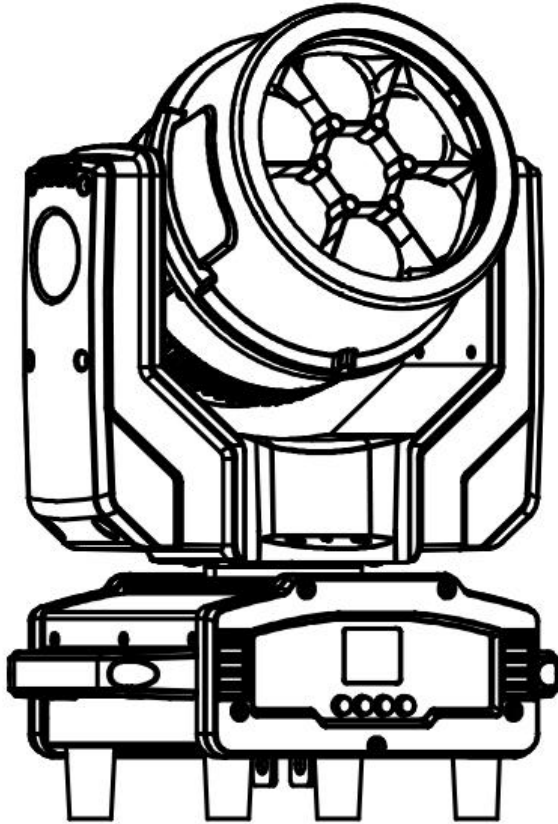


Z-Wash 740 BW IP

IP65 7*40W 4in1 Bee Eye Moving Head



User manual

Please read the instructions carefully before use

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statement

The product has well capability and intact packing when leave factory. All of the user should comply with warning item and manual, any misuse cause of the damages are not included in our guarantee, and also can't be responsible for any malfunction & problem owing to ignore the manual.

1. Safety Instructions

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.

- Unpack and check carefully there is no transportation damage before using the unit.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- The unit is for indoor use only. Use only in a dry location.
- The unit must be installed in a location with adequate ventilation, at least 50 cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Disconnect main power before replacement or servicing.
- Make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- Use safety cable when fixes this unit. Do not handle the unit by taking its head only, but always by taking its base.
- Maximum ambient temperature is $T_a: 40^{\circ}\text{C}$. Do not operate it where the temperature is higher than this Unit surface temperature may reach up to 85°C . Do not touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.
- the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Do not touch any wire during operation as high voltage might be causing electric shock.

Warning:

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- Do not open the unit within five minutes after switching off.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

Caution:

There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

Installation:

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people.

2. Technical Specifications

Optics

Light Sources: 7x40W 4IN1 RGBW LED

Beam Angle: 6°~ 45°

Glass Light Guide + PMMA High Quality Optical Lens

Power Consumption: 240W

Power Voltage: AC 100-240V, 50/60Hz

Control

DMX Channel: 21/24/32/60Channels

Control Modes: DMX512/Master-Slave/Auto Run/Music/RDM

Pan/Tilt

Pan/Tilt: 540°/ 270°

Pan/Tilt Resolution: 8/16 bit Adopt Photoelectric Reset System

Construction

Display: TFT1.8 Inch Color Display

Data In/Out socket: 3-pin XLR sockets or 5-pin XLR sockets(Optional)

Power Socket: Power con in/out

Protection Rating: IP65

Dimension: 625*400*590mm

Net Weight: 10.9 kg

Carton package 2in1 size: 62.5*40*59cm Gross weight: 29.5 kg

Flight case package 4in1 size: 68.5*70.5*65cm Gross weight: 84.5 kg

Features

Motorized liner zoom system, zoom range: 6°~45°

Pixels control

Outstanding color macro effect

Dimmer: 0~100% smooth dimming

Variable strobe effects

Fast, quiet operation and flicker free

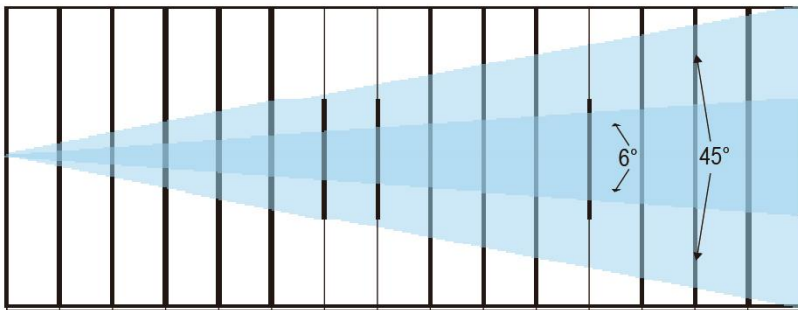
3. LUX Date

Beam Angle =6°

R lux	15400	5570	2200	845
G lux	35000	13900	5220	1970
B lux	6350	2550	931	351
W lux	47800	18300	6970	2660
4in1 lux	96400	36500	13800	5340

Beam Angle =45°

R lux	1900	256	93.8	38.1
G lux	4760	620	231	86.1
B lux	896	112	42.5	16.5
W lux	6390	831	312	120
4in1 lux	13000	1660	628	240



Distance (m)		1	3	5	8
Spot diameter (m) 3.5°		0.275	0.54	0.83	1.23
Spot diameter (m) 45°		0.9	2.56	3.88	None

4. How To Control The Unit

The DMX512 is widely used in intelligent lighting control, with a DMX 512 controller. connect several lights together, dmx in and dmx out, 3 pin XLR connectors: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

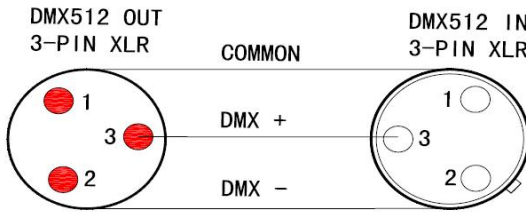
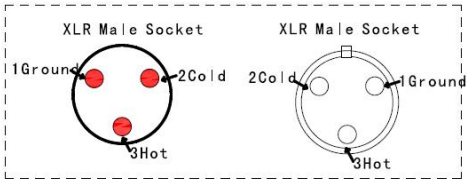


Figure2



XLR Pin Configuration	
pin1	=Ground
pin2	=Data Compliment (negative)
pin3	=Data true (positive)

Display:



Menu

Up

Down

Enter

- MENU To select the programming functions
- DOWN To go backward in the selected functions
- UP To go forward in the selected functions
- ENTER To confirm the selected functions

Set DMX Address Code

- 1 Press **"Menu"** to "Set DMX Address", and press **"ENTER"** keys to enter into
- 2 Show "Set DMX Address DMX Address:**001**", Press the **"UP and DOWN"** keys to amended
- 3 Press **"ENTER"** keys to save and Exit, Press the **"MENU"** Keys does not save and Exit

Menu	1.Pan Degree	1.540 2.360	Pan running angle selection
	2.Sound	001--100	Sound control sensitivity adjustment
	3.Language	1.English 2.Chinese	Choose language
	4.No Signal	1.BlackOut 2.Hold	
	5.Fan Set	1.Auto 2.Low 3.High	
	6.Reset	1.Yes	Reset
		2.No	
	7.Default	1.Yes	Factory setting
		2.No	
	8.Adjust	Pass word	****
1.Pan		Change the value of Pan/Tilt/Focus/Rota to adjust the angle; change the value of R/G/B/W to adjust the white balance	
2.Tilt			
3.Focus			
4.Rotate			
5.Red			
6.Green			

		7.Blue		
Address	Address 001~512		Address setting 001-512	
Rever	1.Pan Invert	1.NO,2.YES	Pan forward and reverse setting	
	2.Tilt Invert	1.NO,2.YES	Tilt forward and reverse setting	
	3.Display Invert	1.NO,2.YES	Display reverse setting	
Inform	1.CH Value		Show the version number	
	2.Temp /°C		Show the temperature of led board	
	3.Soft V1.0		Program version number	
Mode	1.DMX512		Select Mode	
	2.Auto			
	3.Sound			
		Master/Alone	Master/Alone	
	4.Manual		1.Pan:0-255	Manual control
			2.Tilt:0-255	
			3.Focus:0-255	
			4.Red:0-255	
			5.Green:0-255	
		6.Blue:0-255		

		7.White:0-255	
		8.Strobe:0-255	
Channel	21CH	21CH	Choose Channel Mode
	24CH	24CH	
	32CH	32CH	
	60CH	60CH	

5.DMX Channels

DMX channel's functions and values (21 DMX channels):

21 Channel Mode:

Channel	Function	Description	Value
Ch 1	Red	Red dimming	0----255
Ch 2	Red adjustment	Red adjustment	0----255
Ch 3	Green	Green dimming	0----255
Ch 4	Green adjustment	Green adjustment	0----255
Ch 5	Blue	Blue dimming	0----255
Ch 6	Blue adjustment	Blue adjustment	0----255
Ch 7	White	White dimming	0----255
Ch 8	White adjustment	White adjustment	0----255
Ch9	Linear Color Temperature	No function	0-4
		Color temperature from warm to cool	5-255
Ch 10	Macro color	No function	0----9
		Macro color 1	10----19
		Macro color 2	20----29

		....(10 numbers 1 macro color)	....
		Macro color 19	190----199
		Macro color 20	200----255
Ch 11	Dimmer	dark to bright linear dimming	0----255
Ch 12	Dimmer adjust	Dimmer adjustment control	0----255
Ch 13	Strobe	Turn on the light/No function	0----3
		Synchro strobe speed slow to fast (1HZ-25HZ)	4----203
		Random strobe	204----255
Ch 14	Pan	Pan control	0----255
Ch 15	Pan adjustment	Pan adjustment control	0----255
Ch 16	Tilt	Tilt control	0----255
Ch 17	Tilt adjustment	Tilt adjustment control	0----255
Ch 18	zoom	zoom	0----255
Ch 19	Lens rotation	0~60°	0-155
		Counter Clockwise infinite rotation from fast to slow	156-205
		Clockwise infinite rotation from slow to fast	206-255
Ch 20	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
		NO	0-250

Ch 21	Reset	Reset within 5s	251---255
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DMX channel's functions and values (24 DMX channels):

24 channel mode:

Channel	Function	Description	Value
Ch 1	pan adjustment	pan adjustment	0---255
Ch 2	Pan fine adjustment	Pan fine adjustment	0---255
Ch 3	Tilt adjustment	Tilt adjustment	0---255
Ch 4	Tilt fine adjustment	Pan fine adjustment	0---255
Ch 5	Speed of Pan/Tilt	from fast to slow	0---255
Ch 6	zoom	from small to large	0---255
Ch 7	Lens rotation	0-60°	0---155
		Counter clockwise infinite rotation from fast to slow	156---205
		Counter clockwise rotation from slow to fast	206---255
Ch 8	Dimmer	from dark to bright	0---255
Ch 9	Strobe	Turn on the light	0---3

		Synchro strobe speed slow to fast (1HZ-25HZ)	4----203
		Random strobe	204----255
Ch 10	R	from dark to bright	0----255
Ch 11	G	from dark to bright	0----255
Ch 12	B	from dark to bright	0----255
Ch 13	W	from dark to bright	0----255
Ch14	Linear Color Temperature	No function	0-4
		Color temperature from warm to cold	5-255
Ch 15	Macro color	No function	0----9
		Macro color 1	10----19
		Macro color 2	20----29
		....(10 numbers 1 macro color)	....
		Macro color 19	190----199
		Macro color 20	200----255
Ch 16	Pattern rotation	No function	0----9
		Monochrome dynamic pattern 1	10----14
		Monochrome dynamic pattern 2	15----19
		.....	.....(5numbers 1

			pattern).....
		Monochrome dynamic pattern 20	105----109
		Mixed color dynamic pattern 1	110----114
		Mixed color dynamic pattern 2	115----119
		.....	.....(5 numbers 1 pattern)
		Mixed color dynamic pattern 12	165----169
		Mixed color dynamic pattern 13	170----255
Ch 17	Pattern movement	Pattern movement(with 16CH)	0----255
Ch 18	Pattern effect speed (with 16CH)	No function	0----9
		Forward, from fast to slow	10----132
		Reverse, from slow to fast	133----255
Ch 19	Background R	Linear dimming from dark to bright	0----255
Ch 20	Background G	Linear dimming from dark to bright	0----255

Ch 21	Background B	Linear dimming from dark to bright	0----255
Ch 22	Background W	Linear dimming from dark to bright	0----255
Ch 23	Dimming Mode	Mode -1	0----49
		Mode -2	50----99
		Mode -3	100----149
		Mode -4	150----255
Ch 24	Reset	No function	0----250
		Reset 5s	251----255

DMX channel's functions and values (32 DMX channels):

32 channel mode:

Channel	Function	Description	Value
Ch 1	pan adjustment	pan adjustment	0----255
Ch 2	Pan fine adjustment	Pan fine adjustment	0----255
Ch 3	Tilt adjustment	Tilt adjustment	0----255
Ch 4	Tilt fine adjustment	Pan fine adjustment	0----255
Ch 5	Speed of Pan/Tilt	from fast to slow	0----255
Ch 6	Zoom	Zoom	0----255
Ch 7	Lens rotation	0-60°	0----155
		Clockwise infinite rotation from	156----205

		fast to slow	
		Counter clockwise rotation from slow to fast	206---255
Ch 8	Dimmer	from dark to bright	0---255
Ch 9	Dimmer adjust	Dimmer adjustment control	0---255
Ch 10	Strobe	Turn on the light	0---3
		Synchro strobe speed slow to fast (1HZ-25HZ)	4---203
		Random strobe	204---255
Ch 11	R	Red dimming	0---255
Ch 12	Red adjust	Red adjust	0---255
Ch 13	G	Green dimming	0---255
Ch 14	Green adjust	Green adjust	0---255
Ch 15	B	Blue dimming	0---255
Ch 16	Blue adjust	Blue adjust	0---255
Ch 17	W	White dimming	0---255
Ch 18	White adjust	White adjust	0---255
Ch 19	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
CH20	Linear Temperature Color	No function	0---4
		Color temperature from warm to cold	5---255

Ch 21	Macro color	No function	0----9
		Macro color 1	10----19
		Macro color 2	20----29
		....(10 numbers 1 macro color)	....
		Macro color 19	190---199
		Macro color 20	200----255
Ch 22	Pattern rotation	No function	0----9
		Monochrome dynamic pattern 1	10----14
		Monochrome dynamic pattern 2	15----19
		.....(5 numbers 1 pattern)	.....
		Monochrome dynamic pattern 20	105----109
		Mixed color dynamic pattern 1	110----114
		Mixed color dynamic pattern 2	115----119
		.....(5 numbers 1 pattern)	.....
		Mixed color dynamic pattern 12	165----169

		Mixed color dynamic pattern 13	170----255
Ch 23	Pattern movement	Pattern movement(with 22CH)	0----255
Ch 24	Pattern effect speed(with 22CH)	No function	0----9
		Forward, from fast to slow	10----132
		Reverse, from slow to fast	133----255
Ch 25	Pattern effect fade	Pattern effect fade	0----255
Ch 26	Background dimming	Background 0-100% dimming	0----255
Ch 27	Background strobe	Background strobe	0----255
Ch 28	Background R	dark to bright	0----255
Ch 29	Background G	dark to bright	0----255
Ch 30	Background B	dark to bright	0----255
Ch 31	Background W	dark to bright	0----255
Ch 32	Reset	no function	0----250
		Reset 5s	251----255

DMX channel's functions and values (60 DMX channels):

60 channel mode:

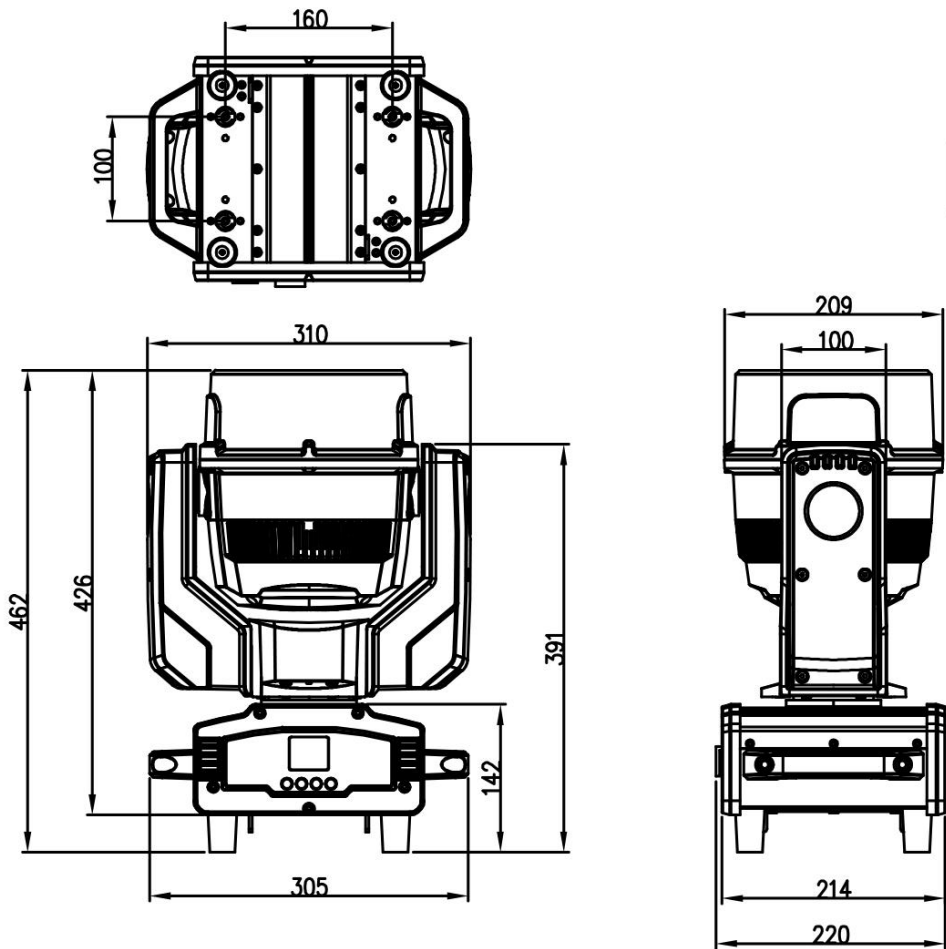
Channel	Function	Description	Value
Ch 1	pan adjustment	pan adjustment	0----255
Ch 2	Pan fine adjustment	Pan fine adjustment	0----255
Ch 3	Tilt adjustment	Tilt adjustment	0----255
Ch 4	Tilt fine adjustment	Pan fine adjustment	0----255
Ch 5	Speed of Pan/Tilt	from fast to slow	0----255
Ch 6	Zoom	Zoom	0----255
Ch 7	Lens rotation	0-60°	0----155
		Clockwise infinite rotation from fast to slow	156----205
		Counterclockwise rotation from slow to fast	206----255
Ch 8	Dimmer	Linear dimming from dark to bright	0----255
Ch 9	Dimmer adjust	Dimmer adjustment control	0----255
Ch 10	Strobe	Turn on the light	0----3
		Synchro strobe speed slow to fast (1HZ-25HZ)	4----203
		Random strobe	204----255
Ch 11	R	Red dimming	0----255
Ch 12	Red adjust	Red adjust	0----255
Ch 13	G	Green dimming	0----255
Ch 14	Green adjust	Green adjust	0----255

Ch 15	B	Blue dimming	0---255
Ch 16	Blue adjust	Blue adjust	0---255
Ch 17	W	White dimming	0---255
Ch 18	White adjust	White adjust	0---255
Ch 19	Dimming Mode	Mode -1	0 --- 49
		Mode -2	50 --- 99
		Mode -3	100---149
		Mode -4	150---255
CH20	Linear color temperature	No function	0---4
		Color temperature from warm to cool	5---255
Ch 21	Macro color	No function	0---9
		Macro color 1	10---19
		Macro color 2	20---29
		....(10 numbers 1 macro color)	....
		Macro color 19	190---199
		Macro color 20	200---255
Ch 22	Pattern rotation	No function	0---9
		Monochrome dynamic pattern 1	10---14

		Monochrome dynamic pattern 2	15----19
		.....(5 numbers 1 pattern)	.....
		Monochrome dynamic pattern 20	105----109
		Mixed color dynamic pattern 1	110----119
		Mixed color dynamic pattern 2	150----159
		.....(5 numbers 1 pattern)	.....
		Mixed color dynamic pattern 12	165----169
		Mixed color dynamic pattern 13	170----255
Ch 23	Pattern movement	Pattern movement(with 22CH)	0----255
Ch 24	Pattern effect speed(with 22CH)	No function	0----9
		Forward, from fast to slow	10----132
		Reverse, from slow to fast	133----255
Ch 25	Pattern effect fade	Pattern effect fade	0----255
Ch 26	Background dimming	Background 0-100% dimming	0----255

Ch 27	Background strobe	Background strobe	0---255
Ch 28	Background R	dark to bright	0---255
Ch 29	Background G	dark to bright	0---255
Ch 30	Background B	dark to bright	0---255
Ch 31	Background W	dark to bright	0---255
Ch 32	Reset	no function	0---250
		Reset 5s	251---255
Ch 33	R1 LED	R1 LED1 dimming	0---255
Ch 34	G1 LED	G1 LED1 dimming	0---255
Ch 35	B1 LED	B1 LED1 dimming	0---255
Ch 36	W1 LED	W1LED1 dimming	0---255
.....
Ch 57	R7 LED	R7 LED dimming	0---255
Ch 58	G7 LED	G7 LED dimming	0---255
Ch 59	B7 LED	B7 LED dimming	0---255
Ch 60	W7 LED	W7 LED dimming	0---255

6.Shape



7. Trouble shooting

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 connection of power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if link 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 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.

8. Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

- **Clean with soft cloth using normal glass cleaning fluid.**
- **Always dry the parts carefully.**
- **Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.**