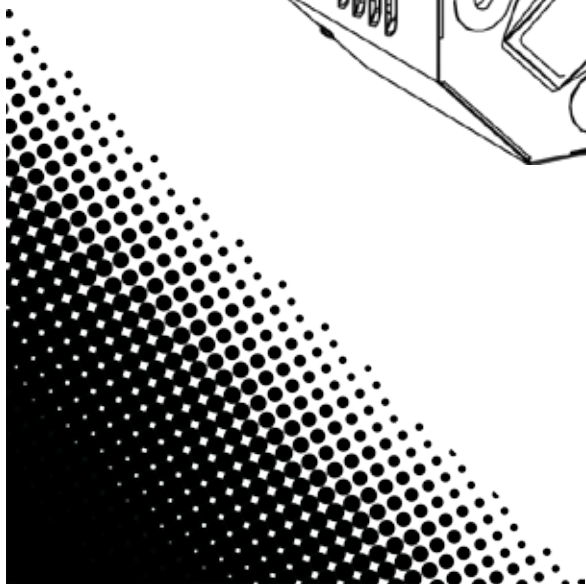
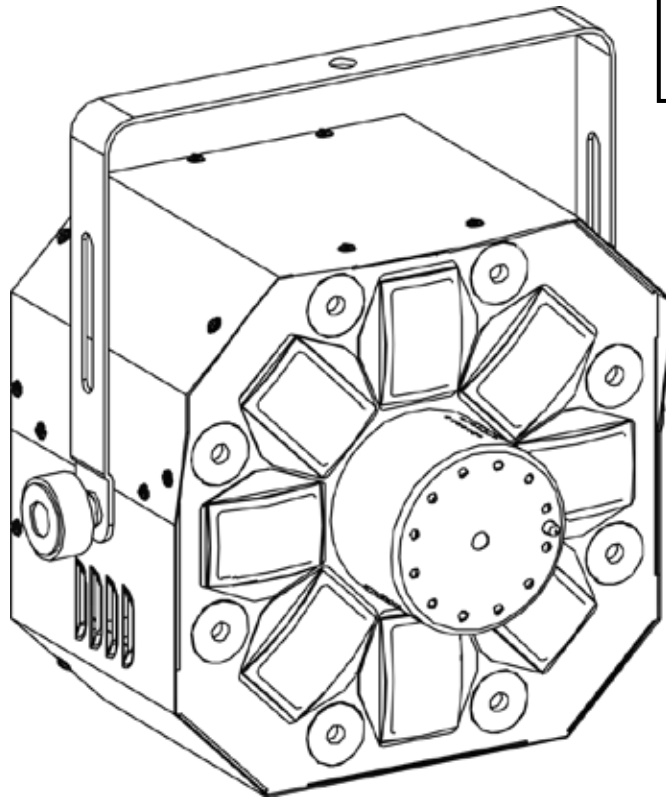


# ***SWARM WASH FX***

## **User Manual**



**LASER LIGHT**  
**AVOID DIRECT EYE EXPOSURE**  
**CLASS 3R LASER PRODUCT**  
**CLASSIFIED PER EN/IEC 60825-1:2007**  
Complies with FDA performance standards  
for laser products except for deviations  
pursuant to Laser Notice No. 50, dated June  
24, 2007.



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# 1. BEFORE YOU BEGIN

## What Is Included

- Swarm Wash FX
- External power cord
- Warranty card
- User Manual

## Unpacking Instructions

Carefully unpack the product immediately and check the box to make sure all the parts are in the package and are in good condition.

## Claims




If the box or the contents (the product and included accessories) appear damaged from shipping or show signs of mishandling, notify the carrier immediately, not Chauvet. Failure to do so in a timely manner may invalidate your claim with the carrier. In addition, keep the container and all the packing material for inspection.

For other issues, such as missing components or parts, damage not related to shipping, or concealed damage, file a claim with Chauvet within 7 days of delivery.

## Manual Conventions

Convention	Meaning
1–512	A range of values
50/60	A set of values of which only one can be chosen
Settings	A menu option not to be modified
Menu > Settings	A sequence of menu options to be followed
<ENTER>	A key to be pressed on the product's control panel
ON	A value to be entered or selected

## Symbols

Symbol	Meaning
	Critical installation, configuration, or operation information. Ignoring this information can cause the product to not work, damage it, or cause harm to the operator.
	Important installation or configuration information. The product may not function correctly if this information is not used.
	Useful information.

## Disclaimer

Chauvet believes that the information contained in this manual is accurate in all respects. However, Chauvet assumes no responsibility and specifically disclaims any and all liability to any party for any loss, damage or disruption caused by any errors or omissions in this document, whether such errors or omissions result from negligence, accident or any other cause. Chauvet reserves the right to revise the content of this document without any obligation to notify any person or company of such revision, however, Chauvet has no obligation to make, and does not commit to make, any such revisions. Download the latest version from [www.chauvetlighting.com](http://www.chauvetlighting.com).

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## Safety Notes

The Safety Notes include important laser system safety information. Read and understand all instructions before powering on the laser for the first time. Knowing these safety instructions is crucial to avoiding laser eye injury and breaking the law. Keep this User Manual in a safe place for future reference.



### STOP AND READ ALL LASER SAFETY DATA



- Lasers can be hazardous and have unique safety considerations. Permanent eye injury and blindness are possible if lasers are used incorrectly. Pay close attention to each safety REMARK and WARNING statement in this User Manual. Read all instructions carefully BEFORE operating this device.
- Always connect the product to a grounded circuit to avoid the risk of electrocution.
- Always disconnect the product from the power source before cleaning.
- Avoid direct eye exposure to the light source while the product is on.
- Make sure the power cord is not crimped or damaged.
- Never disconnect the product from power by pulling or tugging on the cord.
- If mounting the product overhead, always secure to a fastening device using a safety cable.
- Make sure there are no flammable materials close to the product when operating.
- Do not touch the product's housing when operating because it may be very hot.



- This product is not intended for permanent installation.
- Always make sure that the voltage of the outlet to which you are connecting the product is within the range stated on the decal or rear panel of the product.
- The product is for indoor use only! (IP20) To prevent risk of fire or shock, do not expose the product to rain or moisture.
- Always install the product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Be sure that no ventilation slots on the product's housing are blocked.
- Never connect the product to a dimmer.
- Always use the mounting bracket to carry the product.
- Do not switch the product on/off in short intervals. This will reduce the laser diode life.
- Do not shake this product. Avoid brute force when mounting or operating this product.
- ALWAYS use a safety cable when mounting the product overhead.
- The ambient operating temperature for the laser is 59 °F to 95 °F (15 °C to 35 °C). Do not operate this product outside this range.
- In the event of a serious operating problem, stop using the product immediately.
- Never try to repair the product. Repairs carried out by unskilled people can lead to damage or malfunction. Contact the nearest authorized technical assistance center.





- Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser light.
- This laser product can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.
- It is illegal and dangerous to shine this laser into audience areas, where the audience or other personnel could get direct laser beams or bright reflections into their eyes.
- It is a U.S. federal offense to shine any laser at aircraft.
- Use of controls, adjustments, or procedures other than those specified in this User Manual may result in hazardous radiation exposure.
- To eliminate wear and improve its lifespan, during periods of non-use completely disconnect from power via breaker or by unplugging it.
- **DO NOT attempt any repairs. Repairs and servicing must be carried out by a certified technician. Unauthorized modifications are forbidden for safety reasons!**



- **Keep this User Manual for future consultation. If transferring ownership of the product to another user, be sure this document is kept with the laser.**

### **Non-Interlocked Housing Warning**

- This unit contains high power laser devices internally.
- Do not open the laser housing, due to potential exposure to unsafe levels of laser radiation.
- The laser power levels, accessible if the unit is opened, can cause instant blindness, skin burns, and fires.

### **Laser Safety Notes**



#### **STOP AND READ ALL THE LASER SAFETY NOTES BELOW**



Laser light is different from any other light. Laser light can cause eye injury if the product is not set up and used properly. Laser light is a thousand times more concentrated than any other kind of light. This concentration can cause instant eye injuries by burning the retina (the light-sensitive portion at the back of the eye). The heat from a laser light cannot be felt, but it can still injure or blind product operators and the audience. Even very small amounts of laser light at long distances are potentially hazardous.

**DO NOT** assume that exposure to an individual laser beam is safe, even a tiny beam split off from a larger beam. This laser product uses dozens of milliwatts of laser power—Class 3B levels internally—and splits them into multiple beams—Class 3R levels. The individual Class 3R level beams are potentially hazardous to the eyes.

**DO NOT** assume that a moving laser light is safe. Laser light is never without risk. Since eye injuries can occur instantly, it is critical to prevent the possibility of ANY direct eye exposure. According to laser safety regulations, it is not legal to aim Class 3R lasers into areas where people can be exposed, even if the laser is aimed below people's faces, such as at a dance floor.

- Do not operate the laser without first reading and understanding all the safety and technical data in this manual.
- ALWAYS set up and install all laser effects so that any laser light is at least 3 meters (9.8 feet) above the floor on which people are standing. See the [Proper Usage](#) section of this manual.
- After setup, and prior to public use, test the lasers to ensure they are functioning properly. Do not use the product if any defect is detected.
- DO NOT use laser if it is emitting only one or two beams, rather than dozens/hundreds, as this indicates damage to the diffraction grating optic, and allows emission of laser levels higher than Class 3R.
- DO NOT point lasers at people or animals.
- DO NOT look into the laser aperture or laser beams.
- DO NOT point lasers into areas where people could be exposed to them..
- DO NOT point lasers at highly reflective surfaces such as windows, mirrors, and shiny metal. Even laser reflections can be hazardous.
- Never point a laser at aircraft; this is a U.S. federal offense.
- Never point un-terminated laser beams into the sky.
- Do not expose the output optic (aperture) to harsh cleaning chemicals.
- Do not use the laser if the housing is damaged, open, or if the optics appear damaged in any way.
- Never open the laser housing. The high laser power levels inside of the protective housing can start fires or burn skin, and will cause instant eye injury.
- Never leave this product running unattended.
- The operation of a Class 3R laser show is allowed only if the lasers are operated by a skilled and well-trained professional, who is familiar with the data included in this manual.
- The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements in the location/country of use.

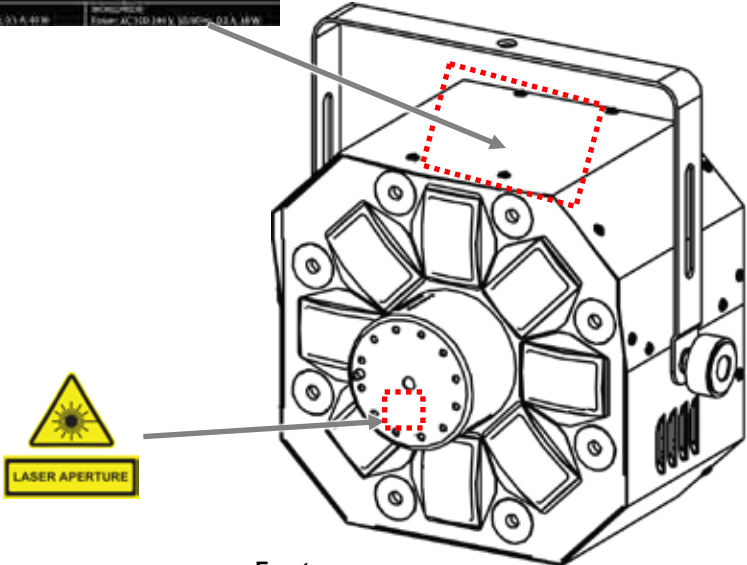


**CAUTION! Do not operate this device in ways not specified in this User Manual. Failure to follow the instructions will void the warranty, may damage the product, or injure the user or the audience.**

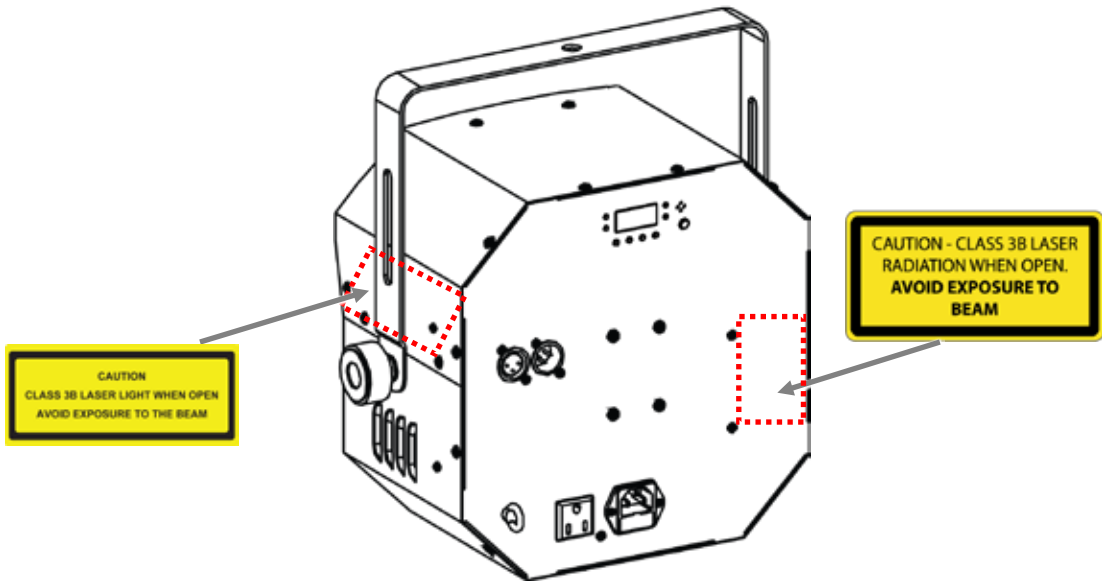


**CAUTION! This product cannot be discarded with household waste. Contact your local waste management service for electronic disposal regulations in your area.**

# Laser Safety Label Reproduction



Front



Rear

**Laser Exposure Warning**



**LASER LIGHT AVOID DIRECT EYE EXPOSURE**

Further guidelines and safety programs for safe use of lasers can be found in the ANSI Z136.1 Standard "For Safe Use of Lasers," available from the Laser Institute of America: [www.laserinstitute.org](http://www.laserinstitute.org). Many local governments, corporations, agencies, military, and others, require all lasers to be used under the guidelines of ANSI Z136.1. Laser Display guidance can be obtained via the International Laser Display Association: [www.laserist.org](http://www.laserist.org).

**Laser Emission Data**

As measured under IEC measurement conditions for classification.

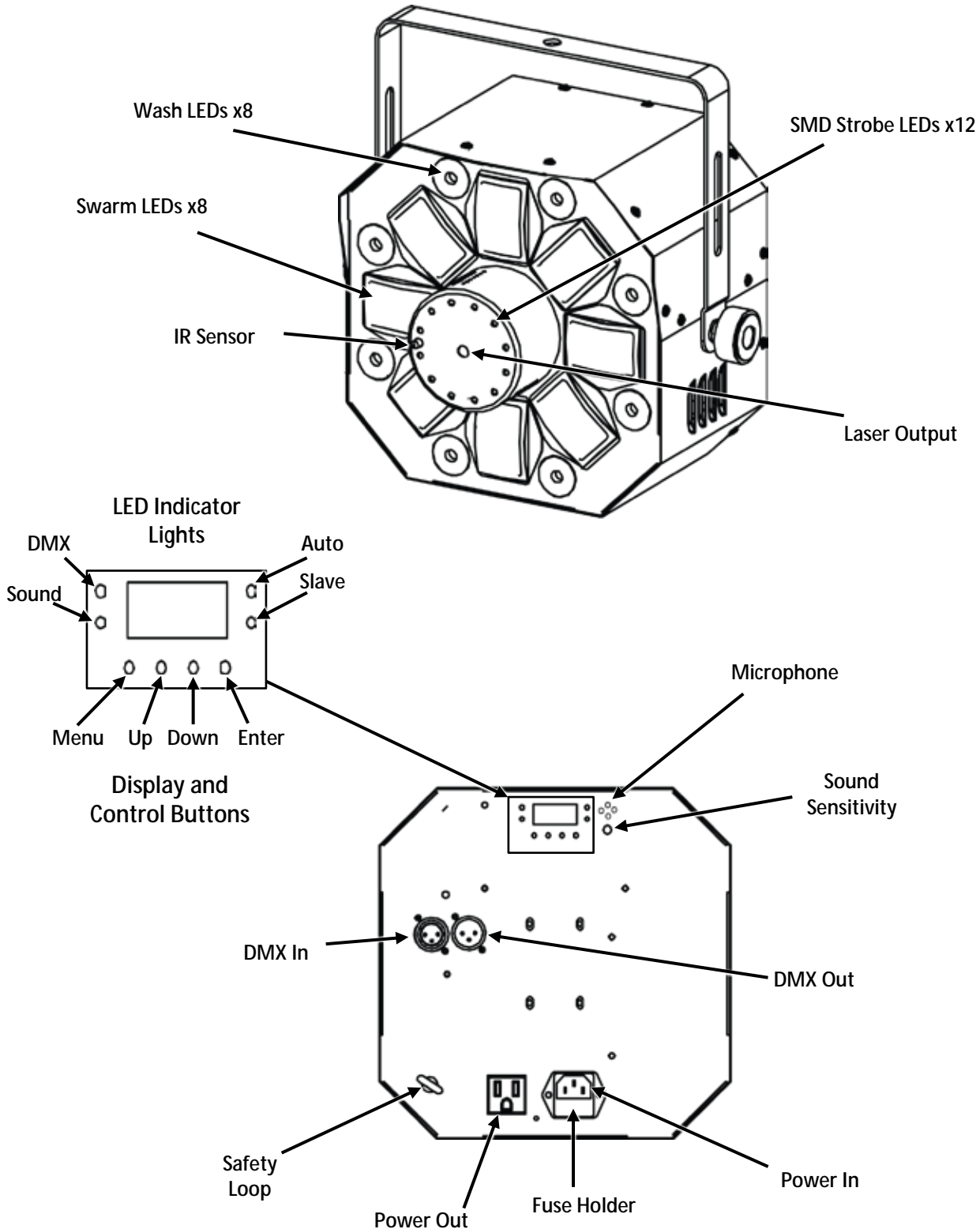
<b>Laser Classification</b>	Class 3R
<b>Green Laser Medium</b>	DPSS Nd:YVO4, 532 nm/30 mW
<b>Red Laser Medium</b>	LD GaAlAs, 650 nm/100 mW
<b>Beam Diameter</b>	<5 mm at aperture
<b>Pulse Data</b>	All pulses < 4 Hz (>0.25 sec)
<b>Divergence (each beam)</b>	<2 mrad
<b>Divergence (total light)</b>	<160 degrees
<b>Laser Power of Each Beam from Aperture*</b>	<5 mW

**Laser Compliance Statement**

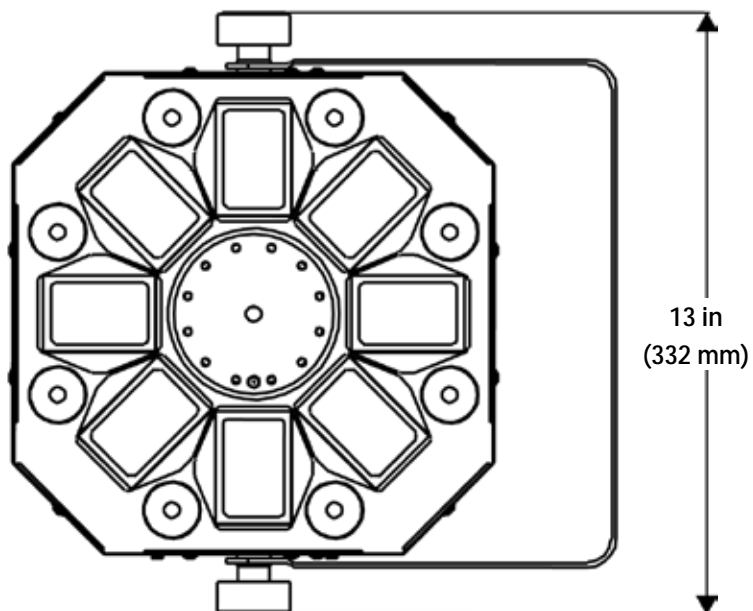
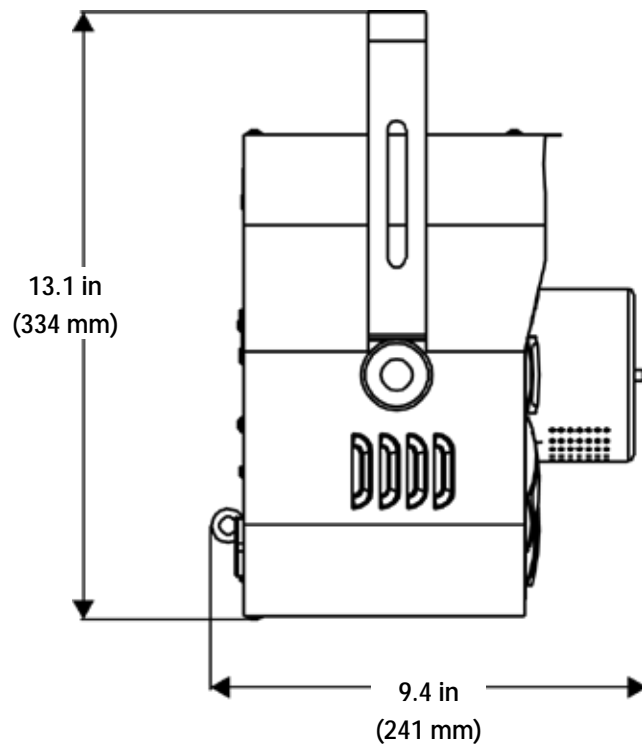
This laser product complies with EN/IEC 60825-1 Ed 2, 2007-03, and U.S. FDA/CDRH FLPPS via the terms of Laser Notice No. 50 dated June 24, 2007. This laser device is classified 3R. (Class 3R is the international equivalent of U.S. Class IIIa.) No maintenance is required to keep this product in compliance with laser performance standards.

# 2. INTRODUCTION

## Overview



## Dimensions



# 3. SETUP

**AC Power** The Swarm Wash FX has an internal auto-ranging power supply and it can work with an input voltage range of 100 to 240 VAC, 50/60 Hz.

To determine the product's power requirements (circuit breaker, power outlet, and wiring), use the current value listed on the label affixed to the product's back panel, or refer to [6. Technical Specifications](#) in this manual. The listed current rating indicates the product's average current draw under normal conditions.



- **Always connect the product to a protected circuit (circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.**
- **To eliminate wear and improve its lifespan, during periods of non-use completely disconnect from power via breaker or by unplugging it.**



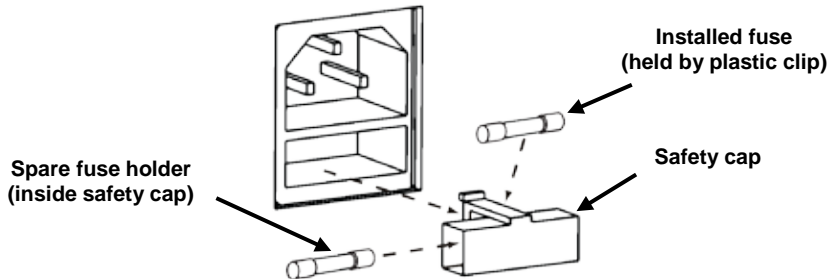
**Never connect the product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.**

## Fuse Replacement

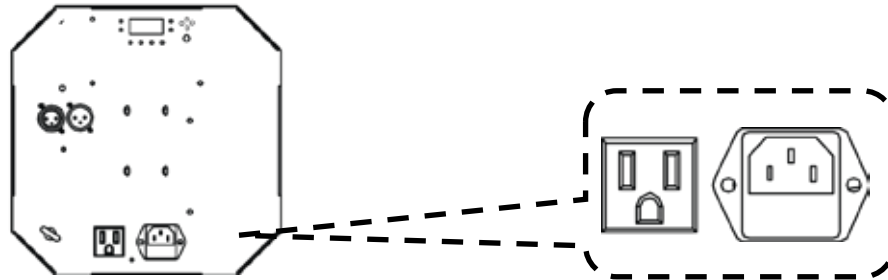
1. Disconnect the product from power.
2. Wedge the tip of a flat-head screwdriver into the slot of the fuse holder.
3. Pry the fuse holder out of the housing.
4. Remove the blown fuse from the holder.
5. Replace with a fuse of the exact same type and rating.
6. Insert the fuse holder back in place and reconnect power.



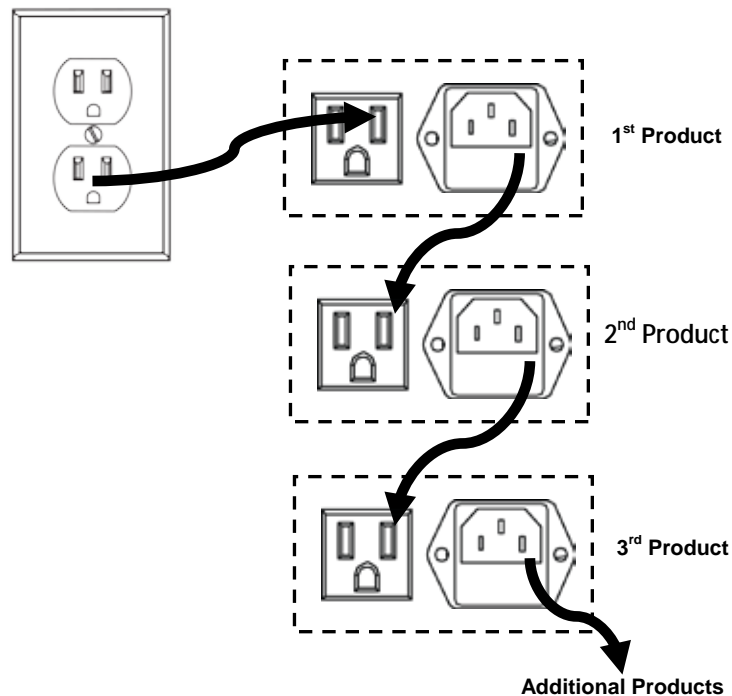
**Disconnect the product from power before replacing the fuse.**



**Power Linking** Power linking is when products are daisy chained together through the power in and power out plugs, allowing many products to be powered from one wall outlet.  
 Up to 15 Swarm Wash FX products can be power linked at 120 V, and up to 26 Swarm Wash FX products can be power linked at 230 V.  
 The diagram below illustrates the power linking process.



**Power Linking Diagram**



**i** Do not power link more than 15 Swarm Wash FX on 120 V.  
 Do not power link more than 26 Swarm Wash FX on 230 V.



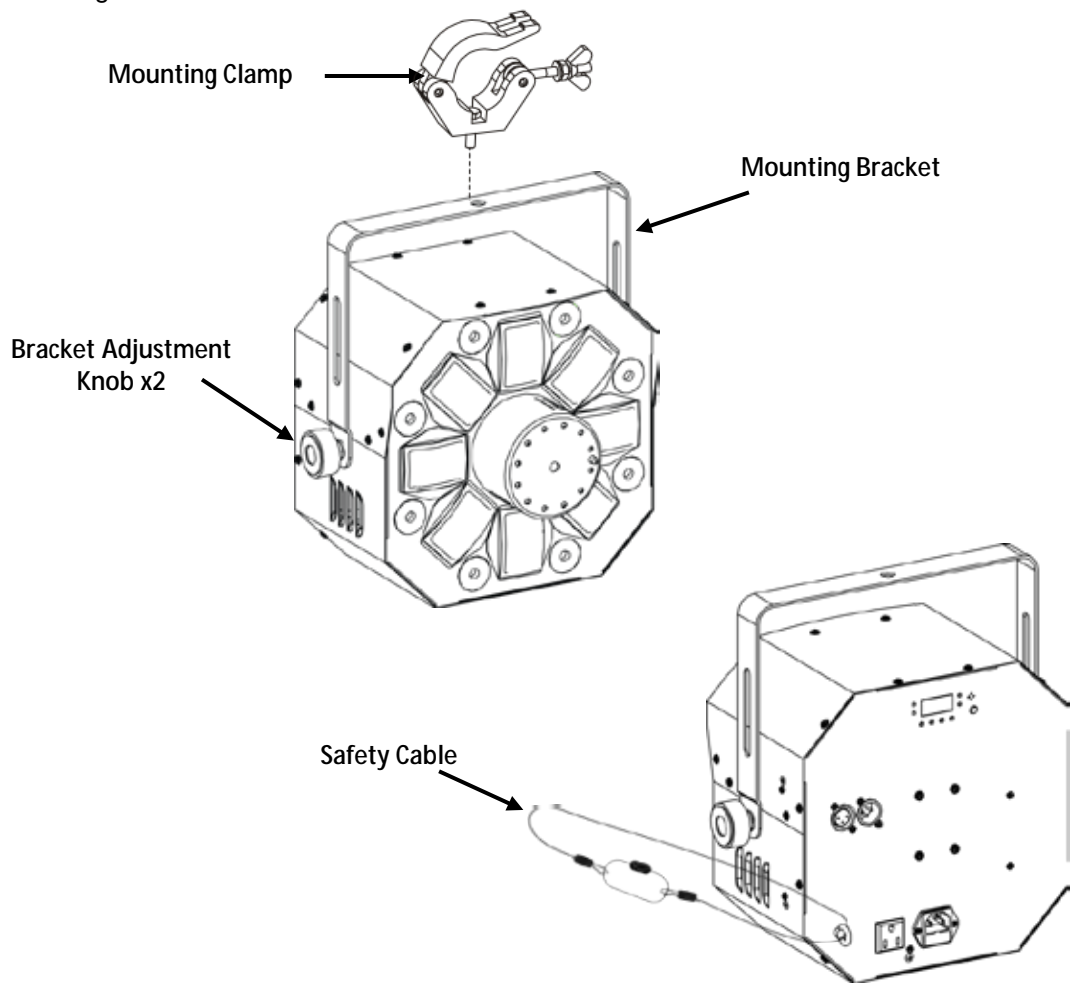
The power linking diagram above shows the North American version of the product only!  
 Power linking connectors and requirements differ from country to country, and region to region.  
 If using this product anywhere other than North America, consult with the local Chauvet distributor.



**Mounting** Before mounting the product, read and follow the safety recommendations indicated in the [Safety Notes](#). Use at least one mounting point per product. Make sure the mounting clamp (such as **CLP-15** from Chauvet) is capable of supporting the weight of the product. For our Chauvet line of mounting clamps, go to [www.chauvetlighting.com/cables-clamps-main.html](http://www.chauvetlighting.com/cables-clamps-main.html).

**Orientation** The Swarm Wash FX must be mounted in a position that includes planning for safe laser usage. In addition, make sure adequate ventilation is provided around the product.

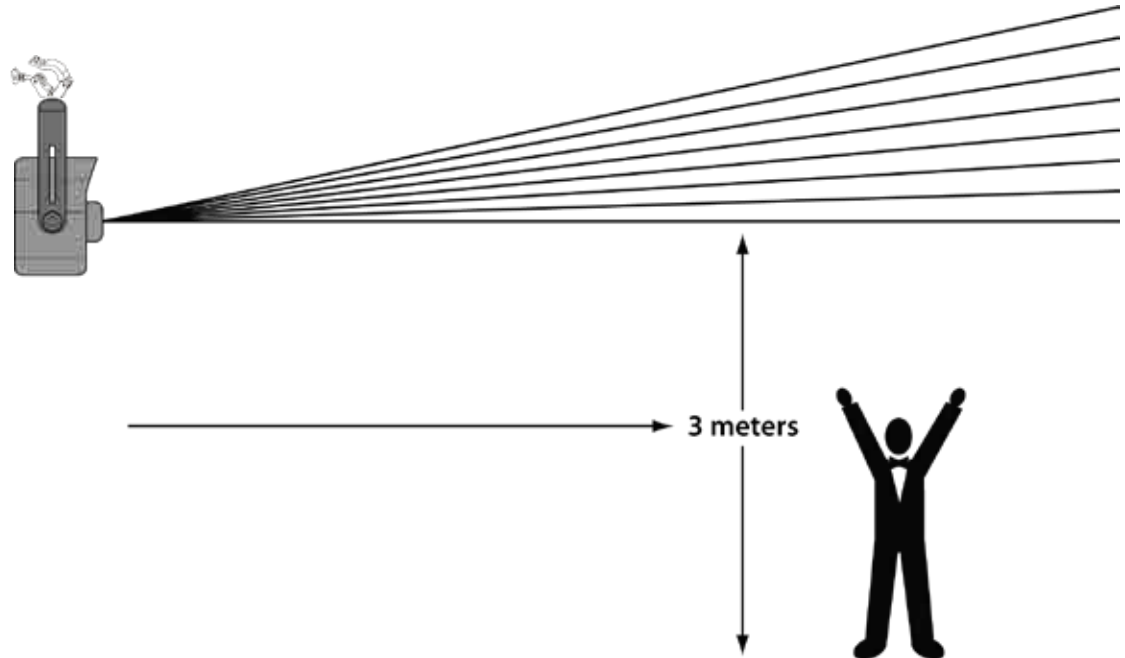
- Rigging**
- Before deciding on a location for the product, always make sure there is easy access to the product for maintenance and programming.
  - Make sure that the structure or surface onto which you are mounting the product can support the product's weight (see [Technical Specifications](#)).
  - When mounting the product overhead, always use a safety cable (such as **CH-05** from Chauvet). Mount the product securely to a rigging point, such as an elevated platform or a truss.
  - When rigging the product onto a truss, you should use a mounting clamp of appropriate weight capacity. The bracketed has a 13-mm hole, which is appropriate for this purpose.
  - The bracket adjustment knobs allow for directional adjustment when aiming the product to the desired angle. Only loosen or tighten the bracket knobs manually. Using tools could damage the knobs.



**Mounting Diagram**

**Proper Usage** This product is for overhead mounting only. For safety purposes, Chauvet recommends mounting lighting effect products on steady elevated platforms or sturdy overhead supports using suitable hanging clamps. In all cases, use safety cables. Obtain appropriate mounting hardware from your lighting vendor.

International laser safety regulations require that laser products must be operated in the fashion illustrated below, with a minimum of 3 meters (9.8 ft) of vertical separation between the floor and the lowest laser light. Additionally, 3 meters of horizontal separation is required between laser light and audience or other public spaces.



**CAUTION!** Use of controls, adjustments, or procedures other than **THOSE** specified **IN THIS USER MANUAL** may result in hazardous radiation exposure.

## 4. OPERATION

This product is not designed for continual use. Make sure there are regular breaks during operation to maximize the life of your laser. Always disconnect the Swarm Wash FX from power when not in use.

**Control Panel Operation** To access the control panel functions, use the four buttons located underneath the display. When the product is on, the LED monitor on the rear panel will show the current operating mode (Standalone or DMX). The product will retain the last saved settings when powered off.

Button	Function
<MENU>	Selects an operation mode or backs out of the current menu option
<UP>	Scrolls up the list of options or selects a higher value
<DOWN>	Scrolls down the list of options or selects a lower value
<ENTER>	Activates a menu option or a selected value

### Menu Map

Mode	Programming Steps		Description
DMX	2-CH	d001–d511	Sets DMX address and personality
	18CH	d001–d495	
Auto	P--	P 1-15	Selects Auto Program Effect and speed (slow to fast)
Speed	S--	S.01–S.99	Speed for Sound Mode and Auto Programs
Sound	SND	SN 1-15	Selects Sound Active Mode Program Effects
IR Function	SET	ON	On/Off IR functions
		OFF	

### Auto and Sound Modes Defined

Program	Effect
1	All Effects- Derby, Laser, Strobos and Wash
2	Wash Only
3	Laser Only
4	Derby Only
5	Strobos Only
6	Wash, Laser and Derby
7	Wash, Laser and Strobos
8	Wash, Derby and Strobos
9	Laser, Derby and Strobos
10	Wash and Laser
11	Wash and Derby
12	Wash and Strobos
13	Laser and Derby
14	Laser and Strobos
15	Derby and Strobos

## Configuration (DMX)

Set the product in DMX mode to control with a DMX controller. The product uses 3-pin DMX cable.

1. Connect the product to a suitable power outlet.
2. Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket on the product.

## Starting Address

When selecting a DMX starting address, always consider the number of DMX channels used by the fixture. If you choose a starting address that is too high, you could restrict the access to some of the product's channels.

The Swarm Wash FX uses 2 or 18 DMX channels, which means the highest DMX address you can use in 18 Channel mode, is **495**.

If you are not familiar with the DMX protocol, download the DMX Primer from <http://www.chauvetlighting.com>.

To select the starting DMX address, do the following:

1. Press **<MENU>** repeatedly until **02CH** or **18CH** blinks on the display and the DMX light come on.
2. Press **<ENTER>** and **d001–d495** will appear on the screen.
3. Use **<UP>** or **<DOWN>** to select the starting address.
4. Press **<ENTER>** to put the fixture in DMX mode. The display will continue to blink.



**The display will continue to blink until the fixture receives a DMX signal.**

## DMX Channel Assignments and Values

18Channel	Channel	Function	Value	Setting
1	Auto Programs	000 ó 015	Blackout	
		016 ó 030	Wash Only	
		031 ó 045	Lasers Only	
		046 ó 060	Derby Only	
		061 ó 075	Strobes Only	
		076 ó 090	Wash, Laser and Derby	
		091 ó 105	Wash, Laser and Strobes	
		106 ó 120	Wash, Derby and Strobes	
		121 ó 135	Laser, Derby and Strobes	
		136 ó 150	Wash and Laser	
		151 ó 165	Wash and Derby	
		166 ó 180	Wash and Strobes	
		181 ó 195	Laser and Derby	
		196 ó 210	Laser and Strobes	
		211 ó 225	Derby and Strobes	
		226 ó 255	All effects	
2	Auto Program Speed	000 ó 200	Selects speed, (slow to fast)	
	Sound Active Mode	201 ó 255	Sound Active mode - all effects	
3–10	Wash Group 1–8	001 ó 051	Blackout	
		052 ó 102	Red	
		103 ó 153	Green	
		154 ó 204	Blue	
		205 ó 255	UV	
11	Wash Strobe	000 ó 255	Strobe Speed (slow to fast)	

18Channel	Channel	Function	Value	Setting
			000 ó 009	Blackout
			010 ó 014	Red
			015 ó 019	Green
			020 ó 024	Blue
			025 ó 029	Amber
			030 ó 034	White
			035 ó 039	White + Red
			040 ó 044	Red + Green
			045 ó 049	Green + Blue
			050 ó 054	Blue + Amber
			055 ó 059	Amber + White
			060 ó 064	White + Green
			065 ó 069	Green + Amber
			070 ó 074	Amber + Red
			075 ó 079	Red + Blue
			080 ó 084	Blue + White
			085 ó 089	Red + Green + Blue
	12	Derby	090 ó 094	Red + Green + Amber
			095 ó 099	Red + Green + White
			100 ó 104	Red + Amber + Blue
			105 ó 109	Red + White + Blue
			110 ó 114	Red + Amber + White
			115 ó 119	Amber + Green + Blue
			120 ó 124	Blue + Green + White
			125 ó 129	Amber + Green + White
			130 ó 134	Amber + White + Blue
			135 ó 139	Red + Green + Blue + Amber
			140 ó 144	Red + Green + Blue + White
			145 ó 149	Green + Blue + Amber + White
			150 ó 154	Red + Green + Amber + White
			155 ó 159	Red + Blue + Amber + White
			160 ó 164	Red + Green + Blue + Amber + White
			165 ó 209	Automatic (single colors only)
			210 ó 222	Automatic (two colors at a time)
			223 ó 255	Automatic Sound

**18Channel**

Channel	Function	Value	Setting
13	Derby Strobe	000 ó 004	No Function
		005 ó 200	Strobe speed (fast to slow)
		201 ó 255	Sound Active Mode
14	Derby Speed	000 ó 004	Stop
		005 ó 127	Rotate right (slow to fast)
		128 ó 133	Stop
		134 ó 255	Rotate left (slow to fast)
15	SMD Strobe	000 ó 009	Blackout
		010 ó 019	Auto Program 1 (fast to slow)
		020 ó 029	Auto Program 2 (fast to slow)
		030 ó 039	Auto Program 3 (fast to slow)
		040 ó 049	Auto Program 4 (fast to slow)
		050 ó 059	Auto Program 5 (fast to slow)
		060 ó 069	Auto Program 6 (fast to slow)
		070 ó 079	Auto Programs 7 (fast to slow)
		080 ó 089	Auto Programs 8 (fast to slow)
		090 ó 099	Auto Programs 9 (fast to slow)
		100 ó 109	Auto Programs 10 (fast to slow)
		110 ó 119	Auto Programs 11 (fast to slow)
		120 ó 200	Full on
		201 ó 255	Sound- Active strobe
16	Lasers	000 ó 009	Blackout
		010 ó 049	Red on
		050 ó 089	Green on
		090 ó 129	Green and red, alternating strobe
		130 ó 169	Red on and green strobe
		170 ó 209	Green on and red strobe
		210 ó 255	Red and Green Strobe
17	Laser Strobe	000 ó 004	No function
		005 ó 254	Strobe (fast to slow)
		255	Sound- Active strobe
18	Motor LED	000 ó 004	Stop
		005 ó 127	Rotate right (slow to fast)
		128 ó 133	Stop
		134 ó 255	Rotate left (slow to fast)

02Channel	Channel	Function	Value	Setting
1	1	Auto Programs	000 ó 015	Blackout
			016 ó 030	Wash Only
			031 ó 045	Lasers Only
			046 ó 060	Derby Only
			061 ó 075	Strobes Only
			076 ó 090	Wash, Laser and Derby
			091 ó 105	Wash, Laser and Strobes
			106 ó 120	Wash, Derby and Strobes
			121 ó 135	Laser, Derby and Strobes
			136 ó 150	Wash and Laser
			151 ó 165	Wash and Derby
			166 ó 180	Wash and Strobes
			181 ó 195	Laser and Derby
			196 ó 210	Laser and Strobes
			211 ó 225	Derby and Strobes
2	2	Auto Program Speed	000 ó 200	Selects speed, (slow to fast)
		Sound Active Mode	201 ó 255	Sound Active mode - all effects



For manual operation of LEDs and lasers using DMX control, be sure Channel 1 is set to the appropriate DMX address.



## IRC-6 Infrared Remote Control

The Swarm Wash FX is compatible with the IRC-6 infrared remote control from Chauvet. To activate IR mode, press any button on the IRC-6.

**Be sure the IRC-6 remote is pointing directly at the product and there is nothing in between the remote and the product.**

### IRC-6 Operation



#### Auto Mode

To run the product in an auto program:

1. Press **<AUTO>** on the IRC-6.

#### Sound-Active Mode

To run the product in a Sound-Active program:

1. Press **<SOUND>** on the IRC-6.

#### Speed Adjust

To adjust the speed of the auto program:

1. Press **<SPEED>**
2. Use **<+>** or **<->** to increase or decrease the program speed.

#### To modify Auto and Sound-Active Mode effects with IRC-6 Buttons:

Auto Mode / Sound-Active Mode
<b>&lt;1&gt;</b> - Turn On/Off wash effect
<b>&lt;2&gt;</b> - Turn On/Off derby effect
<b>&lt;3&gt;</b> - Turn On/Off laser effect
<b>&lt;4&gt;</b> - Turn On/Off strobe effect

#### Black Out

To black out the light:

Press **<BLACK OUT>** on the IRC-6.

This will turn off the light until the button is pressed again.

**NOTE:** The IRC will not respond to any inputs when Black Out is activated. If the remote does not respond when a button is pressed, try pressing **<BLACK OUT>**. You may have inadvertently activated Black Out.



**All other buttons on the IRC-6 infrared remote control have no function with this product.**

## Configuration (Standalone)

Set the product in one of the Standalone modes to control without a DMX controller. Connect the product to a suitable power outlet.



**Never connect a product that is operating in any Standalone mode (Static, Automatic, or Sound) to a DMX string connected to a DMX controller. Products in Standalone mode may transmit DMX signals that could interfere with the DMX signals from the controller.**

## Sound-Active Mode

To enable the Sound-Active mode, do the following:

1. Press **<MENU>** repeatedly until **SND** blinks on the display.
2. **SN1—SN15** blinks on the display and the Sound light comes on.
3. Use **<UP>** or **<DOWN>** to select the desired Sound-Active program.
4. Press **<ENTER>** to put the fixture into the selected Sound-Active mode.
5. Turn the music on and adjust the sound sensitivity knob until the product starts responding to the beat of the music.



**The product will only respond to low frequencies of music (bass and drums).**

**The laser will blackout when in Sound-Active mode after 3 seconds of silence or noise below the sensitivity setting.**

## Automatic Mode

To enable the Automatic mode, follow the instructions below:

1. Press **<MENU>** repeatedly until **P--** blinks on the display.
2. **P 1—P15** blinks on the display and the Auto light comes on.
3. Use **<UP>** or **<DOWN>** to select the desired Automatic mode.
4. Press **<ENTER>**.

## Speed Adjustment

To change the speed of Auto or Sound-Active mode, follow the instructions below:

1. Press **<MENU>** repeatedly until **S--** shows on the display.
2. Press **<ENTER>** and **S.01—S.99** will show on the display.
3. Use **<UP>** or **<DOWN>** to adjust the program speed.
4. Press **<ENTER>**.

## Master/Slave Mode

The Master/Slave mode allows a single Swarm Wash FX product (the master) to control the actions of one or more Swarm Wash FX products (the slaves) without the need of a DMX controller. The master will be set to operate in either Automatic or Sound-Active mode, while the slaves will be set to operate in Slave mode. Once set and connected, the slave units will operate in unison with the master.

Configure the products as indicated below.

**For every slave:**

1. Set the product's DMX address to **d001**.



- **Configure all the slave units before connecting the master to the DMX daisy chain.**
- **The display on the slaves will continue to blink until the slaves are receiving a DMX signal from the master.**

**For the master:**

1. Connect the DMX output of the master to the DMX input of the first slave unit.
2. Set the master unit to operate in either Automatic or Sound-Active mode



- **Make sure the master is the first unit in the DMX chain.**
- **Never connect a DMX controller to a DMX chain configured for Master/Slave operation because the controller may interfere with the signals from the master.**
- **Do not connect more than 31 slaves to the master.**

## 5. TECHNICAL INFORMATION

**Product Maintenance** Dust build-up reduces light output performance and can cause overheating. To maintain optimum performance, clean the product at least twice a month. However, usage and environmental conditions contribute to increasing the cleaning frequency.

To clean the product, follow the instructions below:

1. Unplug the product from power.
2. Wait until the product is at room temperature.
3. Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external surfaces and fan vents.
4. Clean the optical panel (laser aperture) with a mild solution of optical cleaner or isopropyl alcohol.
5. Apply the solution directly to a soft, lint-free cotton cloth or a lens cleaning tissue.
6. Softly wipe any dirt or grime to the outside edges of the optical.
7. Gently polish the optical surface until they are free of haze and lint.



**Always dry the glass surfaces carefully after cleaning them.**

# 6. TECHNICAL SPECIFICATIONS

Dimensions and Weight	<b>Length</b>	<b>Width</b>	<b>Height</b>	<b>Weight</b>
	13.1 in (335 mm)	13 in (332 mm)	9.4 in (241 mm)	9.2 lb (4.2 kg)
<b>Note: Dimensions in inches rounded to the nearest decimal digit.</b>				
Power	<b>Input Voltage</b>	<b>Range</b>	<b>Voltage Selection</b>	
	Switching (internal)	100–240 VAC, 50/60 Hz	Auto-ranging	
	<b>Parameter</b>	<b>120 V, 60 Hz</b>	<b>230 V, 50 Hz</b>	
	Consumption	40 W	38 W	
	Operating current	0.5 A	0.3 A	
	Power linking current (units)	8 A (15 units)	8 A (26 units)	
	Fuse	T 1.6 A, 250 V	T 1.6 A, 250 V	
	<b>Power I/O</b>	<b>US/Worldwide</b>	<b>UK/Europe</b>	
	Power input connector	IEC	IEC	
	Power output connector	Edison	IEC	
	Power cord plug	Edison (US)	Local plug	
Light Source	<b>Laser</b>	<b>Type</b>	<b>Power</b>	<b>Wavelength</b>
		Laser (green)	30 mW	532 nm
		Laser (red)	100 mW	650 nm
Wash LED	<b>Type</b>	<b>Power</b>	<b>Lifespan</b>	
	LED	1.5 W	50,000 hours	
	<b>Color</b>	<b>Quantity</b>	<b>Current</b>	
	Quad-Color RGB+UV	8	600 mA	
Swarm LED	<b>Type</b>	<b>Power</b>	<b>Lifespan</b>	
	LED	3 W	50,000 hours	
	<b>Color</b>	<b>Quantity</b>	<b>Current</b>	
	Red	1	500 mA	
	Green	1	500 mA	
	Blue	1	500 mA	
	Amber	1	500 mA	
White	1	500 mA		
Strobe	<b>Type</b>	<b>Power</b>	<b>Lifespan</b>	
	LED	1 W	50,000 hours	
	<b>Color</b>	<b>Quantity</b>	<b>Current</b>	
	White	12	300 mA	
Photometrics	<b>Parameter</b>			
	Coverage angle (laser)	82°		
	Coverage angle (Swarm)	65°		
	Coverage angle (SMD strobe)	71°		
	Coverage angle (Wash)	46°		
	Strobe rate	0–20 Hz		
	Illuminance @ 2 m (strobe)	823 lux		
Thermal	<b>Laser Maximum External Temp</b>	<b>Cooling System</b>		
	95 °F (35 °C)	Convection		
DMX	<b>I/O Connectors</b>	<b>Connector Type</b>	<b>Channel Range</b>	
	3-pin XLR	Sockets	18 or 2	
Ordering	<b>Product Name</b>	<b>Item Code</b>	<b>UPC Code</b>	
	Swarm Wash FX	10051155	781462215033	



# RETURNS

In case you need to get support or return a product:

- If you are located in the U.S., contact Chauvet World Headquarters (see [Contact Us](#)).
- If you are located in the UK or Ireland, contact Chauvet Europe Ltd. (see [Contact Us](#)).
- If you are located in Mexico, contact Chauvet Mexico (see [Contact Us](#)).
- If you are located in Benelux, contact Chauvet Europe BVBA (see [Contact Us](#)).
- If you are located in any other country, DO NOT contact Chauvet. Instead, contact your local distributor. See [www.chauvetlighting.com](http://www.chauvetlighting.com) for distributors outside the U.S., UK, Ireland, Mexico, or Benelux.



**If you are located outside the U.S., UK, Ireland, Mexico, or Benelux, contact your distributor of record and follow their instructions on how to return CHAUVET® products to them. Visit our website [www.chauvetlighting.com](http://www.chauvetlighting.com) for contact details.**

Call the corresponding Chauvet Technical Support office and request a Return Merchandise Authorization (RMA) number before shipping the product. Be prepared to provide the model number, serial number, and a brief description of the cause for the return.

Send the merchandise prepaid, in its original box, and with its original packing and accessories. Chauvet will not issue call tags.

Clearly label the package with the RMA number. Chauvet will refuse any product returned without an RMA number.



**Write the RMA number on a properly affixed label. DO NOT write the RMA number directly on the box.**

Before sending the product, clearly write the following information on a piece of paper and place it inside the box:

- Your name
- Your address
- Your phone number
- RMA number
- A brief description of the problem

Be sure to pack the product properly. Any shipping damage resulting from inadequate packaging will be your responsibility. FedEx packing or double-boxing are recommended.



**Chauvet reserves the right to use its own discretion to repair or replace returned product(s).**