



FUZE WASH FR™ user manual

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DOCUMENT VERSION



Due to additional product features and/or enhancements, an updated version of this document may be available online. Please scan the QR Code with your mobile device or visit www.elationlighting.com for the latest revision/update of this manual, before installation and/or programming.

Date	Document Version	SoftwareVersion ≥	DMX Channel Modes	Notes
08/03/2020	1.0	1.04	Standard, Extended, CMY, CMY Extended	Initial Release
03/04/2021	2.0	N/C	No Change	Updated Dim Dwgs

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GENERAL INFORMATION

INTRODUCTION

Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information.

Unpacking

Every device has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton is damaged, carefully inspect the device for damage, and be sure all accessories necessary to install and operate the device have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this device to your dealer without first contacting customer support. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

BOX CONTENTS

Omega Brackets (x2) Locking Power Cable

CUSTOMER SUPPORT

Contact **ELATION Service** for any product related service and support needs. Also visit <u>forums.elationlighting.com</u> with questions, comments or suggestions.

ELATION SERVICE USA - Monday - Friday 8:00am to 4:30pm PST 323-582-3322 | Fax 323-832-9142 | support@elationlighting.com

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REPLACEMENT PARTS please visit <u>parts.elationlighting.com</u>



IMPORTANT NOTICE!

There are no user serviceable parts inside this unit.

Do not attempt any repairs yourself; doing so will void your manufactures warranty. Damages resulting from modifications to this fixture and/or the disregard of safety instructions and guidelines in this manual void the manufactures warranty and are not subject to any warranty claims and/or repairs.

WARRANTY RETURNS (USA ONLY)

To obtain warranty service, a Return Materials Authorization (RMA) number must first be obtained from ELATION. It is the Customer's responsibility to provide product proof of purchase and serial number by acceptable evidence such as an invoice copy or an approved ELATION Extended Warranty Certificate ("EWC") and any relevant maintenance records at the time warranty service is sought. Failure to provide acceptable evidence of product proof of purchase or EWC and any relevant maintenance records may be cause for denial of warranty service.

Products returned for warranty service must be sent without any accessories (i.e., power, data, and safety cables, brackets, clamps, rigging hardware, frost filters, gel frames, barn doors, lens, hoses, nozzles, rack mounting hardware, etc.), must be boxed using the original and/or suitable packaging materials (double-box and foam) that provides ample product protection for ground and/or air freight transit, and must be shipped freight pre-paid and insured to ELATION in Los Angeles, CA or an ELATION Authorized Service Center. The RMA number must be clearly written on the outside of the return box, and a brief description of the problem and the RMA number must be documented and included in the box.

Products returned for warranty service without an RMA number clearly marked on the outside of the package will be refused and returned to the shipper at the Customer's expense. Products returned for warranty service, which are received damaged due to inadequate and/or improper packaging and/or due to damage caused by shipping carrier, may incur additional repair charges before warranty service begins and/or may void this warranty. If any product accessories (included and/or optional) are shipped with the product, ELATION and/or the ELATION Authorized Service Center shall have no liability what so ever for the loss and/or damage to any such accessories, nor the safe return thereof. If the requested warranty repairs or service (including parts replacement) are within the terms of this warranty, ELATION will pay return ground transportation shipping charges to a single designated point within the United States.

SAFETY GUIDELINES

This fixture is a sophisticated piece of electronic equipment. To guarantee smooth operation, it is important to follow all instructions and guidelines in this manual. ADJ PRODUCTS, LLC is not responsible for injury and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.



PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED



THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT.
DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR
MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS
TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND
GUIDELINES IN THIS MANUAL VOID THE MANUFACTURE'S WARRANTY AND ARE
NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.



DO NOT PLUG FIXTURE INTO A DIMMER PACK!
NEVER OPEN THIS FIXTURE WHILE IN USE!
UNPLUG POWER BEFORE SERVICING FIXTURE!
NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!
KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!



NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
RETINA INJURY RISK - MAY INDUCE BLINDNESS!
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!



INDOOR / DRY LOCATIONS USE ONLY!
DO NOT EXPOSE FIXTURE TO RAIN AND MOISTURE!



MINIMUM DISTANCE TO OBJECTS/SURFACES
MUST BE 6.6 FEET (2 METERS)
MAXIMUM TEMP OF EXTERNAL SURFACE 185° F (85°C)
MINIMUM DISTANCE OF INFLAMMABLE MATERIALS
FROM THE SURFACE 1.6 FEET (0.5 METER)



---15.0 m

Minimum distance to lighted objects 15.0 meters.

Maximum temperature of the external surface 100°C.

Minimum distance of inflammable materials from the surface 0.5m.

SAFETY GUIDELINES

DO NOT TOUCH the fixture housing during operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before serving.

DO NOT shake fixture, avoid brute force when installing and/or operating fixture.

DO NOT operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease. **NEVER** force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar power rating.

DO NOT block any air ventilation slots.

All fan and air inlets must remain clean and never blocked.

Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling.

Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure. Only handle the power cord by the plug end, never pull out the plug by tugging the wire portion of the cord.

During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.

Consistent operational breaks will ensure fixture will function properly for many years.

ONLY use the original packaging and materials to transport the fixture in for service.

MAINTENANCE GUIDELINES



DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

CLEANING

Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Clean the external lens surface at least every 20 days with a soft cloth to avoid dirt/debris accumulation.

NEVER use alcohol, solvents, or ammonia-based cleaners.

MAINTENANCE

Regular inspections are recommended to insure proper function and extended life.

There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized Elation service technician. Should you need any spare parts, please order genuine parts from an authorized Elation dealer.

Please refer to the following points during routine inspections:

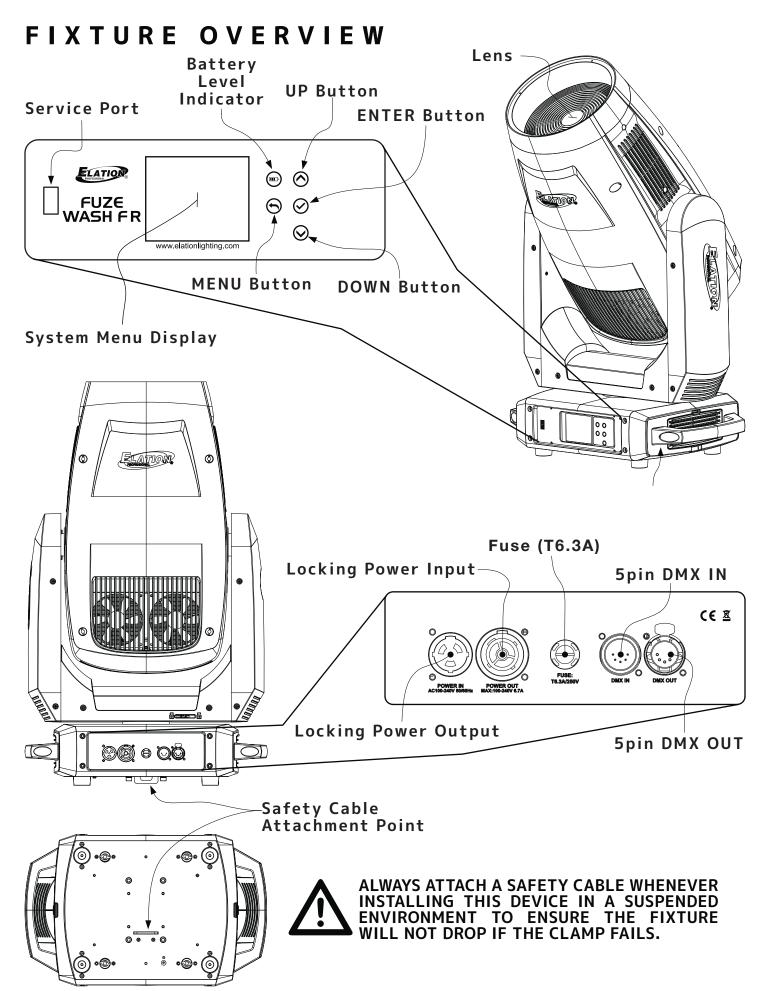
A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.

Be sure all screws and fasteners are securely tightened at all times. Lose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

Check for any deformations on the housing, color lenses, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).

Electric power supply cables must not show any damage, material fatigue or sediments.

NEVER remove the ground prong from the power cable.

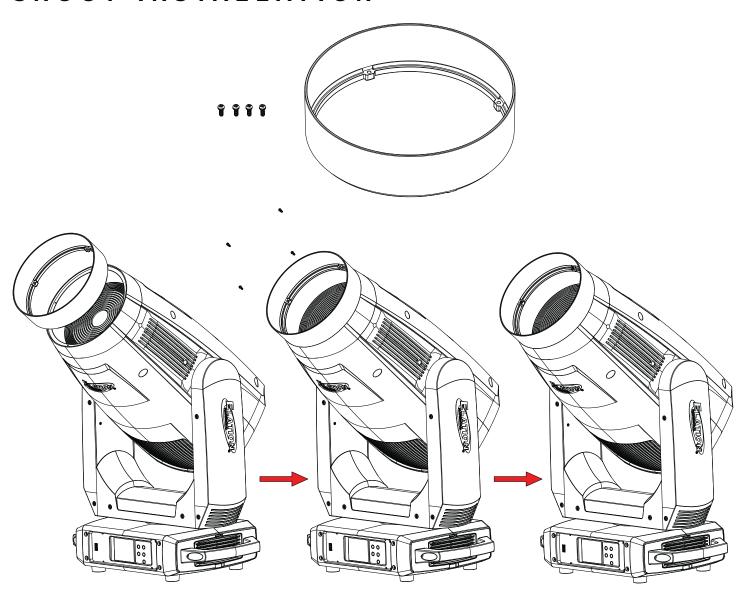


COLORS

Colors	Color Temperature	Green Shift
Cyan	•	Full Minus Green to
Magenta		Neutral
Yellow		Neutrai
Red	2400K – 8500K	Neutral White
Green	2400K - 6500K	Neutral Willte
Blue		
Mint		Neutral to Full Plus Green
Amber		

	Vi	rtual Gel	Swatch Book Cold	ors	
7	Pale Yellow	157	Pink	68	Sky Blue
103	Straw	36	Medium Pink	143	Pale Navy Blue
151	Gold Tint	111	Dark Pink	131	Marine Blue
100	Spring Yellow	128	Bright Pink	115	Peacock Blue
10	Medium Yellow	148	Bright Rose	172	Lagoon Blue
101	Yellow	332	Special Rose Pink	116	Medium Blue Green
104	Deep Amber	793	Vanity Fair	90	Dark Yellow Green
15	Deep Straw	113	Magenta	139	Primary Green
179	Loving Amber	46	Dark Magenta	122	Fern Green
21	Gold Amber	48	Rose Purple	89	Moss Green
105	Orange	126	Mauve	124	Dark Green
158	Deep Orange	49	Medium Purple	88	Lime Green
22	Dark Amber	58	Lavender	138	Pale Green
778	Millennium Gold	199	Palace Blue	203	Quarter CT Blue
135	Deep Golden Amber	119	Dark Blue	202	Half CT Blue
24	Scarlet	132	Medium Blue	201	FULL CT Blue
106	Primary Red	120	Deep Blue	200	Double CT Blue
26	Bright Red	165	Daylight Blue	206	Quarter CT Orange
27	Medium Red	161	Slate Blue	205	Half CT Orange
19	Fire	118	Light Blue	204	FULL CT Orange

SNOOT INSTALLATION



- 1. Place fixture on the stable flat surface and let cool for 15mins.
- 2. Align Snoot onto front lens so 4 screw holes on snoot match 4 screw holes on lens.
- 3. Carefully using a hand screwdriver, insert/secure included 4 screws.
- 4. Check Snoot to confirm it is seated properly and all 4 screws are secure.



DO NOT OVER TIGHTEN SCREWS! DO NOT USE A POWER SCREWDRIVER!

INSTALLATION GUIDELINES



FLAMMABLE MATERIAL WARNING

Keep fixture minimum 5.0 feet (1.5m) away from flammable materials and/or pyrotechnics.



ELECTRICAL CONNECTIONS

A qualified electrician should be used for all electrical connections and/or installations.



USE CAUTION WHEN POWER LINKING OTHER MODEL FIXTURES AS THE POWER CONSUMPTION OF OTHER MODEL FIXTURES MAY EXCEED THE MAX POWER OUTPUT ON THIS FIXTURE. CHECK SILK SCREEN FOR MAX AMPS.



MINIMUM DISTANCE TO OBJECTS/SURFACES MUST BE 1 FOOT (0.3 METERS)



MINIMUM DISTANCE OF INFLAMMABLE MATERIALS FROM THE SURFACE 1.6 FEET (0.5 METER)



MAXIMUM AMBIENT TEMPERATURE 113° F (45°C)



DO NOT INSTALL THE FIXTURE IF YOU ARE NOT QUALIFIED TO DO SO!

Fixture **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations.

Before rigging/mounting a single fixture or multiple fixtures to any metal truss/structure or placing the fixture(s) on any surface, a professional equipment installer **MUST** be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture(s), clamps, cables, and accessories.

Overhead rigging requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand.

NEVER stand directly below the fixture(s) when rigging, removing or servicing.

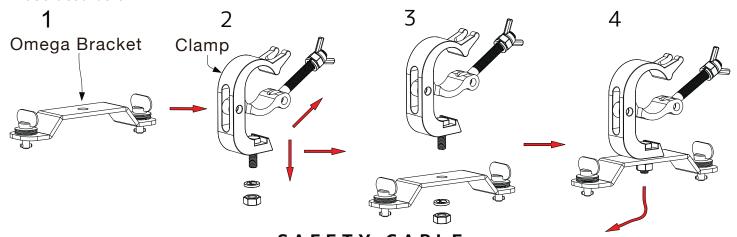
Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable.

Allow approximately 15 minutes for the fixture to cool down before serving.

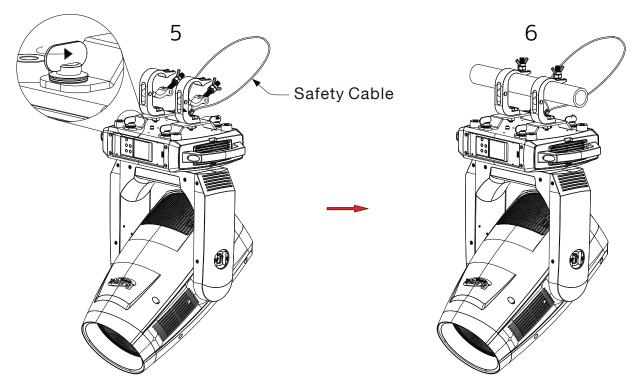
INSTALLATION GUIDELINES

OMEGA BRACKETS INSTALLATION

Insert the Omega Brackets into the matching holes on the bottom of the fixture. Secure the Omega Brackets to the fixture by turning each quick-lock fastener ¼ turn clockwise; making sure the fastener is completely locked. Omega Brackets can be installed into the fixture base as illustrated below.



SAFETY CABLE ALWAYS ATTACH A SAFETY WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.



CLAMP INSTALLATION

When mounting fixture to truss, be sure to secure an appropriately rated professional grade rigging clamp to the included **Omega Brackets** using an M10 screw fitted through the center hole of the **Omega Brackets**. The fixture provides built-in rigging points for a **SAFETY CABLE** (not included). Be sure to only use one of the designated rigging points for the safety cable and never secure a safety cable to a carrying handle.

RIGGING

Overhead rigging requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

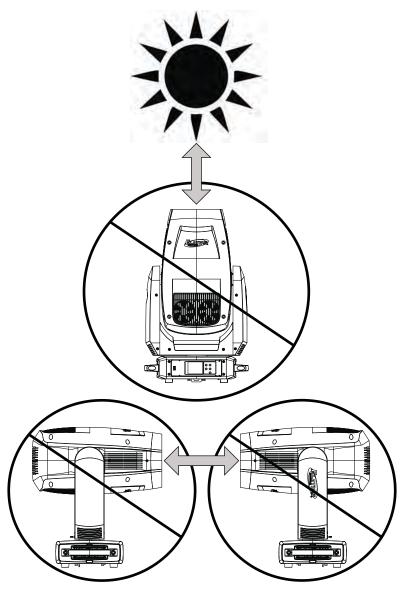
INSTALLATION GUIDELINES

POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

External sources of light beams from direct sunlight, lighting moving head fixtures, and lasers, which are focused directly towards the exterior housing and/or penetrate the front lens opening of ELATION lighting fixtures, can cause severe internal damage including burning to optics, dichroic color filters, glass and metal gobos, prisms, animation wheels, frost filters, iris, shutters, motors, belts, wiring, discharge lamps, and LEDs.

This issue is not specific only to ELATION lighting fixtures, it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to fully prevent this issue from happening, the guidelines below can prevent any potential damage from occurring if followed. Contact ELATION Service for more details.

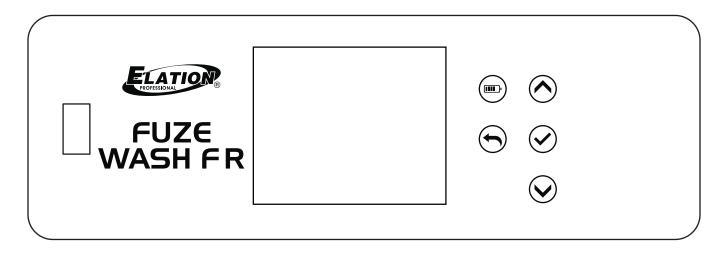
DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING MOVING HEAD FIXTURES, AND LASERS WHILE UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.



SYSTEM MENU

The fixture includes an easy to navigate system menu. The LCD touch panel display located on the front of the fixture (see image below), provides access to the main system menu and is where all necessary system adjustments are made to the fixture. During normal operation, pressing the **ENTER (Check Mark)** button once will access the fixture's main menu. Once in the main menu you can navigate through the different functions and access the sub-menus with the **UP** and **DOWN** buttons. Once you reach a field that requires adjusting, press the **ENTER** button to activate that field and use the **UP** and **DOWN** buttons to adjust the field. Pressing the **ENTER** button once more will confirm your setting. You may exit the main menu at any time without making any adjustments by pressing the **ESC (Back Arrow)** button.

To access the LCD Menu Control Display via the internal battery, press and hold the **BATTERY ICON** button for 3 seconds. The LCD Menu Control Display will shut **OFF** automatically about 1 minute from the last button press.



SYSTEM MENU

			ION FUZE Wanted		
			Software Vers		
MAIN MENU	OPT	IONS / VALUES (Defa			DESCRIPTION
PIANT PIERO		`	are seconings in E	JOLD)	Used to set the units desired DMX
	DMX Presets	A001~AXXX			mode.
	DMX Channel	Standard, Extended	CMY CMY Ext	ended	Used to set the units desired DMX
	Mode	Standard, Extended	, CITT, CITT EXC	Indea	mode.
		Blackout			Blackout option shall take all channels to zero (0) when signal is
		Diackout		lost.	
DMX Setting					Hold Last shall be the default setting
	No DMX	Hold Last			and unit shall hold all last channel
	Status				values received from the console when signal is lost.
					Internal Programs option shall take
		Internal Dressrams			all channels to the last set Internal
		Internal Programs			Programs channel settings when
	Declaration	ON OFF			signal is lost.
	Primary Secondary	ON/ OFF ON/ OFF			
	Secondar y	Pan Invert	ON/ OFF		
		Tilt Invert	ert ON/ OFF		
		Pan/Tilt Feedback Pan Degree	dback ON/ OFF 630/ 540		
		Pan/Tilt Speed	Speed 1~4		
	Ctatus	'	•		When DMX signal is not present for
	Status Settings				the set time, the unit shall go into
					standby mode after the set time. When set to OFF, unit shall never go
		Hibernation	OFF, 01M~99N	1, 15M	into hibernation mode. The unit
					should have 01M to 99M options
					01M, 02M, 03M ··· 99M (M=Minutes
					15M should be default.
		Auto High			
	Fan Settings	Low			
		Studio			
		Mute Standard	1		
		Stage			
	D: M I	TV			
	Dim Mode	Architectural Theatre			
Personality		Stage 2			
		Dim Speed	0S~10S		
		Linear Square			
	Dim Curves	Square Inverse			
		S-Curve	040 4300 4	240 4220	
	LED Refresh	900, 910, 920, 930, 1230, 1500, 2500			
	Rate	25KHZ	, 4000, 3000, 1	OK, TJK, ZOK,	
		Reset All Motors	YES/NO		
	Reset Motors	Pan/Tilt Reset Focus and Zoom reset	YES/NO		
		Other motor reset	YES/ NO		
		Screen Saver Delay	01M ~10M/0F	=	
	Display	Touch Screen Lock Rotate Display 180°	OFF/ON		
	Temp Unit	C/ F	TL3/NO		
				Pan 000-255	
			Calibration	Tilt 000-255	
			Calibration	Red 000-255	
	Service	Passcode			
			USB Software	YES/ NO	
			<u>Update</u> Factory		
			Factory Restore	YES/ NO	
	I	1	111031011	I.	1

MAIN MENU	OPTIO	ONS / VALUES (Defa	ault Settings ir	BOLD)	DESCRIPTION
	Pan, Tilt, Red, Amber,, Cor	, Green, Blue, Mint, trol	000-255		Set Manual Control values remain set when no DMX signal is present, including through a power cycle.
	Tilt	000-255	•		, , ,
	Red	000-255			
Manual	Green	000-255			
-idiiddi	Blue	000-255			
	Mint	000-255			
	Amber	000-255			
	Control	000-255			
		Speed	000-255		
	Program 0	Fade	000-255		
		Speed	000-255		
	Program 1	Fade	000-255		
nternal	Program 2	Speed	000-255		
Programs		Fade	000-255		
	Program 3	Speed	000-255		
	g	Fade	000-255		
			T		
	Program 16	Speed	000-255		
		Fade	000-255		
	Fixture Life Time	Power On Time	xxxxxx Hours		Fixing running total time
	Fixture Last Run Time	Power On Resettable Time	xxxxxx Hours		Fixture last running time
	ituii Tiille	Power On Time Reset	Passcode	YES/ NO	Clear fixture total running time
			Current		xxxF/xxxC
		LEDs	Max Resettable		xxxF/xxxC
	Fixture Temperatures		Max Not Rese	ettable	xxxF/xxxC
		Reset LED Temp	Passcode	YES/ NO	
1.6		Base Temp	Current		xxxF/xxxC
Information			1_fan xxxx		
		LED_fan RPM	2_fan xxxx		
	Fan Info.	_	3_fan xxxx		
		Daga fan DDM	4_fan xxxx		
		Base_fan RPM Blade fan RPM	Base_fan xxx		
		Pan	Blade_fan xx	ΚX	
		Tilt			
	DMX Values				
		Zoom			
	Product IDs	RDM UID			
		Fixture Errors			
	Error Logs	Reset Error Log	Passcode	YES/ NO	
		1U:V1.04	,	,	
		2U:V1.04			
	Software	3U:V1.04			
	Software Version	3U:V1.04 4U:V1.04 5U:V1.04			

COLOR LED PROGRAMMING GUIDELINES

The fixture utilizes an advanced additive LED light engine that contains Red, Green, Blue, Mint and Amber LED which when combined, provides a brilliant high CRI White. Using a 5-color LED engine allows the fixture to have a wide color gamut which offers robust saturated colors as well as a wide range of pastel and theatrical colors.

Programming a 5-color LED engine is a bit more time consuming than the more common 3-color CMY (Cyan, Yellow, Magenta) or RGB (Red, Blue Green) systems. To help ensure optimal performance of the fixture, it is highly suggested to try out the multiple DMX control modes to understand specifically how they work with color before programming a full show. A couple of suggested modes are listed below.

The **CMY Extended** DMX control mode provides a "natural" color mix which is compatible with color pickers of most lighting consoles and includes 16-bit color control.

The **Extended** RGBMA (Red, Green, Blue, Mint, Amber) DMX control mode provides slightly higher precision color mixes but may be require additional time to find the right values for all 5-color LEDs to achieve a specific desired color.

DMX TRAITS: CHANNEL FUNCTIONS & VALUES

Supports Software Versions: ≥ 1.04					MX Chanr	ON FUZE WASH FR nel Values / Functions		
NODE/CHAINSE Standard Extended CMY CMY Extended CMY Extend								
Standard Extended CMV CMY Extended CMV		MODE //	- 11 1 11 11		<u>es subjec</u>	t to change without notice.		
1	Standard			1	VALUE	FUNCTION	DEFAULT	SNAP
2 2 2 2 2 2 2 2 2 2	4	4	4	4		PAN Movement 8bit:	427	
12	1	I	1	1	000-255	Pan Movement	12/	
3 3 3 3 3 3 3 3 3 3	2	2	2	2		Pan Fine 16bit:	127	
10	2	2	2	2	000-255	Fine control of Pan movement	12/	
100-255 Tilt Fine 15bit: 127	7	7	7	7		TILT Movement 8bit:	127	
4		J	J	J	000-255	Tilt Movement	127	
S S S Cyan Cy	4	4		4		Tilt Fine 16bit:	127	
S S O00-255 Cyan (0-100% Cyan)	4	4	4	4	000-255	Fine control of Tilt movement	127	
000-255 Cyan (0-100% (yan) 0 0 0 0 0 0 0 0 0			5	5		· ·	0	
Company				5	000-255		U	
Content Cont				6			0	
S				0	000-255	Cyan Fine	U	
Section Sect			6	7			0	
10 15 8 11 10 15 8 11 10 15 8 11 10 15 8 11 10 10 10 10 10 1				,	000-255			
10 10 15 Magenta Fine				8			0	
10				0	000-255			
10 10 10 10 10 10 10 15 10 15 10 15 15			7	g			0	
10			,	J	000-255			
Section Sect				10			0	
5 5 000-255 Red (0-100% Cyan) 255 6 000-255 Red Fine: 255 6 7 6 7 255 8 000-255 Green (0-100% Magenta) 255 8 000-255 Green Fine: 255 9 8 8 255 10 8 8 8 255 8 11 000-255 8 9 255 8 11 000-255 Mint (0-100% Cyan) 255 9 13 000-255 Mint Fine: 255 9 13 000-255 Amber: 255 14 000-255 Amber Fine: 255 000-255 Open 0-23 Open 10 15 8 11 000-23 Open 10 15 000-25 000-25 000-25 000-25				10	000-255			
Concord Conc	5	5					255	
6 000-255 Red Fine Green: 000-255 Green (0-100% Magenta) 8 000-255 Green Fine: 000-255 Green Fine Blue: 000-255 Blue (0-100% Yellow) 255 10 Blue Fine: 000-255 Blue Fine 000-255 Blue Fine 11 0000-255 Mint (0-100% Cyan) 12 Mint Fine: 000-255 Mint Fine 255 Mint Fine: 000-255 Amber: 000-255 Amber (0-100% Magenta) 255 Amber Fine: 000-255 Amber Fine 255 CTO: 0-23 Open 24-85 CTO 2400K - 8500K (see separate sheet)					000-255			
Company		6					255	
6					000-255			
Green Fine: 7 9 Blue: 255 8 10 Blue (0-100% Yellow) 255 8 11 Mint: 255 9 12 Mint Fine: 255 9 13 Mint Fine: 255 9 14 Mayber Fine: 255 10 Mint Fine: 255 10 Mint Fine: 255 10 Mint Fine: 255 10 Mayber: 255 10 Mayber Fine: 255	6	7					255	
The state of the latter of t					000-255			
Blue: 000-255 Blue (0-100% Yellow) 10 Blue Fine: 000-255 Blue Fine 8 11 Mint: 000-255 Mint (0-100% Cyan) Mint Fine: 255 000-255 Mint Fine 4 Amber: 000-255 Amber (0-100% Magenta) Amber Fine: 255 000-255 Amber Fine 000-255 Amber Fine 000-255 CTO: 0-23 Open 24 - 85 CTO 2400K - 8500K (see separate sheet)		8			222 255		255	
The color of the					000-255			
10	7	9			000 255		255	
8 11 000-255 Blue Fine 255 Mint: 000-255 Mint (0-100% Cyan) 12 000-255 Mint Fine: 000-255 Mint Fine 255 Amber: 000-255 Amber (0-100% Magenta) 255 Amber Fine: 000-255 Amber Fine 255 CTO: 0-23 Open 24-85 CTO 2400K - 8500K (see separate sheet)					000-255			
8 11 Mint: 000-255 Mint (0-100% Cyan) Mint Fine: 255 000-255 Mint Fine 255 3 Amber: 000-255 Amber (0-100% Magenta) 255 3 Amber Fine: 000-255 Amber Fine: 000-255 Amber Fine 000-255 Open 255 0-23 Open 24 -85 CTO 2400K - 8500K (see separate sheet)		10			000 255		255	
8 11 000-255 Mint (0-100% Cyan) 12					000-255			
12	8	11			000 255		255	
9 13 Amber: 000-255 Mint Fine 255 Amber: 000-255 Amber (0-100% Magenta) 255 Amber Fine: 000-255 Amber Fine 255 CTO: 0-23 Open 24 -85 CTO 2400K - 8500K (see separate sheet)					000-255	, ,		
9 13 Amber: 000-255 Amber (0-100% Magenta) 255 Amber Fine: 000-255 Amber Fine 255 000-255 Amber Fine 000-255 Amber Fine 255 CTO: 0-23 Open 24 -85 CTO 2400K - 8500K (see separate sheet)		12			000 355		255	
9 13 000-255 Amber (0-100% Magenta) Amber Fine: 000-255 Amber Fine 000-255 Amber Fine CTO: 0-23 Open 24 -85 CTO 2400K - 8500K (see separate sheet) 000-255 Amber Fine					000-255			
Amber Fine: 255	9	13			000-255		255	
10 15 8 11 000-255 Amber Fine CTO: 000-255 Amber Fine CTO: 0-23 Open 24 -85 CTO 2400K - 8500K (see separate sheet) 0					000-233			
CTO: 0-23 Open 24 -85 CTO 2400K - 8500K (see separate sheet) 0		14			000-255		255	
10 15 8 11 0-23 Open 24 -85 CTO 2400K - 8500K (see separate sheet) 0					000-233			
10					0-23			
	10	15	8	11		-	0	
						·	-	

	MODE/C	HANN	IEL							
Standard	Extended	CMY	CMY Extended	VALUE	FUNCTION	DEFAULT	SNAP			
					Color Wheel:					
				0	Open					
				1-60	Virtual Swatch Book (see separate sheet)					
							61-179	Open		
					Color Scroll					
				180-201						
	4.0		4.0	202-207						
11	16	9	12		Counter-clockwise, slow→ fast	0				
				230-234						
					Random Slots					
				235-239						
				240-244						
				245-249		1				
				250-255		1				
				230 233	Focus:					
12	18	10	14	0-255	Continuous adjustment from near to far	127				
				0 233	Zoom:					
13	19	11	15	0-255	Zoom adjustment from small to big	127				
				0-233	Dim Modes					
				0-20	Standard					
				21-40	Stage					
				41-60	TV					
					61-80	Architectural	_			
				81-100	Theatre					
				101- 120						
				424	Dimmer Delay Time					
				121	0s					
				122	0.1s					
				123	0.2s					
				124	0.3s					
				125	0.4s					
				126	0.5s					
	23		19	127	0.6s	0	X			
				128	0.7s					
				129	0.8s					
				130	0.9s					
				131	1.0s					
				132	1.5s					
				133	2.0s					
				134	3.0s					
				135	4.0s	1				
				136	5.0s	1				
				137	6.0s	_				
				138	7.0s					
				139	8.0s					
				140	9.0s					
				141	10s	1				
				142 - 255	Idle					

	MODE/C	HAN	NEL					
Standard	Extended	CMY	CMY Extended	VALUE	FUNCTION		DEFAULT	SNAP
					Iris:			
47	24	4.5	20	0-191	Max. diameter to Min.diameter			
17	24	15	20	192-223	Pulse opening fast to slow		0	
				224-255	Pulse closing slow to fast			
40	25	1.0	24		Frost Light		_	
18	25	16	21	0-255	Open to Full Frost		0	
40	26	47	22		Frost Medium		0	
19	26	17	22	0-255	Open to Full Frost		0	
20	27	40	27		Blade 1A			
20	27	18	23	0-255	Open to Close		0	
	20		2.4		Blade 1A Fine			
	28		24	0-255	Open to Close Fine	Тор	0	
24	20	10	2.5		Blade 1B	7		
21	29	19	25	0-255	Open to Close		0	
	30		26		Blade 1B Fine		0	
	30		20	0-255	Open to Close Fine			
22	71	20	27		Blade 2A		0	
22	31	20	27	0-255	Open to Close		0	
	70		20		Blade 2A Fine	_	0	
	32		28	0-255	Open to Close Fine	tom	0	
27	77	24	20		Blade 2B	Bottom		
23	33	21	29	0-255	Open to Close	ш	0	
	7.4		70		Blade 2B Fine			
	34		30	0-255	Open to Close Fine		0	
24	7.5	22	7.1		Blade 3A		0	
24	35	22	31	0-255	Open to Close		0	
	7.0		7.0		Blade 3A Fine		0	
	36		32	0-255	Open to Close Fine	ft	0	
25	37	23	33		Blade 3B	Left	0	
25	57	23	33	0-255	Open to Close			
	70		7.4		Blade 3B Fine		0	
	38		34	0-255	Open to Close Fine			
26	39	24	35		Blade 4A		0	
20	39	24	30	0-255	Open to Close			
	40		36		Blade 4A Fine		0	
	40		30	0-255	Open to Close Fine	Right		
27	41	25	37		Blade 4B	Riç	0	
<i>∠1</i>	41	25	١٠.	0-255	Open to Close			
	42		38		Blade 4B Fine		0	
	42		30	0-255	Open to Close Fine			
					Framing Rotation:			
20	17	26	70	0-126	Min (-60 degrees)		127	
28	43	26	39	127-128	Parallel (0 degrees)		127	
				129-255	Max (+60 degrees)			
	44		40		Framing Speed:		0	
	44		40	0-255	Speed Max —>Min			

	MODE/CHANNEL				T	CNAD	
Standard	Extended	CMY	CMY Extended	VALUE	FUNCTION	DEFAULT	SNAP
					Framing Macro:		
				0-7	OFF		
				8-15	Macro1		
				16-23	Macro2		
				24-31	Macro3		
				32-39	Macro4		
				40-47	Macro5		
				48-55	Macro6		
				56-63	Macro7		
				64-71	Macro8		
				72-79	Macro9		
				80-87	Macro10		
				88-95	Macro11		
				96-103	Macro12		
				104-111	Macro13		
				112-119	Macro14		
	45		41	120-127		0	
				128-135	Macro16		
				136-143			
				144-151	Macro18		
				152-159	Macro19		
				160-167	Macro20		
				168-175	Macro21		
				176-183	Macro22		
				184-191	Macro23		
				192-199	Macro24		
				200-207			
				208-215			
				216-223			
				224-231	Macro28		
				232-239			
				240-247			
				248-255			
					Pan / Tilt and Color Speed:		
				0-225	Max to min speed		
	46		42	226-235	,	0	
				236-245	Blackout by all wheel changing		
				246-255			
				0.40	Control:		
				0-19	Color change normal	4	
				20-29	Color change to any position	_	
				30-39	Color & gobo change to any position	_	
				40-44	Low Noise - Mute	_	
				45-49	Low Noise - Studio	4	
29	47	27	43	50-59	Fan Control - Low	0	X
				60-69	Fan Control - High	4	
				70-79	Fan Control - Auto (Default)	4	
				80-84	All motor reset	4	
				85-87	Pan / Tilt reset	4	
				88-93	Idle	4	
				94-96	Focus and Zoom reset	_	
				97-99	Other motor reset		

	MODE/CHANNEL								
Standard	Extended	CMY	CMY Extended	VALUE	FUNCTION	DEFAULT	SNAP		
				100-168	•				
				100	900				
				101	910				
				102	920				
				103	930				
				104	940				
				105	950				
				106	960				
				107	970				
				108 109	980				
				1109	1000				
				111	1010				
				112	1020				
				113	1030				
				114	1040				
				115	1050				
				116	1060				
						117	1070	-	
					118	1080	-		
				119	1090	0			
				120	1100				
				121	1110				
29	47	27	43	122	1120		X		
		21	21	21	13	123	1130	1	``
				124	1140	_			
				125	1150				
				126	1160				
				127	1170				
				128	1180				
				129	1190				
				130	1200				
				131	1210				
				132	1220				
				133	1230				
				134	1240				
				135	1250				
				136	1260				
				137	1270				
				138	1280				
				139	1290				
				140	1300	_			
				141	1310				
				142	1320				
				143	1330	_			
				144	1340				
				145	1350				

	MODE/CHANNEL						
Standard	Extended	CMY	CMY Extended	VALUE	FUNCTION	DEFAULT	SNAP
				146	1360		
				147	1370		
				148	1380		
				149	1390		
				150	1400		
				151	1410		
				152	1420		
				153	1430		
				154	1440		
				155	1450		
				156	1460		
				157	1470		
				158	1480		
				159	1490		
				160	1500		
				161	2500		
				162	4000		
29	47	27	43	163	5000	— о	X
23	47	21	45	164	6000		_ ^
				165	10000		
				166	15000		
				167	20000		
				168	25000		
				169-200	Idle		
				211-220	Dimmer Curve Square		
				221-230	Dimmer Curve Inverse Square		
				231-240	Dimmer Curve S-Curve		
				241	Internal program 1 (Scene 1-8)		
				242	Internal program 2 (Scene 9-16)		
				243	Internal program 3 (Scene 17-24)		
				244	Internal program 4 (Scene 25-32)		
				245	Internal program 5 (Scene 33-40)		
				246	Internal program 6 (Scene 41-48)		
				247	Internal program 7 (Scene 49-56)		
				248-255	Idle		

COLOR TEMPERATURE

VALUE	COLOR TEMPERATURE (K)	VALUE	COLOR TEMPERATURE (K)	
24	2400	55	5500	
25	2500	56	5600	
26	2600	57	5700	
27	2700	58	5800	
28	2800	59	5900	
29	2900	60	6000	
30	3000	61	6100	
31	3100	62	6200	
32	3200	63	6300	
33	3300	64	6400	
34	3400	65	6500	
35	3500	66	6600	
36	3600	67	6700	
37	3700	68	6800	
38	3800	69	6900	
39	3900	70	7000	
40	4000	71	7100	
41	4100	72	7200	
42	4200	73	7300	
43	4300	74	7400	
44	4400	75	7500	
45	4500	76	7600	
46	4600	77	7700	
47	4700	78	7800	
48	4800	79	79 7900	
49	4900	80	8000	
50	5000	81	8100	
51	5100	82	8200	
52	5200	83 8300		
53	5300	84 8400		
54	5400	85	8500	

VIRTUAL GEL SWATCH BOOK

VALUE	FILTER NUMBER	COLOR	VALUE	FILTER NUMBER	COLOR
1	7	Pale Yellow	31	126	Mauve
2	103	Straw	32	49	Medium Purple
3	151	Gold Tint	33	58	Lavender
4	100	Spring Yellow	34	199	Palace Blue
5	10	Medium Yellow	35	119	Dark Blue
6	101	Yellow	36	132	Medium Blue
7	104	Deep Amber	37	120	Deep Blue
8	15	Deep Straw	38	165	Daylight Blue
9	179	Loving Amber	39	161	Slate Blue
10	21	Gold Amber	40	118	Light Blue
11	105	Orange	41	68	Sky Blue
12	158	Deep Orange	42	143	Pale Navy Blue
13	22	Dark Amber	43	131	Marine Blue
14	778	Millennium Gold	44	115	Peacock Blue
15	135	Deep Golden Amber	45	172	Lagoon Blue
16	24	Scarlet	46	116	Medium Blue Green
17	106	Primary Red	47	90	Dark Yellow Green
18	26	Bright Red	48	139	Primary Green
19	27	Medium Med	49	122	Fern Green
20	19	Fire	50	89	Moss Green
21	157	Pink	51	124	Dark Green
22	36	Medium Pink	52	88	Lime Green
23	111	Dark Pink	53	138	Pale Green
24	128	Bright Pink	54	203	Quarter CT Blue
25	148	Bright Rose	55	202	Half CT Blue
26	332	Special Rose Pink	56	201	FULL CT Blue
27	793	Vanity Fair	57	200	Double CT Blue
28	113	Magenta	58	206	Quarter CT Orange
29	46	Dark Magenta	59	205	Half CT Orange
30	48	Rose Purple	60	204	FULL CT Orange

ERROR CODES

Error Codes subject to change without notice								
ERROR CODES								
PAN	Movement is not located in the default position after the reset. These messages will appear after a fixture reset if the magnetic-indexing circuit malfunctions (sensor failed, or magnet is missing) or there is a motor failure							
Tilt	(defective motor or a defective motor IC drive on the main PCB). This error may also be displayed if the head/yoke was blocked during a reset function.							
Zoom	Movement is not located in the default position after the reset. These messages will appear after a fixture reset if the magnetic-indexing circuit malfunctions							
Focus								
Blade	(sensor failed, or magnet is missing) or there is a motor failure (defective motor or a defective motor IC drive on the main PCB).							
Blade Fan								
Cool Fan1								
Cool Fan2								
Cool Fan3								
Cool Fan4	These messages will appear if there is a temperature and/or fan malfunction p							
Base Fan1								
Base Fan2								
HighLEDTemp								
High Base								

SPECIFICATIONS

SOURCE

480W 6,500K RGBMA (Red, Green, Blue, Mint, Amber) LED Engine 30,000 Hour Average LED Life*

*Test lab conditions. May vary depending on several factors including but not limited to: Environmental Conditions, Power/Voltage, Usage Patterns (On-Off Cycling), Control, and Dimming.

PHOTOMETRIC DATA

14,000 Total Lumen Fixture Output

EFFECTS

8.2° to 42.1°(Beam) | 12.7° to 62.1° (Field) Motorized Zoom 4 Rotating Full Blackout Framing Blades, +/- 60 Index Variable Frost Filter Iris Variable 16-bit Dimming Curve Modes

COLOR

RGBMA Color Array CMY Emulation Virtual Color Correction Green/Magenta Shift Virtual Gel Swatch Book

CONTROL / CONNECTIONS

4 DMX Channel Modes (RGBMA 29 / 47) (CMY 27 / 43)

16-bit Pan, Tilt, and Dimming Control

High Speed Electronic Shutter and Strobe

DMX Adjustable LED Frequency

DMX, RDM Protocol Support

4 Button Touch Control Panel

Full Color 180° Reversible LCD Menu Display

Locking 5pin XLR Connector In/Out

Locking IP65 Power Connector Power In/Out

USB Connection (Firmware Updates)

With Wired Digital Communication Network

SIZE / WEIGHT

Length: 16.06" (408mm) Width: 10.08" (256mm)

Vertical Height: 26.74" (679mm)

Weight: 62 lbs. (28.1kg)

ELECTRICAL / THERMAL

AC 100-240V - 50/60Hz Max Power Consumption 631W 14°F to 113°F (-10°C to 45°C) BTU/hr (+/- 10%) 3239.5

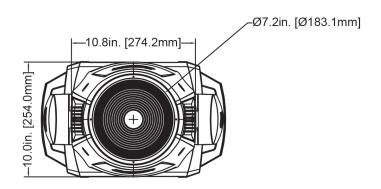
APPROVALS / RATINGS

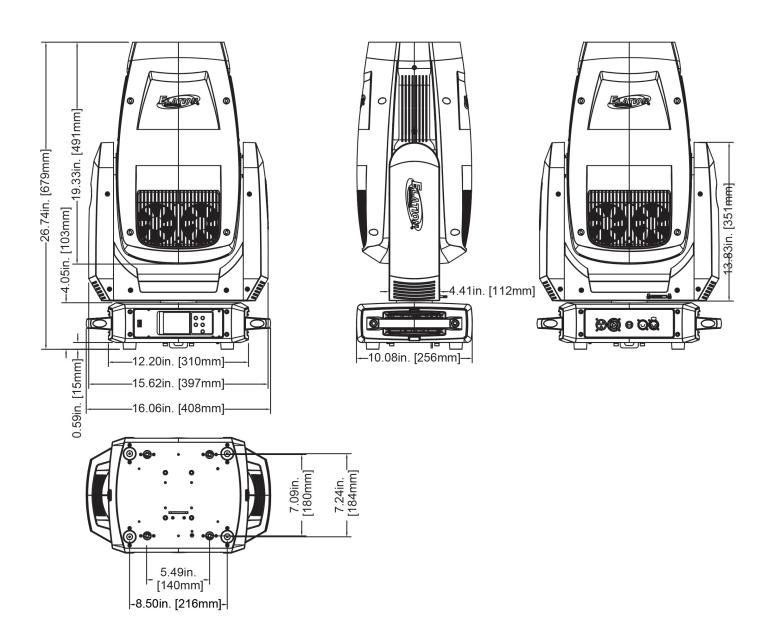
CE | cETLus | IP20

Specifications and documentation subject to change without notice.



DIMENSIONS*Drawings not to scale. Specifications and improvements in the design of this unit and this manual are subject to change without notice.





OPTIONAL ACCESSORIES

ORDER CODE	ITEM
TRIGGER CLAMP	Heavy Duty Wrap Around Hook Style Clamp
SIP126	5 ft. (1.5m) IP65 Twist Lock Power Link Cable
AC5PDMX5PRO	5 ft. (1.5m) 5pin PRO DMX Cable
	Additional Cable Lengths Available

SNOOT, GEL FRAME, & GEL FRAME HOLDER

Snoot is included. Gel Frame Holder and Gel Frame are optional.



Snoot (included) + Gel Frame Holder (optional) + Gel Frame (Optional)

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be deter- mined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!