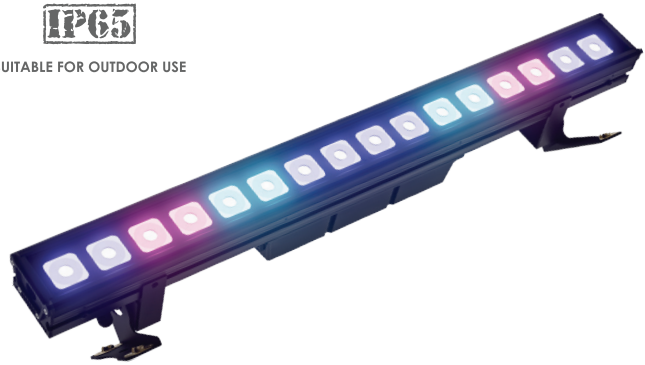
STICKNADO™

HAMMER HEAD

IP65

SUITABLE FOR OUTDOOR USE



blizzard

Blizzard Lighting, LLC
http://www.blizzardpro.com
Waukesha, WI USA

TABLE OF CONTENTS

1. Getting Started **3**

What's In The Box? 3
Getting It Out Of The Box 3
Powering Up! 3
Getting A Hold Of Us 3

2. Meet the Sticknado™ Hammerhead **5**

Main Features 5
Sticknado™ Hammerhead Pin-Up Picture 6
Rear Connections 6

3. Setup **7**

Fuse Replacement 7
Connecting Multiple Fixtures 7
Data/DMX Cabling 7
Cable Connectors 8
3-Pin??? 5-Pin??? Huh?!? 8
Take It To The Next Level: Setting Up DMX Control 8
Fixture Linking (M/S Mode) 9
Mounting & Rigging 9

4. Operating Adjustments **10**

The Control Panel 10
Control Panel Menu Structure 11
DMX Mode 12
Dimming Mode Settings 12
LED Display Setting 12
Custom Programs 13
Auto Mode and Speed Settings 13
Color Calibration Settings 14
Custom Static Colors 14
Fixture Reset Functions 14
Data Sync Feature 15
Fixture Information 15
DMX Value In-Depth Reference Guide 16
LED Pixel Group Configurations 17
DMX In-Depth Reference 18

5. APPENDIX **20**

A Quick Lesson On DMX 20
Troubleshooting 20
Keeping Your Fixture As Good As New 21
Returns (Gasp!) 21
Shipping Issues 21
Tech Specs! 22
Photometric Data 22
Dimensional Drawings 23

1. GETTING STARTED

What's In The Box?

- 1x Sticknado™ Hammerhead
- IP-rated Power Cord
- 2x Alignment Hardware Sets
- 2x Omega Clamp Brackets
- User Manual

Getting It Out Of The Box

Congratulations on purchasing the Sticknado™ Hammerhead. Now that you've got your fixture, carefully unpack the box and check the contents to ensure that all parts are present and in good condition. If anything appears to be damaged in transit, notify the shipper immediately and keep the packing material for inspection. Please save the carton and all packing materials. If the fixture must be returned to the factory, it is important that it 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 Compatibility - Confirm that the product's power requirements align with your local power supply before use. Refer to the product's label or the specifications chart provided with the product for details. The current rating listed represents the average current draw under normal conditions.

Warning! ***Verify the product's compatibility with your area's line voltage to avoid damage. Ensure that all connections are made to circuits that provide proper grounding (earthing).***

Getting A Hold Of Us

If something is wrong, please visit our website at www.blizzardpro.com/support and open a support ticket. We'll be happy to help, honest.

Author:	Date:	Last Edited:	Date:
J. Thomas	5/30/2024	J. Thomas	5/30/2024

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.

• 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 head. 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 open a support ticket at www.blizzardpro.com/support.

2. MEET THE STICKNADO™ HAMMERHEAD

Main Features

- Color mixing via 16x 20W RGBL 4-in-1 LEDs
- 10-45° asymmetrical beam spread
- Flicker-free constant-current LED driver
- IP65 rated outdoor LED fixture
- Built-in color and pixel chase macros via DMX
- Virtual color wheel effects
- 33 built-in macros and 3 customizable programs
- Efficient convection cooling
- Dual mounting brackets with locking knobs
- Interlocking housing design for connecting multiple fixtures
- 5-pin DMX in/out + powerCON-compatible AC in/out

Control

- Protocol: USITT DMX-512, RDM
- DMX Channels: 3/4/5/10/14/22/38/48/64/70 channels
- Easy-to-use 4-button control menu with OLED display
- Operating modes: DMX512, M/S, auto

DMX Quick Reference (3/4/5/10/14/22/38/48/64/70 Ch. Modes)

Ch.	70-Channel
1	Dimmer
2-65	RGBL Pixel Control
66	Strobe
67	Effect
68	Speed
69	Virtual Color Wheel
70	Dimming Modes

Ch.	38-Channel
1	Dimmer
2-33	8 RGBL Groups (2x8)
34	Strobe
35	Effect
36	Speed
37	Virtual Color Wheel
38	Dimming Modes

Ch.	22-Channel
1	Dimmer
2-17	4 RGBL Groups (4x4)
18	Strobe
19	Effect
20	Speed
21	Virtual Color Wheel
22	Dimming Modes

Ch.	14-Channel
1	Dimmer
2-9	2 Pixel Groups (8x2)
10	Strobe
11	Effect
12	Speed
13	Virtual Color Wheel
14	Dimming Modes

Ch.	48-Channel
1-48	RGB Pixel Control

Ch.	64-Channel
1-64	RGBL Pixel Control

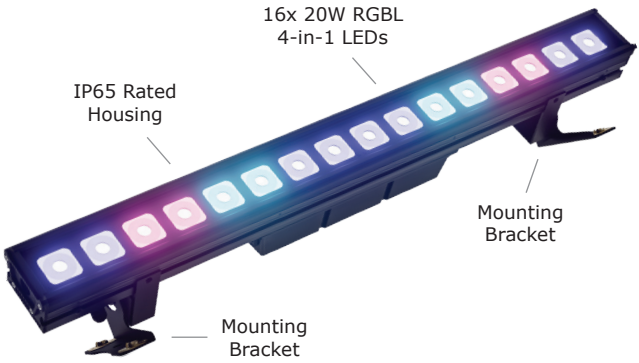
Ch.	10-Channel
1	Dimmer
2-5	Full Bar RGBL Mixing
6	Strobe
7	Effect
8	Speed
9	Virtual Color Wheel
10	Dimming Modes

Ch.	5-Channel
1	Dimmer
2-5	Full Bar RGBL Mixing

Ch.	4-Channel
1-4	Full Bar RGBL Mixing

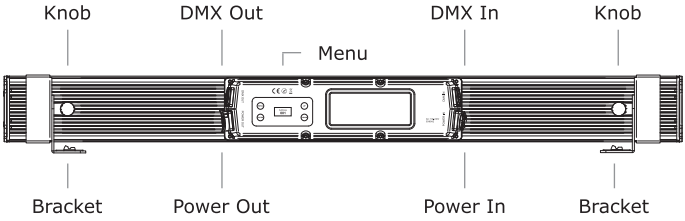
Ch.	3-Channel
1-3	Full Bar RGB Mixing

Figure 1: Sticknado™ Hammerhead Pin-Up Picture



Note: Multiple fixtures can be horizontally aligned and locked together using the included alignment hardware sets, which fit into the top and bottom channel grooves.

Figure 2: Rear Connections



3. SETUP

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

Fuse Replacement

This fixture utilizes a high-output switch-mode power supply with an internal fuse. Under normal conditions, the fuse should not require replacement. Should your fixture require fuse replacement, please contact us for instructions.

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

Data/DMX Cabling

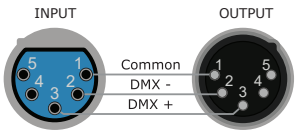
To link fixtures together, you'll need data cables. You should use data-grade cables that can carry a high-quality signal and are less prone to electromagnetic interference.

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 3-pin DMX output connector, you will need to use a 3-pin to 5-pin adapter. 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
Data 1- (Primary Data)	Pin 2	Pin 2
Data 1+ (Primary Data)	Pin 3	Pin 3
Data 2- (Optional)	--	Pin 4 - Do Not Use
Data 2+ (Optional)	--	Pin 5 - Do Not Use

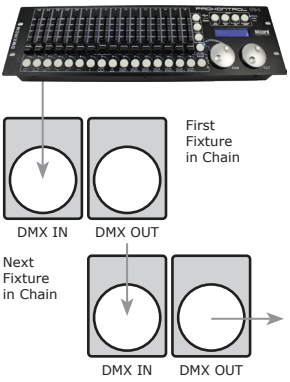
Take It To The Next Level: Setting Up DMX Control

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).

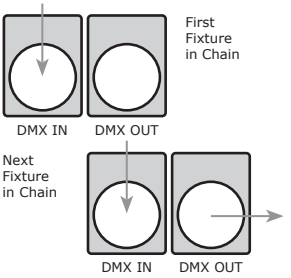
Note: It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture number first, and so on.

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 (M/S Mode)

1. Connect the male connector side of the DMX cable to the output female connector of the first fixture.

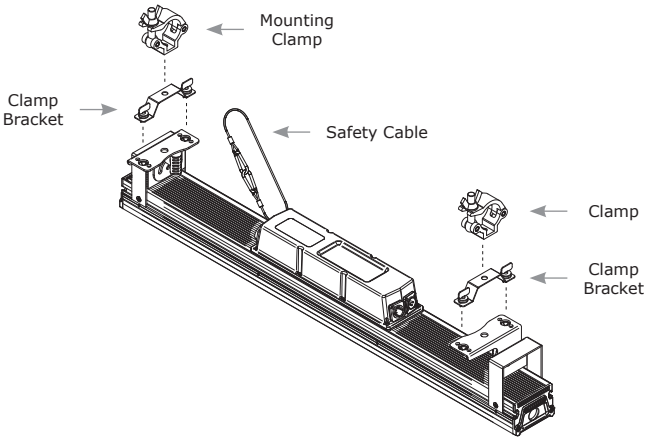


2. Connect the end of the cable coming from the first fixture which will have a female connector to the input connector of the next fixture consisting of a male connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

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



Ensure fixtures have ample ventilation and no obstructions. Regardless of the rigging option, always use a safety cable.

Use "C" or "O" clamps rated 10x the fixture's weight. Only mount on known, strong surfaces and use proper overhead rigging.

4. OPERATING ADJUSTMENTS

The Control Panel

All the features and different modes possible in this fixture are accessed by using the control panel on the rear of the fixture. There are 4 control buttons which allow you to navigate through the various control panel menus.

<MENU>

Is used to navigate to the previous higher-level menu item.

<UP>

Scrolls through menu items and numbers in ascending order.

<DOWN>

Scrolls through menu items and numbers in descending order.

<ENTER>

Is used to select and confirm/store the current selection.

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

Use the **<UP>** and **<DOWN>** buttons to navigate the menu options. Press the **<ENTER>** button to select the menu function currently displayed or 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

Address	001-512		To choose the DMX address	
Static	Red 1		Red 1 intensity (0% <--> 100%)	
	Green 1		Green 1 intensity (0% <--> 100%)	
	Blue 1		Blue 1 intensity (0% <--> 100%)	
	Lime 1		Lime 1 intensity (0% <--> 100%)	
	Red 2		Red 2 intensity (0% <--> 100%)	
	Green 2		Green 2 intensity (0% <--> 100%)	
	Blue 2		Blue 2 intensity (0% <--> 100%)	
	Lime 2		Lime 2 intensity (0% <--> 100%)	
	Strobe		Flash / strobe speed (0-255)	
	Presets		None, Red, Green, Blue, Lime, RGBL, Yellow, Pink, Cyan, Orange, Violet, Golden, 2700K, 3200K, 4000K, 5500K, 6500K	
Set	Calibrate		To set global intensity levels of each color + USE: YES/NO	
	Ch. Mode	3CH	To run in 3-channel mode	
		4CH	To run in 4-channel mode	
		5CH	To run in 5-channel mode	
		10CH	To run in 10-channel mode	
		14CH	To run in 14-channel mode	
		22CH	To run in 22-channel mode	
		38CH	To run in 38-channel mode	
		48CH	To run in 48-channel mode	
		64CH	To run in 64-channel mode	
		70CH	To run in 70-channel mode	
	Curves	LIN	Linear dimming curve	
		SQR	Square law curve	
		ISQR	Inverse square law curve	
		SCUR	S-curve	
		LIN.	Linear dimming curve (smooth)	
		SQR.	Square law curve (smooth)	
		ISQR.	Inverse square law curve (smooth)	
		SCUR.	S-curve (smooth)	
	PWM		1200Hz, 2400Hz, 4000Hz, 12000Hz,16000Hz, 20000Hz	
	Display	On	Menu display is on continually	
		Off (2 Min)	Menu display shuts off after 2 minutes of inactivity	
	Lock	No/Yes	To unlock the menu, press: **<UP>, <DOWN>, <UP>, <DOWN>, <ENTER>** within 3 seconds each.	
	Rotate	**<ENTER>**	Select normal or rotate the menu display by 180°	
	Intensity	**<ENTER>**	Adjust the menu brightness intensity level 1-100	
Custom	CT01-CT10	**<ENTER>**	R/G/B/L adjustments for custom colors 01-10	
Auto	AT01-AT33	**<ENTER>**	Auto programs 1-33	
	ATSP	**<ENTER>**	Auto speed 0-255 (fast to slow)	
	CHS1	**<ENTER>**	Custom program 1	
	CHS2	**<ENTER>**	Custom program 2	
	CHS3	**<ENTER>**	Custom program 3	
Program	CHS1-CHS3 Custom programs 1-3.	SC01-SC25 25 scenes for each custom program.	Red 1 / Red 2 (0-255)	Auto (None, AT01-AT33)
			Green 1 / Green 2 (0-255)	ATSP (speed, 0-255 seconds)
			Blue 1 / Blue 2 (0-255)	Time (duration, 0-255 seconds)
			Lime 1 / Lime 2 (0-255)	Wait (before fade, 0-255 sec.)
			Strobe (strobe, 0-255)	Use (use scene, No/Yes)
Info	Software		Software version information	
	Power		Current automated overheat protection level (100%/80%/50%)	
	Temp.		Display the internal temperature of the fixture	
	RDM UID		RDM Unique ID (UID)	
Reset	Settings		Restore factory settings	
	Programs		Restore factory program settings	
Send	No/Yes		Sync settings between fixtures via DMX	

DMX Mode

Allows the unit to be controlled by any universal DMX controller.

Setting the DMX Address:

1.) The default mode for the fixture is DMX, which appears as **001** on the menu display. To select a different DMX address, use the **<MENU>** button to select **Address**, then press **<ENTER>**. Use the **<UP/DOWN>** buttons to select the correct address, then press **<ENTER>** to confirm.

Setting the DMX Channel Mode:

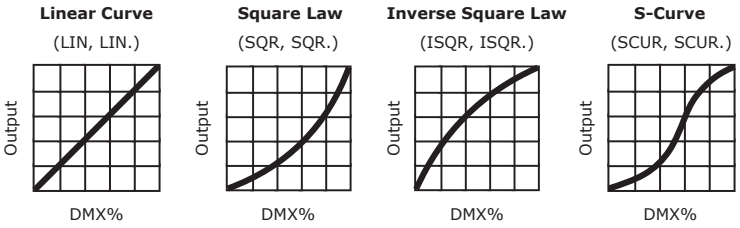
1.) To select a DMX channel mode, press the **<MENU>** button, then use the **<UP/DOWN>** buttons until the display reads **Set** and press **<ENTER>**. Then use the **<UP/DOWN>** buttons until the display reaches **CH. Mode**, and press **<ENTER>**. Now press the **<UP/DOWN>** buttons again to highlight your desired DMX channel mode, and press **<ENTER>** to confirm.

Slave Mode:

1.) Daisy chain the fixtures using DMX in/out connections. The first fixture in line is the master, and the other fixtures will follow the master.

Dimming Mode Settings

Allows users to set the fixture to use one of four (x2) dimming curve settings for smoother (and slower) dimming capabilities. In the control panel menu, there are two settings for each curve, distinguishable by a trailing dot.



**The curve settings with the trailing dot adds a bit more delay to the curve for a smoother effect.*

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Set** and press **<ENTER>**. Then use the **<UP/DOWN>** buttons again to scroll to **Curves** and press **<ENTER>**.
2.) Use the **<UP/DOWN>** buttons to highlight either **LIN** (Linear), **SQR** (Square), **ISQR** (Inverse Square), **SCUR** (S-Curve), **LIN.** (Smooth Linear), **SQR.** (Smooth Square), **ISQR.** (Smooth Inverse Square), or **SCUR.** (Smooth S-Curve), then press **<ENTER>**.

LED Display Setting

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Set** and press **<ENTER>**. Then navigate to **Display** and press **<ENTER>**.
2.) In **Display,** you can set the menu display to be continually on, or automatically shut off after 2 minutes of inactivity.

Custom Programs

Allows users to create up to 3 customizable, 25-scene programs that are directly accessible via the control panel and also in DMX mode.

Creating A Custom Program:

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Program** and press **<ENTER>**.

2.) Use the **<UP/DOWN>** buttons to highlight your choice of either **CHS1**, **CHS2**, or **CHS3** and press **<ENTER>**.

3.) Start by editing scene 1 **(SC01)**, customizing it to your liking using the choices outlined in the table below. You can insert any of the 33 built-in auto programs **(AT01-AT33)**, adjust its speed **(ATSP 0-255)**, and set the duration (in seconds) before moving on to the next scene **(Time 0-255)**. Alternatively, you can create a custom scene by color mixing any (or all) of the 3 programs, and add a fade-in effect **(Wait 0-255)** and/or strobe **(Strobe 0-255)**. Finally, if you want to use this scene in your program, be sure to enable it **(USE: YES/NO)**.

4.) Repeat the above process to create up to 25 scenes in each of the 3 customizable programs.

Red 1 / Red 2 Intensity (0-255)	AUTO (AT01-AT33) - Auto Programs	***IMPORTANT:*** ***If USE is set to NO, or TIME is set to 0, the scene will not run!***
Green 1 / Green 2 Intensity (0-255)	ATSP (0-255) - Auto Speed (fast - slow)	
Blue 1 / Blue 2 Intensity (0-255)	Time (0-255) - Scene Time (seconds)	
Lime 1 / Lime 2 Intensity (0-255)	Wait (0-255) - Fade In (fast - slow)	
Strobe (0-255) - Strobe (slow - fast)	Use (YES/NO) Use Scene in Program?	

Running A Custom Program:

1.) To view your newly created lighting masterpiece, use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Auto** in the main menu and press **<ENTER>**.

2.) Use the **<UP/DOWN>** buttons to highlight your choice of either **CHS1, CHS2,** or **CHS3** and press **<ENTER>**. These are also directly accessible from the **Effect Channel** in DMX mode.

Auto Mode and Speed Settings

Set single or Master/Slaved units to run automated programs at user-selectable speeds.

Auto Mode:

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to navigate to **Auto** and press the **<ENTER>** button.

2.) Use the **<UP/DOWN>** buttons to highlight any program ranging from **AT01-AT33** and press **<ENTER>**.

Auto Speed:

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Auto** and press **<ENTER>**. Then use the **<UP/DOWN>** buttons to navigate to **ATSP** and press **<ENTER>**.

2.) Make a selection from **0-255** and press **<ENTER>** to choose a speed (slow <--> fast).

Color Calibration Settings

Allows the user to set up and save one customized R/G/B/L color balance setting for future use. This custom setting is global and will affect all modes.

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Set** and press **<ENTER>**, then on while **Calibrate**, push **<ENTER>** again.
2.) Use the **<UP/DOWN>** buttons to highlight either **Red**, **Green**, **Blue**, or **Lime**, then press the **<ENTER>** button.
3.) Now using the **<UP/DOWN>** buttons, select the maximum level for each color between 000-255 (000=off), and hit **<ENTER>** to confirm your choice.
4.) You have now set up and saved a custom global color calibration setting. To use your custom setting now (or later), press the **<UP/DOWN>** buttons to reach **USE**, and press **<ENTER>**. Then choose either **YES** or **NO** and press **<ENTER>**. Selecting **YES** enables this custom color calibration globally, and choosing **NO** keeps the fixture using the default color calibration settings. Your customized settings will be saved for later use even after powering off the fixture. They can be altered to your liking at any time. Just remember to return to this setting to either enable or disable it when needed.

Custom Static Colors

Allows the user to create and save up to 10 custom static colors for use in standalone or DMX mode.

1.) Navigate to **Custom** in the menu and press **<ENTER>**, then use the **<UP/DOWN>** buttons to select a color bank from **CT01-CT10**, and push **<ENTER>** to confirm your selection.
2.) Now use the **<UP/DOWN>** buttons to highlight either **Red**, **Green**, **Blue**, or **Lime**, and then press **<ENTER>**.
3.) Using the **<UP/DOWN>** buttons, select the maximum level for each color between 000-255 (000=off), and press **<ENTER>** to confirm your choice(s).
4.) These 10 custom colors can be accessed and edited to your liking at any time and will be saved even after powering off the fixture.
5.) These static colors are directly accessible from the **Effect Channel** in DMX mode.

Fixture Reset Functions

Allows users to reset the fixture to factory default settings without losing customized settings or to reset the custom programs exclusively.

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Reset** and press **<ENTER>**. Then highlight either **Settings** or **Programs** and press **<ENTER>**.
2.) Use the **<UP/DOWN>** buttons to highlight either **YES** or **NO**, then press **<ENTER>**.
3.) The **Settings** reset function will reset all default values **except** those in **Address**, **CTST** (10 custom colors), and **Programs** (custom scenes and programs).
4.) The **Programs** reset function will only reset all customized program settings found in the **Programs** settings (custom scenes and programs).

Data Sync Feature

Users can transfer their custom settings from one fixture to another via DMX.

1.) Disconnect fixtures from any DMX controllers, and link them together via DMX in/out.
2.) On the sending fixture (DMX out), navigate the main menu using the **<UP/DOWN>** buttons to reach **Send**, and press the **<ENTER>** button.
3.) Select **YES**, and press the **<ENTER>** button to begin the transfer.
4.) The information in **Address**, and **Calibrate** will not be sent.
5.) After the data has been transferred, the receiving fixture will be automatically be reset.

Fixture Information

These are not editable features, they are for informational purposes only.

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Info** and press **<ENTER>**. Then use the **<UP/DOWN>** buttons to highlight **Software**, **Power**, or **Temp** and press **<ENTER>**.

2.) The **Software** information displays the current software version installed on the fixture, **Temp.** displays the temperature (C) of the LED board, and **Power** displays the fixture's current power level setting. Normally, it will be at 100%, but this fixture has built-in overheat protection that may automatically reduce the output level to 80%, or 50% in high temperature situations.

DMX Value In-Depth Reference Guide

Function	Value	What It Does
Dimmer	000 <-> 255	(0% <-> 100%)
Red	000 <-> 255	(0% <-> 100%)
Green	000 <-> 255	(0% <-> 100%)
Blue	000 <-> 255	(0% <-> 100%)
Lime	000 <-> 255	(0% <-> 100%)
Strobe	000 <-> 005	No strobe
	006 <-> 020	Non-synchronous strobe (slow <--> fast)
	021 <-> 060	Synchronous strobe (slow <--> fast)
	061 <-> 100	Electronic sine wave (slow <--> fast)
	101 <-> 140	Random strobe (slow <--> fast)
	141 <-> 180	Opening pulse (slow <--> fast)
	181 <-> 220	Closing pulse (slow <--> fast)
	221 <-> 255	Electronic square wave (slow <--> fast)
Effect	000 <-> 005	No Function
	006 <-> 010	Custom color 1 (CT01 in menu settings)
	011 <-> 015	Custom color 2 (CT02 in menu settings)
	016 <-> 020	Custom color 3 (CT03 in menu settings)
	021 <-> 025	Custom color 4 (CT04 in menu settings)
	026 <-> 030	Custom color 5 (CT05 in menu settings)
	031 <-> 035	Custom color 6 (CT06 in menu settings)
	036 <-> 040	Custom color 7 (CT07 in menu settings)
	041 <-> 045	Custom color 8 (CT08 in menu settings)
	046 <-> 050	Custom color 9 (CT09 in menu settings)
	051 <-> 055	Custom color 10 (CT10 in menu settings)
	056 <-> 060	Auto 1 - R, G, B, L, RG, RB, GB, RGBL
	061 <-> 065	Auto 2 - R↑, R↓, G↑, G↓, B↑, B↓, L↑, L↓
	066 <-> 070	Auto 3 - B, BG↑, BG, B↓G, G, GR↑, GR, G↓R, R, RB↑, RB, R↓B
	071 <-> 075	Auto 4 - Pink BG + R, G, B, L, RG, RB, GB, BL every other LED
	076 <-> 080	Auto 5 - R, G, B, L, RG, RB, GB, BL (rainbow)
	081 <-> 085	Auto 6 - R↑, R↓, G↑, G↓, B↑, B↓, L↑, L↓ (rainbow)
	086 <-> 090	Auto 7 - B, BG↑, BG, B↓G, G, GR↑, GR, G↓ R, R, RB↑, RB, R↓B (rainbow)
	091 <-> 095	Auto 8 - 1 of 16 LEDs run: R, G, B, L, RG, RB, GB, BL (+bg color)
	096 <-> 100	Auto 9 - 2 of 16 LEDs run: R, G, B, L, RG, RB, GB, BL (+bg color)
	101 <-> 105	Auto 10 - 4 of 16 LEDs run: R, G, B, L, RG, RB, GB, BL (+bg color)
	106 <-> 110	Auto 11 - 8 of 16 LEDs run: R, G, B, L, RG, RB, GB, BL (+bg color)
	111 <-> 115	Auto 12 - 2 LED inward chase: R, G, B, L, RG, RB, GB, BL (+bg color)
	116 <-> 120	Auto 13 - 4 LED inward chase: R, G, B, L, RG, RB, GB, BL (+bg color)
	121 <-> 125	Auto 14 - 8 LED inward chase: R, G, B, L, RG, RB, GB, BL (+bg color)
	126 <-> 130	Auto 15 - 4 LED pairs back/forth: R, G, B, L, RG, RB, GB, BL (+bg color)
	131 <-> 135	Auto 16 - 1 LED overwrite in sequence: R, G, B, L, RG, RB, GB, BL
	136 <-> 140	Auto 17 - 1 color swipe in with trail effect: R, G, B, L, RG, RB, GB, BL
	141 <-> 145	Auto 18 - Color swipe with overlap: R, G, B, L, RG, RB, GB, BL
	146 <-> 150	Auto 19 - 2 LEDs, 2 colors: R, G, B, L, RG, RB, GB, BL (+bg color)
	151 <-> 155	Auto 20 - 8 LED (halves) swipe: R, G, B, L, RG, RB, GB, BL (+bg color)
	156 <-> 160	Auto 21 - Inverse direction of Auto 8
	161 <-> 165	Auto 22 - Inverse direction of Auto 9
	166 <-> 170	Auto 23 - Inverse direction of Auto 10
	171 <-> 175	Auto 24 - Inverse direction of Auto 11
	176 <-> 180	Auto 25 - Inverse direction of Auto 12
	181 <-> 185	Auto 26 - Inverse direction of Auto 13
	186 <-> 190	Auto 27 - Inverse direction of Auto 14
	191 <-> 195	Auto 28 - Inverse direction of Auto 15
	196 <-> 200	Auto 29 - Inverse direction of Auto 16
	201 <-> 205	Auto 30 - Inverse direction of Auto 17
	206 <-> 210	Auto 31 - Inverse direction of Auto 18
	211 <-> 215	Auto 32 - Inverse direction of Auto 19
	216 <-> 220	Auto 33 - Inverse direction of Auto 20
	221 <-> 225	Custom program 1 (CH01 in menu settings)
	226 <-> 230	Custom program 2 (CH02 in menu settings)
	231 <-> 235	Custom program 3 (CH03 in menu settings)
	236 <-> 255	Built-in color presets (1 color per each increment)

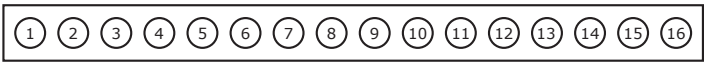
DMX Value In-Depth Reference Guide (continued)

Function	Value	What It Does
Auto Speed	000 <-> 255	(fast <-> slow)
Virtual Color Wheel	000 <-> 010 011 012 <-> 050 051 052 <-> 090 091 092 <-> 130 131 132 <-> 170 171 172 <-> 210 211 212 <-> 250 251 <-> 255	No Function Blue Blue (+ green) Teal Teal (- blue) Green Green (+ red) Yellow Yellow (- green) Red Red (+ blue) Magenta Magenta (- red) Blue
Dimming Mode	000 <-> 010 011 <-> 020 021 <-> 030 031 <-> 040 041 <-> 050 051 <-> 060 061 <-> 070 071 <-> 080 081 <-> 090 091 <-> 255	Default (as set in the LED menu) Linear curve Square law curve Inverse square law curve S-curve Linear curve (smooth) Square law curve (smooth) Inverse square law curve (smooth) S-curve (smooth) Default (as set in the LED menu)

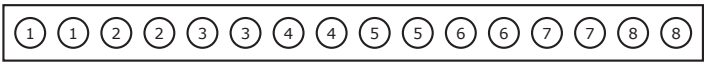
LED Pixel Group Configurations

Below are illustrations of the fixtures 5 different pixel group configurations found in each channel mode.

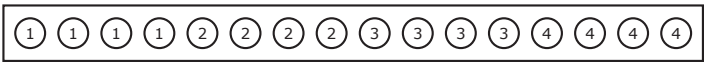
70/64/48ch



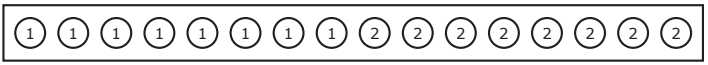
38ch



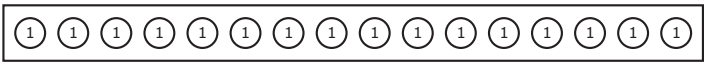
22ch



14ch



10/5/4/3ch



DMX In-Depth Reference: 3-Channel Mode

Ch.	Name	Ch.	Name	Ch.	Name
1	Red 1	2	Green 1	3	Blue 1

DMX In-Depth Reference: 4-Channel Mode

Ch.	Name	Ch.	Name	Ch.	Name	Ch.	Name
1	Red 1	2	Green 1	3	Blue 1	4	Lime 1

DMX In-Depth Reference: 5-Channel Mode

Ch.	Name	Ch.	Name	Ch.	Name
1	Dimmer	3	Green 1	5	Lime 1
2	Red 1	4	Blue 1		

DMX In-Depth Reference: 10-Channel Mode

Ch.	Name	Ch.	Name	Ch.	Name	Ch.	Name
1	Dimmer	4	Blue 1	7	Effect	10	Dimming Mode
2	Red 1	5	Lime 1	8	Speed		
3	Green 1	6	Strobe	9	Virtual Color Wheel		

DMX In-Depth Reference: 14-Channel Mode

Ch.	Name	Ch.	Name	Ch.	Name	Ch.	Name
1	Dimmer	5	Lime 1	9	Lime 2	13	Virtual Color Wheel
2	Red 1	6	Red 2	10	Strobe	14	Dimming Mode
3	Green 1	7	Green 2	11	Effect		
4	Blue 1	8	Blue 2	12	Speed		

DMX In-Depth Reference: 22-Channel Mode

Ch.	Name	Ch.	Name	Ch.	Name	Ch.	Name
1	Dimmer	7	Green 2	13	Lime 3	19	Effect
2	Red 1	8	Blue 2	14	Red 4	20	Speed
3	Green 1	9	Lime 2	15	Green 4	21	Virtual Color Wheel
4	Blue 1	10	Red 3	16	Blue 4	22	Dimming Mode
5	Lime 1	11	Green 3	17	Lime 4		
6	Red 2	12	Blue 3	18	Strobe		

DMX In-Depth Reference: 38-Channel Mode

Ch.	Name	Ch.	Name	Ch.	Name	Ch.	Name
1	Dimmer	11	Green 3	21	Lime 5	31	Green 8
2	Red 1	12	Blue 3	22	Red 6	32	Blue 8
3	Green 1	13	Lime 3	23	Green 6	33	Lime 8
4	Blue 1	14	Red 4	24	Blue 6	34	Strobe
5	Lime 1	15	Green 4	25	Lime 6	35	Effect
6	Red 2	16	Blue 4	26	Red 7	36	Speed
7	Green 2	17	Lime 4	27	Green 7	37	Virtual Color Wheel
8	Blue 2	18	Red 5	28	Blue 7	38	Dimming Mode
9	Lime 2	19	Green 5	29	Lime 7		
10	Red 3	20	Blue 5	30	Red 8		

DMX In-Depth Reference: 48-Channel Mode

Ch.	Name	Ch.	Name	Ch.	Name	Ch.	Name
1	Red 1	13	Red 5	25	Red 9	37	Red 13
2	Green 1	14	Green 5	26	Green 9	38	Green 13
3	Blue 1	15	Blue 5	27	Blue 9	39	Blue 13
4	Red 2	16	Red 6	28	Red 10	40	Red 14
5	Green 2	17	Green 6	29	Green 10	41	Green 14
6	Blue 2	18	Blue 6	30	Blue 10	42	Blue 14
7	Red 3	19	Red 7	31	Red 11	43	Red 15
8	Green 3	20	Green 7	32	Green 11	44	Green 15
9	Blue 3	21	Blue 7	33	Blue 11	45	Blue 15
10	Red 4	22	Red 8	34	Red 12	46	Red 16
11	Green 4	23	Green 8	35	Green 12	47	Green 16
12	Blue 4	24	Blue 8	36	Blue 12	48	Blue 16

DMX In-Depth Reference: 64-Channel Mode

Ch.	Name	Ch.	Name	Ch.	Name	Ch.	Name
1	Red 1	17	Red 5	33	Red 9	49	Red 13
2	Green 1	18	Green 5	34	Green 9	50	Green 13
3	Blue 1	19	Blue 5	35	Blue 9	51	Blue 13
4	Lime 1	20	Lime 5	36	Lime 9	52	Lime 13
5	Red 2	21	Red 6	37	Red 10	53	Red 14
6	Green 2	22	Green 6	38	Green 10	54	Green 14
7	Blue 2	23	Blue 6	39	Blue 10	55	Blue 14
8	Lime 2	24	Lime 6	40	Lime 10	56	Lime 14
9	Red 3	25	Red 7	41	Red 11	57	Red 15
10	Green 3	26	Green 7	42	Green 11	58	Green 15
11	Blue 3	27	Blue 7	43	Blue 11	59	Blue 15
12	Lime 3	28	Lime 7	44	Lime 11	60	Lime 15
13	Red 4	29	Red 8	45	Red 12	61	Red 16
14	Green 4	30	Green 8	46	Green 12	62	Green 16
15	Blue 4	31	Blue 8	47	Blue 12	63	Blue 16
16	Lime 4	32	Lime 8	48	Lime 12	64	Lime 16

DMX In-Depth Reference: 70-Channel Mode

Ch.	Name	Ch.	Name	Ch.	Name	Ch.	Name
1	Dimmer	19	Green 5	37	Lime 9	55	Green 14
2	Red 1	20	Blue 5	38	Red 10	56	Blue 14
3	Green 1	21	Lime 5	39	Green 10	57	Lime 14
4	Blue 1	22	Red 6	40	Blue 10	58	Red 15
5	Lime 1	23	Green 6	41	Lime 10	59	Green 15
6	Red 2	24	Blue 6	42	Red 11	60	Blue 15
7	Green 2	25	Lime 6	43	Green 11	61	Lime 15
8	Blue 2	26	Red 7	44	Blue 11	62	Red 16
9	Lime 2	27	Green 7	45	Lime 11	63	Green 16
10	Red 3	28	Blue 7	46	Red 12	64	Blue 16
11	Green 3	29	Lime 7	47	Green 12	65	Lime 16
12	Blue 3	30	Red 8	48	Blue 12	66	Strobe
13	Lime 3	31	Green 8	49	Lime 12	67	Effect
14	Red 4	32	Blue 8	50	Red 13	68	Speed
15	Green 4	33	Lime 8	51	Green 13	69	Virtual Color Wheel
16	Blue 4	34	Red 9	52	Blue 13	70	Dimming Mode
17	Lime 4	35	Green 9	53	Lime 13		
18	Red 5	36	Blue 9	54	Red 14		

5. APPENDIX

A Quick Lesson On DMX

DMX (short for Digital Multiplex) 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 underwent revisions in 1990 and 2000 to increase flexibility. The Entertainment Services and Technology Association (ESTA) later assumed control over the DMX512 standard, which has also been approved and recognized as an ANSI standard.

DMX is the most commonly used communications standard in lighting and related stage equipment. It allows for up to 512 control channels per data link, with each channel originally designed to control the brightness levels of lamps. Imagine 512 faders on a lighting console, each connected to a light bulb, with each fader's position represented as an 8-bit number ranging from 0 to 255. A value of 0 means the light is completely off, while 255 indicates full brightness.

DMX data transmits at 250,000 bits per second using the RS-485 standard over two wires. Similar to microphone cables, a grounded cable shield helps prevent interference with other signals.

A DMX connector features five pins: one for ground (cable shield), two for primary communication from a DMX source to a receiver, and two for secondary communication, which returns from the receiver to the source. Typically, the secondary channel is not used, allowing data to flow only from sources to receivers. Consequently, DMX-512 is commonly implemented using standard 3-pin microphone cables, although this does not adhere to the official standard.

Devices are connected in a daisy-chain configuration: the source connects to the input of the first device, the output of which connects to the input of the next device, and so forth. The standard supports up to 32 devices on a single DMX link.

Troubleshooting

Symptom	Solution
Fixture Auto-Shut Off	If the fixture stops or runs slower than normal, it may shut itself off due to high heat. This is a safety feature to prevent overheating.
No Light Output	Ensure the fixture is operating under the correct mode, such as auto, DMX, etc., if applicable.
Chase Speed Too Fast/Slow	Verify the speed adjustment settings are configured properly.
No Power	Inspect the AC cord and circuit for any malfunctions.
Fixture Not Responding or Responding Erratically	Ensure all connectors are securely seated and check for any defects in the cables. Use only DMX cables. Reset the fixture(s) if necessary.

Keeping Your Fixture As Good As New

Your new fixture is a robust piece of professional lighting equipment. With proper care, it will function flawlessly for years. Routine maintenance is essential, especially in environments prone to dust, fog, haze, or spills. Regularly clean the optics with a suitable glass cleaner to enhance light output.

Transporting Your Fixtures

Always transport your fixtures in protective cases. Just as you would not transport expensive musical instruments without proper casing, treat your lighting fixtures with the same care to prevent damage.

Maximizing Performance

Proper maintenance isn't just about upkeep—it ensures that your fixtures perform optimally, allowing you to focus on creating a spectacular lighting display that maximizes client satisfaction and delivers that crucial "wow factor."

Returns (Gasp!)

We go to great lengths to ensure that you won't need to return a unit due to defects. However, as with any complex equipment built by humans, unexpected issues can occasionally arise. If your fixture starts acting up, obtaining a Return Authorization (RA) is straightforward:

1.) Open a support ticket at www.blizzardpro.com/support to receive an RA.
2.) Send the unit back to us using a trackable, prepaid freight method such as USPS Priority or UPS. Ensure the fixture is well-packed, ideally in its original box and packing materials, to prevent damage during transit.

Include the following in your return package:

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

At our discretion, we will repair or replace the fixture. Please note that any shipping damage occurring during transit to us is the responsibility of the customer, so ensure the package is secure.

Shipping Issues

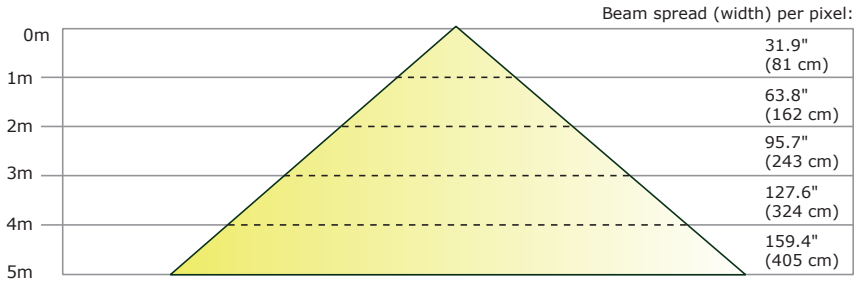
Damage incurred in shipping is the responsibility of the shipper, and must be reported to the carrier immediately upon receipt of the items. Claims must be made within seven (7) days of receipt.

Tech Specs!

Weight & Dimensions	
Width	39.4 inches (1000.3 mm)
Depth	Fixture: 3.9” (100.1 mm), Bracket: 5.9” (149.4 mm)
Height	6.6” (167 mm)
Weight	19.9 lbs (9 kg)
Power	
Operating Voltage	100-240VAC, 50-60 Hz
Power Consumption	192W, 1.66A, PF .99
Light Source	
LED	16x 20W RGBL 4-in-1 LEDs
Optical	
Beam Angle	10-45° asymmetrical beam spread
Thermal	
Max. Operating Temp.	104 degrees F (40 degrees C) ambient
Control	
Protocol	USITT DMX-512, RDM
DMX Channels	3/4/5/10/14/22/38/48/64 or 70-channels
Input/Output	5-pin XLR Male/Female
Operating Modes	Standalone, Master/Slave, Color Preset
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LEDs.

Photometric Data

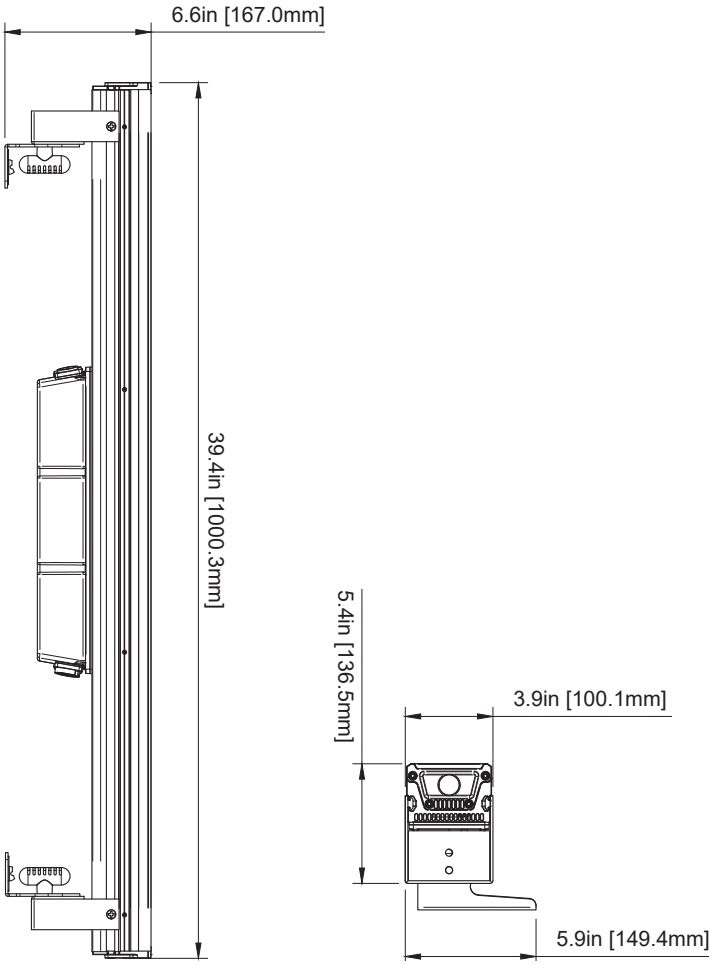
45° Beam Angle

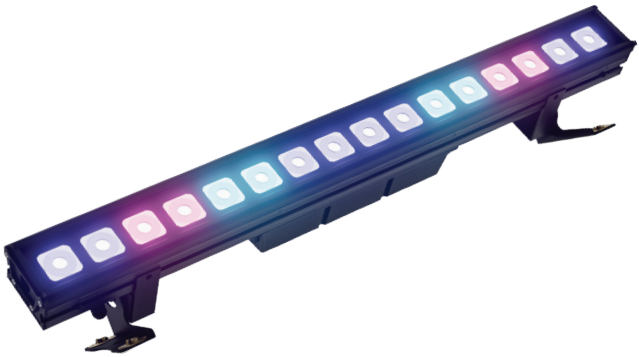


Luminous Intensity:

	2.5-meter		3-meter		4-meter		5-meter	
Beam	Lux	fc	Lux	fc	Lux	fc	Lux	fc
45°	4,045	375.8	3,406	316.4	1,594	148.1	840	78.0

Dimensional Drawings





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