

THE
PUCKRGB
UNPLUGGED™



blizzard
LIGHTING

Blizzard Lighting, LLC
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Wisconsin, USA
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LITHIUM-ION BATTERY WARNINGS & INFO

- 1. CAUTION! TO REDUCE THE RISK OF INJURY AND/OR EQUIPMENT DAMAGE, DO NOT TAMPER WITH THE CHARGING CIRCUITRY IN THIS FIXTURE.** The use of other types of chargers may result in personal injury or equipment damage. Under no circumstances attempt to connect the battery pack to any power supplies or other equipment that is not specifically and expressly designated for use with this model battery pack.
- 2. USE THE LITHIUM ION BATTERY PACK ONLY WITH EQUIPMENT SPECIFICALLY AND EXPRESSLY DESIGNATED FOR USE WITH THIS MODEL BATTERY PACK.** Use with other equipment may result in fire, electric shock, personal injury, and/or damage to equipment.
- 3. AVOID DANGEROUS CONDITIONS AND ENVIRONMENTS.** Do not charge the battery pack in damp or wet conditions. Avoid using the pack in direct exposure to rain or snow. Do not use the battery pack or charger in the presence of explosive gases or flammable materials.
- 4. AVOID USING OR STORING THE BATTERY PACK IN EITHER EXTREME COLD OR EXTREME HOT TEMPERATURES.** The battery pack will disable itself under conditions of extreme heat (above 60 °C) and may not function to full performance under conditions of extreme cold (below -20 °C). Storage at elevated temperatures (above 25 °C) will shorten the life of the battery pack.
- 5. DO NOT BURN OR INCINERATE BATTERY PACKS.** Battery packs may explode causing personal injury, fire, and/or damage. Fumes resulting from burning of battery packs may be toxic.
- 6. DO NOT DROP, CRUSH, IMPACT, OR MECHANICALLY ABUSE BATTERY PACKS.** Cease use of fixtures that have suffered a sharp impact, been dropped, run over, or damaged in any other way. Such impacts may cause internal damage that is not externally visible and that, over time, may cause short circuits, battery cell leakage, or other events that may lead to fire, personal injury, and or equipment damage.
- 7. DO NOT DISASSEMBLE BATTERY PACK.** There are no user serviceable parts within battery packs. Disassembly may result in short circuiting or other damage that may cause fire, personal injury, and/or other damage.
- 8. AVOID CONTACT WITH BATTERY CHEMICALS.** If a battery pack leaks battery chemicals, avoid any contact with skin, eyes, or mouth. In the event of contact with skin, wash immediately with soap and water and rinse with vinegar. For eye contact, begin flushing with clean water, immediately call for medical help, and continue flushing for 20 minutes or until medical help arrives.
exceptions.
- 11. STORE IN A COOL, DRY PLACE.** Avoid leaving the fixture in direct sunlight, vehicle cabs, compartments, or unventilated storage buildings during hot summer conditions. Under extreme temperature conditions damage may occur. Elevated temperatures in general shorten the life of your battery pack.

1. GETTING STARTED

What's In The Box?

- 1 x Puck: UNPLUGGED™ RGBA Flat LED PAR Fixture
- 1x IEC Power Cord
- This Lovely User Manual

Getting It Out Of The Box

Congratulations on purchasing one way cool, way THIN LED PAR fixture! Now that you've got The Puck: UNPLUGGED™ RGBA (or hopefully, *Pucks!*), 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
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support@blizzardlighting.com
www.blizzardlighting.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 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 Puck: UNPLUGGED™ RGBA Flat LED PAR Can

CONTROL FEATURES

- RGBA color mixing via 144 10mm Red/Green/Blue/Amber LEDs
- Variable electronic strobe
- Variable electronic dimmer
- Built-in automated programs via DMX and master/slave
- Built-in sound active programs
- Full RGBA color mixing in standalone and master/slave
- RGBA (4-Channel) and extended (7-Channel) DMX modes

ADDITIONAL FEATURES

- Lightweight and Compact (It kept its New Years' resolution!)
- High-output, long-running Lithium-Ion rechargeable battery system
- 4-Button LED control panel for easy programming
- Light source: 144x 10mm LEDs, 36 each Red/Green/Blue/Amber
- Dual bracket for flexibility in mounting
- Power outlet for fixture linking (up to 50 fixtures, AC power only)

DMX Quick Reference (7-Channel Mode)

Channel	What It Does
1	Dimmer
2	Red Intensity
3	Green Intensity
4	Blue Intensity
5	Amber Intensity
6	Strobe (0-15 off, 16-255 strobe slow <-> fast)
7	Color Macros (slow <-> fast)

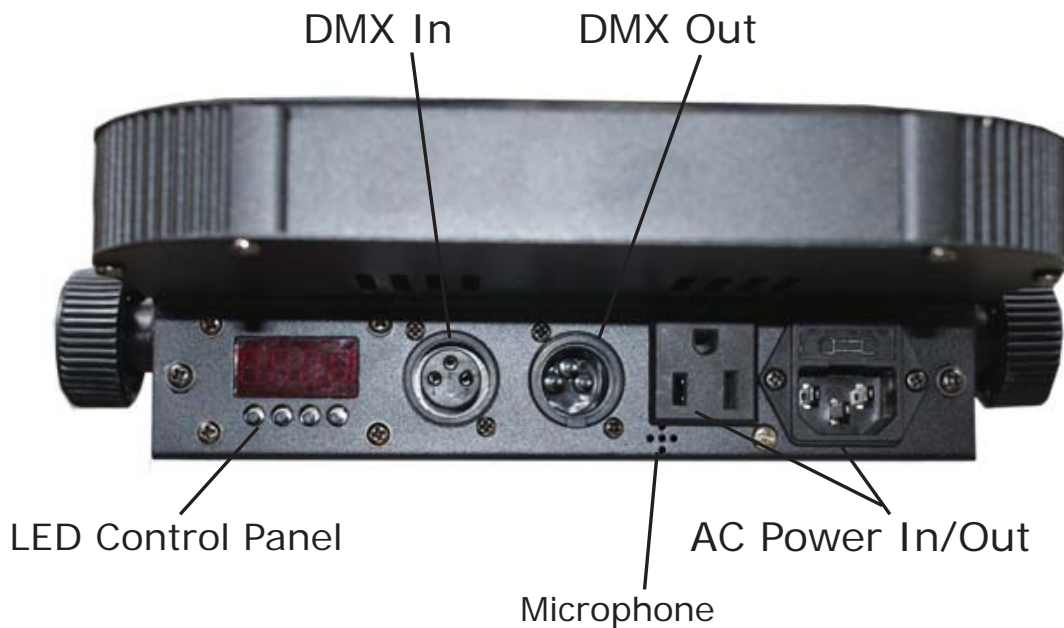
DMX Quick Reference (4-Channel Mode)

Channel	What It Does
1	Red Intensity
2	Green Intensity
3	Blue Intensity
4	Amber Intensity

Figure 1: The Puck: UNPLUGGED™ RGBA Pin-Up Picture



Figure 2: The Rear Connections



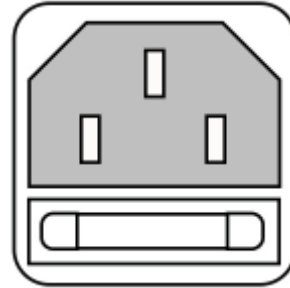
3. SETUP



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

Fuse Replacement

With a flat head screwdriver, wedge the fuse holder out of its housing. Remove the damaged fuse from its holder and replace with exact same type fuse. Insert the fuse holder back in its place and reconnect power.



Connecting A Bunch of The Puck: UNPLUGGED™ RGBA Flat LED PAR Cans

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

USING THIS FIXTURE WITH THE wiCICLE® WIRELESS DMX SYSTEM

In addition to the unbridled thrill you will experience the first time you go sans power cord with your Puck: UNPLUGGED™ fixture, the Puck: UNPLUGGED™ also works seamlessly with our wiCICLE® Wireless DMX system, without additional power.

To use the Puck: UNPLUGGED with a wiCICLE® receiver, first, set the fixture to slave mode by following the instructions on page 11. If the fixture is not set to slave mode, you may experience interference as the wiCICLE will attempt to retransmit the master signal being generated by the fixture.

After the fixture is set to slave mode, simply plug the wiCICLE® receiver into the DMX IN connector on the back of the fixture. The fixture will automatically detect and power the wiCICLE®.

Follow the instructions provided on the wiCICLE® instruction sheet to select/change frequency groups:

- GROUP 1: **RED**
- GROUP 2: **GREEN**
- GROUP 3: **YELLOW**
- GROUP 4: **BLUE**
- GROUP 5: **VIOLET**
- GROUP 6: **CYAN**
- GROUP 7: **WHITE**

Check it out -- the group number corresponds with the "ID" number on the Lightcaster® as well.

Repeat the steps above for each fixture which will use a wiCICLE® receiver.

Notes: wiCICLE® transmitters have additional power requirements and therefore cannot be powered directly from the fixture. You will need to utilize the supplied AC/DC adaptor to drive wiCICLE® transmitters in your system.

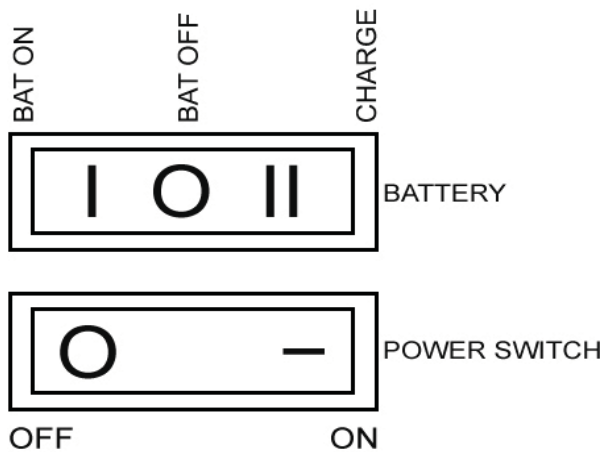
The wiCICLE® receiver takes power from the fixture's battery pack, and will therefore have a minimal impact in runtime of the fixture.

4. OPERATING ADJUSTMENTS

Using The Battery System

The Puck: Unplugged™ features an easy-to-use Lithium-Ion internal battery system which allows the user to the flexibility to operate their light fixture without AC power for up to 20 hours.

The battery system is controlled by two rocker switches located on the rear of the unit, as shown below:



IMPORTANT:

A full charge is obtained after charging the fixture for at least 4 hours. The fixture will automatically stop charging when the battery is in optimal condition.

Display color/fade/chase, strobe, wiCICLE operation, and environmental factors including ambient temperature will all impact battery life. Depending on program, battery life may range from 3 to 20 hours.

As shown in the diagram, the top switch controls whether the battery of the fixture is supplying power for operation, charging, or off. The bottom switch controls whether the unit is operating from AC power from a traditional power source (IE a wall outlet).

To Operate The Fixture From The Battery:

1. Switch the top switch to position "I," (BAT ON).
2. Switch the bottom switch to position "O," (OFF).

To Operate The Fixture From AC Power:

1. Switch the top switch to position "O," (BAT OFF).
2. Switch the bottom switch to position "--," (ON).

To Operate The Fixture From AC Power & Charge The Battery:

1. Switch the top switch to position "II," (CHARGE).
2. Switch the bottom switch to position "--," (ON).

To Charge The Battery With The Fixture Off:

- 1.) Switch the top switch to position "II," (CHARGE).
- 2.) Switch the bottom switch to position "--," (OFF).

NOTE: After making any adjustment, the fixture will return to the correct mode after approximately 5 seconds.

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 *Addr* on the LED Readout. Use the <ENTER> button then the <UP> and <DOWN> buttons to choose a channel between *1* and *512*. Press <ENTER> again to confirm.
- 2.) To change between 3 and 6 channel DMX mode, select *Chnd*, then press <ENTER>. Select either *3Ch* or *6Ch*, then press <ENTER> again to confirm.

Master/Slave Mode (Auto/Sound Active/Color Preset/Custom):

Allows you to link up to 32 units together without a controller.

- 1.) Use standard DMX cables to daisy chain your units together via the DMX connector on the rear of the units.

- 2.) Choose a unit to function as the Master. Select MAST. The master unit must be the first unit. Finally, chain the units together using DMX cable.

Master *SLND* then *MAST* to confirm.

- 3.) Select slave function by using the <UP>/<DOWN> keys to reach SLAV in the Master/Auto menu on the slave units, and they will react in the same as the Master.

Slave *SLND* then *SLAV* to confirm.

- 4.) On the master fixture, use the <UP>/<DOWN> keys to reach SHND, which allows you to select the Master/Slave mode.

Sound active *SOUn* then <ENTER> to confirm.

Auto mode *COLO* then *Auto*, then <ENTER> to confirm.

Color preset *COLO* then *COL 1 - COL 15*, <ENTER>.

To set a custom color in Master/Slave / Standalone Mode:

Using this function, you can select any color by adjusting the Red, Green, Blue and Amber values from 0-255. You may also adjust the color balance of the fixture.

Please note that modifying the values in this step will affect ALL modes, therefore we recommend resetting all levels to their highest value (255) after using this mode.

- 1.) Select *MANU* from the control panel, then hit <ENTER>.

- 2.) Choose *RED, GREEN, BLUE or WHITE*, then hit <ENTER> to confirm.

- 3.) Using the <UP>/<DOWN> keys, select the color you wish to display by varying Red/Green/Blue intensity between 0 and 255, then hit <ENTER> to confirm each color choice.

- 4.) Select Color preset mode as instructed above, then select *COL 15*, then <ENTER> to confirm.

To Show the Fixture Running Hours:

- 1.) Select *Fhrs* from the control panel, then hit <ENTER> to confirm.

Troubleshooting

Symptom	Solution
Fixture Auto-Shut Off	Check the fan in the fixture. If it is stopped or moving slower than normal, the unit may have shut itself off due to high heat. This is to protect the fixture from overheating. Clear the fan of obstructions, or return the unit for service.
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 fuse, AC cord and circuit for malfunction.
Blown Fuse	Check AC cord and circuit for damage, verify that moving parts are not restricted and that unit's ventilation is not obstructed
Slow Movement	Verify that 220V/110V switch is in the correct position, if applicable. Also check that speed channels are set appropriately.
No Response to Audio	Verify that the fixture is in "Sound Active" mode. Adjust Audio Sensitivity, If Applicable.
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).
Intermittant Lamp	Check lamp for properly installation. Relamp, lamp may have reached end of life.
Remote Doesn't Work	Verify remote control cable is installed properly and securely. Verify remote is correct type (CA-9 or other as applicable.)
Fixture Moving On Its Own	Verify proper mode of operation. Is the fixture in "Auto" mode?

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

5. APPENDIX

Keeping Your Puck: UNPLUGGED™ RGBA 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.

Tech Specs!

Weight & Dimensions	
Length	8.25 inches (210 mm)
Width	3.75 inches (63.5 mm)
Height	8.25 inches (210 mm)
Weight	4.5 lbs (2.05 kg)
Power	
Operating Voltage	90-230VAC, 50-60 Hertz
Fuse	3A 250V
Power Consumption	20W
Light Source	
LED	144x 10mm Red/Green/Blue/Amber 100K hrs.
Optical	
Beam Angle	21 degrees 32 degree field
Luminous Intensity	2,995 Lux @ 1m
Thermal	
Max. Operating Temp.	104 degrees F (40 degrees C) ambient
Control	
Protocol	USITT DMX-512
DMX Channels	4 or 7 (User Selectable)
Input	3-pin XLR Male
Output	3-pin XLR Female
Other Operating Modes	Standalone, Master/Slave, Sound Active, Color Preset, Standalone color mixing
Battery	
Type/Rating	Field-replacable Lithium-Ion, 11.1V 8.0Ah with built-in protection circuit.
Coolness Factor	
Leventy Billion Percent	
Warranty	Fixture: 2-year limited warranty. Battery: 1-year limited warranty covering failure only.

Thine pagest hath beenst lefteth blanketh on purposeth.



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