

infinipix™

ARCADE



Blizzard Lighting, LLC
<http://www.blizzardpro.com>
Waukesha, WI USA
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1. GETTING STARTED

What's In The Box?

- Infinipix™ Arcade
- Power Cord
- 2x Alignment Hardware Sets
- 2x Omega Clamp Brackets
- This Lovely User Manual

Getting It Out Of The Box

Congratulations on purchasing the Infinipix™ Arcade. Now that you've got your fixture, 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 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. We reserve the right to update the existing, or create a new document to correct any errors or omissions. You can download the latest version of this document from www.blizzardpro.com.

Author:	Date:	Last Edited:	Date:
J. Thomas	3/6/2024	J. Thomas	4/24/2024

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 THE INFINIPIX™ ARCADE

Main Features

- 8x 20W white LEDs w/narrow 3° beam angle
- 256x SMD 5050 RGBW 0.5W LEDs (32x8 LED sections)
- Smooth dimming (0-100%)
- Narrow white beam + RGBW LED background effects
- Electronically controlled clear/frosted smart lens
- Built-in programs and manual color mixing
- 5-pin DMX in/out connections
- powerCON™ TRUE1 compatible power in/out
- Dual mounting brackets + omega clamp bracket
- Interlocking housing design for connecting multiple fixtures
- Heavy-duty aluminum enclosure

Control

- Protocol: USITT DMX-512, RDM
- DMX Channels: 11/20/21/41-channels
- Easy-to-use 4-button control menu with LCD display
- Operating modes: DMX512, M/S, auto

DMX Quick Reference (11/20/21/41-Channel Modes)

11CH	20CH	21CH	41CH	Function
1	1	1	--	Dimmer (Glow, 0% - 100%)
--	2	2	--	Dimmer Fine (Glow, 0% - 100%)
2	3	3	--	Red (Glow, 0% - 100%)
3	4	4	--	Green (Glow, 0% - 100%)
4	5	5	--	Blue (Glow, 0% - 100%)
5	6	6	--	White (Glow, 0% - 100%)
6	7	--	--	White (Beam, 0% - 100%)
7	8	7	--	Strobe (11/20ch = Universal, 21ch = Glow Only)
8	9	8	--	Rainbow Effects (Glow, slow to fast)
9	10	9	--	Special Effect (Glow, slow to fast)
--	11	10	--	Effect Speed (Glow, slow to fast)
--	12	11	--	Trail Effect (Glow, slow to fast)
--	13	12	--	Background Color (Glow)
--	14	13	--	Background Color Brightness (Glow, 0% - 100%)
--	15	14	--	Effect Direction (Glow)
--	--	15	--	White (Beam, 0% - 100%)
--	--	16	--	Strobe (Beam)
10	16	17	--	Special Effect (Beam)
--	17	18	--	Effect Speed (Beam, slow to fast)
--	18	19	--	Trail Effect (Beam, short to long)
--	19	20	--	Effect Direction (Beam)
11	20	21	1	Frost
--	--	--	2-41	Pixel Mapping (Glow Sections 1-8, Beam Sections 1-8)

Figure 1: Infinipix™ Arcade Pin-Up Picture

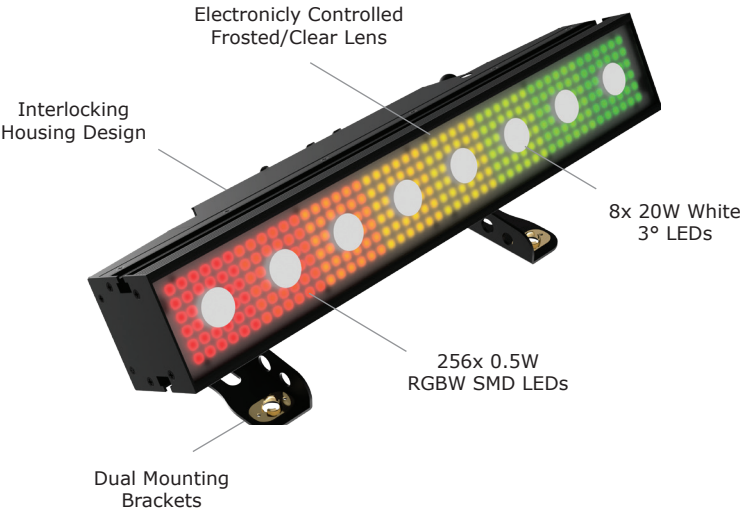
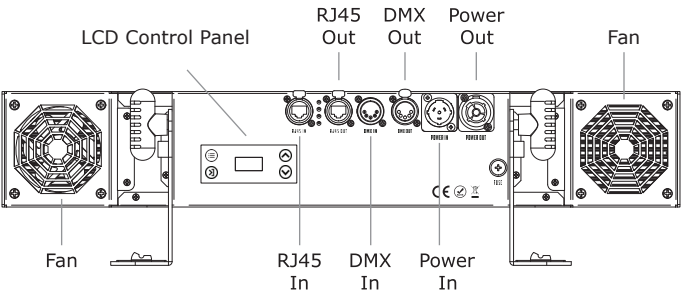


Figure 2: Rear Connections



3. SETUP



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

Fuse Replacement

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 Infinipix™ Arcade 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 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.

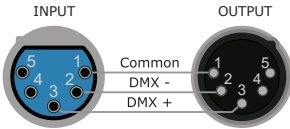
For instance, Belden© 9841 meets the specifications for EIA RS-485 applications. Standard microphone cables will "probably" be OK, but note that they cannot transmit DMX data as reliably over long distances. In any event, the cable should have the following characteristics:

- *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*

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 powerCON® are registered trademarks of Neutrik AG.

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

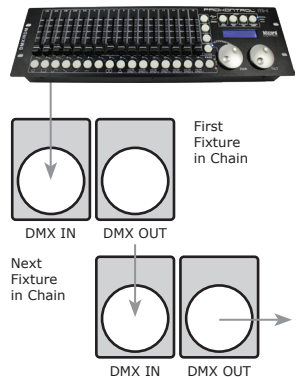
Take It To The Next Level: Setting Up DMX Control

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).

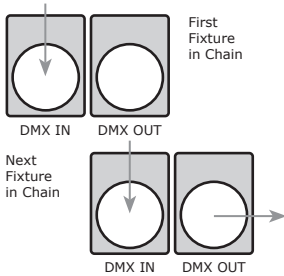
Note: It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture number first, and so on.

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.

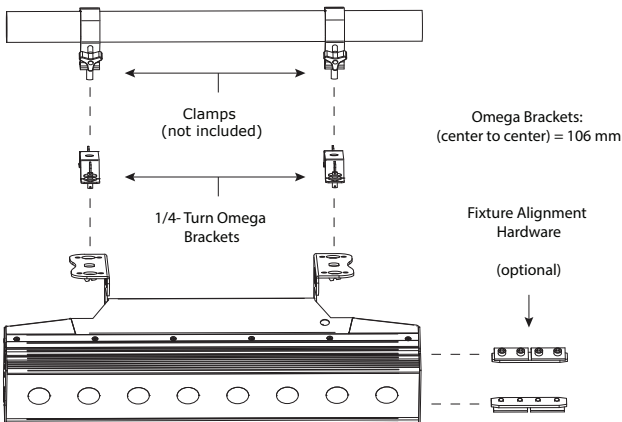


2. Connect the end of the cable coming from the first fixture which will have a female connector to the input connector of the next fixture consisting of a male connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

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. Secondly, 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.



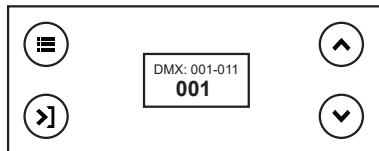
<DOWN>

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 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

DMX Setup	Address	001-512	Set the starting DMX address
	Channels	11CH	11-channel DMX mode
		20CH	20-channel DMX mode
		21CH	21-channel DMX mode
		41CH	41-channel DMX mode
Net Setup	Protocol	DMX	DMX input mode
		Art-Net	Art-Net input mode
	Universe	0-255	Set the universe
	IP Address	002.000.000.002	Set the IP address
	Mask Address	255.000.000.000	Set the network mask
Personality	Dim Curve	Linear	Linear curve
		Square	Square law curve
		Inverse SQ	Inverse square law curve
		S-Curve	S-Curve dimming
	Frequency	1200Hz	
		2400Hz	
		6000Hz	
		25000Hz	
	Dim Speed	Fast	Fast dimming speed
		Slow	Slow dimming speed
	No Data	Hold	Hold last signal if DMX is lost
		Blackout	Blackout if DMX is lost
	M/S Mode	Slave	Set as slave fixture
		Master	Set as master fixture
	Display	Rotate	Rotate 180°
		Intensity	1-100
		Temp Unit	°C or °F
		Menu Lock	Off/On (hold <Menu> to unlock)
Fixture Test	Test All	Testing...	Test all effects
	Test Effects	Test each individual effect	
DMX Live	Dimmer	View current DMX channel values.	

	Frost		
Manual	Dimmer	Manual adjustment mode.	

	Frost		
Program	Program 1	Auto program 1 - Speed (0-255), Frost (Off/On)	
	Program 2	Auto program 2 - Speed (0-255), Frost (Off/On)	
	Program 3	Auto program 3 - Speed (0-255), Frost (Off/On)	
	Program 4	Auto program 4 - Speed (0-255), Frost (Off/On)	
	Program 5	Auto program 5 - Speed (0-255), Frost (Off/On)	
	Program 6	Auto program 6 - Speed (0-255), Frost (Off/On)	
Service	Calibration	Manually calibration (passcode = 200)	
	Default	Reset fixture to factory defaults	
Information	On Time	Total fixture ON time hours	
	LED Hours	Total LED running hours	
	SW Version	Displays the current software version	
	RDM UID	Displays the RDM UID	
	Temperatures	Displays current internal temperature	

DMX Values In-Depth (11/20/21-Channel Modes)

11CH	20CH	21CH	Value	Function
1	1	1	000 <-> 255	Dimmer (Glow, 0% - 100%)
--	2	2	000 <-> 255	Dimmer Fine (Glow, 0% - 100%)
2	3	3	000 <-> 255	Red (Glow, 0% - 100%)
3	4	4	000 <-> 255	Green (Glow, 0% - 100%)
4	5	5	000 <-> 255	Blue (Glow, 0% - 100%)
5	6	6	000 <-> 255	White (Glow, 0% - 100%)
6	7	--	000 <-> 255	White (Beam, 0% - 100%)
7	8	7		Strobe (11/20ch = Universal, 21ch = Glow Only)
			000 <-> 005	No Function
			006 <-> 055	Strobe (slow to fast)
			056 <-> 105	Pulse, Ramp Up (slow to fast)
			106 <-> 155	Pulse, Ramp Down (slow to fast)
			156 <-> 205	Pulse, Ramp Up (slow to fast)
			206 <-> 255	Random Strobe
8	9	8		Rainbow Effects (Glow, slow to fast)
			000 <-> 005	No Function
			006 <-> 026	Effect 1
			027 <-> 047	Effect 2
			048 <-> 068	Effect 3
			069 <-> 089	Effect 4
			090 <-> 110	Effect 5
			111 <-> 131	Effect 6
			132 <-> 152	Effect 7
			153 <-> 173	Effect 8
			174 <-> 194	Effect 9
			195 <-> 215	Effect 10
			216 <-> 236	Effect 11
			237 <-> 255	Effect 12
9	10	9		Special Effect (Glow, slow to fast)
			000 <-> 005	No Function
			006 <-> 015	Effect 1
			016 <-> 025	Effect 2
			026 <-> 035	Effect 3
			036 <-> 045	Effect 4
			046 <-> 055	Effect 5
			056 <-> 065	Effect 6
			066 <-> 075	Effect 7
			076 <-> 085	Effect 8
			086 <-> 095	Effect 9
			096 <-> 105	Effect 10
			106 <-> 115	Effect 11
			116 <-> 125	Effect 12
			126 <-> 135	Effect 13
			136 <-> 145	Effect 14
			146 <-> 155	Effect 15
			156 <-> 165	Effect 16
			166 <-> 175	Effect 17
			176 <-> 185	Effect 18
			186 <-> 195	Effect 19
			196 <-> 205	Effect 20
			206 <-> 215	Effect 21
			216 <-> 225	Effect 22
			226 <-> 235	Effect 23
			236 <-> 245	Effect 24
			246 <-> 255	Effect 25
--	11	10	000 <-> 255	Effect Speed (Glow, slow to fast)
--	12	11	000 <-> 255	Trail Effect (Glow, slow to fast)
--	13	12		Background Color (Glow)
			000 <-> 005	No Function
			006 <-> 127	Static Macros
			128 <-> 255	Dynamic Macros
--	14	13	000 <-> 255	Background Color Brightness (Glow, 0% - 100%)
--	15	14		Effect Direction (Glow)
			000 <-> 127	Right to Left
			128 <-> 255	Left to Right

DMX Values In-Depth (11/20/21-Channel Modes)

11CH	20CH	21CH	Value	Function
--	--	15	000 <-> 255	White (Beam, 0% - 100%)
--	--	16	000 <-> 005	Strobe (Beam)
			006 <-> 055	No Function
			056 <-> 105	Strobe (slow to fast)
			106 <-> 155	Pulse, Ramp Up (slow to fast)
			156 <-> 205	Pulse, Ramp Down (slow to fast)
			206 <-> 255	Pulse, Ramp Up (slow to fast)
10	16	17	000 <-> 005	Random Strobe
			006 <-> 015	Special Effect (Beam)
			016 <-> 025	No Function
			026 <-> 035	Effect 1
			036 <-> 045	Effect 2
			046 <-> 055	Effect 3
			056 <-> 065	Effect 4
			066 <-> 075	Effect 5
			076 <-> 085	Effect 6
			086 <-> 095	Effect 7
			096 <-> 105	Effect 8
			106 <-> 115	Effect 9
			116 <-> 125	Effect 10
			126 <-> 135	Effect 11
			136 <-> 145	Effect 12
			146 <-> 155	Effect 13
			156 <-> 165	Effect 14
			166 <-> 175	Effect 15
			176 <-> 185	Effect 16
			186 <-> 195	Effect 17
			196 <-> 205	Effect 18
			206 <-> 215	Effect 19
			216 <-> 225	Effect 20
			226 <-> 235	Effect 21
			236 <-> 245	Effect 22
			246 <-> 255	Effect 23
--	17	18	000 <-> 255	Effect 24
--	18	19	000 <-> 255	Effect 25
--	19	20	000 <-> 127	Effect Direction (Beam)
			128 <-> 255	Right to Left Left to Right
11	20	21	000 <-> 127	Frost
			128 <-> 255	Frost On Frost Off

DMX Values In-Depth (41-Channel Mode)

41CH	Value	Function
1	000 <-> 127	Frost
	128 <-> 255	Frost On
		Frost Off

Pixel Mapping Channels (0-255, 0% to 100%):

CH	Function	CH	Function	CH	Function	CH	Function	CH	Function
2	Glow 1 (R)	10	Glow 3 (R)	18	Glow 5 (R)	26	Glow 7 (R)	34	Beam 1
3	Glow 1 (G)	11	Glow 3 (G)	19	Glow 5 (G)	27	Glow 7 (G)	35	Beam 2
4	Glow 1 (B)	12	Glow 3 (B)	20	Glow 5 (B)	28	Glow 7 (B)	36	Beam 3
5	Glow 1 (W)	13	Glow 3 (W)	21	Glow 5 (W)	29	Glow 7 (W)	37	Beam 4
6	Glow 2 (R)	14	Glow 4 (R)	22	Glow 6 (R)	30	Glow 8 (R)	38	Beam 5
7	Glow 2 (G)	15	Glow 4 (G)	23	Glow 6 (G)	31	Glow 8 (G)	39	Beam 6
8	Glow 2 (B)	16	Glow 4 (B)	24	Glow 6 (B)	32	Glow 8 (B)	40	Beam 7
9	Glow 2 (W)	17	Glow 4 (W)	25	Glow 6 (W)	33	Glow 8 (W)	41	Beam 8

5. APPENDIX

Keeping Your Infinipix™ Arcade 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, you'll need to take care of it if you want it to operate as designed. You should keep the fixture clean, especially if you are using it in an environment with a lot of dust, fog, haze, wild animals, wild teenagers or spilled drinks.

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

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

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

Returns (Gasp!)

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

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

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

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

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

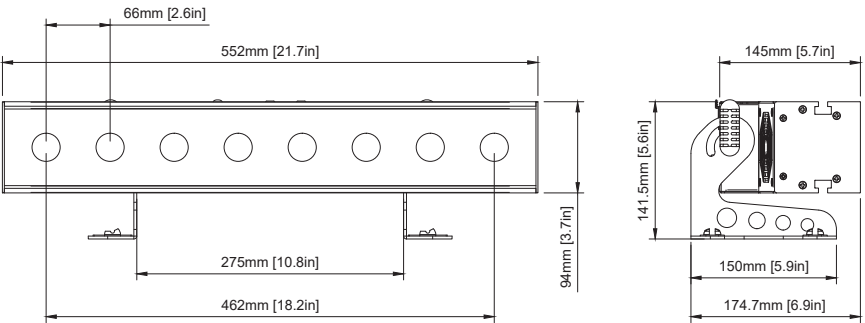
Shipping Issues

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

Tech Specs!

Weight & Dimensions	
Width	21.7 in. (552 mm)
Depth	6.9 in. (174.7 mm)
Height	5.6 in. (141.5 mm)
Weight	13.25 lbs. (6 kg)
Power	
Operating Voltage	AC 100V-240V/50-60Hz
Power Consumption	265W, 2.54A, PF:.91
Fuse	10A, 250V
Light Source	
LED	8x 20W white LEDs (beams) 256x SMD 5050 RGBW 0.5W LEDs (32x8 LED sections)
Luminous Intensity	RGBW SMD LEDs = 270 Lux White Beams Only (no frost) 2.5M = 20,366 Lux White Beams Only (with frost) 2.5M = 560 Lux White Beams Only (no frost) 5M = 10,557 Lux White Beams Only (with frost) 5M = 272 Lux
Optical	
Beam Angle	White LEDs: 3° beam angle (x8) SMD RGBW LEDs: 104° (110° with frost)
Thermal	
Max. Operating Temp.	104 degrees F (40 degrees C) ambient
Control	
Protocol	USITT DMX-512, RDM
DMX Channels	11/20/21/41-channel DMX modes
Input/Output	5-pin XLR Male/Female
Other Operating Modes	DMX512, M/S, Auto Mode
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