

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™ 5 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
<FUNC>	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 Mode	d001—d506	Selects the DMX starting address
Automatic Mode	AUT0—AUT6 S 1—S100	Selects auto program and speed
Sound-Active Mode	SOU0—SOU6	Sound-Active modes
Slave Mode	SLA	Slave mode

Configuration (DMX) Set the product in DMX mode to control with a DMX controller.

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 the selected DMX mode uses. If you choose a starting address that is too high, you could restrict the access to some of the product's channels.

The Swarm™ 5 FX uses up to 9 DMX channels in its 9-channel DMX mode, which defines the highest configurable address to **504**.

If you are not familiar with the DMX protocol, download the DMX Primer from www.chauvetlighting.com.

To select the starting address, do the following:

1. Press <FUNC> repeatedly until **d001—d506** blinks on the display.
2. Use <UP> or <DOWN> to select the starting address.
3. Press <ENTER> and the DMX indicator light turns on.

DMX Channel Modes, Assignments, and Values

9-Channel	Channel	Function	Value	Setting
	1	Automatic Programs	000 ⇔ 009	Blackout
			010 ⇔ 024	Auto program 1
			025 ⇔ 039	Auto program 2
			040 ⇔ 054	Auto program 3
			055 ⇔ 069	Auto program 4
			070 ⇔ 084	Auto program 5
			085 ⇔ 099	Auto program 6
			100 ⇔ 114	Auto program 7
			115 ⇔ 129	Sound-Active mode 1
			130 ⇔ 144	Sound-Active mode 2
			145 ⇔ 159	Sound-Active mode 3
			160 ⇔ 174	Sound-Active mode 4
			175 ⇔ 189	Sound-Active mode 5
			190 ⇔ 204	Sound-Active mode 6
			205 ⇔ 219	Sound-Active mode 7
			220 ⇔ 255	DMX mode
	2	LED Operation	000 ⇔ 009	Blackout
			010 ⇔ 014	Red
			015 ⇔ 019	Green
			020 ⇔ 024	Blue
			025 ⇔ 029	Amber
			030 ⇔ 034	White
			035 ⇔ 039	White + Red
			040 ⇔ 044	Red + Green
			045 ⇔ 049	Green + Blue
			050 ⇔ 054	Blue + Amber
			055 ⇔ 059	Amber + White
			060 ⇔ 064	White + Green
			065 ⇔ 069	Green + Amber
			070 ⇔ 074	Amber + Red
			075 ⇔ 079	Red + Blue
			080 ⇔ 084	Blue + White
			085 ⇔ 089	Red + Green + Blue
			090 ⇔ 094	Red + Green + Amber
			095 ⇔ 099	Red + Green + White
			100 ⇔ 104	Red + Amber + Blue
			105 ⇔ 109	Red + White + Blue
			110 ⇔ 114	Red + Amber + White
			115 ⇔ 119	Amber + Green + Blue
			120 ⇔ 124	Blue + Green + White
			125 ⇔ 129	Amber + Green + White
			130 ⇔ 134	Amber + White + Blue
	135 ⇔ 139	Red + Green + Blue + Amber		
	140 ⇔ 144	Red + Green + Blue + White		
	145 ⇔ 149	Green + Blue + Amber + White		
	150 ⇔ 154	Red + Green + Amber + White		
	155 ⇔ 159	Red + Blue + Amber + White		
	160 ⇔ 164	Red + Green + Blue + Amber + White		
	165 ⇔ 209	Automatic (single colors only)		
	210 ⇔ 255	Automatic (two colors at a time)		
	3	Auto Program Speed (when Channel 2 is between 165–255)	000 ⇔ 255	Automatic speed, slow to fast (colors only)
	4	LED Strobe (when Channel 2 is between 010–255)	000 ⇔ 004	No function
			005 ⇔ 254	Strobe (fast to slow)
			255	Sound-Active strobe

9-Channel (cont.)	Channel	Function	Value	Setting
	5	White LED	000 ⇔ 009 010 ⇔ 019 020 ⇔ 029 030 ⇔ 039 040 ⇔ 049 050 ⇔ 059 060 ⇔ 069 070 ⇔ 079 080 ⇔ 089 090 ⇔ 099 100 ⇔ 109 110 ⇔ 255	Blackout Auto program 1 (fast to slow) Auto program 2 (fast to slow) Auto program 3 (fast to slow) Auto program 4 (fast to slow) Auto program 5 (fast to slow) Auto program 6 (fast to slow) Auto program 7 (fast to slow) Auto program 8 (fast to slow) Auto program 9 (fast to slow) Auto program 10 (fast to slow) On
	6	Lasers	000 ⇔ 009 010 ⇔ 049 050 ⇔ 089 090 ⇔ 129 130 ⇔ 169 170 ⇔ 209 210 ⇔ 255	Blackout Red on Green on Green + Red, alternate strobe Red on + Green strobe Green on + Red strobe Red + Green strobe
	7	Laser Strobe (when Channel 6 is between 010—255)	000 ⇔ 004 005 ⇔ 254 255	No function Strobe (slow to fast) Sound-Active strobe
	8	Motor LED (when Channel 2 is between 010—255)	000 ⇔ 004 005 ⇔ 127 128 ⇔ 133 134 ⇔ 255	Stop Rotate clockwise (slow to fast) Stop Rotate counter-clockwise (slow to fast)
	9	Motor Laser (when Channel 6 is between 010—255)	000 ⇔ 004 005 ⇔ 127 128 ⇔ 133 134 ⇔ 255	Stop Rotate clockwise Stop Rotate counter-clockwise



For manual operation of LEDs and Lasers using DMX control, be sure Channel 1 is set to DMX mode (220—255).

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 **<FUNC>** repeatedly until **SOU0—SOU6** blinks on the display.
2. Use **<UP>** or **<DOWN>** to select the desired Sound-Active mode.
3. Turn the music on and adjust the sound sensitivity knob until the product starts responding to the beat of the music.
4. Press **<ENTER>** and the SOUND indicator light turns on.



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 **<FUNC>** repeatedly until **AUTO—AUT6** blinks on the display.
2. Use **<UP>** or **<DOWN>** to select the desired automatic program.
3. Press **<ENTER>**.
4. Use **<UP>** or **<DOWN>** to adjust the auto program speed, **S 1** (fast) to **S100** (slow).
5. Press **<ENTER>** and the AUTO indicator light turns on.

Master/Slave Mode

The Master/Slave mode allows a single Swarm™ 5 FX product (the “master”) to control the actions of one or more Swarm™ 5 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 unit.

Configure the units as indicated below.

Slave units:

1. Press <FUNC> repeatedly until **SLA** shows on the display.
2. Press <ENTER> and the SLAVE indicator light turns on.
3. Connect the DMX input of the first slave unit to the DMX output of the master unit.
4. Connect the DMX input of the subsequent slave units to the DMX output of the previous slave unit.
5. Finish setting and connecting all the slave units.

Master unit:

1. Set the master unit to operate in either Automatic or Sound-Active mode.
 2. Make the master unit the first unit in the DMX daisy chain.
- **Configure all the slave units before connecting the master unit to the DMX 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 unit.**
 - **Do not connect more than 31 slave units to the master unit.**

