STILETTO Glo 19™

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1. GETTING STARTED

What's In The Box?

- 1 x Stiletto™ Glo Moving Head Fixture
- 1 x Set of Mounting Brackets
- An Ever-So-Handy Power Cord
- This Lovely User Manual

Getting It Out Of The Box

Congratulations on your purchase of the Stiletto™ Glo, the powerful beam and wash luminaire that is built to impress with its sharp beams and glowing personality! So now that you're the proud owner of a Stiletto™ Glo (or hopefully, *Stilettos!*), you should carefully unpack the box and check the contents to ensure that all parts are present and in good condition. If anything looks as if it has been damaged in transit, notify the shipper immediately and keep the packing material for inspection. Again, please save the carton and all packing materials. If a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Powering Up!

All fixtures must be powered directly off a switched circuit and **cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch**.

AC Voltage Switch - Not all fixtures have a voltage select switch, so please verify that the fixture you receive is suitable for your local power supply. See the label on the fixture or refer to the fixture's specifications chart for more information. A fixture's listed current rating is its average current draw under normal conditions. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

Warning! ***Verify that the voltage select switch on your unit matches the line voltage applied. Damage to your fixture may result if the line voltage applied does not match the voltage indicated on the voltage selector switch. All fixtures must be connected to circuits with a suitable Ground (Earthing).***

Getting A Hold Of Us

If something happens goes wrong, please visit www.blizzardlighting.com/support and open a support ticket. We'll be happy to help, honest.

Disclaimer: The information and specifications contained in this document are subject to change without notice. Blizzard Lighting™ assumes no responsibility or liability for any errors or omissions that may appear in this user manual. Blizzard Lighting™ reserves the right to update the existing document or to create a new document to correct any errors or omissions at any time. You can download the latest version of this document from www.blizzardlighting.com.

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SAFETY INSTRUCTIONS

Please read these instructions carefully. They include important information about the installation, usage and maintenance of this product.

- Please keep this User Guide for future use. If you sell the unit to someone else, be sure that they also receive this User Guide.
- ALWAYS make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- This product is intended for indoor use only.
- To prevent risk of fire or shock, do not expose fixture to rain or moisture.
- Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 20in (50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- ALWAYS disconnect from the power source before servicing or replacing fuse and be sure to replace with same fuse size and type.
- ALWAYS secure fixture using a safety chain. NEVER carry the fixture by its cord. Use its carrying handles.
- DO NOT operate at ambient temperatures higher than 104°F (40°C).
- In the event of a serious operating problem, stop using the unit immediately. NEVER try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- NEVER connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.

Caution! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact Blizzard Lighting at www.blizzardlighting.com/support.

2. MEET THE STILETTO™ GLO MOVING HEAD™

MAIN FEATURES:

- 19*15W OSRAM™ 4-in-1 RGBW LEDs (patterns)
- RGB color mixing Glo™ control (secondary background LED array)
- 11°-58° zoomable beam angle
- Linear smooth dimming 0-100%
- 1000-2500K CTC (Color Temperature Control)
- 540° pan & 270° tilt (16-bit)
- Internal fan cooling system
- Color macro effects
- USITT DMX-512 (14/17/28/74/85 and 93-channel)
- 3/5-pin XLR input and output
- 5-button menu with LCD display

DMX Quick Reference *(Standard, Shape, Extended, Extended RGBW, & Full Modes)*

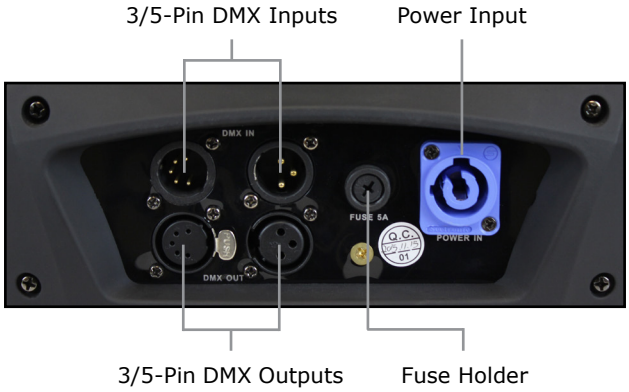
STD.	SHAPE	EXT.	RGBW	FULL	What is does
1	1	1	1	1	Red Intensity (0% <--> 100%)
2	2	2	2	2	Green Intensity (0% <--> 100%)
3	3	3	3	3	Blue Intensity (0% <--> 100%)
4	4	4	4	4	White Intensity (0% <--> 100%)
5	5	5	5	5	Linear CTO
6	6	6	6	6	Color Macros
7	7	7	7	7	Beam Strobe
8	8	8	8	8	Master Dimmer
9	9	9	9	9	Pan
10	10	10	10	10	Fine Pan
11	11	11	11	11	Tilt
12	12	12	12	12	Fine Tilt
13	13	13	13	13	Reset
14	14	14	14	14	Zoom
15	15	15	15	15	Glo Red
16	16	16	16	16	Glo Green
17	17	17	17	17	Glo Blue
--	18	--	--	18	Pattern Selection
--	19	--	--	19	Pattern Speed
--	20	--	--	20	Pattern Red
--	21	--	--	21	Pattern Green
--	22	--	--	22	Pattern Blue
--	23	--	--	23	Pattern White
--	24	--	--	24	Pattern Dimmer
--	25	--	--	25	Beam Dimmer
--	26	--	--	26	Pattern Strobe
--	27	--	--	27	Beam Strobe
--	28	--	--	28	Background Selection
--	--	18	18	29	LED 1 Red (0% <--> 100%)
--	--	19	19	30	LED 1 Green (0% <--> 100%)
--	--	20	20	31	LED 1 Blue (0% <--> 100%)
--	--	--	21	--	LED 1 White (0% <--> 100%)
--	--	--	--	--	--
--	--	72	90	83	LED 19 Red (0% <--> 100%)
--	--	73	91	84	LED 19 Green (0% <--> 100%)
--	--	74	92	85	LED 19 Blue (0% <--> 100%)
--	--	--	93	--	LED 19 White (0% <--> 100%)

DMX Quick Reference *(Classic Mode)*

Channel	What is does	Channel	What is does
1	Beam Shutter	8	Reset
2	Beam Dimmer	9	Beam Color Effects
3	Zoom	10	Beam Red
4	Pan	11	Beam Green
5	Pan Fine	12	Beam Blue
6	Tilt	13	Beam White
7	Fine Tilt	14	Beam CTC

Figure 1: The Stiletto™ Glo Pin-Up Picture

Figure 2: The Rear Connections



3. SETUP

Before replacing a fuse, disconnect power cord. ALWAYS replace with the same type and rating of fuse.

Fuse Replacement

With a phillips head screwdriver, unscrew the fuse holder out of its housing. Remove the damaged fuse from its holder and replace with exact same type fuse. Reattach the fuse holder, and then reconnect power.

Connecting A Bunch of Stiletto™ Glo Fixtures

You will need a serial data link to run light shows using a DMX-512 controller or to run shows on two or more fixtures set to sync in master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Fixtures on a serial data link must be daisy chained in one single line. Also, connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.
The maximum recommended cable-run distance is 500 meters (1640 ft).
The maximum recommended number of fixtures on a serial data link is 32 fixtures.

Data/DMX Cabling

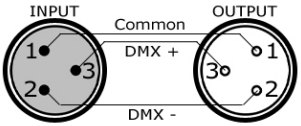
To link fixtures together you'll need data cables. You should use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

For instance, Belden© 9841 meets the specifications for EIA RS-485 applications. Standard microphone cables will "probably" be OK, but note that they cannot transmit DMX data as reliably over long distances. In any event, the cable should have the following characteristics:

2-conductor twisted pair plus a shield
Maximum capacitance between conductors – 30 pF/ft.
Maximum capacitance between conductor & shield – 55 pF/ft.
Maximum resistance of 20 ohms / 1000 ft.
Nominal impedance 100 – 140 ohms

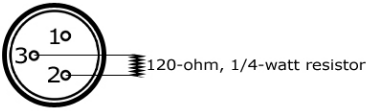
Cable Connectors

Cables must have a male XLR connector on one end and a female XLR connector on the other end. (Duh!)



A Word on Termination: DMX is a resilient communication protocol, however errors still occasionally occur. Termination reduces signal errors, and therefore best practices include use of a terminator in all circumstances. If you are experiencing problems with erratic fixture behavior, especially over long signal cable runs, a terminator may help improve performance.

To build your own DMX Terminator: Obtain a 120-ohm, 1/4-watt resistor, and wire it between pins 2 & 3 of the last fixture. They are also readily available from specialty retailers.



CAUTION: Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

3-Pin??? 5-Pin??? Huh?!?

If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. They are widely available over the internet and from specialty retailers. If you'd like to build your own, the chart below details a proper cable conversion:

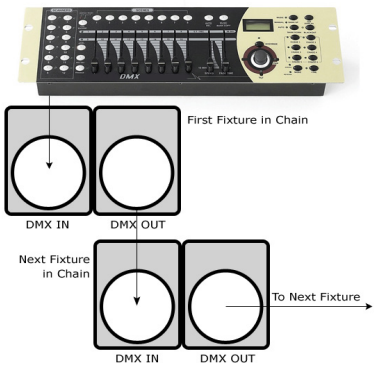
Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
DMX Data (-)	Pin 2	Pin 2
DMX Data (+)	Pin 3	Pin 3
Not Used.	No Connection.	No Connection.
Not Used.	No Connection.	No Connection.

Take It To The Next Level: Setting Up DMX Control

Step 1: Connect the male connector of the DMX cable to the female connector (output) on the controller.

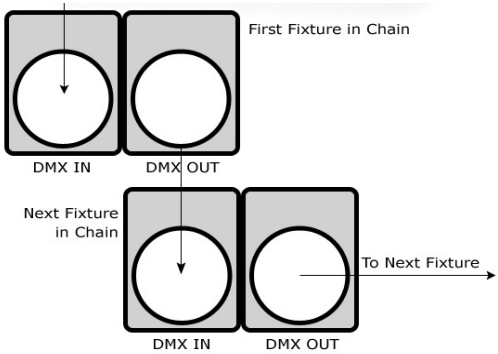
Step 2: Connect the female connector of the DMX cable to the first fixture's male connector (input). *Note:* It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture number first, and so on.

Step 3: Connect other fixtures in the chain from output to input as above. Place a DMX terminator on the output of the final fixture to ensure best communication.



Fixture Linking (Master/Slave Mode)

1. Connect the (male) 3/5-pin connector side of the DMX cable to the output (female) 3/5-pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3/5-pin connector to the input connector of the next fixture consisting of a (male) 3/5-pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.



A quick note: Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via either settings in the control panel or DIP-switches. Secondarily, the fixtures that follow may also require a slave setting.

Check the "**Operating Adjustments**" section in this manual for complete instructions for this type of setup and configuration.

Mounting & Rigging

This fixture may be mounted in any SAFE position provided there is enough room for ventilation.

It is important never to obstruct the fan or vents pathway. Mount the fixture using a suitable "C" or "O" type clamp. The clamp should be rated to hold at least 10x the fixture's weight to ensure structural stability. Do not mount to surfaces with unknown strength, and ensure properly "rated" rigging is used when mounting fixtures overhead.

Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

- When selecting installation location, take into consideration access for routine maintenance.
- Safety cables MUST ALWAYS be used.
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

4. OPERATING ADJUSTMENTS

The Control Panel

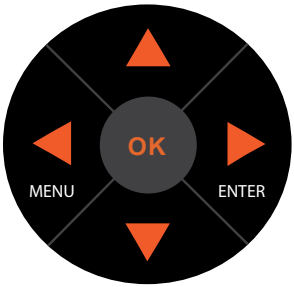
All the goodies and different modes possible with the Stiletto Glo™ are accessed by using the control panel on the front of the fixture. There are 5 control buttons next to the LCD display which allow you to navigate through the various control panel menus.

<ENTER>

Is used to navigate to a higher-level menu item.

<UP>

Scrolls through menu items and numbers in ascending order.



<DOWN>

Scrolls through menu items and numbers in descending order.

<OK>

Is used to save any changes made to a menu setting.

<MENU>

To return to the previous option or menu without changing the value.

Access control panel functions using the five panel buttons located directly to the right of the LCD display.

The control panel LCD display shows the menu items you select from the menu map on page #11. When a menu function is selected, the display will show immediately the first available option for the selected menu function. To select a menu item, press **<ENTER>**.

Use the **<UP>, <DOWN>,** and **<ENTER>** buttons to navigate the menu map and menu options. Press the **<OK>** button to enable a menu option. To return to the previous option or menu without changing the value, press the **<MENU>** button.

Control Panel Menu Structure

Main Function	Sub Function	Selection	What It Does...
Set Up	DMX Address	000 <-> 512	Sets the DMX address
	Channel Mode	Standard	Standard Mode (17-Channel)
		Shape	Shape Mode (28-channel)
		Extended	Extended Mode (74-channel)
		Extended RGBW	Extended RGBW Mode (93-channel)
		Full	Full Mode (85-channel)
		Classic Mode	Classic Mode (14-channel)
Option	Pan/Tilt	Pan/Tilt Speed	Normal/Fast Speed
		Pan Invert	On/Off
		Tilt Invert	On/Off
		Swap Pan-Tilt	On/Off
	Fan Mode	Auto	Auto Fan Speed
		High	High Fan Speed
	Display	Orientation	Normal/Inverted Display
		Backlight	On / 30 Seconds / 2 Minutes / 5 Minutes
		Intensity	LCD Brightness (20%-100%)
		Font Color	Change the Display Font Color
	Special Function	Dimmer Curve	Gamma 1 / Gamma 1.5 / Gamma 2 / S-Curve
	Load Default	Yes/No	Load the Default Settings
Information	System Errors	**<ENTER>**	Display of System Errors
	System Version	**<ENTER>**	Display Software Version
	DMX Monitor	**<ENTER>**	Display Current Value Settings
Manual Control	Reset Fixture	**<ENTER>**	Yes/No
	Channel	**<ENTER>**	Manual Value Configurations
Test	Pan/Tilt	**<ENTER>**	Pan/Tilt Test
	Color	**<ENTER>**	Color Test
	Zoom	**<ENTER>**	Zoom Test
	All	**<ENTER>**	Test All
Advanced	Access Code	**<ENTER>**	Password: 168 to access calibration
	Calibration	**<ENTER>**	Calibrate Pan/Tilt/Zoom

Operation and Effects

Pattern (Beam) and Glo (Wash)

The Stiletto Glo™ moving head fixture has two different LED arrays:

1.) Pattern (beam): the LEDs that provide the main output.
2.) Glo (wash): the secondary LEDs that illuminate the front of the head, provide diffused light output, and can be set to contrast with the Glo output.

Dimming

1.) Pattern (beam) and Glo (wash) output can be adjusted 0 - 100% intensity.

Zoom

1.) The beam can be zoomed from 11° to 58° angle.

Macros

1.) Stiletto Glo's patterns offer static macros, dynamic macros, and are speed controllable.

RGBW and RGB Control

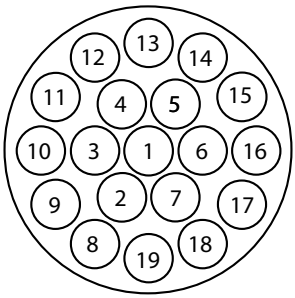
1.) RGBW or RGB color control is available for the Pattern (beam), and RGB control is available for the Glo (wash).
2.) To obtain consistent color output at different intensities do not use the RGBW or RGB channels to control overall intensity. Instead, set the desired color on the RGBW or RGB channels then use the dedicated Pattern dimmer and Glo dimmer channels to control intensity.

Classic Mode

1.) In addition to the Stiletto Glo's five normal DMX channel working modes, Classic Mode is an extra 14-channel mode that is compatible with other fixtures found on the market today.

Individual LED Control

1.) Stiletto Glo™ features 19* RGBW 4-in-1 LEDs with the ability for individual control. The drawing below shows each LEDs assigned number:



DMX Values In-Depth *(Standard, Shape, Extended, Extended RGBW, & Full Modes)*

STD.	SHAPE	EXT.	RGBW	FULL	Value	What is does
1	1	1	1	1	000 <--> 255	Red Intensity (0% <--> 100%)
2	2	2	2	2	000 <--> 255	Green Intensity (0% <--> 100%)
3	3	3	3	3	000 <--> 255	Blue Intensity (0% <--> 100%)
4	4	4	4	4	000 <--> 255	White Intensity (0% <--> 100%)
5	5	5	5	5	 000 <--> 009 010 <--> 255	**Linear CTO** No Function 2500K - 8000K

Channel 6: Standard, Shape, Extended, Extended RGBW, & Full Modes (Color Macros)

Value	What is does	Value	What is does	Value	What is does
000 <--> 009	OFF	062 <--> 067	Light Lavender	134 <--> 135	Dark Green
010	Red	068 <--> 077	Lavender	136 <--> 137	Mauve
011	Green	078 <--> 088	Sky Blue	138 <--> 141	Bright Pink
012	Blue	089 <--> 099	Just Blue	142 <--> 144	Medium Blue
013	Cyan	100 <--> 109	Dark Yellow	145	Golden Amber
014	Yellow	110 <--> 111	Spring Yellow	146	Pale Lavender
015	Magenta	112	Light Amber	147 <--> 148	Lavender
016	White 7000K	113	Straw	149 <--> 150	Primary Green
017	White 3700K	114	Deep Amber	151 <--> 156	Bright Blue
018	White 5000K	115 <--> 116	Orange	157 <--> 161	Apricot
019	Black	117	Light Rose	162 <--> 167	Pale Gold
020 <--> 022	Medium Yellow	118	English Rose	168 <--> 171	Deep Orange
023 <--> 026	Straw Tint	119	Light Salmon	172 <--> 173	Bastard Amber
027 <--> 028	Surprise Peach	120	Middle Rose	174	Flame Red
029	Fire	121 <--> 122	Dark Pink	175 <--> 178	Daylight Blue
030	Medium Amber	123 <--> 124	Magenta	179	Lilac Tint
031	Gold Amber	125	Peacock Blue	180 <--> 183	Deep Lavender
032 <--> 034	Dark Amber	126	Blue Green	184 <--> 190	Dark Blue
035 <--> 044	Sunrise Red	127	Steel Blue	191 <--> 206	Congo Blue
045	Light Pink	128	Light Blue	207	Alice Blue
046 <--> 048	Medium Pink	129 <--> 130	Dark Blue	208	Dirty White
049 <--> 061	Pink Camation	131 <--> 133	Leaf Green	209 <--> 255	White

DMX Values In-Depth *(Standard, Shape, Extended, Extended RGBW, & Full Modes)*

STD.	SHAPE	EXT.	RGBW	FULL	Value	What is does
7	7	7	7	7	 000 001 <--> 103 104 <--> 107 108 <--> 207 208 <--> 212 213 <--> 251 252 <--> 255	**Beam Strobe** Close Strobe (slow <--> fast) Open Pulse (slow <--> fast) Open Random (slow <--> fast) Open
8	8	8	8	8	 000 <--> 255	**Master Dimmer** Dimmer (0% <--> 100%)
9	9	9	9	9	000 <--> 255	**Pan** 0°- 540°
10	10	10	10	10	000 <--> 255	**Fine Pan**
11	11	11	11	11	 000 <--> 255	**Tilt** 0°- 540°
12	12	12	12	12	000 <--> 255	**Fine Tilt**
13	13	13	13	13	 000 <--> 025 026 <--> 076 077 <--> 127 128 <--> 255	**Reset** No Function Zoorn Reset Pan/Ti1t Reset All Reset
14	14	14	14	14	 000 <--> 255	**Zoom** Wide <--> Narrow
15	15	15	15	15	 000 <--> 255	**Glo Red** Intensity (0% <--> 100%)
16	16	16	16	16	 000 <--> 255	**Glo Green** Intensity (0% <--> 100%)

DMX Values In-Depth *(Standard, Shape, Extended, Extended RGBW, & Full Modes)*

STD	SHAPE	EXT	RGBW	FULL	Value	What is does
17	17	17	17	17	000 <--> 255	**Glo Blue** Intensity (0% <--> 100%)
--	18	--	--	18	000 <--> 007 008 <--> 014 015 <--> 071 072 <--> 255	**Pattern Selection** Macro OFF Static Effects Macro Unused Range
--	19	--	--	19	000 <--> 003 004 <--> 063 064 <--> 158 159 <--> 160 161 <--> 255	**Pattern Speed** Stop Indexing Reverse rotation (fast <--> slow) Stop Forward rotation (slow <--> fast)
--	20	--	--	20	000 <--> 255	**Pattern Red** Intensity (0% <--> 100%)
--	21	--	--	21	000 <--> 255	**Pattern Green** Intensity (0% <--> 100%)
--	22	--	--	22	000 <--> 255	**Pattern Blue** Intensity (0% <--> 100%)
--	23	--	--	23	000 <--> 255	**Pattern White** Intensity (0% <--> 100%)
--	24	--	--	24	000 <--> 255	**Pattern Dimmer** Intensity (0% <--> 100%)
--	25	--	--	25	000 <--> 255	**Beam Dimmer** Intensity (0% <--> 100%)
--	26	--	--	26	000 001 <--> 103 104 <--> 107 108 <--> 207 208 <--> 212 213 <--> 251 252 <--> 255	**Pattern Strobe** Close Strobe (slow <--> fast) Open Pulse (slow <--> fast) Open Random (slow <--> fast) Open
--	27	--	--	27	000 001 <--> 103 104 <--> 107 108 <--> 207 208 <--> 212 213 <--> 251 252 <--> 255	**Beam Strobe** Close Strobe (slow <--> fast) Open Pulse (slow <--> fast) Open Random (slow <--> fast) Open
--	28	--	--	28	000 <--> 008 009 010 011 012 013 014 015 016 <--> 255	**Background Selection** No Function Pixel 1 Ring 2 Ring 3 Pixel 1 + Ring 3 Pixel 1 + Ring 2 Pixel 1 + Ring 2 + Ring 3 Ring 2 + Ring 3 No Function
--	--	18	18	29	000 <--> 255	LED 1 Red (0% <--> 100%)
--	--	19	19	30	000 <--> 255	LED 1 Green (0% <--> 100%)
--	--	20	20	31	000 <--> 255	LED 1 Blue (0% <--> 100%)
--	--	--	21	--	000 <--> 255	LED 1 White (0% <--> 100%)
--	--	21	22	32	000 <--> 255	LED 2 Red (0% <--> 100%)
--	--	22	23	33	000 <--> 255	LED 2 Green (0% <--> 100%)
--	--	23	24	34	000 <--> 255	LED 2 Blue (0% <--> 100%)
--	--	--	25	--	000 <--> 255	LED 2 White (0% <--> 100%)
--	--	24	26	35	000 <--> 255	LED 3 Red (0% <--> 100%)
--	--	25	27	36	000 <--> 255	LED 3 Green (0% <--> 100%)
--	--	26	28	37	000 <--> 255	LED 3 Blue (0% <--> 100%)
--	--	--	29	--	000 <--> 255	LED 3 White (0% <--> 100%)

DMX Values In-Depth *(Standard, Shape, Extended, Extended RGBW, & Full Modes)*

STD	SHAPE	EXT	RGBW	FULL	Value	What is does
--	--	27	30	38	000 <--> 255	LED 4 Red (0% <--> 100%)
--	--	28	31	39	000 <--> 255	LED 4 Green (0% <--> 100%)
--	--	29	32	40	000 <--> 255	LED 4 Blue (0% <--> 100%)
--	--	--	33	--	000 <--> 255	LED 4 White (0% <--> 100%)
--	--	30	34	41	000 <--> 255	LED 5 Red (0% <--> 100%)
--	--	31	35	42	000 <--> 255	LED 5 Green (0% <--> 100%)
--	--	32	36	43	000 <--> 255	LED 5 Blue (0% <--> 100%)
--	--	--	37	--	000 <--> 255	LED 5 White (0% <--> 100%)
--	--	33	38	44	000 <--> 255	LED 6 Red (0% <--> 100%)
--	--	34	39	45	000 <--> 255	LED 6 Green (0% <--> 100%)
--	--	35	40	46	000 <--> 255	LED 6 Blue (0% <--> 100%)
--	--	--	41	--	000 <--> 255	LED 6 White (0% <--> 100%)
--	--	36	42	47	000 <--> 255	LED 7 Red (0% <--> 100%)
--	--	37	43	48	000 <--> 255	LED 7 Green (0% <--> 100%)
--	--	38	44	49	000 <--> 255	LED 7 Blue (0% <--> 100%)
--	--	--	45	--	000 <--> 255	LED 7 White (0% <--> 100%)
--	--	39	46	50	000 <--> 255	LED 8 Red (0% <--> 100%)
--	--	40	47	51	000 <--> 255	LED 8 Green (0% <--> 100%)
--	--	41	48	52	000 <--> 255	LED 8 Blue (0% <--> 100%)
--	--	--	49	--	000 <--> 255	LED 8 White (0% <--> 100%)
--	--	42	50	53	000 <--> 255	LED 9 Red (0% <--> 100%)
--	--	43	51	54	000 <--> 255	LED 9 Green (0% <--> 100%)
--	--	44	52	55	000 <--> 255	LED 9 Blue (0% <--> 100%)
--	--	--	53	--	000 <--> 255	LED 9 White (0% <--> 100%)
--	--	45	54	56	000 <--> 255	LED 10 Red (0% <--> 100%)
--	--	46	55	57	000 <--> 255	LED 10 Green (0% <--> 100%)
--	--	47	56	58	000 <--> 255	LED 10 Blue (0% <--> 100%)
--	--	--	57	--	000 <--> 255	LED 10 White (0% <--> 100%)
--	--	48	58	59	000 <--> 255	LED 11 Red (0% <--> 100%)
--	--	49	59	60	000 <--> 255	LED 11 Green (0% <--> 100%)
--	--	50	60	61	000 <--> 255	LED 11 Blue (0% <--> 100%)
--	--	--	61	--	000 <--> 255	LED 11 White (0% <--> 100%)
--	--	51	62	62	000 <--> 255	LED 12 Red (0% <--> 100%)
--	--	52	63	63	000 <--> 255	LED 12 Green (0% <--> 100%)
--	--	53	64	64	000 <--> 255	LED 12 Blue (0% <--> 100%)
--	--	--	65	--	000 <--> 255	LED 12 White (0% <--> 100%)
--	--	54	66	65	000 <--> 255	LED 13 Red (0% <--> 100%)
--	--	55	67	66	000 <--> 255	LED 13 Green (0% <--> 100%)
--	--	56	68	67	000 <--> 255	LED 13 Blue (0% <--> 100%)
--	--	--	69	--	000 <--> 255	LED 13 White (0% <--> 100%)
--	--	57	70	68	000 <--> 255	LED 14 Red (0% <--> 100%)
--	--	58	71	69	000 <--> 255	LED 14 Green (0% <--> 100%)
--	--	59	72	70	000 <--> 255	LED 14 Blue (0% <--> 100%)
--	--	--	73	--	000 <--> 255	LED 14 White (0% <--> 100%)
--	--	60	74	71	000 <--> 255	LED 15 Red (0% <--> 100%)
--	--	61	75	72	000 <--> 255	LED 15 Green (0% <--> 100%)
--	--	62	76	73	000 <--> 255	LED 15 Blue (0% <--> 100%)
--	--	--	77	--	000 <--> 255	LED 15 White (0% <--> 100%)
--	--	63	78	74	000 <--> 255	LED 16 Red (0% <--> 100%)
--	--	64	79	75	000 <--> 255	LED 16 Green (0% <--> 100%)
--	--	65	80	76	000 <--> 255	LED 16 Blue (0% <--> 100%)
--	--	--	81	--	000 <--> 255	LED 16 White (0% <--> 100%)
--	--	66	82	77	000 <--> 255	LED 17 Red (0% <--> 100%)
--	--	67	83	78	000 <--> 255	LED 17 Green (0% <--> 100%)
--	--	68	84	79	000 <--> 255	LED 17 Blue (0% <--> 100%)
--	--	--	85	--	000 <--> 255	LED 17 White (0% <--> 100%)
--	--	69	86	80	000 <--> 255	LED 18 Red (0% <--> 100%)
--	--	70	87	81	000 <--> 255	LED 18 Green (0% <--> 100%)
--	--	71	88	82	000 <--> 255	LED 18 Blue (0% <--> 100%)
--	--	--	89	--	000 <--> 255	LED 18 White (0% <--> 100%)
--	--	72	90	83	000 <--> 255	LED 19 Red (0% <--> 100%)
--	--	73	91	84	000 <--> 255	LED 19 Green (0% <--> 100%)
--	--	74	92	85	000 <--> 255	LED 19 Blue (0% <--> 100%)
--	--	--	93	--	000 <--> 255	LED 19 White (0% <--> 100%)

DMX Values In-Depth *(Classic Mode)*

Channel	DMX Value	%	What is does	Fade status	Default value
1	000 <--> 019 020 <--> 024 025 <--> 064 065 <--> 069 070 <--> 084 085 <--> 089 090 <--> 104 105 <--> 109 110 <--> 124 125 <--> 129 130 <--> 144 145 <--> 149 150 <--> 164 165 <--> 169 170 <--> 184 185 <--> 189 190 <--> 204 205 <--> 209 210 <--> 224 225 <--> 229 230 <--> 244 245 <--> 255	0 - 7 8 - 9 10 - 25 26 - 27 28 - 33 34 - 35 36 - 41 42 - 43 44 - 49 50 - 51 52 - 57 58 - 59 60 - 65 66 - 67 68 - 73 74 - 75 76 - 81 82 - 83 84 - 89 90 - 91 92 - 97 98 - 100	**Beam Shutter** Shutter closed Shutter open Strobe 1 (fast <--> slow) Shutter open Strobe 2: opening pulse (fast <--> slow) Shutter open Strobe 3: closing pulse (fast <--> slow) Shutter open Strobe 4: random strobe (fast <--> slow) Shutter open Strobe 5: random opening pulse (fast <--> slow) Shutter open Strobe 6: random closing pulse (fast <--> slow) Shutter open Strobe 7: burst pulse (fast <--> slow) Shutter open Strobe 8: random burst pulse (fast <--> slow) Shutter open Strobe 9: sine wave (fast <--> slow) Shutter open Strobe 10: burst (fast <--> slow) Shutter open	Snap	22
2	000 <--> 255	0 - 100	**Beam Dimmer** (0% <--> 100%)	Fade	0
3	000 <--> 255	0 - 100	**Zoom** (wide <--> narrow)	Fade	255
4	000 <--> 255	0 - 100	**Pan** (0° - 540°)	Fade	128
5	000 <--> 255	0 - 100	**Pan Fine** Pan fine adjustment (Least Significant Byte)	Fade	32768
6	000 <--> 255	0 - 100	**Tilt** (0° - 232°)	Fade	128
7	000 <--> 255	0 - 100	**Fine Tilt** Tilt fine adjustment (Least Significant Byte)	Fade	32768
8	000 <--> 255	0 - 100	**Reset** Tilt fine adjustment (Least Significant Byte)	Snap	0
9	000 <--> 009 010 <--> 014 015 <--> 019 020 <--> 024 025 <--> 029 030 <--> 034 035 <--> 039 040 <--> 044 045 <--> 049 050 <--> 054 055 <--> 059 060 <--> 064 065 <--> 069 070 <--> 074 075 <--> 079 080 <--> 084 085 <--> 089 090 <--> 094 095 <--> 099 100 <--> 104 105 <--> 109 110 <--> 114 115 <--> 119 120 <--> 124 125 <--> 129 130 <--> 134 135 <--> 139 140 <--> 144 145 <--> 149	0 - 2 3- 4 4 - 5 6 - 7 8 - 9 10 - 11 12 - 13 14 - 15 16 - 17 18 - 19 20 - 21 22 - 23 24 - 25 26 - 27 28 - 29 30 - 31 32 - 33 34 - 35 36 - 37 38 - 39 40 - 41 42 - 43 44 - 45 46 - 47 48 - 49 50 - 51 52 - 53 54 - 55 56 - 57	**Beam Color Effects** Open. RGBW color mixing enabled LEE 790 - Moroccan pink LEE 157 - Pink LEE 332 - Special rose pink LEE 328 - Follies pink LEE 345 - Fuchsia pink LEE 194 - Surprise pink LEE 181 - Congo Blue LEE 071 - Tokyo Blue LEE 120 - Deep Blue LEE 079 - Just Blue LEE 132 - Medium Blue LEE 200 - Double CT Blue LEE 161 - Slate Blue LEE 201 - Full CT Blue LEE 202 - Half CT Blue LEE 117 - Steel Blue LEE 353 - Lighter Blue LEE 118 - Light Blue LEE 116 - Medium Blue Green LEE 124 - Dark Green LEE 139 - Primary Green LEE 089 - Moss Green LEE 122 - Fern Green LEE 738 - JAS Green LEE 088 - Lime Green LEE 100 - Spring Yellow LEE 104 - Deep Amber LEE 179 - Chrome Orange	Snap	0

DMX Values In-Depth *(Classic Mode), continued*

Channel	DMX Value	%	What is does	Fade status	Default value
			Beam Color Effects		
	150 - 154	58 - 59	LEE 105 - Orange		
	155 - 159	60 - 61	LEE 021 - Gold Amber		
	160 - 164	62 - 63	LEE 778 - Millennium Gold		
	165 - 169	64 - 65	LEE 135 - Deep Golden Amber		
	170 - 174	66 - 67	LEE 164 - Flame Red		
	175 - 179	68 - 69	Open		
			Color wheel rotation effect		
9	180 - 201	70 - 78	Clockwise (fast <--> slow)	Snap	0
	202 - 207	79 - 80	Stop		
	208 - 229	81 - 89	Counter-clockwise (slow <--> fast)		
	230 - 234	90 - 91	Open		
			Random color		
	235 - 239	92 - 93	Fast		
	240 - 244	94 - 95	Medium		
	245 - 249	96 - 97	Slow		
	250 - 255	98 - 100	Open		
10	000 <--> 255	0 - 100	**Beam Red** (0% <--> 100%)	Fade	255
11	000 <--> 255	0 - 100	**Beam Green** (0% <--> 100%)	Fade	255
12	000 <--> 255	0 - 100	**Beam Blue** (0% <--> 100%)	Fade	255
13	000 <--> 255	0 - 100	**Beam White** (0% <--> 100%)	Fade	0
			Beam CTC		
14	000 <--> 019	0 - 7	CTC disabled	Fade	0
	020 <--> 255	8 - 100	CTC 10,000K - 2,500K		

LEE Colors and RGB Equivalents

The table below gives approximate RGB equivalent values of the LEE colors found in the Stiletto Glo™.

		DMX Integer		
Lee #	**Name**	**Red**	**Green**	**Blue**
790	Moroccan Pink	255	235	052
157	Pink	214	134	048
332	Special Rose Pink	255	000	044
328	Follies Pink	255	059	113
345	Fuchsia Pink	255	138	219
194	Surprise Pink	226	175	226
181	Congo Blue	040	001	255
071	Tokyo Blue	000	000	255
120	Deep Blue	000	078	255
079	Just Blue	000	199	255
132	Medium Blue	000	255	234
200	Double CT Blue	149	246	255
161	State Blue	137	255	227
201	Full CT Blue	213	220	222
202	Half CT Blue	219	232	175
117	Steel Blue	205	255	199
353	Lighter Blue	115	255	165
118	Light Blue	006	255	143
116	Medium Blue Green	000	255	94
124	Dark Green	029	255	000
139	Primary Green	032	223	000
089	Moss Green	075	255	000
122	Fern Green	080	232	000
738	JAS Green	108	226	000
088	Lime Green	145	194	000
100	Spring Yellow	210	255	000
104	Deep Amber	225	232	000
179	Chrome Orange	023	215	000
105	Orange	247	214	000
021	Gold Amber	255	163	000
778	Millennium Gold	255	152	000
135	Deep Golden Amber	255	108	000
164	Flame Red	255	080	000

5. APPENDIX

A Quick Lesson On DMX

DMX (aka DMX-512) was created in 1986 by the United States Institute for Theatre Technology (USITT) as a standardized method for connecting lighting consoles to lighting dimmer modules. It was revised in 1990 and again in 2000 to allow more flexibility. The Entertainment Services and Technology Association (ESTA) has since assumed control over the DMX512 standard. It has also been approved and recognized for ANSI standard classification.

DMX covers (and is an abbreviation for) Digital MultipleXed signals. It is the most common communications standard used by lighting and related stage equipment.

DMX provides up to 512 control "channels" per data link. Each of these channels was originally intended to control lamp dimmer levels. You can think of it as 512 faders on a lighting console, connected to 512 light bulbs. Each slider's position is sent over the data link as an 8-bit number having a value between 0 and 255. The value 0 corresponds to the light bulb being completely off while 255 corresponds to the light bulb being fully on.

DMX data is transmitted at 250,000 bits per second using the RS-485 transmission standard over two wires. As with microphone cables, a grounded cable shield is used to prevent interference with other signals.

There are five pins on a DMX connector: a wire for ground (cable shield), two wires for "Primary" communication which goes from a DMX source to a DMX receiver, and two wires for a "Secondary" communication which goes from a DMX receiver back to a DMX source. Generally, the "Secondary" channel is not used so data flows only from sources to receivers. Hence, most of us are most familiar with DMX-512 as being employer over typical 3-pin "mic cables," although this does not conform to the defined standard.

DMX is connected using a daisy-chain configuration where the source connects to the input of the first device, the output of the first device connects to the input of the next device, and so on. The standard allows for up to 32 devices on a single DMX link.

Each receiving device typically has a means for setting the "starting channel number" that it will respond to. For example, if two 6-channel fixtures are used, the first fixture might be set to start at channel 1 so it would respond to DMX channels 1 through 6, and the next fixture would be set to start at channel 7 so it would respond to channels 7 through 12.

The greatest strength of the DMX communications protocol is that it is very simple and robust. It involves transmitting a reset condition (indicating the start of a new "packet"), a start code, and up to 512 bytes of data. Data packets are transmitted continuously. As soon as one packet is finished, another can begin with no delay if desired (usually another follows within 1 ms). If nothing is changing (i.e. no lamp levels change) the same data will be sent out over and over again. This is a great feature of DMX -- if for some reason the data is not interpreted the first time around, it will be re-sent shortly.

Not all 512 channels need to be output per packet, and in fact, it is very uncommon to find all 512 used. The fewer channels are used, the higher the "refresh" rate. It is possible to get DMX refreshes at around 1000 times per second if only 24 channels are being transmitted. If all 512 channels are being transmitted, the refresh rate is around 44 times per second.

In summary, since its design and evolution in the 1980's DMX has become the standard for lighting control. It is flexible, robust, and scalable, and its ability to control everything from dimmer packs to moving lights to foggers to lasers makes it an indispensable tool for any lighting designer or lighting performer.

Keeping Your Stiletto™ Glo As Good As New

The fixture you've received is a rugged, tough piece of pro lighting equipment, and as long as you take care of it, it will take care of you. That said, like anything, you'll need to take care of it if you want it to operate as designed. You should absolutely keep the fixture clean, especially if you are using it in an environment with a lot of dust, fog, haze, wild animals, wild teenagers or spilled drinks.

Cleaning the optics routinely with a suitable glass cleaner will greatly improve the quality of light output. Keeping the fans free of dust and debris will keep the fixture running cool and prevent damage from overheating.

In transit, keep the fixtures in cases. You wouldn't throw a prized guitar, drumset, or other piece of expensive gear into a gear trailer without a case, and similarly, you shouldn't even think about doing it with your shiny new light fixtures.

Common sense and taking care of your fixtures will be the single biggest thing you can do to keep them running at peak performance and let you worry about designing a great light show, putting on a great concert, or maximizing your client's satisfaction and "wow factor." That's what it's all about, after all!

Returns (Gasp!)

We've taken a lot of precautions to make sure you never even have to worry about sending a defective unit back, or sending a unit in for service. But, like any complex piece of equipment designed and built by humans, once in a while, something doesn't go as planned. If you find yourself with a fixture that isn't behaving like a good little fixture should, you'll need to obtain a Return Authorization (RA).

Don't worry, this is easy. Just visit www.blizzardlighting.com/support and open a support ticket, and we'll issue you an RA. Then, you'll need to send the unit to us using a trackable, pre-paid freight method. We suggest using USPS Priority or UPS. Make sure you carefully pack the fixture for transit, and whenever possible, use the original box & packing for shipping.

When returning your fixture for service, be sure to include the following:

1.) Your contact information (Name, Address, Phone Number, Email address).
2.) The RA# issued to you
3.) A brief description of the problem/symptoms.

We will, at our discretion, repair or replace the fixture. Please remember that any shipping damage which occurs in transit to us is the customer's responsibility, so pack it well!

Shipping Issues

Damage incurred in shipping is the responsibility of the shipper, and must be reported to the carrier immediately upon receipt of the items. Claims must be made within seven (7) days of receipt.

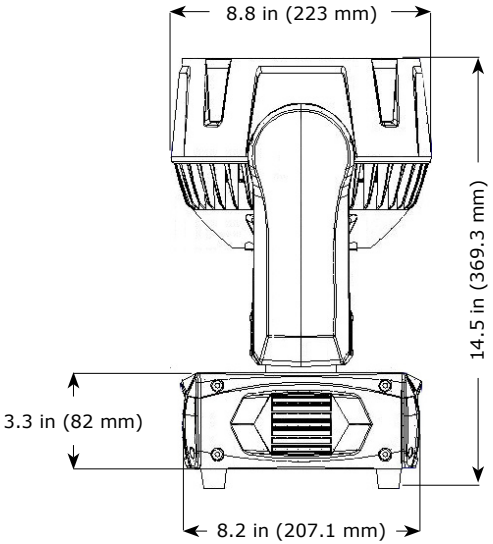
Troubleshooting

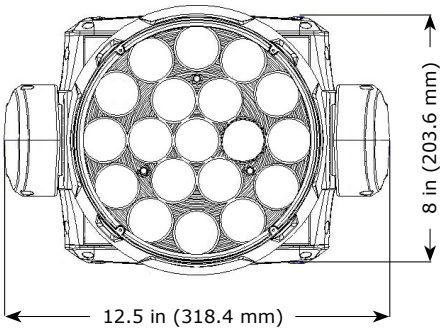
Symptom	Solution
Fixture Auto-Shut Off	Check the fan in the fixture. If it is stopped or moving slower than normal, the unit may have shut itself off due to high heat. This is to protect the fixture from overheating. Clear the fan of obstructions, or return the unit for service.
Beam is Dim	Check optical system and clean excess dust/grime. Also ensure that the 220V/110V switch is in the correct position, if applicable.
No Light Output	Check to ensure fixture is operating under correct mode, IE sound active/auto/ DMX/Etc., if applicable. Contact service for more information.
Chase Speed Too Fast/Slow	Check to ensure proper setup of speed adjustment.
No Power	Check fuse, AC cord and circuit for malfunction.
No Response to Audio	Verify that the fixture is in "Sound Active" mode. Adjust Audio Sensitivity, If Applicable.
Fixture Not Responding / Responding Erratically	Make sure all connectors are seated properly and securely. Use Only DMX Cables. Install a Terminator. Check all cables for defects. Reset fixture(s).

Tech Specs!

Weight & Dimensions	
Width	12.5 inches (318.4 mm)
Depth	8 inches (203.6 mm)
Height	14.5 inches (369.3 mm)
Weight	17.5 lbs (8 kg)
Power	
Operating Voltage	AC 110-220VAC, 50-60 Hertz
Power Consumption	118W, .76A
Power Factor	.99
Light Source	
LED	19*15W OSRAM™ 4-in-1 RGBW LEDs (patterns) + RGB color mixing secondary background LED array
Optical	
Beam Angle	11°-58° zoomable beam angle
Luminous Intensity	Narrow: 9,200 Lux @ 5M Wide: 530 Lux @ 5M
Thermal	
Max. Operating Temp.	104 degrees F (40 degrees C) ambient
Control	
Protocol	USITT DMX-512
DMX Channels	14/17/28/74/85 and 93-Channel
Input	3/5-pin XLR Male
Output	3/5-pin XLR Female
Other Operating Modes	Standalone, Master/Slave
Other Information	
Never assume anything but the position.	
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LEDs.

Dimensional Drawings





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Enjoy your product!
Our sincerest thanks for your purchase!
--The team @ Blizzard Lighting