SWARM 5 FX ILS

User Manual

Edition Notes

The Swarm 5 FX ILS User Manual includes a description, safety precautions, installation, programming, operation, and maintenance instructions for the Swarm 5 FX ILS as of the release date of this edition.

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Document Printing

For best results, print this document in color, on letter size paper (8.5 x 11 in), double-sided. If using A4 paper (210 x 297 mm), configure the printer to scale the content accordingly.

Intended Audience

Any person installing, operating, and/or maintaining this product should completely read through the guide that shipped with the product, as well as this manual, before installing, operating, or maintaining this product.

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Document Revision

Go to www.chauvetdj.com for the latest version.

Revision	Date	Description
6	06/2024	Updated to current template.

TABLE OF CONTENTS

1. Before You Begin

What Is Included

- Swarm 5 FX ILS
- Power cable
- Key and interlock (EU)
- Quick Reference Guide

Unpacking Instructions

Carefully unpack the product immediately and check the container 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 report damage to the carrier immediately may invalidate a claim. In addition, keep the box and contents 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.

Text 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
<ENTER>	A key to be pressed on the product's control panel
ON	A value to be entered or selected

Symbols

Symbol	Meaning
⚡	Electrical warning. Not following these instructions may cause electrical damage to the product, accessories, or the user.
⚠	Critical installation, configuration, or operation information. Not following these instructions may make the product not work, cause damage to the product, 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.
☢	Laser safety information.

Safety Notes

These Safety Notes include important information about installation, use, and maintenance of the Swarm 5 FX ILS.

- ■ **ALWAYS:**
  - ♦ Connect to a grounded circuit.
  - ♦ Connect to operating voltages as specified on the product's spec sticker.
  - ♦ Disconnect from power before replacing the fuse.
  - ♦ Disconnect from its power source during periods of inactivity.
  - ♦ Use a safety cable when suspending overhead.
  - ♦ Heed all restrictions and warnings on the spec sticker.
  - ♦ Mount in a location with at least 20 in (50 cm) of ventilation.
  - ♦ Replace the fuse with the same type and rating.

- ■ In the event of a serious operating problem, stop using immediately.
- ■ **DO NOT:**
  - ♦ Open this product or attempt any repairs. It contains no user-serviceable parts.
  - ♦ Look at the light source when the product is on.
  - ♦ Use if the power cable is crimped or damaged.
  - ♦ Disconnect by pulling on the power cable.
  - ♦ Allow flammable materials close to the product when it is operating.
  - ♦ Touch the housing when it is on.
  - ♦ Block any ventilation holes/slots in the housing.
  - ♦ Connect to a dimmer or rheostat.
  - ♦ Carry the product by its power cable.
  - ♦ Operate in temperatures higher than 104°F (40°C).
  - ♦ Expose to environments that exceed the Ingress Protection (IP) rating.
  - ♦ Expose to rain or moisture.
  - ♦ Use outdoors.
  - ♦ Submerge.

Keep this User Manual for future use. If the product is sold to someone else, be sure that they also receive this document.

Laser Data
Laser Safety Notes

STOP AND READ ALL LASER SAFETY DATA

The Laser 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.

Laser light is a focused beam more intense than ordinary lights. This intensity can cause instant eye injuries and potential blindness when the eyes are directly exposed to laser light.

This laser product uses Class 3B level of laser power internally, which are then split into multiple Class 3R-level beams. These beams are potentially hazardous to the eyes.

Laser safety regulations state that it is illegal to aim Class 3R lasers into areas where people can be exposed, even if the laser is aimed below eye level.

- **CAUTION!**
  - ♦ Use of controls, adjustments, or procedures other than those specified in this manual may result in hazardous radiation exposure.
  - ♦ Lasers in a Class 3R laser show must be operated only by skilled and well-trained professionals 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.
  - ♦ Failure to follow these instructions will void the warranty, may damage the product, or injure the user or the audience.
  - ♦ This product cannot be discarded with household waste. Contact a local waste management service for specific electronic disposal regulations.

- **ALWAYS**
  - ♦ Read and understand all the safety and technical data in this manual before operating the laser.
  - ♦ Install laser products at least 9.8 ft (3 m) above the floor on which people are standing.
  - ♦ Test the lasers prior to public use to ensure that they are functioning properly.

- **DO NOT:**
  - ♦ Expose eyes to direct laser light to avoid instant eye injury or potential blindness.
  - ♦ Expose the output optic (aperture) to harsh cleaning chemicals.
  - ♦ Shine laser at aircraft or any vehicle that is in motion.
  - ♦ Point lasers at people or animals.
  - ♦ Point lasers into areas where people could be exposed to them.
  - ♦ Point lasers at highly reflective surfaces such as windows, mirrors, and shiny metal.
  - ♦ Point unterminated laser beams into the sky.
  - ♦ Look into the laser aperture or laser beams.
  - ♦ Use if housing is damaged, open, or if optics appear damaged.
  - ♦ Open the laser housing, to avoid potential exposure to unsafe levels of laser radiation.
  - ♦ Leave running unattended.

Keep this manual for future consultation. If transferring ownership of the product to another user, ensure this document is kept with the laser.

Laser Safety Label Reproduction

WARNING – CLASS 3B
LASER RADIATION WHEN OPEN
AVOID EXPOSURE TO THE BEAM

LASER APERTURE

LASER RADIATION
AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT
IEC/EN60825-1:2014
Wavelength:520/650nm
Laser radiation: CW, <5mW

Manufacturer : CHAUVET LIGHTING
Address: 3360 Davie Road, Davie, Florida 33314

This device complies with 21 CFR 1040.10 and 1040.11 except for
deviations pursuant to Laser Notice No. 56. Issued on May 8, 2019.

WORLDWIDE HEADQUARTERS:
3360 Davie Road, Davie, Florida 33314

MODEL:	SWARM5FXILS
ITEM CODE:	10051881
FUSE:	T 1.6 A, 250 V
POWER LINKING:	8 A (15 UNITS @ 120 V)
	(26 UNITS @ 230 V)
ORIGIN:	MADE IN CHINA

THIS APPLIANCE MUST BE GROUNDED
CETTE UNITÉ DOIT ÊTRE RELIÉE À LA TERRE
USE ONLY FUSE OF SAME TYPE & RATING
N'UTILISER QUE DES FUSIBLES DU TYPE ET
DE L'AMPÉRAGE INDIQUÉ
NOT FOR HOUSEHOLD USE
IMPROPRE A L'USAGE DOMESTIQUE
DRY LOCATIONS
EMPLACEMENTS SECS
DISCONNECT POWER BEFORE SERVICING
DÉBRANCHER AVANT TOUT ENTRETIEN
FOR INDOOR USE ONLY
USAGE INTÉRIEUR UNIQUEMENT

USA / CANADA	WORLDWIDE
POWER: 100-125 VAC, 60 Hz	POWER: 100-240 VAC, 50/60 Hz
0.5 A, 62 W	0.3-0.5 A, 62 W

⚠ WARNING
Cancer and Reproductive Harm -
www.P65Warnings.ca.gov

RoHS
UK CA   CE

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.lia.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.ilda.com.

Laser Emission Data

As measured under IEC measurement conditions for classification.

Laser Classification	Class 3R
Red Laser Diode Wavelength/Optical Power	650 nm/100 mW
Green Laser Diode Wavelength/Optical Power	520 nm/30 mW
Beam Diameter	<5 mm at aperture
Pulse Data	All pulses < 4 Hz (>0.25 sec)
Divergence (each beam)	<2 mrad
Divergence (total light)	<160 degrees
Laser Power of Each Beam from Aperture	<5 mW

Laser Compliance Statement

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 56, dated May 8, 2019. No maintenance is required to keep this product in compliance with laser performance standards.

2. Introduction

Product Overview
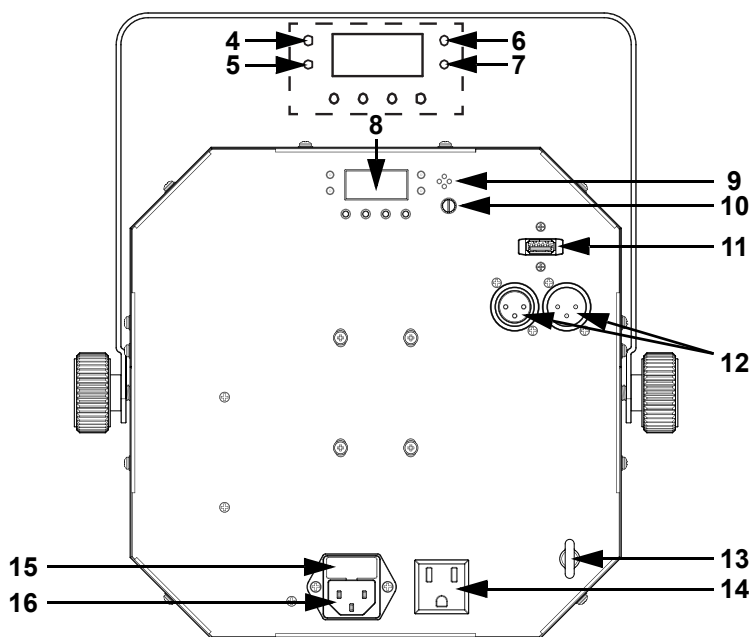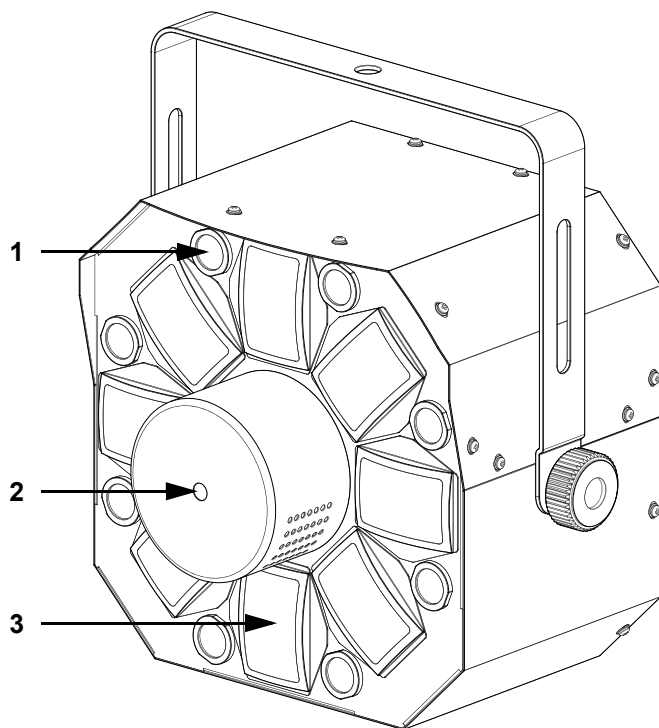
#	Name
1	Strobe LEDs (x8)
2	Laser output
3	Swarm effect lenses (x8)
4	DMX indicator LED
5	Sound indicator LED
6	Auto indicator LED
7	Slave indicator LED
8	Display / control buttons
9	Microphone
10	Sensitivity knob
11	USB port
12	DMX in/out
13	Safety loop
14	Power out
15	Fuse holder
16	Power in

⚠️ **WARNING! DO NOT plug anything other than a D-Fi USB into the USB type B port. Doing so may cause damage to the product.**

Product Dimensions

11.7 in
298 mm

9.75 in
248 mm

12.2 in
310 mm
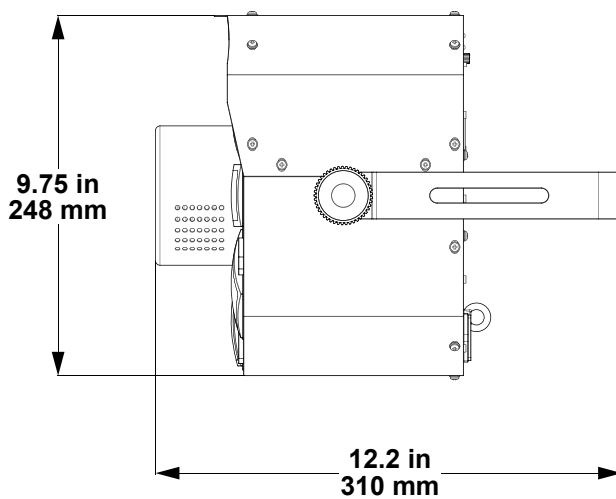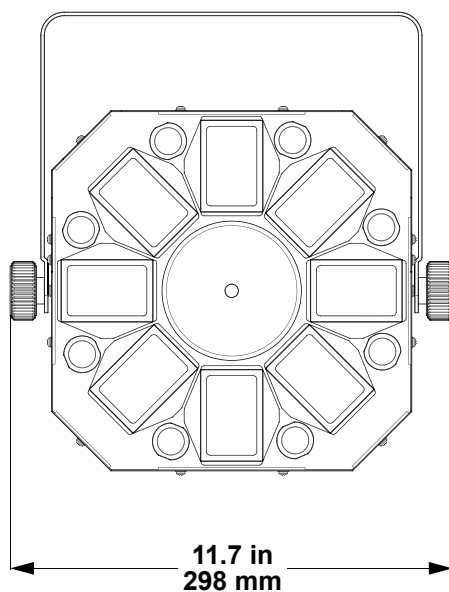
3. Setup

AC Power

The Swarm 5 FX ILS has an 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 the product's specifications chart. The listed current rating indicates the product's average current draw under normal conditions.

- **Always connect the product to a protected circuit (a circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.**
- **To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product 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 and replace with a fuse of the exact same type and rating.
5. Insert the fuse holder back in place and reconnect power.

Installed fuse
(held by plastic clip)

Spare fuse holder
(inside safety cap)

Safety cap
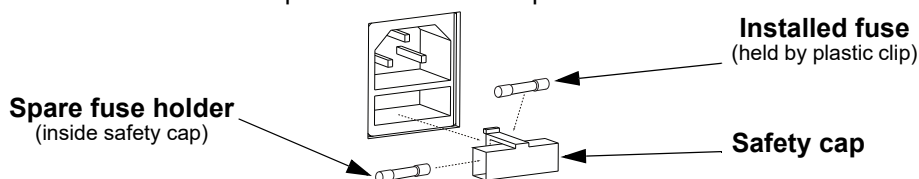
Disconnect the product from the power outlet before replacing the fuse.

Always replace a blown fuse with one of the same type and rating.

Power Linking

This product provides power linking via the outlet located in the back of the product. See the diagram below for further explanation.

Power Linking Diagram

Power source   **1ˢᵗ product**   **2ⁿᵈ product**   **3ʳᵈ product**   **Additional products**
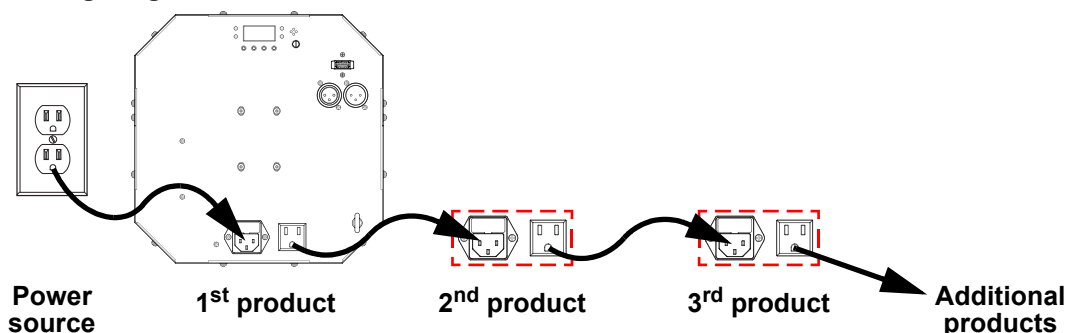
It is possible to link up to 15 Swarm 5 FX ILS products on 120 VAC or up to 26 products on 230 VAC.

The power linking diagram shown above corresponds to the North American version of the product ONLY! If using the product in other markets, consult with the local Chauvet distributor as power linking connectors and requirements may differ by country or region.

Mounting

Before mounting the product, read and follow the safety recommendations indicated in the Safety Notes.

Orientation

The Swarm 5 FX ILS may be mounted in any position; however, 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 and attachment points can support the weight before hanging the product (see the Technical Specifications).
- When mounting the product overhead, always use a safety cable. Mount the product securely to a rigging point, such as an elevated platform or a truss.
- When rigging the product onto a truss, use a mounting clamp of appropriate weight capacity. The bracket 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.
- When power linking multiple products, mount the products close enough for power linking cables to reach.

Mounting Diagram

Mounting clamp
(such as **CLP-15** from Chauvet)

Mounting bracket

Safety cable
(such as **CH-05** from Chauvet)

Bracket adjustment knob (x2)
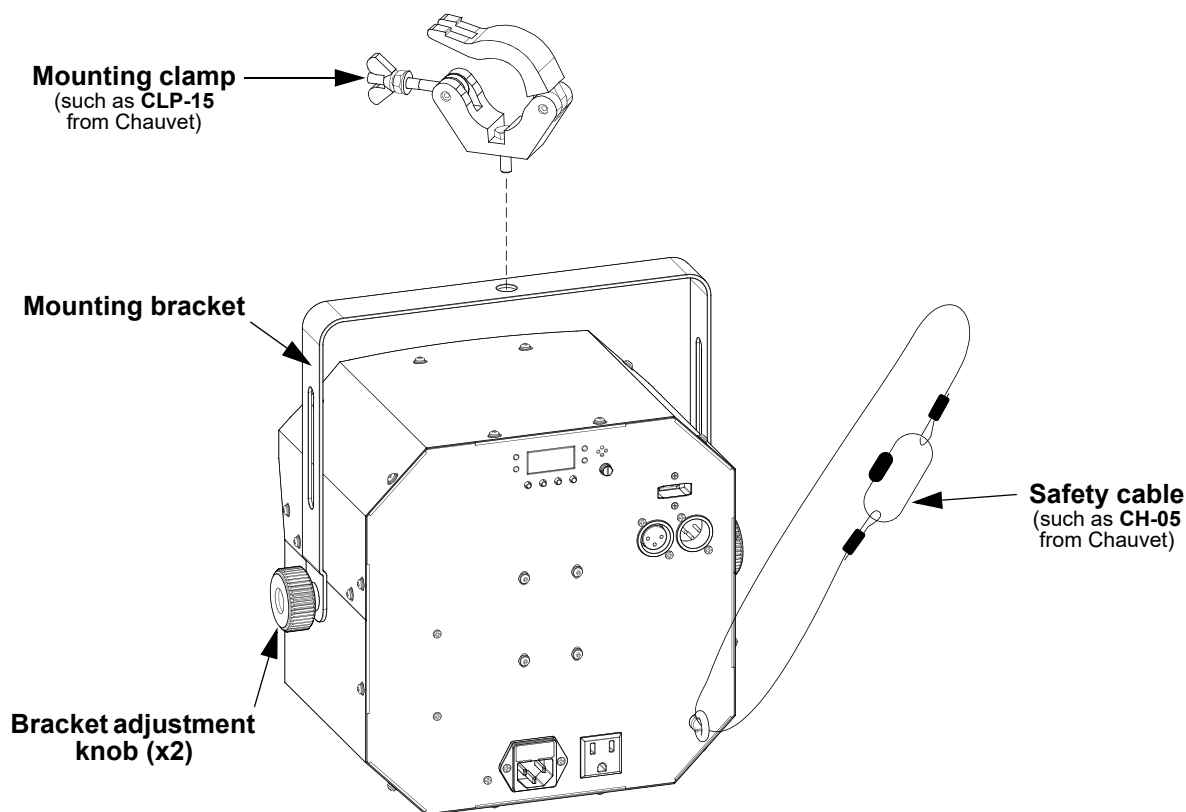
Proper Usage

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 a 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.

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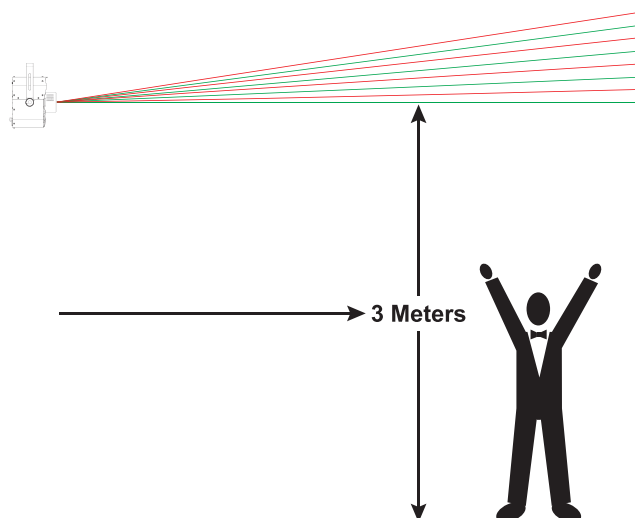
CAUTION! Use of controls, adjustments, or procedures other than THOSE specified IN THIS USER MANUAL may result in hazardous radiation exposure.

Laser Interlock and Key

If purchased outside of North America, this product will have an interlock and key to prevent the laser from operating unless the interlock and key are **both** inserted and the key is turned to the **ON** position.

For the laser to function, DO BOTH:
- **Insert the interlock**
- **Insert the key and turn it to the ON position**

If both are not performed, the laser WILL NOT turn on!

Insert the interlock

Insert AND turn the key to the ON position

ON
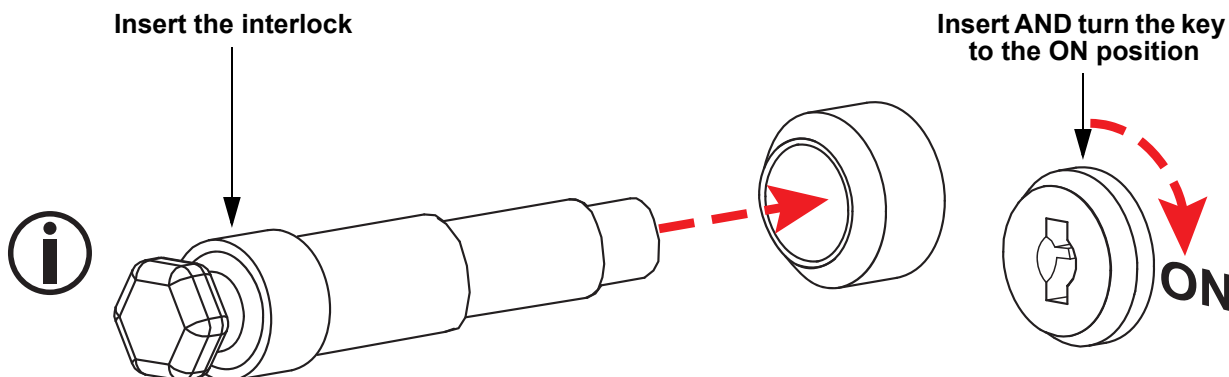
*For illustrative purposes only

Always turn the key to the OFF position and remove it when leaving this product unattended to prevent accidents or injuries to third parties.

4. Operation

Control Panel Operation

To access the control panel functions, use the four buttons located underneath the display. Please refer to the Product Overview to see the button locations on the control panel.

Button	Function
<MENU>	Press to find an operation mode or to back out of the current menu option
<UP>	Press to scroll up the list of options or to find a higher value
<DOWN>	Press to scroll down the list of options or to find a lower value
<ENTER>	Press to activate a menu option or a selected value

Menu Map

Refer to the Swarm 5 FX ILS product page on www.chauvetdj.com for the latest menu map and software.

Mode	Programming Levels				Description
DMX	**d_ _ _**	**d001–504**			Selects the DMX starting address
Automatic program	**Aut_**	**Aut0–6**	**S 0–100**	**FAdE**	Automatic programs (see Programs)
				SnAP	
Sound-active program	**Sou_**	**Sou0–6**			Sound-active programs (see Programs)
Slave mode	**SLA**	**SLA**			Sets slave mode
ILS mode	**iLS_**	**iLS1–4**			Sets ILS mode

DMX Configuration

The Swarm 5 FX ILS works with a DMX controller. Information about DMX is in the Chauvet DMX Primer, which is available from the Chauvet website chauvetlighting.com/downloads/DMX_Primer_rev05_WO.pdf.

Personality and Starting Address

The Swarm 5 FX ILS uses 9 DMX channels, which defines the highest configurable address to **504**.

When selecting a starting DMX address, always consider the number of DMX channels the DMX mode uses. If the starting address is set too high, access to some channels could be restricted.

For information about the DMX protocol, download the DMX Primer from www.chauvetdj.com.

To select the personality and starting address, do the following:

1. Press **<MENU>** repeatedly until **d_ _ _** shows on the display.
2. Use **<UP>** or **<DOWN>** to select the starting address, from **d001–504**.
3. Press **<ENTER>**.

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

D-Fi USB Connectivity

The Swarm 5 FX ILS is able to become a D-Fi wireless receiver/transmitter with the use of the D-Fi USB from Chauvet DJ. Simply set the product's DMX Personality and DMX Address, set the DIP switch D-Fi receiving/transmitting channel, then plug it into the D-Fi USB port.

WARNING! DO NOT plug anything other than a D-Fi USB into the USB type B port. Doing so may cause damage to the product.

Once plugged in, the D-Fi USB will take over the product. Wired DMX and manual display control / menu buttons will be unavailable until the D-Fi USB is unplugged. The priority levels are:
1. D-Fi USB
2. Wired DMX
3. Manual Digital Display/Menu Buttons

D-Fi USB Compatibility

The D-Fi USB can receive a DMX signal from the D-Fi Hub and the FlareCON Air 2 as well as other D-Fi USB products.

D-Fi USB Configuration

1. Set the DMX Personality and DMX address on the Swarm 5 FX ILS.
2. Use the Chart provided to set **BOTH**:
   - the Channel, and then
   - The Receiving or Transmitting option

   NOTE: DIP Switch 5 is for Transmitting OR Receiving, please choose carefully.

D-Fi USB DIP Switch Channels

Receiving Ch.	1	2	3	4	T/R	Receiving Ch.	1	2	3	4	T/R	Transmitting Ch.	1	2	3	4	T/R	Transmitting Ch.	1	2	3	4	T/R
1						9						1						9					
2						10						2						10					
3						11						3						11					
4						12						4						12					
5						13						5						13					
6						14						6						14					
7						15						7						15					
8						16						8						16					

DMX Channel Assignments and Values

Channel	Function	Value	Percent/Setting
1	Programs	000 ⇔ 009	Blackout
		010 ⇔ 024	Automatic program 0 (all effects)
		025 ⇔ 039	Automatic program 1 (laser and swarm effect)
		040 ⇔ 054	Automatic program 2 (laser and strobes)
		055 ⇔ 069	Automatic program 3 (swarm effect and strobes)
		070 ⇔ 084	Automatic program 4 (swarm effect only)
		085 ⇔ 099	Automatic program 5 (laser only)
		100 ⇔ 114	Automatic program 6 (strobes only)
		115 ⇔ 129	Sound-active program 0 (all effects)
		130 ⇔ 144	Sound-active program 1 (laser and swarm effect)
		145 ⇔ 159	Sound-active program 2 (laser and strobes)
		160 ⇔ 174	Sound-active program 3 (swarm and strobes)
		175 ⇔ 189	Sound-active program 4 (swarm effect only)
		190 ⇔ 204	Sound-active program 5 (laser only)
		205 ⇔ 219	Sound-active program 6 (strobes only)
		220 ⇔ 255	Manual operation mode
2	Swarm effect color	000 ⇔ 009	No function
		010 ⇔ 014	Red
		015 ⇔ 019	Green
		020 ⇔ 024	Blue
		025 ⇔ 029	Amber
		030 ⇔ 034	White
		035 ⇔ 039	Red and white
		040 ⇔ 044	Red and green
		045 ⇔ 049	Green and blue
		050 ⇔ 054	Blue and amber
		055 ⇔ 059	Amber and white
		060 ⇔ 064	Green and white
		065 ⇔ 069	Green and amber
		070 ⇔ 074	Red and amber
		075 ⇔ 079	Red and blue
		080 ⇔ 084	Blue and white
		085 ⇔ 089	Red, green, and blue
		090 ⇔ 094	Red, green, and amber
		095 ⇔ 099	Red, green, and white
		100 ⇔ 104	Red, blue, and amber
		105 ⇔ 109	Red, blue, and white
		110 ⇔ 114	Red, amber, and white
		115 ⇔ 119	Green, blue, and amber
		120 ⇔ 124	Green, blue, and white
		125 ⇔ 129	Green, amber, and white
		130 ⇔ 134	Blue, amber, and white
		135 ⇔ 139	Red, green, blue, and amber
		140 ⇔ 144	Red, green, blue, and white
		145 ⇔ 149	Green, blue, amber, and white
		150 ⇔ 154	Red, green, amber, and white
		155 ⇔ 159	Red, blue, amber, and white
		160 ⇔ 164	Red, green, blue, amber, and white
		165 ⇔ 209	Automatic single-color chase
		210 ⇔ 255	Automatic multi-color chase
3	Swarm effect chase speed	000 ⇔ 255	Swarm effect chase speed, slow to fast

Channel	Function	Value	Percent/Setting
4	**Swarm effect strobe**	000 ⇔ 004	No function
		005 ⇔ 254	Swarm effect strobe, fast to slow
		255	Sound-active swarm effect strobe
5	**Strobes program**	000 ⇔ 009	No function
		010 ⇔ 019	Strobes program 1, fast to slow
		020 ⇔ 029	Strobes program 2, fast to slow
		030 ⇔ 039	Strobes program 3, fast to slow
		040 ⇔ 049	Strobes program 4, fast to slow
		050 ⇔ 059	Strobes program 5, fast to slow
		060 ⇔ 069	Strobes program 6, fast to slow
		070 ⇔ 079	Strobes program 7, fast to slow
		080 ⇔ 089	Strobes program 8, fast to slow
		090 ⇔ 099	Strobes program 9, fast to slow
		100 ⇔ 109	Strobes program 10, fast to slow
		110 ⇔ 255	Full on
6	**Laser color** (Ch. 7 must be active for strobe)	000 ⇔ 009	No function
		010 ⇔ 049	Red
		050 ⇔ 089	Green
		090 ⇔ 129	Red and green alternating strobe
		130 ⇔ 169	Red and strobing green
		170 ⇔ 209	Green and strobing red
		210 ⇔ 255	Red and green
7	**Laser strobe**	000 ⇔ 004	No function
		005 ⇔ 254	Laser strobe, fast to slow
		255	Sound-active laser strobe
8	**Swarm effect motor**	000 ⇔ 004	Stop
		005 ⇔ 127	Clockwise rotation, slow to fast
		128 ⇔ 133	Stop
		134 ⇔ 255	Counterclockwise rotation, slow to fast
9	**Laser rotation**	000 ⇔ 004	Stop
		005 ⇔ 127	Counterclockwise rotation, slow to fast
		128 ⇔ 133	Stop
		134 ⇔ 255	Clockwise rotation, slow to fast

For manual operation of LEDs and lasers using DMX control, set Channel 1 to 220 ⇔ 255.

Standalone Configuration

Set the product in one of the standalone modes to operate without a DMX controller.

ⓘ **Never connect a product that is operating in any standalone mode 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.**

Automatic Programs

To run the Swarm 5 FX ILS with an automatic program, follow the instructions below.

1. Press **<MENU>** repeatedly until **Aut_** shows on the display.
2. Press **<ENTER>**.
3. Use **<UP>** or **<DOWN>** to select the desired program, from **Aut0–6**. (see Programs)
4. Press **<ENTER>**.
5. Use **<UP>** or **<DOWN>** to increase or decrease the speed, from **S 0–100** (fast to slow).
6. Press **<ENTER>**.
7. Use **<UP>** or **<DOWN>** to select the program mode, from **FAdE** (fading) or **SnAP** (quick change).
8. Press **<ENTER>**.

Sound-Active Programs

To run the Swarm 5 FX ILS with a sound-active program, follow the instructions below.

1. Press **<MENU>** repeatedly until **Sou_** shows on the display.
2. Press **<ENTER>**.
3. Use **<UP>** or **<DOWN>** to select the desired program, from **Sou0–6**. (see Programs)
4. Press **<ENTER>**.
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 black out when in Sound-Active mode after 3 seconds of silence or noise below the sensitivity setting.**

Programs

Aut/Sou	Effect
0	All effects
1	Laser and swarm effect
2	Laser and strobes
3	Swarm effect and strobes
4	Swarm effect only
5	Laser only
6	Strobes only

Wired Master/Slave Mode

The Master/Slave mode allows a single Swarm 5 FX ILS product (the "master") to control the actions of one or more Swarm 5 FX ILS products (the "slaves") without the need of a DMX controller. The master product will be set to operate in standalone mode, while the slave products will be set to operate in slave mode. Once set and connected, the slave products will operate in unison with the master product.

Configure the products as indicated below.

Slave products:
1. Press **<MENU>** repeatedly until **SLA** shows on the display.
2. Press **<ENTER>**.
3. Connect the DMX input of the first slave product to the DMX output of the master product.
4. Connect the DMX input of the subsequent slave products to the DMX output of the previous slave product.
5. Finish setting and connecting all the slave products.

Master product:
1. Set the master product to operate in standalone mode or with the IRC-6.
2. Make the master product the first product in the DMX daisy chain.

> • **Configure all the slave products before connecting the master to the daisy chain.**
> • **Never connect a DMX controller to a DMX string 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.**

D-Fi USB Master/Slave Mode

The D-Fi USB allows a single Swarm 5 FX ILS product (the "master") to control the actions of one or more Swarm 5 FX ILS products (the "slaves") without the need of a DMX controller or DMX cables. The master (transmitter) product will be set to operate in standalone mode, while the slave (receiver) products will be set to operate in slave mode. Once set and connected, the slave products will operate in unison with the master product.

Configure the products as indicated below.

Slave products:
1. Press **<MENU>** repeatedly until **SLA** shows on the display.
2. Press **<ENTER>**.
3. Set the D-Fi USB to receive on a specific channel, 1–16.
4. Plug in the D-Fi USB.
5. Finish setting and connecting all the slave products.

Master product:
1. Set the master product to operate in standalone mode.
2. Set the D-Fi USB to transmit on the D-Fi channel the slaves are receiving on.
3. Plug in the D-Fi USB.

> • **All products must be set to the same DMX personality, DMX address, and D-Fi channel.**
> • **Configure all the slave products before configuring the master to transmit.**
> • **Never connect a DMX controller to a D-Fi channel configured for Master/Slave operation because the controller may interfere with the signals from the master.**

ILS Mode

ILS (Integrated Lighting System) provides 4 modes that synchronize with the GigBAR MOVE+ILS: Modes 1 and 3 synchronize with side 1 of the GigBAR MOVE+ILS, whereas modes 2 and 4 synchronize with side 2 of the GigBAR MOVE+ILS. When linked, effects will sync with the most similar effect on the selected side of the GigBAR MOVE+ILS: Kinta effects will sync with one of the kintas, moving heads will sync with one of the moving heads, and wash effects will sync with one of the pars. Laser effects will sync with the laser, and strobe effects will sync with the strobe effects regardless of ILS mode.

This product will synchronize with the kinta effect on the selected side of the GigBAR MOVE+ILS, as well as the laser and strobes.

To set the Swarm 5 FX ILS to respond to an ILS signal:
1. Press **<MENU>** repeatedly until **iLS_** shows on the display.
2. Use **<UP>** or **<DOWN>** to select from **iLS1** (side 1), **iLS2** (side 2), **iLS3** (side 1), or **iLS4** (side 2).
3. Press **<ENTER>**.

5. Maintenance

Product Maintenance

Dust build-up reduces light output performance and can cause overheating. This can lead to reduction of the light source's life and/or mechanical wear. To maintain optimum performance and minimize wear, clean all lighting products at least twice a month. However, be aware that usage and environmental conditions could be contributing factors to increase 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 surface/vents.
4. Clean all transparent surfaces with a mild soap solution, ammonia-free glass cleaner, or isopropyl alcohol.
5. Apply the solution directly to a soft, lint free cotton cloth or a lens cleaning tissue.
6. Softly drag any dirt or grime to the outside of the transparent surface.
7. Gently polish the transparent surfaces until they are free of haze and lint.

Always dry the transparent surfaces carefully after cleaning them.

6. Technical Specifications

Dimensions and Weight

Length	Width	Height	Weight
9.75 in (248 mm)	11.7 in (298 mm)	12.2 in (310 mm)	9.8 lb (4.5 kg)

Note: Dimensions in inches are rounded.

Power

Power Supply Type	Range	Voltage Selection
Switching (internal)	100 to 240 VAC, 50/60 Hz	Auto-ranging

Parameter	120 V, 60 Hz	230 V, 50 Hz
Consumption	62 W	62 W
Operating Current	0.5 A	0.3 A
Power linking current (products)	8 A (15 products)	8 A (26 products)
Fuse	T 1.6 A, 250 V	T 1.6 A, 250 V

Power I/O	U.S./Worldwide	UK/Europe
Power input connector	IEC	IEC
Power output connector	Edison	IEC
Power cable plug	Edison (U.S.)	Local Plug

Swarm Light Source

Type	Color	Quantity	Power	Current	Lifespan
LED	Red	1	3 W	300 mA	50,000 hours
LED	Green	1	3 W	300 mA	50,000 hours
LED	Blue	1	3 W	300 mA	50,000 hours
LED	Amber	1	3 W	300 mA	50,000 hours
LED	White	1	3 W	300 mA	50,000 hours

Strobe Light Source

Type	Color	Quantity	Power	Current	Lifespan
LED	White	8	1 W	300 mA	50,000 hours

Laser Light Source

Type	Power	Wavelength
Laser (red)	100 mW	650 nm
Laser (green)	30 mW	520 nm

Photometrics

Strobe Rate	Beam Angle (Strobes)	Field Angle (Strobes)	Coverage Angle (Laser)	Coverage Angle (Swarm Effect)	Illuminance @ 2 m (Strobes)
0 to 20 Hz	17°	35°	100°	65°	823 lux

Thermal

Laser Minimum External Temp.	Laser Maximum External Temp.	Cooling System
59 °F (15 °C)	95 °F (35 °C)	Fan-assisted convection

DMX

I/O Connector	Channel Range
3-pin XLR	9

Ordering

Product Name	Item Code	UPC Number
Swarm 5 FX ILS	10051881	781462222291

RoHS

UKCA CE

Contact Us

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Warranty & Returns

For warranty terms and conditions and return information, please visit our website.
For customers in the United States and Mexico: www.chauvetlighting.com/warranty-registration.
For customers in the United Kingdom, Republic of Ireland, Belgium, the Netherlands, Luxembourg, France, and Germany: www.chauvetlighting.eu/warranty-registration.