



Blizzard Lighting, LLC
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1. GETTING STARTED

What's In The Box?

- 1 x N-Trance™ LED Moving Head Fixture
- 1 x Ever-So-Handy Power Cord
- 1 x Set of Mounting Brackets
- This Lovely User Manual

Getting It Out Of The Box

Congratulations on your purchase of N-Trance™. It's mesmerizing and bewitching, mood-altering and mind-blowing. It may even take you to another plane of existence. Now that you've got your N-Trance™ (or *hopefully N-Trances*), 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.blizzardpro.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.blizzardpro.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 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 N-TRANCE™

MAIN FEATURES

- 2° narrow beam effects via 90W LED
- LED ring with 86pcs RGB 3-in-1 SMD5050 LEDs
- Gobo wheel with 21 gobos + open
- Color wheel with 14 colors + open (split colors and bi-directional rotation)
- 6/8-facet bi-directional rotating prism
- Frost and color filter effects
- Independent DMX control of beam and LED ring effects
- Built-in auto/sound active programs
- Pan: 540/640°, Tilt: 270° (8-16 Bit Resolution)
- 1-25Hz fps strobe + variable/random effects
- 4 user-selectable dimming curves
- 2.4" TFT LCD display with 4 button control
- DMX512, Art-Net, RDM, M/S, sound active & auto mode
- 3/5-pin DMX In/Out + RJ45 etherCON In/Out (Art-NET)
- PowerCON™ compatible AC power In/Out

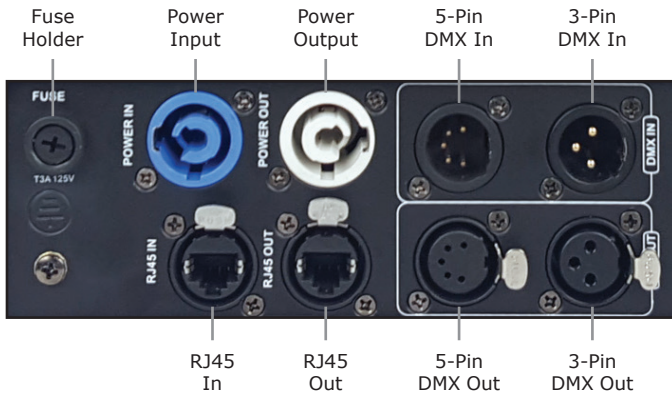
DMX Quick Reference (21/44/128-Channel Modes)

CH.	Basic (21ch)	CH.	Standard (44ch)	CH.	Extended (128ch)
1	Pan	1	Pan	1	Pan
2	Fine Pan (16-bit)	2	Fine Pan (16-bit)	2	Fine Pan (16-bit)
3	Tilt	3	Tilt	3	Tilt
4	Fine Tilt (16-bit)	4	Fine Tilt (16-bit)	4	Fine Tilt (16-bit)
5	Dimmer	5	Dimmer	5	Dimmer
6	Strobe	6	Dimmer Fine	6	Dimmer Fine
7	Color Wheel	7	Strobe	7	Strobe
8	Gobo Wheel	8	Color Wheel	8	Color Wheel
9	Prism 1 (8-facet circular)	9	Gobo Wheel	9	Gobo Wheel
10	Prism 1 Rotation	10	Prism 1 (8-facet circular)	10	Prism 1 (8-facet circular)
11	Prism 2 (6-facet linear)	11	Prism 1 Rotation	11	Prism 1 Rotation
12	Prism 2 Rotation	12	Prism 2 (6-facet linear)	12	Prism 2 (6-facet linear)
13	Focus	13	Prism 2 Rotation	13	Prism 2 Rotation
14	Colorizer / Frost	14	Focus	14	Focus
15	Pan/Tilt Speed	15	Focus Fine	15	Focus Fine
16	Reset	16	Colorizer / Frost	16	Colorizer / Frost
17	Ring Dimmer	17	Pan/Tilt Speed	17	Pan/Tilt Speed
18	Ring Strobe	18	Dimmer Curve	18	Dimmer Curve
19	Ring Red	19	Device Settings	19	Device Settings
20	Ring Green	20	Reset	20	Reset
21	Ring Blue	21	Ring Dimmer 1	21	Ring Dimmer 1
--	--	22	Red 1 - Main FX Color	22	Red 1 - Main FX Color
--	--	23	Green 1 - Main FX Color	23	Green 1 - Main FX Color
--	--	24	Blue 1 - Main FX Color	24	Blue 1 - Main FX Color
--	--	25	Red 1 - BG or 2nd FX	25	Red 1 - BG or 2nd FX
--	--	26	Green 1 - BG or 2nd FX	26	Green 1 - BG or 2nd FX
--	--	27	Blue 1 - BG or 2nd FX	27	Blue 1 - BG or 2nd FX
--	--	28	FX Select 1	28	FX Select 1
--	--	29	FX Rotation 1	29	FX Rotation 1
--	--	30	FX Repeat 1	30	FX Repeat 1
--	--	31	FX Direction 1	31	FX Direction 1
--	--	32	FX Rotation Offset 1	32	FX Rotation Offset 1
--	--	33	Ring Dimmer 2	33	Ring Dimmer 2
--	--	34	Red 2 - Main FX Color	34	Red 2 - Main FX Color
--	--	35	Green 2 - Main FX Color	35	Green 2 - Main FX Color
--	--	36	Blue 2 - Main FX Color	36	Blue 2 - Main FX Color
--	--	37	Red 2 - BG or 2nd FX	37	Red 2 - BG or 2nd FX
--	--	38	Green 2 - BG or 2nd FX	38	Green 2 - BG or 2nd FX
--	--	39	Blue 2 - BG or 2nd FX	39	Blue 2 - BG or 2nd FX
--	--	40	FX Select 2	40	FX Select 2
--	--	41	FX Rotation 2	41	FX Rotation 2
--	--	42	FX Repeat 2	42	FX Repeat 2
--	--	43	FX Direction 2	43	FX Direction 2
--	--	44	FX Rotation Offset 2	44	FX Rotation Offset 2
--	--	--	--	45-128	R/G/B Pixels 1 - 28

Figure 1: N-Trance™ Pin-Up Picture



Figure 2: The Rear Connections



3. SETUP



Before replacing a fuse, disconnect the 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 N-Trance™ 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

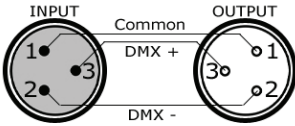
To link fixtures together you'll need data cables. You should use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

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

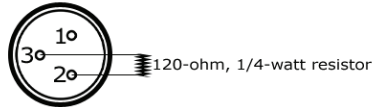
Cable Connectors

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, it's no problem! You can simply use the installed 5-pin DMX input and/or output connections found on the back of your fixture(s).

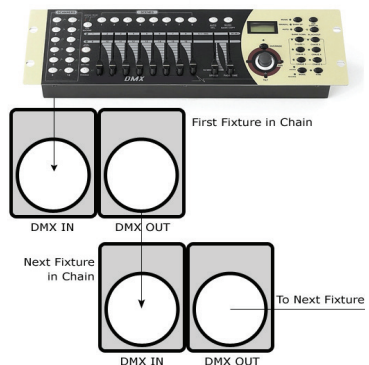
Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data 1- (Primary Data Link)	Pin 2	Pin 2
Data 1+ (Primary Data Link)	Pin 3	Pin 3
Data 2- (Optional Secondary Data Link)	Pin 4	Pin 4
Data 2+ (Optional Secondary Data Link)	Pin 5	Pin 5

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.

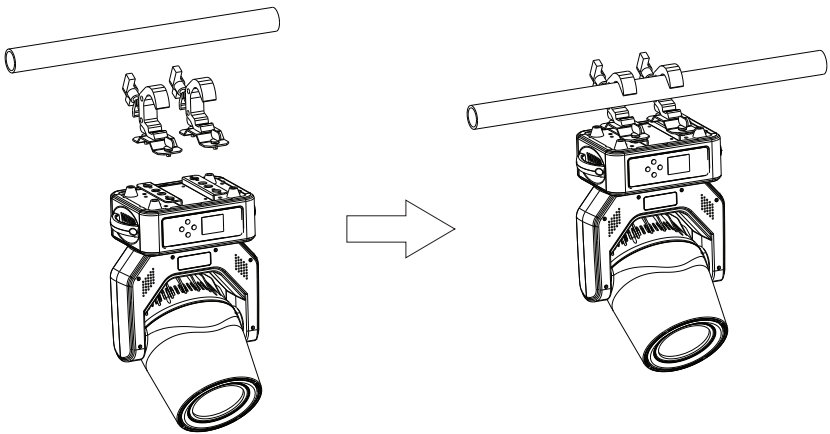


Installation

The fixture can be installed on the floor resting on its rubber feet, or mounted on truss.

- Choose a suitable place to put or hang the equipment when installing. When hanging the fixture, use the included clamp mounting brackets with suitable clamps to properly support the weight of the fixture.
- When installing the equipment, ensure that no flammable or explosive materials are within 1/2 meter distance.
- Please ask professionals to install the equipment. Any improper installation can cause personal injury or material damage.
- The equipment must be placed in a ventilated area, at least 50 cm from the ground, and always ensure that the vents are not clogged.
- Mount the fixture using suitable type clamps. 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.

WARNING: With the exception of when the fixture is positioned on the floor, a safety cable must always be used. It must be securely fixed to the support structure of the projector and then connected to the fixing point at the center of the base.



4. OPERATING ADJUSTMENTS

The Control Panel

All the goodies and different modes possible with the N-Trance™ are accessed by using the control panel on the front of the fixture. There are 4 control buttons to the right of the LCD display which allow you to navigate through the various control panel menus.

<MODE>

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

<ENTER>

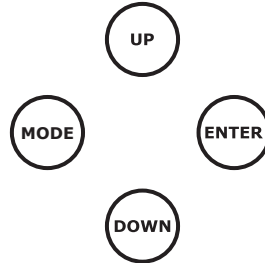
Is used to select and confirm/store the current selection.

<UP>

Scrolls through menu items and numbers in ascending order.

<DOWN>

Scrolls through menu items and numbers in descending order.



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 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 **<MODE>** button.

Control Panel Menu Structure

DMX Address	Set DMX Address	001-512				
MODE	DMX Signal	DMX				
	Select	Artnet				
	DMX Mode	DMX 21Ch				
		DMX 44Ch				
		DMX 128Ch				
	Slave	<ENTER>				
	Auto	Auto Program				
		Auto Speed	000-255			
	Sound	Sensitivity	000-255			
	Static	Pan	000-255	Layer1 Green1	000-255	
		Pan Fine	000-255	Layer1 Blue1	000-255	
		Tilt	000-255	Layer1 Red2	000-255	
		Tilt Fine	000-255	Layer1 Green2	000-255	
		Dimmer	000-255	Layer1 Blue2	000-255	
		Dimmer Fine	000-255	Layer1 FX	000-255	
		Strobe	000-255	Layer1 Rotate	000-255	
		Color Wheel	000-255	Layer1 Repeat	000-255	
		Gobo Wheel	000-255	Layer1 Direction	000-255	
		Prism	000-255	Layer1 Rot Offest	000-255	
		Prism Rot	000-255	Layer2 Dimmer	000-255	
		6 Line Prism	000-255	Layer2 Red1	000-255	
		6 Line Prism Rot	000-255	Layer2 Green1	000-255	
		Focus	000-255	Layer2 Blue1	000-255	
		Focus Fine	000-255	Layer2 Red2	000-255	
		Frost	000-255	Layer2 Green2	000-255	
		Pan/Tilt Speed	000-255	Layer2 Blue2	000-255	
		Dimmer Curve	000-255	Layer2 FX	000-255	
		Device Settings	000-255	Layer2 Rotate	000-255	
		Reset	000-255	Layer2 Repeat	000-255	
		Layer1 Dimmer	000-255	Layer2 Direction	000-255	
		Layer1 Red1	000-255	Layer2 Rot Offest	000-255	
		Settings	Display Rev	OFF/ON		
			Display	OFF/ON		
			DMX Fail	Blackout		
				Hold		
			Dimmer Curve	Linear		
				EXP		
				Log		
				S Curve		
	Dimmer Response		Halogen			
	LED					
Pan Rev	OFF/ON					
Tilt Rev	OFF/ON					
Pan Angle	540					
	630					
Feedback	OFF/ON (Automatic Pan/Tilt position correction)					
Calibrate	Pan		000-255	6 Line Prism	000-255	
	Tilt		000-255	6 Line Prism Rot	000-255	
	Color Wheel		000-255	Focus	000-255	
	Gobo Wheel		000-255	Frost	000-255	
	Prism		000-255			
FanSet	Regular/Silent					
Mov Blackout	OFF/ON (blackout while moving)					
Test	Function Test					
Reset	Pan& Tilt					
	Head					
	All					
Factory Reset	NO/YES					
Network Settings	IP Address	xxx.xxx.xxx.xxx				
	Subnet Mask	xxx.xxx.xxx.xxx				
	Universe	000-255				
System Info	Firmware	Vx.xx				
	Time Info	Power on				
		Last Run				
Temp	LED Temp					
	Temp Unit					

DMX / Art-Net Modes

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

Set the Starting DMX Address:

- 1.) Navigate the main menu to reach **DMX Address**, press **<ENTER>**.
- 2.) Use the **<UP/DOWN>** buttons to select a DMX channel from **001-512**.
- 3.) Press the **<ENTER>** button to confirm.

DMX512 and Art-Net Modes:

- 1.) Navigate the main menu to reach **MODE**, press **<ENTER>**.
- 2.) Highlight **DMX Signal Select**, press **<ENTER>**.
- 3.) Highlight **DMX** or **Artnet**, press **<ENTER>**.
- 4.) When **DMX** is selected, signal can be sent/received through the 3-pin DMX connections, and when **Artnet** is selected, signals can be sent/received through the RJ45 connections.

Select the DMX Channel Mode:

- 1.) Navigate the main menu to reach **MODE**, press **<ENTER>**.
- 2.) Highlight **DMX Mode**, and press **<ENTER>**.
- 3.) Use the **<UP/DOWN>** buttons to select **DMX 21Ch**, **DMX 44Ch** or **DMX 128Ch**, and press the **<ENTER>** button to confirm.

Network Setup: (Artnet)

- 1.) Navigate the main menu to reach **Network Settings**, press **<ENTER>**.
- 2.) Use the **<UP/DOWN>** buttons to navigate through the network setup options.

IP Address	=	Set the IP address xxx.xxx.xxx.xxx	Press the <ENTER> button repeatedly to cycle through each set of 3 digits 1-4. Use the <UP/DOWN> buttons to change the value of each from 000-255.
Subnet Mask	=	Set the subnet mask xxx.xxx.xxx.xxx	Press the <ENTER> button repeatedly to cycle through each set of 3 digits 1-4. Use the <UP/DOWN> buttons to change the value of each from 000-255.
Universe	=	Set the universe	Choose from 000-255.

Slave Mode:

- 1.) Navigate the main menu to reach **DMX Address**, press **<ENTER>**.
- 2.) Use the **<UP/DOWN>** buttons to highlight **Slave**, press **<ENTER>**.
- 3.) Press the **<ENTER>** button to confirm.
- 4.) If a control signal is not present the display will flash, otherwise it will not flash.

Auto, Sound Active, & Manual Adjustments:

Allows a single or Master/Slaved units to run factory installed programs.

Auto Mode:

- 1.) Navigate the main menu until you reach **MODE**, press **<ENTER>**.
- 2.) Use the **<UP/DOWN>** buttons to highlight **Auto**, then press **<ENTER>**.
- 3.) Choose **Auto Program** (to run) or **Auto Speed**, and press **<ENTER>**.
- 4.) You can adjust the **Auto Speed** anywhere ranging from 000-255 (slow <--> fast).

Sound Active Mode:

- 1.) Navigate the main menu until you reach **MODE**, press **<ENTER>**.
- 2.) Highlight **Sound**, then press **<ENTER>** to confirm.
- 3.) Adjust the mic sensitivity using the **<UP/DOWN>** buttons to adjust the mic **Sensitivity (0-255)**, and press **<ENTER>**.

Static Mode:

- 1.) Navigate the main menu until you reach **MODE**, press **<ENTER>**.
- 2.) Highlight **Static**, then press **<ENTER>** to confirm.
- 3.) Select and adjust any function from 000-255. Use the same DMX values that start on p.14.

Display Reverse:

- 1.) Navigate the main menu to reach **Settings**, and then press the **<ENTER>** button.
- 2.) Highlight **Display Rev.** and then press **<ENTER>**.
- 3.) Choose from **ON** (inverted 180°) or **OFF**, and press **<ENTER>** to confirm.

Display OFF/OFF:

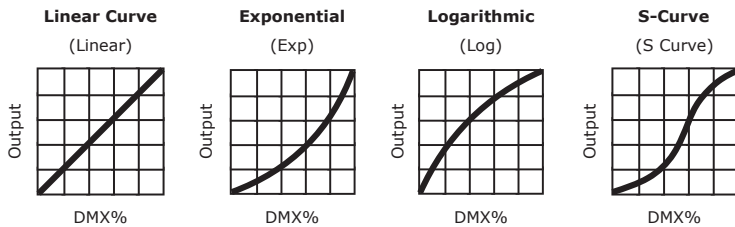
- 1.) Navigate the main menu to **Settings**, and then press **<ENTER>**.
- 2.) Highlight **Display** and then press **<ENTER>**.
- 3.) Choose from **Hold** (continuous), or **OFF** (after 1 minute of inactivity). Press **<ENTER>** to confirm.

DMX Fail Settings:

- 1.) Navigate the main menu to **Settings**, and then press **<ENTER>**.
- 2.) Highlight **DMX Fail** and then press **<ENTER>**.
- 3.) Choose either **Hold** (holds last received signal), or **Blackout**. Press **<ENTER>** to confirm.

Dimming Mode Settings:

Use any 1 of 4 dimming curve settings for smoother (and slower) dimming capabilities.



- 1.) Navigate the main menu until you reach **Settings**, press **<ENTER>**.
- 2.) Use the **<UP/DOWN>** buttons to highlight **Dimmer Curve**, and press **<ENTER>**.
- 3.) Now you can use the **<UP/DOWN>** buttons to highlight **Linear**, **Exp** (exponential), **Log** (logarithmic), or **S Curve**. Press the **<ENTER>** button to confirm your selection.

Dimmer Response:

- 1.) Navigate the main menu until you reach **Settings**, press **<ENTER>**.
- 2.) Use the **<UP/DOWN>** buttons to highlight **Dimmer Response**, and press **<ENTER>**.
- 3.) Now use the **<UP/DOWN>** buttons to highlight **LED** which the dimming responds abruptly to DMX changes, or **Halogen** which is similar to that of a halogen lamp, with more gentle changes in brightness.
- 4.) Press **<ENTER>** to confirm your selection.

Pan/Tilt Reverse:

- 1.) Navigate the main menu until you reach **Settings**, press **<ENTER>**.
- 2.) Use the **<UP/DOWN>** buttons to highlight **Pan Rev** or **Tilt Rev**, and press **<ENTER>**.
- 3.) Now use the **<UP/DOWN>** buttons to highlight **OFF** or **ON**, and press **<ENTER>** to confirm.

Pan Angle:

- 1.) Navigate the main menu until you reach **Settings**, press **<ENTER>**. Then use the **<UP/DOWN>** buttons to highlight **Pan Angle > 540** or **630** degrees, and press **<ENTER>** to confirm.

Calibrate:

- 1.) For fine calibration adjustments, navigate the main menu until you reach **Settings**, then press **<ENTER>**. Now use the **<UP/DOWN>** buttons to highlight **Calibrate** then **<ENTER>**, and choose an effect to adjust anywhere ranging from 0-255. When finished press **<ENTER>** to confirm.

Factory Reset:

- 1.) Navigate the main menu until you reach **Settings**, press **<ENTER>**. Then use the **<UP/DOWN>** buttons to highlight **Factory Reset > YES** or **NO** (to cancel), and press **<ENTER>**.

DMX Values In-Depth (21/44/128-Channel Modes)

Basic Mode 21CH	Standard 44CH	Extended 128CH	Value	What it does
1	1	1	000 <-> 255	Pan
2	2	2	000 <-> 255	Fine Pan (16-bit)
3	3	3	000 <-> 255	Tilt
4	4	4	000 <-> 255	Fine Tilt (16-bit)
5	5	5	000 <-> 255	Dimmer (0% - 100%)
--	6	6	000 <-> 255	Dimmer Fine (0% - 100%)
6	7	7		Strobe
			000 <-> 005	Open
			006 <-> 010	Closed
			011 <-> 033	Pulse Random, (slow <-> fast)
			034 <-> 056	Ramp Up Random(slow <-> fast)
			057 <-> 079	Ramp Down Random (slow <-> fast)
			080 <-> 102	Random (slow <-> fast)
			103 <-> 127	Strobe Break Effect
			128 <-> 250	Linear Strobe, Slow (1Hz) <-> Fast (20Hz)
			251 <-> 255	Open
7	8	8		Color Wheel
			000 <-> 005	Open
			006 <-> 011	Open/Congo (Split)
			012 <-> 017	Congo
			018 <-> 023	Congo/Red (Split)
			024 <-> 029	Red
			030 <-> 035	Red/Fluorescent Green (Split)
			036 <-> 041	Fluorescent Green
			042 <-> 047	Fluorescent Green/Blue (Split)
			048 <-> 053	Blue
			054 <-> 059	Blue/Orange (Split)
			060 <-> 065	Orange
			066 <-> 071	Orange/Light Green (Split)
			072 <-> 077	Light Green
			078 <-> 083	Light Green/Pink (Split)
			084 <-> 089	Pink
			090 <-> 095	Pink/CTB (Split)
			096 <-> 101	CTB
			102 <-> 107	CTB/Lavender (Split)
			108 <-> 113	Lavender
			114 <-> 119	Lavender/Green (Split)
			120 <-> 125	Green
			126 <-> 131	Green/Purple (Split)
			132 <-> 137	Purple
			138 <-> 143	Purple/Cyan (Split)
			144 <-> 149	Cyan
			150 <-> 155	Cyan/Yellow (Split)
			156 <-> 161	Yellow
			162 <-> 167	Yellow/CTO (3000K) (Split)
			168 <-> 173	CTO (3000K)
174 <-> 179	CTO (3000K)/Open (Split)			
180 <-> 185	Open			
186 <-> 218	Color Wheel Rotation CW (Fast <-> Slow)			
219 <-> 222	Stop			
223 <-> 255	Color Wheel Rotation CCW (Slow <-> Fast)			
8	9	9		Gobo Wheel
			000 <-> 003	Open
			004 <-> 007	Reducer 1 (Smallest)
			008 <-> 011	Reducer 2
			012 <-> 015	Reducer 3
			016 <-> 019	Reducer 4
			020 <-> 023	Reducer 5
			024 <-> 027	Reducer 6 (Biggest)
			028 <-> 031	Gobo 1
			032 <-> 035	Gobo 2
			036 <-> 039	Gobo 3
			040 <-> 043	Gobo 4
			044 <-> 047	Gobo 5
			048 <-> 051	Gobo 6
			052 <-> 055	Gobo 7
			056 <-> 059	Gobo 8

DMX Values In-Depth (21/44/128-Channel Modes)

Basic Mode 21CH	Standard 44CH	Extended 128CH	Value	What it does
8	9	9	060 <-> 063 064 <-> 067 068 <-> 071 072 <-> 075 076 <-> 079 080 <-> 083 084 <-> 087 088 <-> 091 092 <-> 095 096 <-> 099 100 <-> 103 104 <-> 107 108 <-> 111 112 <-> 115 116 <-> 119 120 <-> 123 124 <-> 127 128 <-> 131 132 <-> 135 136 <-> 139 140 <-> 143 144 <-> 147 148 <-> 151 152 <-> 155 156 <-> 159 160 <-> 163 164 <-> 167 168 <-> 171 172 <-> 175 176 <-> 187 188 <-> 199 200 <-> 211 212 <-> 223 224 <-> 239 240 <-> 255	Gobo Wheel Gobo 9 Gobo 10 Gobo 11 Gobo 12 Gobo 13 Gobo 14 Gobo 15 Open Shake (slow <-> fast) Reducer 1 Shake (slow <-> fast) Reducer 2 Shake (slow <-> fast) Reducer 3 Shake (slow <-> fast) Reducer 4 Shake (slow <-> fast) Reducer 5 Shake (slow <-> fast) Reducer 6 Shake (slow <-> fast) Gobo 1 Shake (slow <-> fast) Gobo 2 Shake (slow <-> fast) Gobo 3 Shake (slow <-> fast) Gobo 4 Shake (slow <-> fast) Gobo 5 Shake (slow <-> fast) Gobo 6 Shake (slow <-> fast) Gobo 7 Shake (slow <-> fast) Gobo 8 Shake (slow <-> fast) Gobo 9 Shake (slow <-> fast) Gobo 10 Shake (slow <-> fast) Gobo 11 Shake (slow <-> fast) Gobo 12 Shake (slow <-> fast) Gobo 13 Shake (slow <-> fast) Gobo 14 Shake (slow <-> fast) Gobo 15 Shake (slow <-> fast) Effect Wheel #1 Manual Position Effect Wheel #2 Manual Position Effect Wheel #1 Oscillate (fast <-> slow <-> stop) Effect Wheel #2 Oscillate (fast <-> slow <-> stop) Gobo Wheel Spin CW (slow <-> fast) Gobo Wheel Spin CCW (fast <-> slow)
9	10	10	000 <-> 127 128 <-> 255	Prism 1 (8-facet circular) Prism 1 Out Prism 1 In
10	11	11	000 <-> 127 128 <-> 128 129 <-> 191 192 <-> 254 255 <-> 255	Prism 1 Rotation Prism Indexing Prism Stop Prism Rotation CW (slow <-> fast) Prism Rotation CCW (fast <-> slow) Prism Stop
11	12	12	000 <-> 127 128 <-> 255	Prism 2 (6-facet linear) Prism 1 Out Prism 1 In
12	13	13	000 <-> 127 128 <-> 128 129 <-> 191 192 <-> 254 255 <-> 255	Prism 2 Rotation Prism Indexing Prism Stop Prism Rotation CW (slow <-> fast) Prism Rotation CCW (fast <-> slow) Prism Stop
13	14	14	000 <-> 255	Focus (0 <-> 100%)
--	15	15	000 <-> 255	Focus Fine (0 <-> 100%)
14	16	16	000 <-> 005 006 <-> 130 131 <-> 255	Colorizer / Frost Colorizer & Frost Out Colorizer In Frost In
15	17	17	000 <-> 255	Pan/Tilt Speed (fast <-> slow)
--	18	18	000 <-> 005 006 <-> 063 064 <-> 127 128 <-> 191 192 <-> 255	Dimmer Curve No Function Linear Curve Exponential Curve Logarithmic Curve S-Curve

DMX Values In-Depth (21/44/128-Channel Modes)

Basic Mode 21CH	Standard 44CH	Extended 128CH	Value	What it does
--	19	19	000 <-> 005 006 <-> 030 031 <-> 055 056 <-> 080 081 <-> 105 106 <-> 130 131 <-> 155 156 <-> 180 181 <-> 205 206 <-> 230 231 <-> 255	Device Settings (hold for 5 seconds) No Function Move-In-Black On Move-In-Black Off Invert Pan Normal Pan Invert Tilt Normal Tilt Dimmer Response: LED Dimmer Response: Mimic Halogen Fan Speed Max Fan Speed Auto
16	20	20	000 <-> 005 006 <-> 127 128 <-> 191 192 <-> 255	Reset (hold for 5 seconds) No Function Reset Pan/Tilt Reset Effects (Prism, Colors, Gobos, Etc.) Reset All

Ring Layer 1

17	--	--	000 <-> 255	Ring Dimmer (0 <-> 100%)
18	--	--	000 <-> 005 006 <-> 255	Ring Strobe Open Strobe Slow (1Hz) <-> Fast (20Hz)
19	--	--	000 <-> 255	Ring Red (0 <-> 100%)
20	--	--	000 <-> 255	Ring Green (0 <-> 100%)
21	--	--	000 <-> 255	Ring Blue (0 <-> 100%)
--	21	21	000 <-> 255	Ring Dimmer 1 Layer 1 Ring Dimmer (0 <-> 100%)
--	22	22	000 <-> 255	Red - Main FX Color Layer 1 Main FX Color (0 <-> 100%)
--	23	23	000 <-> 255	Green - Main FX Color Layer 1 Main FX Color (0 <-> 100%)
--	24	24	000 <-> 255	Blue - Main FX Color Layer 1 Main FX Color (0 <-> 100%)
--	25	25	000 <-> 255	Red - BG or 2nd FX Color Layer 1 Background/2nd FX Color (0 <-> 100%)
--	26	26	000 <-> 255	Green - BG or 2nd FX Color Layer 1 Background/2nd FX Color (0 <-> 100%)
--	27	27	000 <-> 255	Blue - BG or 2nd FX Color Layer 1 Background/2nd FX Color (0 <-> 100%)
--	28	28	000 <-> 255	FX Select See FX table on pages 18-20
--	29	29	000 <-> 127 128 <-> 128 129 <-> 255	FX Rotation Forward FX Rotation (fast <-> slow) FX Rotation stop Reverse FX Rotation (slow <-> fast)
--	30	30	000 <-> 063 064 <-> 127 128 <-> 191 192 <-> 255	FX Repeat x2 x4 x8 Full
--	31	31	000 <-> 063 064 <-> 127 128 <-> 191 192 <-> 255	FX Direction Forward FX Reverse FX Mirror Out Mirror In
--	32	32	000 <-> 255	FX Rotation Offset FX start point adjustment

DMX Values In-Depth (21/44/128-Channel Modes)

Ring Layer 2

Basic Mode 21CH	Standard 44CH	Extended 128CH	Value	What it does
--	33	33	000 <-> 255	Ring Dimmer 2 Layer 2 Ring Dimmer (0 <-> 100%)
--	34	34	000 <-> 255	Red - Main FX Color Layer 2 Main FX Color (0 <-> 100%)
--	35	35	000 <-> 255	Green - Main FX Color Layer 2 Main FX Color (0 <-> 100%)
--	36	36	000 <-> 255	Blue - Main FX Color Layer 2 Main FX Color (0 <-> 100%)
--	37	37	000 <-> 255	Red - BG or 2nd FX Color Layer 2 Background/2nd FX Color (0 <-> 100%)
--	38	38	000 <-> 255	Green - BG or 2nd FX Color Layer 2 Background/2nd FX Color (0 <-> 100%)
--	39	39	000 <-> 255	Blue - BG or 2nd FX Color Layer 2 Background/2nd FX Color (0 <-> 100%)
--	40	40	000 <-> 255	FX Select See FX table on pages 18-20
--	41	41	000 <-> 127 128 <-> 128 129 <-> 255	FX Rotation Forward FX Rotation (fast <-> slow) FX Rotation stop Reverse FX Rotation (slow <-> fast)
--	42	42	000 <-> 063 064 <-> 127 128 <-> 191 192 <-> 255	FX Repeat x2 x4 x8 Full
--	43	43	000 <-> 063 064 <-> 127 128 <-> 191 192 <-> 255	FX Rotation Offset Forward FX Reverse FX Mirror Out Mirror In
--	44	44	000 <-> 255	FX Rotation Offset FX start point adjustment

128 Channel Mode, continued

45	R1	59	B5	73	G10	87	R15	101	B19	115	G24
46	G1	60	R6	74	B10	88	G15	102	R20	116	B24
47	B1	61	G6	75	R11	89	B15	103	G20	117	R25
48	R2	62	B6	76	G11	90	R16	104	B20	118	G25
49	G2	63	R7	77	B11	91	G16	105	R21	119	B25
50	B2	64	G7	78	R12	92	B16	106	G21	120	R26
51	R3	65	B7	79	G12	93	R17	107	B21	121	G26
52	G3	66	R8	80	B12	94	G17	108	R22	122	B26
53	B3	67	G8	81	R13	95	B17	109	G22	123	R27
54	R4	68	B8	82	G13	96	R18	110	B22	124	G27
55	G4	69	R9	83	B13	97	G18	111	R23	125	B27
56	B4	70	G9	84	R14	98	B18	112	G23	126	R28
57	R5	71	B9	85	G14	99	R19	113	B23	127	G28
58	G5	72	R10	86	B14	100	G19	114	R24	128	B28

Note:

*For 128 channels, to use the pixel mapping function you must select the DMX value 241-255 on the **FX Select** channel to enable it.

FX Channel Chart

DMX	Function	Type
0	No Function	--
One Color "Paparazzi" Snap		
1	Preprogrammed FX	Step
2	Slow/Low Density	Step
3	Slow/Medium Density	Step
4	Slow/High Density	Step
5	Slow/Linear	Step
6	Medium/Low Density	Step
7	Medium/Medium Density	Step
8	Medium/High Density	Step
9	Medium/Linear	Step
10	Fast/Low Density	Step
11	Fast/Medium Density	Step
12	Fast/High Density	Step
13	Fast/Linear	Step
One Color "Paparazzi" Fade		
14	Preprogrammed FX	Step
15	Slow/Low Density	Step
16	Slow/Medium Density	Step
17	Slow/High Density	Step
18	Slow/Linear	Step
19	Medium/Low Density	Step
20	Medium/Medium Density	Step
21	Medium/High Density	Step
22	Medium/Linear	Step
23	Fast/Low Density	Step
24	Fast/Medium Density	Step
25	Fast/High Density	Step
26	Fast/Linear	Step
Two Color "Paparazzi" Snap		
27	Preprogrammed FX	Step
28	Slow/Low Density	Step
29	Slow/Medium Density	Step
30	Slow/High Density	Step
31	Slow/Linear	Step
32	Medium/Low Density	Step
33	Medium/Medium Density	Step
34	Medium/High Density	Step
35	Medium/Linear	Step
36	Fast/Low Density	Step
37	Fast/Medium Density	Step
38	Fast/High Density	Step
39	Fast/Linear	Step
Two Color "Paparazzi" Fade		
40	Preprogrammed FX	Step
41	Slow/Low Density	Step
42	Slow/Medium Density	Step
43	Slow/High Density	Step
44	Slow/Linear	Step
45	Medium/Low Density	Step
46	Medium/Medium Density	Step
47	Medium/High Density	Step
48	Medium/Linear	Step
49	Fast/Low Density	Step
50	Fast/Medium Density	Step
51	Fast/High Density	Step
52	Fast/Linear	Step

FX Channel Chart

Trace #1 - Uniform Decay		
53	Preprogrammed FX	Step
54	Slow/Short Tail	Step
55	Slow/Medium Tail	Step
56	Slow/Long Tail	Step
57	Medium/Short Tail	Step
58	Medium/Medium Tail	Step
59	Medium/Long Tail	Step
60	Fast/Short Tail	Step
61	Fast/Medium Tail	Step
62	Fast/Long Tail	Step
Trace #2 - Uniform Decay, Color Mix		
63	Preprogrammed FX	Step
64	Slow/Short Tail	Step
65	Slow/Medium Tail	Step
66	Slow/Long Tail	Step
67	Medium/Short Tail	Step
68	Medium/Medium Tail	Step
69	Medium/Long Tail	Step
70	Fast/Short Tail	Step
71	Fast/Medium Tail	Step
72	Fast/Long Tail	Step
Trace #3 - Uniform Color		
73	Preprogrammed FX	Step
74	Slow/Short Tail	Step
75	Slow/Medium Tail	Step
76	Slow/Long Tail	Step
77	Medium/Short Tail	Step
78	Medium/Medium Tail	Step
79	Medium/Long Tail	Step
80	Fast/Short Tail	Step
81	Fast/Medium Tail	Step
82	Fast/Long Tail	Step
Trace #4 - Uniform Color, Color Mix w/Base Color		
83	Preprogrammed FX	Step
84	Slow/Short Tail	Step
85	Slow/Medium Tail	Step
86	Slow/Long Tail	Step
87	Medium/Short Tail	Step
88	Medium/Medium Tail	Step
89	Medium/Long Tail	Step
90	Fast/Short Tail	Step
91	Fast/Medium Tail	Step
92	Fast/Long Tail	Step
Jockey Chase		
93	Preprogrammed FX	Step
94	Smallest	Step
95	...	Step
96	...	Step
97	...	Step
98	...	Step
99	...	Step
100	...	Step
101	...	Step
102	Biggest	Step

FX Channel Chart

Pie Piece Chase		
103	Preprogrammed FX	Step
104	1/2 Ring	Step
105	1/4 Ring	Step
106	1/8 Ring	Step
107	1/16 Ring	Step
108	1/32 Ring	Step
109	1/64 Ring	Step
110	Rotating 1/4 Ring	Step
111	Rotating 1/16 Ring	Step
112	Rotating 1/32 Ring	Step
Color Merge		
113	Preprogrammed FX	Step
114	Full Ring	Step
115	3/4 Ring	Step
116	1/2 Ring	Step
117	1/4 Ring	Step
Color Wave		
118	Preprogrammed FX	Step
119	Small	Step
120	Medium	Step
121	Large	Step
122	XL	Step
Color Wave w/Color Mix		
123	Preprogrammed FX	Step
124	Small	Step
125	Medium	Step
126	Large	Step
127	XL	Step
Sweep		
128	Preprogrammed FX	Step
129	Slow	Step
130	Medium	Step
131	Fast	Step
132	Soopafast	Step
137 <--> 240	No Function	Step
Random Sweep		
133	Slow	Step
134	Medium	Step
135	Fast	Step
136	Soopafast	Step
137 <--> 240	No Function	Step
Enable Pixel Mapping		
241 <--> 245	Mix Layers	Proportional
246 <--> 250	Below Other Layer	Proportional
251 <--> 255	Above Other Layer	Proportional

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 N-Trance™ 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.blizzardpro.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!

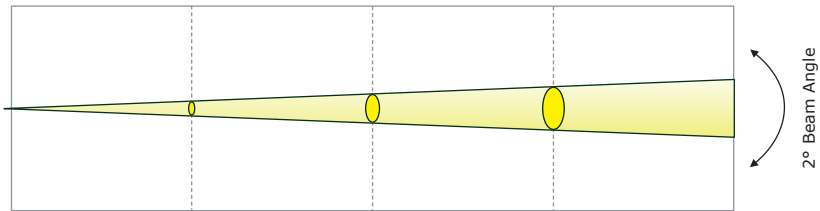
Shipping Issues

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	12.4 inches (315.3 mm)
Depth	8 inches (202 mm)
Height	19.8 inches (502.5 mm)
Weight	31.3 lbs. (14.2 kg)
Power	
Operating Voltage	100V-240VAC, 50-60Hz
Power Consumption	136W, 1.81A, PF: .62
Light Source	
LED	1x 90W LED (beam) 86x RGB 3-in-1 SMD5050 LEDs (ring)
Optical	
Beam Angle	2 degree
Thermal	
Max. Operating Temp.	104 degrees F (40 degrees C) ambient
Control	
Protocol	USITT DMX-512, Art-NET
DMX Channels	21/44/128-channel DMX modes
Input	3/5-pin XLR Male, RJ45 Input
Output	3/5-pin XLR Female, RJ45 Output
Other Operating Modes	Standalone, Master/Slave, Sound Active, Color Preset
Warranty	
	2-year limited warranty, does not cover malfunction caused by damage to LEDs.

Photometric Data

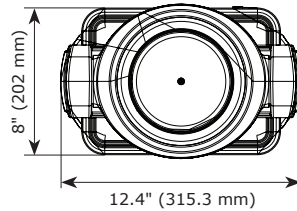
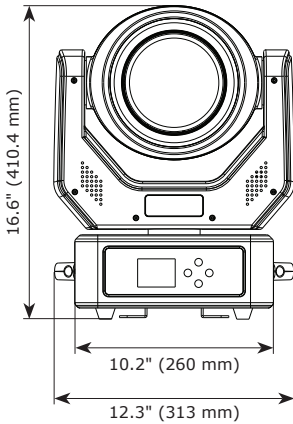
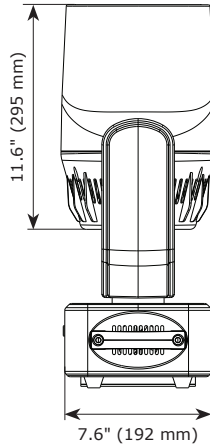
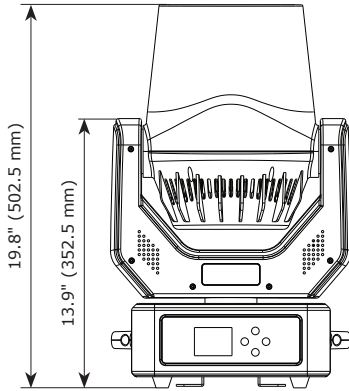


Distance:	5m	7.5m	10m
Diameter:	7.1" (18 cm)	10.6" (27 cm)	14.2" (36 cm)

Luminous Intensity:

Beam	5m lux	5m fc	7.5m lux	7.5m fc	10m lux	10m fc
2°	49,450	4,594.0	25,804	2,397.3	12,721	1,181.8

Dimensional Drawings



DISCLAIMER:

The power connectors fitted to the fixture and fixture cord are designed for compatibility with products manufactured by Neutrik AG, Neutrik USA and their related entities, however they are not manufactured by, affiliated with or endorsed by Neutrik AG, Neutrik USA, or any related entity. Neutrik® and power-CON® are registered trademarks of Neutrik AG.

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