LOOK™

blizzard LIGHTING

Blizzard Lighting, LLC
www.blizzardlighting.com
Waukesha, WI USA

TABLE OF CONTENTS

1. GETTING STARTED

What's In The Box?

- 1 x LOOK™ Professional LED Fixture
- An Ever-So-Handy Power Cord
- This Lovely User Manual

Optional Accessories *(sold separately)*

The following accessory is currently available for this fixture. But the lone wolves that they are, they must be purchased separately. Contact your authorized Blizzard Lighting dealer for best pricing!

- *LOOK Klamp: Modular dual Omega bracket mounting plate that fits perfectly into the top 4-peg locking mechanism of LOOK™ fixtures. Comes with plate attachment and (2) 1/4 turn Omega brackets.*

Getting It Out Of The Box

Congratulations on your purchase of LOOK™, the ultra-sharp dual beam fixture with mesmerizing LED aura effects! Now that you've got your LOOK™ *(or hopefully, LOOKS)*, 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 is wrong, please just visit our website at 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.

Author:	Date:	Last Edited:	Date:
J. Thomas	9/9/2016	J. Thomas	9/13/2016

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 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.blizzardlighting.com/support.

2. MEET THE LOOK™

MAIN FEATURES

- 2* high output 60W RGBW 4-in-1 LEDs
- 2* 4-segment ring aura effects (16 x 0.5W RGB LEDs)
- Individually controllable beams and aura effects
- Ultra-sharp 4.5° beam angle (x2)
- 2700-10000K CTC (color temperature control)
- User adjustable white balance settings
- Stackable and side-by-side locking linear array
- LED drive current: beam=4500mA, aura=30mA
- User selectable 32-bit dimming modes, 0-20Hz strobe effects
- 3-pin and 5-pin male/female input and outputs
- PowerCon™ compatible AC power In/Out connectors

CONTROL:

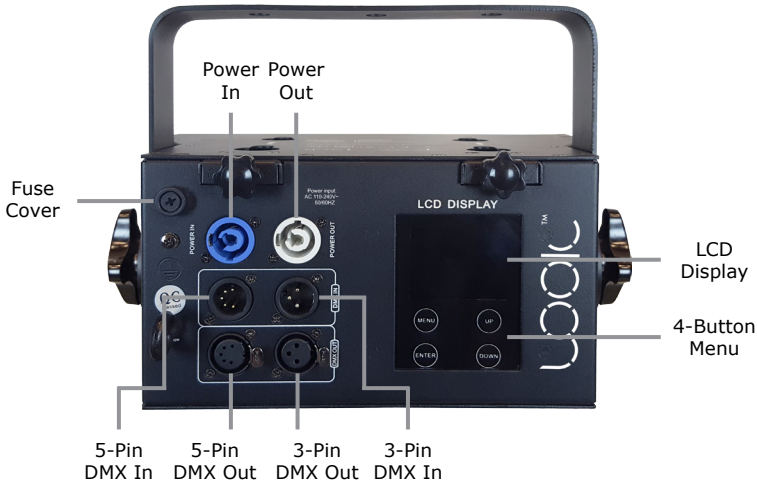
- Protocol: USITT DMX-512
- DMX Channels: 13/24/45-channel
- 2.4 inch TFT color LCD display panel with 4x touch sensitive buttons
- Operating Modes: Standalone, Master/Slave, Auto, Sound Active

DMX Quick Reference (13/24/45-Channel Modes)

CH.	Basic Mode (13ch)	CH.	Standard Mode (24ch)	CH.	Extended Mode (45ch)
1	Beam Red (0-100%)	1	Beam 1 Red (0-100%)	1	Beam 1 Red (0-100%)
2	Beam Green (0-100%)	2	Beam 1 Green (0-100%)	2	Beam 1 Green (0-100%)
3	Beam Blue (0-100%)	3	Beam 1 Blue (0-100%)	3	Beam 1 Blue (0-100%)
4	Beam White (0-100%)	4	Beam 1 White (0-100%)	4	Beam 1 White (0-100%)
5	Aura Red (0-100%)	5	Beam 2 Red (0-100%)	5	Beam 2 Red (0-100%)
6	Aura Green (0-100%)	6	Beam 2 Green (0-100%)	6	Beam 2 Green (0-100%)
7	Aura Blue (0-100%)	7	Beam 2 Blue (0-100%)	7	Beam 2 Blue (0-100%)
8	Beam Macro Color	8	Beam 2 White (0-100%)	8	Beam 2 White (0-100%)
9	Aura LED Effect	9	Beam Linear CTO	9	Beam 1 Linear CTO
10	Aura LED Speed	10	Beam Macro Color	10	Beam 2 Linear CTO
11	Strobe	11	Strobe	11	Beam 1 Macro Color
12	Dimmer	12	Beam LED Dimmer	12	Beam 2 Macro Color
13	32-Bit Dimming Modes	13	32-Bit Dimming Modes	13	Strobe
--	--	14	Aura 1 Red (0-100%)	14	Beam LED Dimmer
--	--	15	Aura 1 Green (0-100%)	15	32-Bit Dimming Modes
--	--	16	Aura 1 Blue (0-100%)	16	Beam LED Auto Select
--	--	17	Aura 2 Red (0-100%)	17	Beam LED Auto Speed
--	--	18	Aura 2 Green (0-100%)	18	Aura LED Dimmer
--	--	19	Aura 2 Blue (0-100%)	19	Aura LED Strobe
--	--	20	Aura LED Dimmer	20	Aura LED Effect
--	--	21	Aura LED Strobe	21	Aura LED Speed
--	--	22	Aura LED Effect	22	Aura 1 - Red 1
--	--	23	Beam LED Auto Select	23	Aura 1 - Green 1
--	--	24	Aura LED Effect & Beam	24	Aura 1 - Blue 1
--	--	--	--	25	Aura 1 - Red 2
--	--	--	--	26	Aura 1 - Green 2
--	--	--	--	27	Aura 1 - Blue 2
--	--	--	--	28	Aura 1 - Red 3
--	--	--	--	29	Aura 1 - Green 3
--	--	--	--	30	Aura 1 - Blue 3
--	--	--	--	31	Aura 1 - Red 4
--	--	--	--	32	Aura 1 - Green 4
--	--	--	--	33	Aura 1 - Blue 4
--	--	--	--	34	Aura 2 - Red 1
--	--	--	--	35	Aura 2 - Green 1
--	--	--	--	36	Aura 2 - Blue 1
--	--	--	--	37	Aura 2 - Red 2
--	--	--	--	38	Aura 2 - Green 2
--	--	--	--	39	Aura 2 - Blue 2
--	--	--	--	40	Aura 2 - Red 3
--	--	--	--	41	Aura 2 - Green 3
--	--	--	--	42	Aura 2 - Blue 3
--	--	--	--	43	Aura 2 - Red 4
--	--	--	--	44	Aura 2 - Green 4
--	--	--	--	45	Aura 2 - Blue 4

Figure 1: The LOOK™ 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

Remove the fuse holder from of its housing. Then take out the damaged fuse from its holder and replace with exact same type of fuse. Reattach the fuse holder, and then reconnect power.

Connecting A Bunch of LOOK™ 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

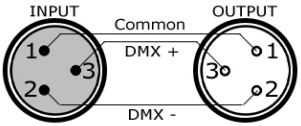
To link fixtures together you'll need data cables. You should use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

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

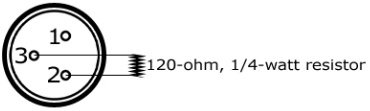
Cable Connectors

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:

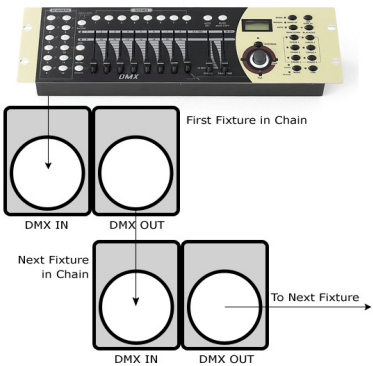
Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
DMX Data (-)	Pin 2	Pin 2
DMX Data (+)	Pin 3	Pin 3
Not Used.	No Connection.	No Connection.
Not Used.	No Connection.	No Connection.

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.

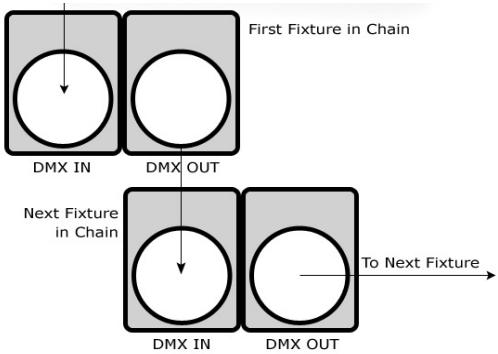
Step 2: Connect the female connector of the DMX cable to the first fixture's male connector (input). *Note:* It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture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

Installation

LOOK™ fixtures can be set up on the ground, or mounted on truss. They can be connected and locked together top to bottom, or side by side for an elongated matrix combination.

When truss mounting, always and use appropriately rated clamps to accommodate the total weight of connected fixtures, and no matter what type of configuration your choose to connect your fixtures together, always be sure that each fixture is individually secured with a safety cable.

Matrix Combination:

1.) Starting with a fixture to be connected under another, loosen the rear locking knobs and slide the locking plates to their outward most positions.
2.) Align and set the feet of the top fixture into the holes found on the top cover of the bottom fixture, then push the fixture slightly into its correct position.
3.) Push both rear locking slider plates fully inward, then tighten down both of the locking knobs to finish securing the fixtures together.
4.) Repeat the process to add more fixtures.

Elongated Combination:

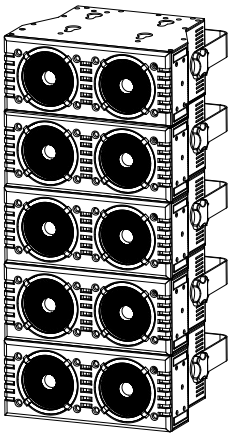
1.) Starting with a fixture to be connected to the side of another, make sure the top and bottom Lock/Unlock hook latches are both in the unlock position.
2.) Align the sides of the fixtures, so the hook side meets the female catch.
3.) Using a 5mm allen wrench, swivel both hook latches to their lock positions.
4.) Repeat the process to add more fixtures.

LOOK™ Klamp (sold separately)

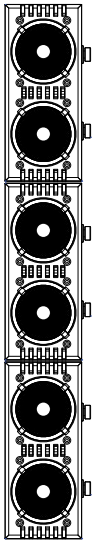
Modular dual Omega bracket mounting plate that fits perfectly into the top 4-peg locking mechanism of LOOK™ fixtures. Comes with plate attachment and (2) 1/4 turn Omega brackets.

Contact your favorite Blizzard Lighting dealer for best pricing.

Matrix Combination



Elongated Combination



4. OPERATING ADJUSTMENTS

The Control Panel

All the goodies and different modes possible with the LOOK™ are accessed by using the control panel on the back of the fixture. There are 4 control buttons next to the menu display which allow you to navigate through the various control panel menus.

<MENU>

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

<UP>

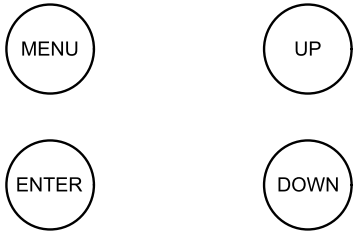
Scrolls through menu items and numbers in ascending order.

<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 #12. 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>** 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

Main Function	Sub Function	Selection	What It Does...
STATIC COLOR	Beam Red1	000 <-> 255	Beam 1 - Red Intensity (0% <-> 100%)
	Beam Green1	000 <-> 255	Beam 1 - Green Intensity (0% <-> 100%)
	Beam Blue1	000 <-> 255	Beam 1 - Blue Intensity (0% <-> 100%)
	Beam White1	000 <-> 255	Beam 1 - White Intensity (0% <-> 100%)
	Beam Red2	000 <-> 255	Beam 2 - Red Intensity (0% <-> 100%)
	Beam Green2	000 <-> 255	Beam 2 - Green Intensity (0% <-> 100%)
	Beam Blue2	000 <-> 255	Beam 2 - Blue Intensity (0% <-> 100%)
	Beam White2	000 <-> 255	Beam 2 - White Intensity (0% <-> 100%)
	Aura Red1	000 <-> 255	Aura 1 - Red Intensity (0% <-> 100%)
	Aura Green1	000 <-> 255	Aura 1 - Green Intensity (0% <-> 100%)
	Aura Blue1	000 <-> 255	Aura 1 - Blue Intensity (0% <-> 100%)
	Aura Red2	000 <-> 255	Aura 2 - Red Intensity (0% <-> 100%)
	Aura Green2	000 <-> 255	Aura 2 - Green Intensity (0% <-> 100%)
	Aura Blue2	000 <-> 255	Aura 2 - Blue Intensity (0% <-> 100%)
AUTO	Auto1 - Auto10	**<ENTER>**	Auto Modes 1-10
	Auto Speed	001 <-> 255	Auto Speed
SOUND	Sound1	**<ENTER>**	Sound Active Mode 1
	Sound2	**<ENTER>**	Sound Active Mode 2
	Sound3	**<ENTER>**	Sound Active Mode 3
	Sensitivity	001 <-> 100	Mic Sensitivity
RUN	DMX512	**<ENTER>**	Set to run in DMX Mode
	Slave	**<ENTER>**	Set to run in Slave Mode
ADDRESS	Set DMX Address	001 <-> 512	Set the DMX Address
DMX MODE	Stand Mode	**<ENTER>**	Standard Mode (24CH)
	Basic Mode	**<ENTER>**	Basic Mode (13CH)
	Extend Mode	**<ENTER>**	Extended Mode (45CH)
TEST	Test Beam	**<ENTER>**	Beam Test
	Test Aura	**<ENTER>**	Aura Test
	Test All	**<ENTER>**	Test All
Linear CTO	CTO 2700K	**<ENTER>**	CTO 2700K
	CTO 3200K	**<ENTER>**	CTO 3200K
	CTO 4200K	**<ENTER>**	CTO 4200K
	CTO 5600K	**<ENTER>**	CTO 5600K
	CTO 6500K	**<ENTER>**	CTO 6500K
	CTO 7200K	**<ENTER>**	CTO 7200K
	CTO 8000K	**<ENTER>**	CTO 8000K
	CTO 10000K	**<ENTER>**	CTO 10000K
SET	White Balance	ON/OFF	Turn ON to use the CAL Parameter settings
	Dimmer Curve	Gamma 1-4	Turn off or use dimming curves 1-4
	Fan Control	Auto/High/Low	Set the fan for Auto or manual High/Low Speed
	Disp Setting	Shut off time	Set to shut off after 2-60 minutes of inactivity
		Flip display	Flip the display
		Disp flash	On/Off: display will flash if DMX signal is lost
	Factory Reset	**<ENTER>**	Select Yes to reset the fixture
CAL Parameter	Beam1 RGB	Beam Red1	Beam 1 Red Color Balance
		Beam Green1	Beam 1 Green Color Balance
		Beam Blue1	Beam 1 Blue Color Balance
	Beam2 RGB	Beam Red2	Beam 2 Red Color Balance
		Beam Green2	Beam 2 Green Color Balance
		Beam Blue2	Beam 2 Blue Color Balance
INFO	Time Info	Power on	Hours since powered on
		Ttl Life Hrs	Total running hours
		Last Run Hrs	Last run hours
	Temp Info	Head 1 Temp	LED 1 temperature (C)
		Head 2 Temp	LED 2 temperature (C)
	Software Ver	**<ENTER>**	Displays software version information

DMX Mode

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

Set the Starting DMX Address:

1.) Navigate the main menu until you reach **ADDRESS**.
2.) Push the **<ENTER>** button.
3.) Use the **<UP/DOWN>** buttons to select a DMX channel from **001-512**.
4.) Press the **<ENTER>** button to confirm.

Select the DMX Channel Mode:

1.) Navigate the main menu until you reach **DMX MODE.**
2.) Push the **<ENTER>** button.
3.) Use the **<UP/DOWN>** buttons to select **Stand Mode, Basic Mode,** or **Extend Mode**.
4.) Press the **<ENTER>** button to confirm your selection.

Master/Slave Mode:

1.) Navigate the main menu until you reach **RUN.**
2.) Push the **<ENTER>** button.
3.) Use the **<UP/DOWN>** buttons to select **DMX512** or **Slave**.
4.) Press the **<ENTER>** button to confirm your selection.

Auto, Sound Active, & Manual Adjustments:

Allows a single or Master/Slaved units to run factory installed programs at user selectable speeds.

Auto Mode:

1.) Navigate the main menu until you reach **AUTO.**
2.) Push the **<ENTER>** button.
3.) Use the **<UP/DOWN>** buttons to select **AUTO1 - AUTO10**.
4.) Press the **<ENTER>** button to confirm your selection of auto mode.
5.) In the same submenu, you can also select **Auto Speed** to adjust the speed of the auto program from 001-255 (slow <--> fast).

Sound Active Mode:

1.) Navigate the main menu until you reach **SOUND.**
2.) Push the **<ENTER>** button.
3.) Use the **<UP/DOWN>** buttons to select **SOUND1 - SOUND3**.
4.) Press the **<ENTER>** button to confirm your selection of sound active mode.
5.) In the same submenu, you can also select **Sensitivity** to adjust the mic sensitivity level for the sound active program from 001-100.

White Balance Adjustment:

1.) Navigate the main menu until you reach **CAL Parameter**, then press **<ENTER>**.
2.) Using the **<UP/DOWN>** buttons, you can highlight and manually adjust **Beam1** or **Beam2** Red/Green/Blue color balance settings from 000-255.
3.) Make your selections, then hit **<ENTER>** to confirm.
4.) To use this custom setting, navigate to **SET** and press **<ENTER>**.
5.) Then use the **<UP/DOWN>** buttons to select **White Balance** and press **<ENTER>**.
6.) Finally, press the **<UP/DOWN>** buttons to select **ON** or **OFF** and press **<ENTER>**.
7.) If **White Balance** is **ON,** the **CAL Parameter** settings are active and will affect all modes.

Dimming Curve Selection

1.) Navigate the main menu until you reach **SET.**
2.) Push the **<ENTER>** button.
3.) Use the **<UP/DOWN>** buttons to highlight **Dimmer Curve**, then press **<ENTER>**.
4.) Use the **<UP/DOWN>** buttons to highlight **ON/OFF**, **Gamma1** (linear), **Gamma2** (Gamma 1.5), **Gamma3** (Gamma 2), or **Gamma4** (S-Curve).
5.) Press the **<ENTER>** button to confirm your choice.

DMX Values In-Depth (45-Channel Mode)

Ch.	Value	What It Does
1	000 <-> 255	Beam 1 Red (0% <--> 100%)
3	000 <-> 255	Beam 1 Green (0% <--> 100%)
2	000 <-> 255	Beam 1 Blue (0% <--> 100%)
4	000 <-> 255	Beam 1 White (0% <--> 100%)
5	000 <-> 255	Beam 2 Red (0% <--> 100%)
6	000 <-> 255	Beam 2 Green (0% <--> 100%)
7	000 <-> 255	Beam 2 Blue (0% <--> 100%)
8	000 <-> 255	Beam 2 White (0% <--> 100%)
9	 000 <-> 009 010 <-> 053 054 <-> 098 099 <-> 116 117 <-> 143 144 <-> 187 188 <-> 223 224 <-> 249 250 <-> 255	**Beam1 Linear CTO** No Function 10000K 8000K 7200K 6500K 5600K 4200K 3200K 2700K
10	 000 <-> 009 010 <-> 053 054 <-> 098 099 <-> 116 117 <-> 143 144 <-> 187 188 <-> 223 224 <-> 249 250 <-> 255	**Beam2 Linear CTO** No Function 10000K 8000K 7200K 6500K 5600K 4200K 3200K 2700K
11	000 <-> 255	Beam1 Macro Color
12	000 <-> 255	Beam2 Macro Color

Beam Macro Colors (Extended Mode, CH11 and CH12):

Value	What is does	Value	What is does	Value	What is does
000 <--> 009	OFF	098 <-> 101	Lavender	182 <-> 185	Dark Green
010 <--> 013	Red	102 <-> 105	Sky Blue	186 <-> 189	Mauve
014 <-> 017	Green	106 <-> 109	Just Blue	190 <-> 193	Bright Pink
018 <-> 021	Blue	110 <-> 113	Dark Yellow	194 <-> 197	Medium Blue
022 <-> 025	Cyan	114 <-> 117	Spring Yellow	198 <-> 201	Golden Amber
026 <-> 029	Yellow	118 <-> 121	Light Amber	202 <-> 205	Pale Lavender
030 <-> 033	Magenta	122 <-> 125	Straw	206 <-> 209	Lavender
034 <-> 037	White 7000K	126 <-> 129	Deep Amber	210 <-> 213	Primary Green
038 <-> 041	White 3700K	130 <-> 133	Orange	214 <-> 216	Bright Blue
042 <-> 045	White 5000K	134 <-> 137	Light Rose	217 <-> 219	Apricot
046 <-> 049	Black	138 <-> 141	English Rose	220 <-> 222	Pale Gold
050 <-> 053	Medium Yellow	142 <-> 145	Light Salmon	223 <-> 225	Deep Orange
054 <-> 057	Straw Tint	146 <-> 149	Middle Rose	226 <-> 228	Bastard Amber
058 <-> 061	Surprise Peach	150 <-> 153	Dark Pink	229 <-> 231	Flame Red
062 <-> 065	Fire	154 <-> 157	Magenta	332 <-> 234	Daylight Blue
066 <-> 069	Medium Amber	158 <-> 161	Peacock Blue	235 <-> 237	Lilac Tint
070 <-> 073	Gold Amber	162 <-> 165	Blue Green	238 <-> 240	Deep Lavender
074 <-> 077	Dark Amber	166 <-> 169	Steel Blue	241 <-> 243	Dark Blue
078 <-> 081	Sunrise Red	170 <-> 173	Light Blue	244 <-> 246	Congo Blue
082 <-> 085	Light Pink	166 <-> 169	Steel Blue	247 <-> 249	Alice Blue
086 <-> 089	Medium Pink	170 <-> 173	Light Blue	250 <-> 252	Dirty White
090 <-> 093	Pink Carnation	174 <-> 177	Dark Green	253 <-> 255	White
094 <-> 097	Light Lavender	178 <-> 181	Leaf Green		

DMX Values In-Depth (45-Channel Mode), continued

Ch.	Value	What It Does
13		**Strobe**
	000 <-> 031	LEDs Off
	032 <-> 063	LEDs On
	064 <-> 095	Strobe Effect (slow <--> fast)
	096 <-> 127	LEDs On
	128 <-> 159	Pulse-Effect in Sequences
	160 <-> 191	LEDs On
	192 <-> 223	Random Strobe (slow <--> fast)
	224 <-> 225	LEDs On
14	000 <-> 255	Beam LED Dimmer
15		**32-Bit Dimming**
	000 <-> 063	Curve1 - Gamma 1 Linear
	064 <-> 127	Curve2 - Gamma 1.5
	128 <-> 191	Curve3 - Gamma 2
	192 <-> 255	Curve4 - Gamma 4 S-Curve
16		**Beam LED Auto**
	000 <-> 099	No Function
	100 <-> 114	Auto1
	115 <-> 129	Auto2
	130 <-> 144	Auto3
	145 <-> 159	Auto4
	160 <-> 174	Auto5
	175 <-> 189	Auto6
	190 <-> 204	Auto7
	205 <-> 219	Auto8
	220 <-> 234	Auto9
	235 <-> 255	Auto10
17	000 <-> 255	Beam LED Auto Speed (slow <--> fast)
18	000 <-> 255	Aura LED Dimmer (0% <--> 100%)
19		**Aura LED Strobe**
	000 <-> 031	LEDs Off
	032 <-> 250	Strobe Effect (slow <--> fast)
	251 <-> 255	LEDs On
20		**Aura LED Effect**
	000 <-> 007	No Function
	008 <-> 019	Aura Macro1
	020 <-> 031	Aura Macro2
	032 <-> 043	Aura Macro3
	044 <-> 055	Aura Macro4
	056 <-> 067	Aura Macro5
	068 <-> 079	Aura Macro6
	080 <-> 091	Aura Macro7
	092 <-> 103	Aura Macro8
	104 <-> 115	Aura Macro9
	116 <-> 127	Aura Macro10
	128 <-> 139	Aura Macro11
	140 <-> 151	Aura Macro12
	152 <-> 163	Aura Macro13
	164 <-> 175	Aura Macro14
	176 <-> 187	Aura Macro15
	188 <-> 199	Aura Macro16
	200 <-> 211	Aura Macro17
	212 <-> 223	Aura Macro18
	224 <-> 235	Aura Macro19
	236 <-> 255	Aura Macro20
21	000 <-> 255	Aura LED Effect Speed (slow <--> fast)
22	000 <-> 255	Aura1 Red1 (0% <--> 100%)
23	000 <-> 255	Aura1 Green1 (0% <--> 100%)
24	000 <-> 255	Aura1 Blue1 (0% <--> 100%)
25	000 <-> 255	Aura1 Red2 (0% <--> 100%)
26	000 <-> 255	Aura1 Green2 (0% <--> 100%)
27	000 <-> 255	Aura1 Blue2 (0% <--> 100%)
28	000 <-> 255	Aura1 Red3 (0% <--> 100%)
29	000 <-> 255	Aura1 Green3 (0% <--> 100%)
30	000 <-> 255	Aura1 Blue3 (0% <--> 100%)
31	000 <-> 255	Aura1 Red4 (0% <--> 100%)
32	000 <-> 255	Aura1 Green4 (0% <--> 100%)

DMX Values In-Depth (45-Channel Mode), continued

Ch.	Value	What It Does
33	000 <-> 255	Aura1 Blue4 (0% <--> 100%)
34	000 <-> 255	Aura2 Red1 (0% <--> 100%)
35	000 <-> 255	Aura2 Green1 (0% <--> 100%)
36	000 <-> 255	Aura2 Blue1 (0% <--> 100%)
37	000 <-> 255	Aura2 Red2 (0% <--> 100%)
38	000 <-> 255	Aura2 Green2 (0% <--> 100%)
39	000 <-> 255	Aura2 Blue2 (0% <--> 100%)
40	000 <-> 255	Aura2 Red3 (0% <--> 100%)
41	000 <-> 255	Aura2 Green3 (0% <--> 100%)
42	000 <-> 255	Aura2 Blue3 (0% <--> 100%)
43	000 <-> 255	Aura2 Red4 (0% <--> 100%)
44	000 <-> 255	Aura2 Green4 (0% <--> 100%)
45	000 <-> 255	Aura2 Blue4 (0% <--> 100%)

DMX Values In-Depth (24-Channel Mode)

Ch.	Value	What It Does
1	000 <-> 255	Beam 1 Red (0% <--> 100%)
3	000 <-> 255	Beam 1 Green (0% <--> 100%)
2	000 <-> 255	Beam 1 Blue (0% <--> 100%)
4	000 <-> 255	Beam 1 White (0% <--> 100%)
5	000 <-> 255	Beam 2 Red (0% <--> 100%)
6	000 <-> 255	Beam 2 Green (0% <--> 100%)
7	000 <-> 255	Beam 2 Blue (0% <--> 100%)
8	000 <-> 255	Beam 2 White (0% <--> 100%)
9		**Beam Linear CTO**
	000 <-> 009	No Function
	010 <-> 053	10000K
	054 <-> 098	8000K
	099 <-> 116	7200K
	117 <-> 143	6500K
	144 <-> 187	5600K
	188 <-> 223	4200K
	224 <-> 249	3200K
	250 <-> 255	2700K
10	000 <-> 255	Beam Macro Color

Beam Macro Colors (Standard Mode, CH10):

Value	What is does	Value	What is does	Value	What is does
000 <--> 009	OFF	098 <-> 101	Lavender	182 <-> 185	Dark Green
010 <--> 013	Red	102 <-> 105	Sky Blue	186 <-> 189	Mauve
014 <-> 017	Green	106 <-> 109	Just Blue	190 <-> 193	Bright Pink
018 <-> 021	Blue	110 <-> 113	Dark Yellow	194 <-> 197	Medium Blue
022 <-> 025	Cyan	114 <-> 117	Spring Yellow	198 <-> 201	Golden Amber
026 <-> 029	Yellow	118 <-> 121	Light Amber	202 <-> 205	Pale Lavender
030 <-> 033	Magenta	122 <-> 125	Straw	206 <-> 209	Lavender
034 <-> 037	White 7000K	126 <-> 129	Deep Amber	210 <-> 213	Primary Green
038 <-> 041	White 3700K	130 <-> 133	Orange	214 <-> 216	Bright Blue
042 <-> 045	White 5000K	134 <-> 137	Light Rose	217 <-> 219	Apricot
046 <-> 049	Black	138 <-> 141	English Rose	220 <-> 222	Pale Gold
050 <-> 053	Medium Yellow	142 <-> 145	Light Salmon	223 <-> 225	Deep Orange
054 <-> 057	Straw Tint	146 <-> 149	Middle Rose	226 <-> 228	Bastard Amber
058 <-> 061	Surprise Peach	150 <-> 153	Dark Pink	229 <-> 231	Flame Red
062 <-> 065	Fire	154 <-> 157	Magenta	332 <-> 234	Daylight Blue
066 <-> 069	Medium Amber	158 <-> 161	Peacock Blue	235 <-> 237	Lilac Tint
070 <-> 073	Gold Amber	162 <-> 165	Blue Green	238 <-> 240	Deep Lavender
074 <-> 077	Dark Amber	166 <-> 169	Steel Blue	241 <-> 243	Dark Blue
078 <-> 081	Sunrise Red	170 <-> 173	Light Blue	244 <-> 246	Congo Blue
082 <-> 085	Light Pink	166 <-> 169	Steel Blue	247 <-> 249	Alice Blue
086 <-> 089	Medium Pink	170 <-> 173	Light Blue	250 <-> 252	Dirty White
090 <-> 093	Pink Carnation	174 <-> 177	Dark Green	253 <-> 255	White
094 <-> 097	Light Lavender	178 <-> 181	Leaf Green		

DMX Values In-Depth (24-Channel Mode), continued

Ch.	Value	What It Does
11		**Strobe**
	000 <-> 031	LEDs Off
	032 <-> 063	LEDs On
	064 <-> 095	Strobe Effect (slow <--> fast)
	096 <-> 127	LEDs On
	128 <-> 159	Pulse-Effect in Sequences
	160 <-> 191	LEDs On
	192 <-> 223	Random Strobe (slow <--> fast)
	224 <-> 225	LEDs On
12	000 <-> 255	Beam LED Dimmer
13		**32-Bit Dimming**
	000 <-> 063	Curve1 - Gamma 1 Linear
	064 <-> 127	Curve2 - Gamma 1.5
	128 <-> 191	Curve3 - Gamma 2
	192 <-> 255	Curve4 - Gamma 4 S-Curve
14	000 <-> 255	Aura1 Red1 (0% <--> 100%)
15	000 <-> 255	Aura1 Green1 (0% <--> 100%)
16	000 <-> 255	Aura1 Blue1 (0% <--> 100%)
17	000 <-> 255	Aura1 Red2 (0% <--> 100%)
18	000 <-> 255	Aura1 Green2 (0% <--> 100%)
19	000 <-> 255	Aura1 Blue 2 (0% <--> 100%)
20	000 <-> 255	Aura LED Dimmer (0% <--> 100%)
21		**Aura Strobe**
	000 <-> 031	Aura LED turn off
	032 <-> 250	Aura LED Strobe (slow <--> fast)
	251 <-> 255	Aura LED turn on
22		**Aura LED Effect**
	000 <-> 007	No Function
	008 <-> 019	Aura Macro1
	020 <-> 031	Aura Macro2
	032 <-> 043	Aura Macro3
	044 <-> 055	Aura Macro4
	056 <-> 067	Aura Macro5
	068 <-> 079	Aura Macro6
	080 <-> 091	Aura Macro7
	092 <-> 103	Aura Macro8
	104 <-> 115	Aura Macro9
	116 <-> 127	Aura Macro10
	128 <-> 139	Aura Macro11
	140 <-> 151	Aura Macro12
	152 <-> 163	Aura Macro13
	164 <-> 175	Aura Macro14
	176 <-> 187	Aura Macro15
	188 <-> 199	Aura Macro16
	200 <-> 211	Aura Macro17
	212 <-> 223	Aura Macro18
	224 <-> 235	Aura Macro19
	236 <-> 255	Aura Macro20
23		**Beam LED Auto**
	000 <-> 099	No Function
	100 <-> 114	Auto1
	115 <-> 129	Auto2
	130 <-> 144	Auto3
	145 <-> 159	Auto4
	160 <-> 174	Auto5
	175 <-> 189	Auto6
	190 <-> 204	Auto7
	205 <-> 219	Auto8
	220 <-> 234	Auto9
	235 <-> 255	Auto10
24	000 <-> 255	Aura LED Effect & Beam LED

DMX Values In-Depth (13-Channel Mode)

Ch.	Value	What It Does
1	000 <-> 255	Beam Red (0% <--> 100%)
3	000 <-> 255	Beam Green (0% <--> 100%)
2	000 <-> 255	Beam Blue (0% <--> 100%)
4	000 <-> 255	Beam White (0% <--> 100%)
5	000 <-> 255	Aura Red (0% <--> 100%)
6	000 <-> 255	Aura Green (0% <--> 100%)
7	000 <-> 255	Aura Blue (0% <--> 100%)
8	000 <-> 255	Beam Macro Color

Beam Macro Colors (Basic Mode, CH8):

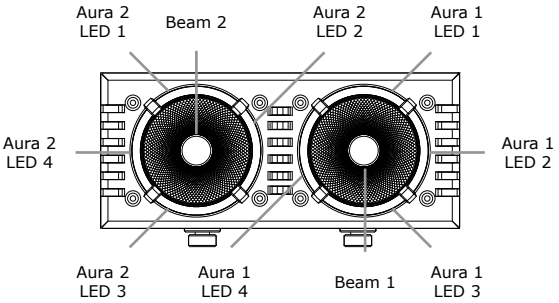
Value	What is does	Value	What is does	Value	What is does
000 <--> 009	OFF	098 <-> 101	Lavender	182 <-> 185	Dark Green
010 <--> 013	Red	102 <-> 105	Sky Blue	186 <-> 189	Mauve
014 <-> 017	Green	106 <-> 109	Just Blue	190 <-> 193	Bright Pink
018 <-> 021	Blue	110 <-> 113	Dark Yellow	194 <-> 197	Medium Blue
022 <-> 025	Cyan	114 <-> 117	Spring Yellow	198 <-> 201	Golden Amber
026 <-> 029	Yellow	118 <-> 121	Light Amber	202 <-> 205	Pale Lavender
030 <-> 033	Magenta	122 <-> 125	Straw	206 <-> 209	Lavender
034 <-> 037	White 7000K	126 <-> 129	Deep Amber	210 <-> 213	Primary Green
038 <-> 041	White 3700K	130 <-> 133	Orange	214 <-> 216	Bright Blue
042 <-> 045	White 5000K	134 <-> 137	Light Rose	217 <-> 219	Apricot
046 <-> 049	Black	138 <-> 141	English Rose	220 <-> 222	Pale Gold
050 <-> 053	Medium Yellow	142 <-> 145	Light Salmon	223 <-> 225	Deep Orange
054 <-> 057	Straw Tint	146 <-> 149	Middle Rose	226 <-> 228	Bastard Amber
058 <-> 061	Surprise Peach	150 <-> 153	Dark Pink	229 <-> 231	Flame Red
062 <-> 065	Fire	154 <-> 157	Magenta	332 <-> 234	Daylight Blue
066 <-> 069	Medium Amber	158 <-> 161	Peacock Blue	235 <-> 237	Lilac Tint
070 <-> 073	Gold Amber	162 <-> 165	Blue Green	238 <-> 240	Deep Lavender
074 <-> 077	Dark Amber	166 <-> 169	Steel Blue	241 <-> 243	Dark Blue
078 <-> 081	Sunrise Red	170 <-> 173	Light Blue	244 <-> 246	Congo Blue
082 <-> 085	Light Pink	166 <-> 169	Steel Blue	247 <-> 249	Alice Blue
086 <-> 089	Medium Pink	170 <-> 173	Light Blue	250 <-> 252	Dirty White
090 <-> 093	Pink Carnation	174 <-> 177	Dark Green	253 <-> 255	White
094 <-> 097	Light Lavender	178 <-> 181	Leaf Green		

DMX Values In-Depth (13-Channel Mode), continued

Ch.	Value	What It Does
9		**Aura LED Effect**
	000 <-> 007	No Function
	008 <-> 019	Aura Macro1
	020 <-> 031	Aura Macro2
	032 <-> 043	Aura Macro3
	044 <-> 055	Aura Macro4
	056 <-> 067	Aura Macro5
	068 <-> 079	Aura Macro6
	080 <-> 091	Aura Macro7
	092 <-> 103	Aura Macro8
	104 <-> 115	Aura Macro9
	116 <-> 127	Aura Macro10
	128 <-> 139	Aura Macro11
	140 <-> 151	Aura Macro12
	152 <-> 163	Aura Macro13
	164 <-> 175	Aura Macro14
	176 <-> 187	Aura Macro15
	188 <-> 199	Aura Macro16
	200 <-> 211	Aura Macro17
	212 <-> 223	Aura Macro18
	224 <-> 235	Aura Macro19
	236 <-> 255	Aura Macro20
10	000 <-> 255	Aura LED Speed (slow <--> fast)

DMX Values In-Depth (13-Channel Mode), continued

Ch.	Value	What It Does
11		**Strobe**
	000 <-> 031	LED turn off
	032 <-> 063	LED turn on
	064 <-> 095	Strobe effect (slow <--> fast)
	096 <-> 127	LED turn on
	128 <-> 159	Pulse-effect in sequences
	160 <-> 191	LED turn on
	192 <-> 223	Random strobe effect (slow <--> fast)
	224 <-> 225	LED turn on
12	000 <-> 255	Dimmer (0% <--> 100%)
13		**32-Bit Dimming Modes**
	000 <-> 063	Curve1 - Gamma 1 Linear
	064 <-> 127	Curve2 - Gamma 1.5
	128 <-> 191	Curve3 - Gamma 2
	192 <-> 255	Curve4 - Gamma 4 S-Curve



Troubleshooting

Symptom	Solution
No Light Output	Check to ensure fixture is operating under correct mode, IE sound active/auto/ DMX/Etc., if applicable.
No Power	Check fuse, AC cord and circuit for malfunction.
Blown Fuse	Check AC cord and circuit for damage.
Slow Movement	Check that speed channels are set appropriately.
No Response to Audio	Verify that the fixture is in "Sound Active" mode. Adjust Audio Sensitivity.
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).
Fixture Moving On Its Own	Verify proper mode of operation. Is the fixture in "Auto" mode?

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 LOOK™ 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 go to our website and open a support ticket at www.blizzardlighting.com/support, 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!

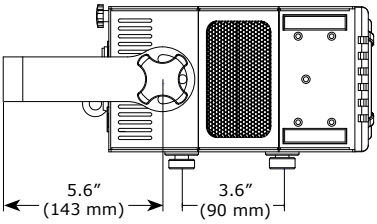
Shipping Issues

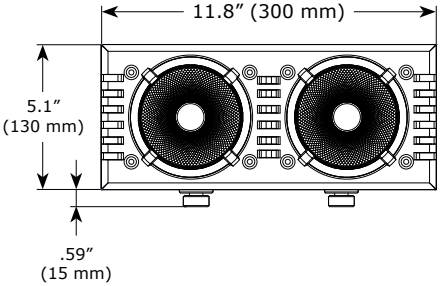
Damage incurred in shipping is the responsibility of the shipper, and must be reported to the carrier immediately upon receipt of the items. Claims must be made within seven (7) days of receipt.

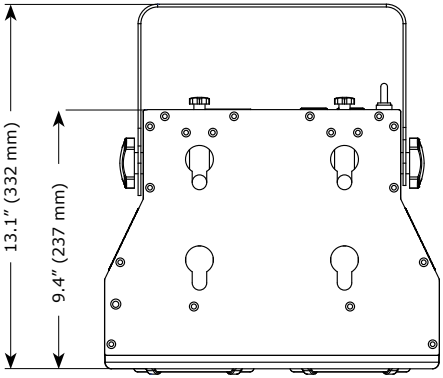
Tech Specs!

Weight & Dimensions						
Width	11.8 inches (300 mm)					
Depth	9.4 inches (237 mm)					
Height	5.1 inches (130 mm)					
Weight	15.4 lbs. (7 kg)					
Power						
Operating Voltage	100V-240VAC, 50-60Hz					
Power Consumption	198W, 1.64A, PF:.99					
Light Source						
LED	2x 60W RGBW 4-in-1 LEDs 2x 4-segment (16 x 0.5W RGB 3-in-1 LEDs)					
Optical						
Beam Angle	4.5 degree beam					
Luminous Intensity	Lux/m	Red	Green	Blue	White	All
	1m	15,710	13,150	19,500	22,280	72,300
	2m	6,750	5,590	7,850	11,070	28,240
	3m	2,969	2,881	3,835	4,980	13,510
	4m	1,822	1,692	2,356	2,750	7,280
	5m	1,112	990	1,463	1,769	4,560
Thermal						
Max. Operating Temp.	104 degrees F (40 degrees C) ambient					
Control						
Protocol	USITT DMX-512					
DMX Channels	13/24 or 45-channel DMX modes					
Input	3 and 5-pin XLR Male					
Output	3 and 5-pin XLR Female					
Other Operating Modes	Standalone, Master/Slave, Sound Active, Color Preset					
Other Information						
Opinion - 3.14 = Onion						
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LEDs.					

Dimensional Drawings







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