# PinUp<sup>™</sup>





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# **1. GETTING STARTED**

## What's In The Box?

- 1 x PinUp<sup>™</sup> LED Pinspot
- A totally rockin' AC Power Cord
- This Lovely User Manual

## **Getting It Out Of The Box**

Congratulations on purchasing one of the coolest professional LED Pinspot fixtures anywhere! Now that you're the proud owner of a PinUp<sup>™</sup> (or hopefully, MORE!), 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, just give us a call or send an email. We'll be happy to help, honest.

Blizzard Lighting W220 N1531 Jericho Ct. Ste E Waukesha, WI 53186 USA www.blizzardlighting.com 414-395-8365 Email: support@blizzardlighting.com

# **SAFETY INSTRUCTIONS**



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

• Please keep this User Guide for future use. If you sell the unit to someone else, be sure that they also receive this User Guide.

• ALWAYS make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.

- This product is intended for indoor use only.
- To prevent risk of fire or shock, do not expose fixture to rain or moisture.
- Make sure there are no flammable materials close to the unit while operating.

• The unit must be installed in a location with adequate ventilation, at least 20in (50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.

• ALWAYS disconnect from the power source before servicing or replacing fuse and be sure to replace with same fuse size and type.

• ALWAYS secure fixture using a safety chain. NEVER carry the fixture by its cord. Use its carrying handles.

• DO NOT operate at ambient temperatures higher than 104°F (40°C).

• In the event of a serious operating problem, stop using the unit immediately. NEVER try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.

- NEVER connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.

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

# 2. MEET THE PINUP™ LED PINSPOT

## MAIN FEATURES:

- Razor-Sharp 6-degree beam angle
- Bright and even output from a 10-watt RGBW LED
- Full RGBW color mixing in DMX & Standalone Modes
- Multiple Auto-Run & Sound Active Programs
- Auto Programs via DMX
- 4-button LED control panel
- Durable metal & plastic housing w/real glass optics
- Metal mounting bracket w/adjustment screws

## DMX Quick Reference (6-Channel Mode)

Channel	What It Does
1	Dimmer / Strobe
2	Red Intensity
3	Green Intensity
4	Blue Intensity
5	White Intensity
6	Built-In Programs

## Figure 1: PinUp<sup>™</sup> 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**

**CAUTION!** The PinUp<sup>TM</sup> utilizes a high-output switch-mode power supply with an internal fuse. Under normal operating conditions, the fuse should not require replacement. The fuse is field replaceable, however it is an advanced procedure suited to qualified individuals. Should your PinUp<sup>TM</sup> fuse require replacement, please contact Blizzard Lighting for instructions, or to return your unit for service.

## Connecting A Bunch of PinUp<sup>™</sup> 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 datagrade 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 pin connector side of the DMX cable to the output (female) 3 pin connector of the first fixture.

2. Connect the end of the cable coming from the first fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 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.

# 4. OPERATING ADJUSTMENTS

## The Control Panel

All the goodies and different modes possible with the PinUp<sup>™</sup> are accessed by using the control panel on the rear of the fixture. There are 4 control buttons below the LED 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 LED 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>**.

Press the **<MENU>** button repeatedly until you reach the desired menu function. 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**

ADD I>	ROO I - 5 I2	Sets the fixture DMX start address
Run0	Run() Run I Run2 Run3 Run3 Run5 Run5 Run5 Run6 Run8 Run8 Run8 Run8 Sou I Sou I Sou2	Sets the fixture to slave mode Auto Mode 1 - 4 Color Chase Auto Mode 2 - Red + G/B/W Chase Auto Mode 3 - Green + R/B/W Chase Auto Mode 3 - Green + R/G/W Chase Auto Mode 5 - White + R/G/B Chase Auto Mode 5 - White + R/G/B Chase Auto Mode 6 - Full Fade, Slow Auto Mode 7 - Full Fade, Fast Auto Mode 8 - Red-Green Fade Auto Mode 9 - Red-Blue Fade Auto Mode 8 - Green-Blue Fade Auto Mode 8 - Red-Green-Blue Fade Auto Mode 8 - Red-Green-Blue Fade Auto Mode 8 - Red-Green-Blue Fade Auto Mode 6 - 7 Color Chase Sound Active Mode 1 - Chase + Strobing Sound Active Mode 2 - Chase, No Strobing Sound Active Mode 3 - Flash Mode
LEan	r255 6255 6255 9255 4255	Red Custom Color Adjustment - (r000-255) Green Custom Color Adjustment - (r000-255) Blue Custom Color Adjustment - (r000-255) White Custom Color Adjustment - (r000-255)
LEon —>	LoFF	LED display On/Off

## DMX Mode:

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

1.) The default mode for the fixture is DMX, which appears as BDD i on the LED Readout. Use the **<ENTER>** button then the **Up/Down** buttons to choose a channel between DD i and 5 i.e. Press **<ENTER>** again to confirm.

#### Setting up for Master/Slave:

1.) Use standard DMX cables to daisy chain your units together via the DMX connectors on the rear of the units. The first fixture in line from the DMX controller will serve as the Master.

2.) Then, to set your other fixtures to run in Slave Mode, you will need use the

**Up/Down** buttons to select  $\mathcal{P}un\mathcal{Q}$ , and press the **<ENTER>** button on the control panel menu to confirm your choice. These fixtures will now be set to slave mode and controlled by the master unit.

## Auto Mode:

1.) Use the  ${\rm Up/Down}$  buttons to navigate to starting main menu setting  ${\it FunU}$  (or last saved menu option).

2.) Then, use the **Up/Down** buttons to navigate to  $\mu_{un} I - \mu_{un} L$ , press the **<ENTER>** button on the control panel menu to confirm your choice (see page 11 for descriptions).

## Sound Active Mode:

1.) Use the  ${\rm Up/Down}$  buttons to navigate to starting main menu setting  ${\it FunU}$  (or last saved menu option).

2.) Then, use the **Up/Down** buttons to navigate to 5aul - 5aud, press the **<ENTER>** button on the control panel menu to confirm your choice (see page 11 for descriptions).

## LED Display (On/Off):

1.) Use the  ${\rm Up/Down}$  buttons to navigate to the starting main menu setting LEon (default).

2.) Then, use the **Up/Down** buttons to navigate to settings LEan (ON) or LaFF (OFF), and press the **<ENTER>** button on the control panel menu to confirm your choice.

Channel	Value	What It Does
1	000 <> 131 032 <> 239 240 <> 255	Dimmer (0% <> 100%) Strobe (Slow <> Fast) No Function
2	000 <> 255	Red Intensity (0% <> 100%)
3	000 <> 255	Green Intensity (0% <> 100%)
4	000 <> 255	Blue Intensity (0% <> 100%)
5	000 <> 255	White Intensity (0% <> 100%)
6	$\begin{array}{c} 000 <> 002 \\ 003 <> 031 \\ 032 <> 063 \\ 064 <> 079 \\ 080 <> 095 \\ 096 <> 111 \\ 112 <> 128 \\ 129 <> 143 \\ 144 <> 159 \\ 160 <> 175 \\ 176 <> 191 \\ 192 <> 207 \\ 208 <> 223 \\ 224 <> 255 \end{array}$	No Function Run 1 Program Run 2 Program Run 3 Program Run 4 Program Run 5 Program Run 7 Program Run 8 Program Run 9 Program Run 9 Program Run B Program Run C Program Blackout

DMX Values In-Depth (6-Channel Mode)

## Troubleshooting

Symptom	Solution
Beam is Dim	Check optical system and clean excess dust/grime. Also ensure that the 220V/110V switch is in the correct position, if applicable.
No Light Output	Check to ensure fixture is operating under correct mode, IE sound active/auto/DMX/Etc., if applicable. Contact service for more information.
Chase Speed Too Fast/Slow	Check to ensure proper setup of speed adjustment.
No Power	Check AC cord and circuit for malfunction.
Fixture Not Responding / Responding Er- raticly	Make sure all connectors are seated properly and securely. Use Only DMX Cables. Install a Terminator. Check all cables for defects. Reset fixture(s).

# If your problem isn't listed, or if problems persist, please contact support: support@blizzardlighting.com.

## 5. APPENDIX

#### Keeping Your PinUp<sup>™</sup> 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 send an email to support@blizzardlighting.com, 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.

Weight & Dimensions		
Length	2.63 inches (66.41 mm)	
Width	4.75 inches (120.18 mm)	
Weight	0.9 pounds (66.41 kg)	
Power		
Operating Voltage	90-230VAC, 12VDC 2.0A	
Current	1.0A	
Light Source		
LED	1* 10-watt RGBW LED, 100,000 hours	
Optical		
Beam Angle	6°	
Luminous Intensity	1200 Lux/1m	
Thermal		
Max. Operating Temp.	104 degrees F (40 degrees C) ambient	
Control		
Protocol	USITT DMX-512	
DMX Channels	6 Channels	
Input	3-pin XLR Male	
Output	3-pin XLR Female	
Other Operating Modes	Standalone, Master/Slave, Color Preset	
Coolness Factor		
Leventy Billion Percent		
Warranty	2-year limited warranty, does not cover mal- function caused by damage to LED's.	



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