Laser output is available only when the interlock is connected. It could be used to connect a laser emergency switch(E-stop box).
9	**ILDA Input & Output**	DB25 connections input and output for ILDA mode display
10	**DMX Input & Output**	3-pin DMX connections input and thru for DMX512 mode display
11	**FUSE**	Safety element; current rating 4Amps
12	**Menu knob for LCD Setting**	The knob for the main settings on LCD, click it to wake the LCD and rotate it for corresponding status setting
13	**SD-Card Slot**	Slot for SD-Card which you may have your own laser files to export on
14	**Safety Ring**	The ring for enwinding a safety rope when the laser device will be installed on out-of-reach locations.
15	**SFS**	Scan-fail safety switch

STARSHINE LIGHTS PRODUCT MANUAL

Type of Laser	Pure diode-based full colors(semiconductor diode laser systems)
Laser Classification	Class 4
Laser Power(mW)	Model λ 638nm 520nm 445nm or 465nm PR3000A-RGB R/700mW+G/1200mW+B/1600mW PR4000A-RGB R/700mW+G/1400mW+B/2000mW PR6000A-RGB R/1400mW+G/1500mW+B/3000mW PR8000A-RGB R/2200mW+G/1700mW+B/4500mW
Scanning-system	40kpps ILDA@8° , Scan angle Max 60°
Beam Size@aperture	3.0*6.0 mm
Beam Divergence	< 1.2 mRad
Modulation	>100 KHz
Power Supply	AC 100-240V, 50/60Hz
Power Consumption	70 | 75 | 85 | 90W
Net Weight	4.80kg
Dimension	254*177*145mm
Controls	Auto[ZLDA], Test, DMX512 , ILDA
Operation Temperature	minus 20℃ to 40℃
Protection Rating	IP54
Safety elements	Keyed interlock, emission delay, magnetic interlock, scan-fail safety, mechanical shutter, adjustable aperture masking plate.
Important statement	Due to Advanced Optical Correction technology used in our laser systems the optical power output of each laser colour within the system may slightly differ from the specification of respective laser module(s) installed. This does not affect the total guaranteed power output.

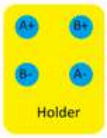
Laser Colour Alignments

!	**These procedures should be conducted only in a controlled environment and with extreme caution. When aligning the beams it is recommended to wear sufficient laser safety protection and to avoid accidental exposure to Class 4 laser radiation.**

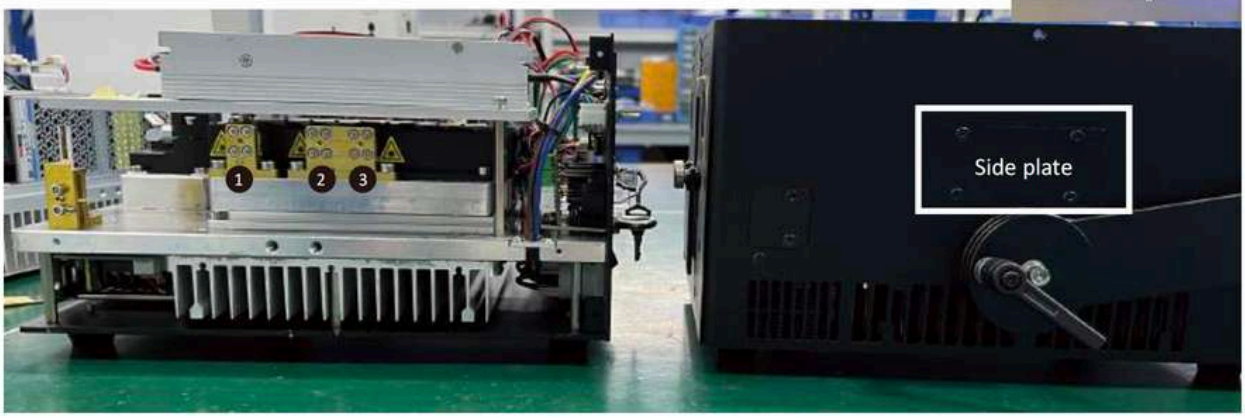
STARSHINE LIGHTS PRODUCT MANUAL

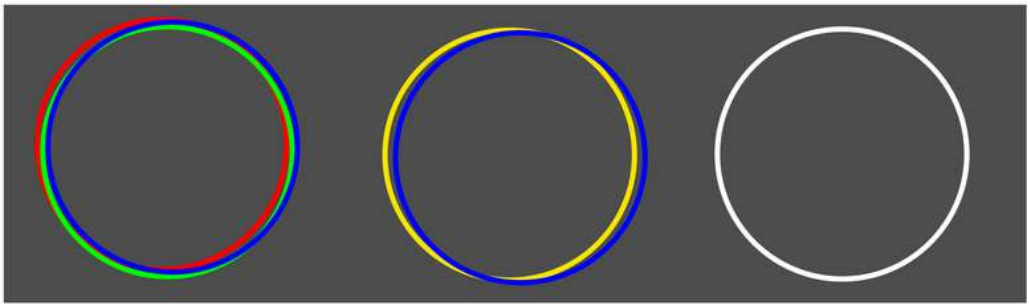
Alignment guidelines for the J7 projector

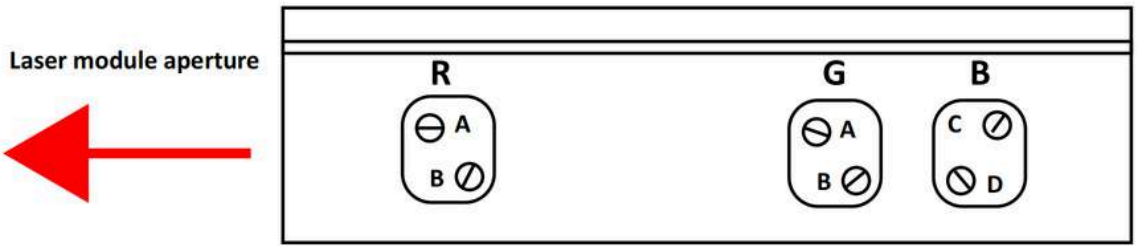
1. Remove the side plate on the enclosure and you will access the R/G/B dichro optic holders 1 2 3
2. Normally, we take the red beam as the reference position(means no need to adjust it) if the issue is that,
the overall green or blue beam misaligned, you will need to do slight adjustments to get the involved beam back
to overlay on the red beam.
3>The slight beam adjustments should be doing loosing or tightening the screws on the green laser's holder or blue laser's dichro holder.



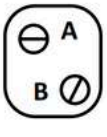
For instance, screws A+ & A- should be deemed as changing the beam's position movements from up and down; screws B+ & B- should be deemed as changing the beam's position movements from left and right. You can try to do the adjustments from the actual misaligned beam or green or blue to get the it/them back to overlay on the red beam until the white beam is achieved.





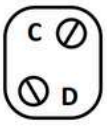


How does the alignment mechanism work?



Rotate the **A** thumb screw to tune the Red/Green's beam position from "up or down"

Rotate the **B** thumb screw to tune the Red/Green's beam position from "left or right"



Rotate the **C** thumb screw to tune the blue beam's position from "up or down"

Rotate the **D** thumb screw to tune the blue beam's position from "left or right"

DMX Charts

16 CHs

CH	Value	Descriptions	Width
1	0-255 _ DMX model	0-31 _ Close the light 33-95 _ Top 4 channels 97-159 _ Top 8 channels 161-232 _ Top 12 channels 225-255 _ Top 16 channels	8 Bit
2	0-255 _ Page index (9 in total Page)	0-15 _ Page 1 17-31 _ Page 2 33-47 _ Page 3 49-63 _ Page 4 65-79 _ Page 5 81-95 _ Page 6 97-111 _ Page 7 113-127 _ Page 8 129-255 _ Page 9	8 Bit
3	0-255 _ program index (48 in total programme)	0-32 _ Close the light 33-35 _ Program 1 37-39 _ Program 2 .. - .. 221-223 _ Program 48 225-255 _ — —	8 Bit
4	0-255 _ speed	0-15 _ Default speed 17-31 _ pause 33-255 _ 25% ~ 200%	8 Bit
5	0-255 _ brightness	0% ~ 100%	8 Bit
6	0-255 _ size	0%~ 100%	8 Bit
7	0-255 _ X size	-100% ~ 100%	8 Bit
8	0-255 _ Y size	-100% ~ 100%	8 Bit
9	0-255 _ Z angle	0~360 deg	8 Bit
10	0-255 _ X position	0 = left , 128 = center , 255 = right	8 Bit
11	0-255 _ Y position	0 = top , 128 = mid , 255 = bottom	8 Bit
12	0-255 _ Visible point	0 ~ 100%	8 Bit
13	0-255 _ scan rate	0-31 _ Default scan rate 33-223 _ 6K ~ 29K 225-255 _ 30K	8 Bit
14	0-255 _ reserve		8 Bit
15	0-255 color table	0-31 original color 33- 223 color table 225- 255 white	8 Bit
16	0-255 Reserved	Reserved	8 Bit

STARSHINE LIGHTS PRODUCT MANUAL

DMX Charts

26 CHs

CH	Value	Description	Width
1	0-255 page index	page index , 0~3 light off 4~7 No. 1 Page 8~ 11 2nd Page 12~15 No. 3 Page ... 252~255 No. 63 Page	8 Bit
2	0-255 program index	program index 0~3 light off 4~7 No. 1 programme 8~ 11 2nd programme 12~15 No. 3 programme ... 252~255 No. 63 programme	8 Bit
3	0-255 playback speed	(0 = original speed , 1 – 255 = 1% ~ 255%)	8 Bit
4	0-255 brightness _	(0 ~ 100%)	8 Bit
5,6	0-65535 size	(0 ~ 100%)	16 Bit
7,8	0-65535X _ size	(-100 ~ 100%, 0 = 32768)	16 Bit
9,10	0-65535 Y size	(-100 ~ 100%, 0 = 32768)	16 Bit
11,12	0-65535 Z angle	Rotation angle (0~ 360 °)	16 Bit
13,14	0-65535Z _ rotate	Rotation speed -60 ~ 60 Rpm (0 = original position , 1 ~ 32767 = -100% ~ -1 % Rotation speed , 32768 = Save stationary and not rotating , 32769 ~ 65535 = 1% ~ 100% Rotating speed)	
15,16	0-65535X _ Location	(-100 ~ 100%, 0 = 32768)	16 Bit
17,18	0-65535 Y Location	(-100 ~ 100%, 0 = 32768)	16 Bit
19	0-255 scan rate	(5k ~ 30K)	8 Bit
20	0-255 red light brightness	(0 ~ 100%)	8 Bit
21	0-255 green light brightness	(0 ~ 100%)	8 Bit
22	0-255 blue light brightness	(0 ~ 100%)	8 Bit
23	0-255 RGB _ Change color	(0 = original color , 1-255 = 0 ~ 100% color change)	8 Bit
24	0-255 start display points	(0 ~ 100%)	8 Bit
25	0-255 end display point	(0 ~ 100%)	8 Bit
26	0-255 strobe _	0 = Turn off strobe 1-255 = 1 to 20 Hz	8 Bit

DMX Charts

39 CHs

Channels	Value		Description	Width
1	0-255	Fixture Modes	0-150 Blackout / Safe 150-190 Setup Mode 200-240 Playback mode 240-255 Laser Off	8 Bit
2	0-255	Max Intensity	Defines the max intensity that can be used during playback mode (Range 0 till 100)	8 Bit
3	0--255	Test frames	Allows enabling test frames during setup mode (1= test frame 1, 255 = test frame 255)	8 Bit
4,5	0-65535	Size X	Defines the maximum width that can be used during playback mode (Range -100 till 100%, 0 = 32768)	16 Bit
6,7	0-65535	Size Y	Defines the maximum height that can be used during playback mode (Range -100 till 100%, 0 = 32768)	16 Bit
8,9	0-65535	Position X	Defines the horizontal position that can be used during playback mode (Range -100 till 100%, 0 = 32768)	16 Bit
10,11	0-65535	Position Y	Defines the vertical position that can be used during playback mode (Range -100 till 100%, 0 = 32768)	16 Bit
12,13	0-65535	Rotation Z	Defines the rotation angle that can be used during playback mode (Range 0 till 360 degrees)	16 Bit
14	0-255	Pages	Page Index, 255 pages in total 1 = page 1, 255 = page 255	8 Bit
15	0-255	Cues	Cue Index, 255 Cues in total (1 = cue 1, 255 = cue 255)	8 Bit
16	0-255	Cue speed	Cue speed (0 = Original, 1 – 255 = 1% till 255%)	8 Bit
17	0-255	Dimmer	Defines the maximum brightness limited by setup mode (Range 0 till 100%)	8 Bit
18,19	0-65535	Zoom	Allows to zoom the cue limited by setup mode (Range 0 till 100%)	16 Bit
20,21	0-65535	X Size	Defines the maximum width limited by setup mode (Range -100 till 100%, 0 = 32768)	16 Bit
22,23	0-65535	Y Size	Defines the maximum height limited by setup mode (Range -100 till 100%, 0 = 32768)	16 Bit
24,25	0-65535	Z Angle	Defines the rotation angle limited by setup mode (Range 0 till 359 degrees)	16 Bit
26,27	0-65535	Z Rotation	Continues rotation from -60 till 60 Rpm	

28,29	0-65535	X Position	Allows for changing the horizontal position of the cue limited by setup mode (Range -100 till 100%, center = 32768)	16 Bit
30,31	0-65535	Y Position	Allows for changing the vertical position of the cue limited by setup mode (Range -100 till 100%, center = 32768)	16 Bit
32	0-255	Scan Rate	Defines the painting speed of the laser beam. (5k till original 30K)	8 Bit
33	0-255	Red	Intensity range from 0 till 100%	8 Bit
34	0-255	Green	Intensity range from 0 till 100%	8 Bit
35	0-255	Blue	Intensity range from 0 till 100%	8 Bit
36	0-255	Alpha	Allows you to shift between original cue color or RGB control. (Range, 0 = original, 1-255 = 0 till 100% alpha blending)	8 Bit
37	0-255	Points start	Allows you to remove points from the start point of a cue (Range from 100 till 0% visibility)	8 Bit
38	0-255	Points end	Allows you to remove points from the end point of a cue (Range from 1000 till 0% visibility)	8 Bit
39	0-255	Strobe	0 = Strobe disabled 1-255 = Strobe from 1 to 20 Hz	8 Bit

SERVICE

There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact us
directly or your local distributor, who will help you with a repair or replacement. We will not accept any
liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to this unit.