

TOUGH PARTM NEO

R G B L

IP65

SUITABLE FOR OUTDOOR USE



 **blizzard**

Blizzard Lighting, LLC
<http://www.blizzardpro.com>
Waukesha, WI USA
Copyright (c) 2024

TABLE OF CONTENTS

1. Getting Started	3
What's In The Box?	3
Getting It Out Of The Box	3
Powering Up!	3
Getting A Hold Of Us	3
2. Meet the ToughPAR™ Neo RGBL	5
Main Features	5
DMX Quick Reference (6-Channel Mode)	5
Pin-Up Picture	6
Rear Connections	6
3. Setup	7
Fuse Replacement	7
Connecting A Bunch of Fixtures	7
Data/DMX Cabling	7
Cable Connectors	8
3-Pin??? 5-Pin??? Huh?!?	8
Take It To The Next Level: Setting Up DMX Control	8
Fixture Linking (M/S Mode)	9
Mounting & Rigging	9
4. Operating Adjustments	10
The Control Panel	10
Control Panel Menu Structure	11
DMX Mode	12
Dimming Mode Settings	12
Custom Programs	13
Color Calibration Settings	14
Custom Static Colors	14
Fixture Reset Functions	14
Data Sync Feature	15
Fixture Information	15
DMX Values In-Depth	16
Troubleshooting	17
5. Appendix	18
Keeping Your Fixture As Good As New	18
Returns (Gasp!)	18
Shipping Issues	18
Tech Specs!	19
Photometric Data	19

1. GETTING STARTED

What's In The Box?

- 1x ToughPAR™ Neo RGBL LED Fixture
- 1x AC Power Cord
- This Lovely User Manual

Getting It Out Of The Box

Congratulations on purchasing the ToughPAR™ Neo RGBL. 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 Compatibility - Confirm that the product's power requirements align with your local power supply before use. Refer to the product's label or the specifications chart provided with the product for details. The current rating listed represents the average current draw under normal conditions.

Warning! Verify the product's compatibility with your area's line voltage to avoid damage. Ensure that all connections are made to circuits that provide proper grounding (earthing).

Getting A Hold Of Us

If something is wrong, please 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 is 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 document or create a new one 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	7/25/2024	J. Thomas	12/11/2024



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.
- 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 TOUGHPAR™ NEO RGBL

Main Features

- Light source: 12x 20W RGBL 4-in-1 LEDs, 100,000 hrs.
- IP65 rated outdoor LED fixture
- RGBL color mixing ability in standalone mode
- Built-in color & chase macros via DMX
- Built-in automated programs via master/slave
- 4/6/10-channel DMX profiles w/32-bit dimming
- Flicker-free constant-current LED driver
- 25 degree beam angle
- 4-button control menu with OLED display
- Mounting bracket for versatile mounting and stable freestanding
- Omega bracket mounting capability (bracket sold separately)
- 5-pin male/female XLR input & output connections
- PowerCON® TRUE1™ compatible in/out power connectors

DMX Quick Reference (4-Channel Mode)

Channel	What is does...
1	Red Intensity (0 <--> 100%)
2	Green Intensity (0 <--> 100%)
3	Blue Intensity (0 <--> 100%)
4	Lime Intensity (0 <--> 100%)

DMX Quick Reference (6-Channel Mode)

Channel	What is does...
1	Master Dimmer (0 <--> 100%)
2	Red Intensity (0 <--> 100%)
3	Green Intensity (0 <--> 100%)
4	Blue Intensity (0 <--> 100%)
5	Lime Intensity (0 <--> 100%)
6	Strobe (Slow <--> Fast)

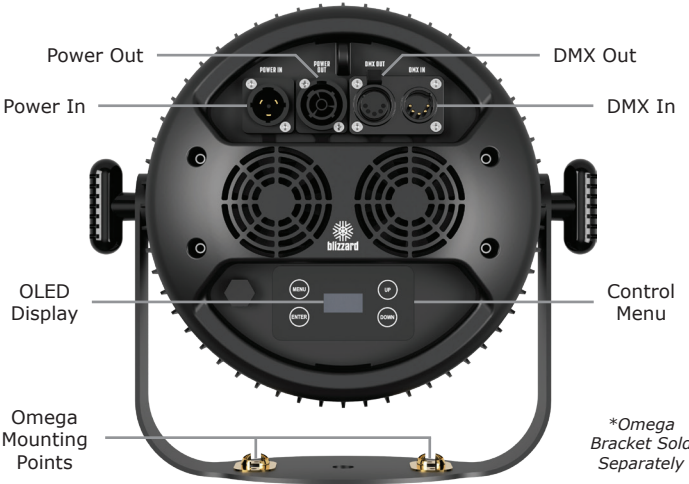
DMX Quick Reference (10-Channel Mode)

Channel	What is does...
1	Master Dimmer (0 <--> 100%)
2	Red Intensity (0 <--> 100%)
3	Green Intensity (0 <--> 100%)
4	Blue Intensity (0 <--> 100%)
5	Lime Intensity (0 <--> 100%)
6	Strobe (Slow <--> Fast)
7	Built-In Programs
8	Auto Speed (Fast <--> Slow)
9	Virtual Color Wheel
10	32-Bit Dimming

Figure 1: ToughPAR™ Neo RGBL 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

This fixture utilizes a high-output switch-mode power supply with an internal fuse. Under normal conditions, the fuse should not require replacement. Should your fixture require fuse replacement, please contact us for instructions.

Connecting A Bunch of ToughPAR™ Neo RGBL 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.

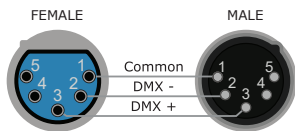
For instance, Belden© 9841 meets the specifications for EIA RS-485 applications. Standard microphone cables will "probably" be OK, but note that they cannot transmit DMX data as reliably over long distances. In any event, the cable should have the following characteristics:

- *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

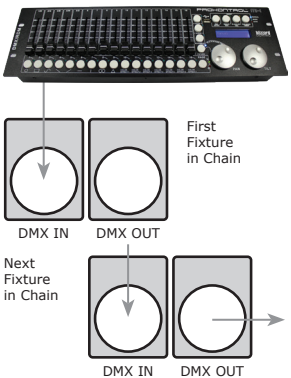
Take It To The Next Level: Setting Up DMX Control

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).

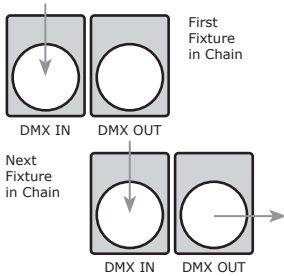
Note: It doesn’t matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture number first, and so on.

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.

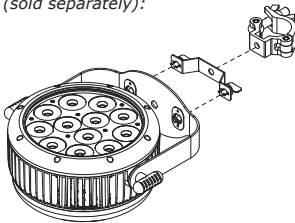
Mounting & Rigging

This fixture may be mounted in any SAFE position provided there is enough room for ventilation. The fan or vent pathway must never be obstructed.

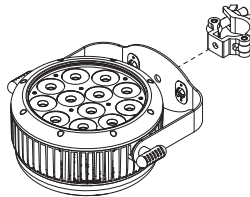
IMPORTANT: Regardless of the rigging option you choose for your fixtures, always be sure to secure your fixture with a safety cable.

Clamp Mounting

*With Omega bracket
(sold separately):*



Without Omega bracket:



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 of unknown strength, and ensure properly rated rigging is used when mounting fixtures overhead.

Overhead mounting requires extensive experience, which includes calculating working load limits, knowledge of the installation material being used, and periodic safety inspections. If you lack these qualifications, do not attempt the installation yourself.

4. OPERATING ADJUSTMENTS

The Control Panel

All the features and different modes possible with the ToughPAR™ Neo RGBL 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>

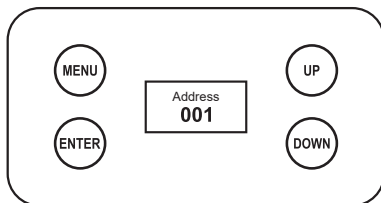
Scrolls through menu items and numbers in ascending order.

<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

Address	001-512		To choose the DMX address	
Static	Red		Red intensity (0% <--> 100%)	
	Green		Green intensity (0% <--> 100%)	
	Blue		Blue intensity (0% <--> 100%)	
	Lime		Lime intensity (0% <--> 100%)	
	Strobe		Flash / strobe speed (0-255)	
	Presets		None, Red, Green, Blue, Lime, RGL, RGB, Yellow, Pink, Cyan, Orange, Violet, Golden, 2700K, 3200K, 4000K, 5500K, 6500K, RGBL	
Set	Calibrate		Set global intensity levels of each color + USE: YES/NO	
	Ch. Mode	4CH	To run in 4-channel mode	
		6CH	To run in 6-channel mode	
		10CH	To run in 10-channel mode	
	Curves	Linear	Linear dimming curve	
		Square	Square law curve	
		Inv. Sq.	Inverse square law curve	
		S-Curve	S-curve	
		Linear (S)	Linear dimming curve (smooth)	
		Square (S)	Square law curve (smooth)	
		Inv Sq (S)	Inverse square law curve (smooth)	
		S-Curve (S)	S-curve (smooth)	
	PWM		1200Hz, 2400Hz, 4000Hz, 12000Hz,16000Hz, 20000Hz	
	Display	On	Menu display is on continually	
		Off (2 Min)	Menu display shuts off after 2 minutes of inactivity	
	Lock	No/Yes	To unlock the menu, press: <UP>, <DOWN>, <UP>, <DOWN>, <ENTER> within 3 seconds each.	
	Rotate	<ENTER>	Select normal or rotate the menu display by 180°	
Intensity	<ENTER>	Adjust the menu brightness intensity level 1-100		
Custom	Color 1-10	<ENTER>	R/G/B/L adjustments for custom colors 1-10	
Auto	Auto 1 - Auto 5	<ENTER>	Auto programs 1-5	
	Auto Speed	<ENTER>	Auto speed 0-255 (fast to slow)	
	Chase 1	<ENTER>	Custom chase program 1	
	Chase 2	<ENTER>	Custom chase program 2	
	Chase 3	<ENTER>	Custom chase program 3	
Program	Chase 1-3	Scene 1-25	Red (0-255)	Auto (None, Auto 1-5)
	Custom chase programs 1-3.	25 scenes for each custom program.	Green (0-255)	Auto Speed (0-255 sec.)
			Blue (0-255)	Time (duration, 0-255 sec.)
			Lime (0-255)	Wait (before fade, 0-255 sec.)
			Strobe (0-255)	Use (use scene, No/Yes)
Info	Software		Software version information	
	Power		Automated overheat protection level (100%/80%/50%)	
	Temp.		Display the internal temperature of the fixture	
	RDM UID		RDM Unique ID (UID)	
Reset	Settings		Restore factory settings	
	Programs		Restore factory program settings	
Send	No/Yes		Sync settings between fixtures via DMX	

DMX Mode

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

Setting the DMX Address:

1.) The default mode for the fixture is DMX, which appears as **001** on the OLED readout.

To select a different DMX address, using the **<MENU>** button, select **Address**, then hit **<ENTER>**. Use the **<UP/DOWN>** buttons to select the correct address, then hit **<ENTER>** to confirm.

Setting the DMX Channel Mode:

1.) To select a DMX channel mode, press the **<MENU>** button, then use the **<UP/DOWN>** buttons until the display reads **Set** and press the **<ENTER>** button. Then use the **<UP/DOWN>** buttons until the display reaches **Ch. Mode**, and press **<ENTER>**. Now press the **<UP/DOWN>** buttons again to highlight your desired DMX channel mode, and press the **<ENTER>** button to confirm.

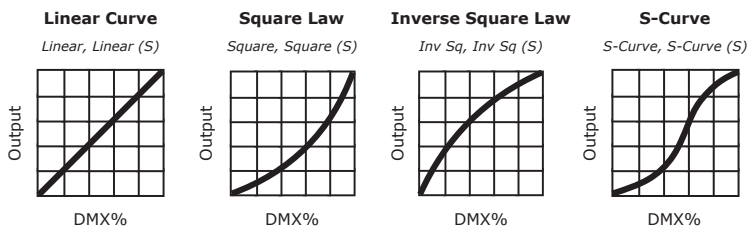
Slave Mode:

1.) Daisy chain the DMX in/out connections on all fixtures.

2.) There is nothing else to it! The first fixture in the DMX chain is the master fixture, and the other fixtures down the line will follow it.

Dimming Mode Settings

Allows users to set the fixture to use 1 of 4 (x2) dimming curve settings for smoother (and slower) dimming capabilities. In the control panel menu, there are two settings for each curve that are distinguishable from one another by the trailing (S).



**The curve settings with the trailing (S) adds a bit more delay to the curve for a smoother effect.*

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Set** and press **<ENTER>**, then **<UP/DOWN>** buttons again to scroll to **Curves**, and press the **<ENTER>** button.

2.) Now use the **<UP/DOWN>** buttons to highlight either **Linear**, **Square**, **Inv Sq**, **S-Curve**, **Linear (S)**, **Square (S)**, **Inv Sq (S)**, or **S-Curve (S)**, then press **<ENTER>**.

Custom Programs

Allows users to create up to 3 customizable, 25 scene programs that are directly accessible via the control panel and also in DMX mode.

Creating A Custom Program:

- 1.) Use the <MENU> and <UP/DOWN> buttons to navigate to **Program**, then press the <ENTER> button.
- 2.) Now use the <UP/DOWN> buttons to highlight your choice of either **Chase 1**, **Chase 2**, or **Chase 3** and press <ENTER>.
- 3.) Start with editing **Scene 1**, customizing it to your liking by using the choices outlined in the table below. You can insert any of its 5 built-in auto programs (**Auto 1-5**), and adjust its speed (**Auto Speed 0-255**), and also set the duration (in seconds) before moving on to the next scene (**Time 0-255**). You can also add a fade in effect to the start of this scene (**Wait 0-255**), and/or strobe (**Strobe 0-255**). Finally, if you want to use this scene in your program, *be sure to enable it (USE: YES/NO)*.
- 4.) Repeat the above process to create up to 25 scenes in each of the 3 customizable programs.

Red Intensity (0-255)	Auto 1-5 (auto programs)	IMPORTANT: <i>If USE is set to NO, or TIME is set to 0, the scene will not run!</i>
Green Intensity (0-255)	Auto Speed (0-255, fast - slow)	
Blue Intensity (0-255)	Time (0-255, scene time in seconds)	
Lime Intensity (0-255)	Wait (0-255, fade in fast to slow)	
Strobe (0-255, slow - fast)	Use (No/Yes) Use scene in program?	

Running A Custom Program:

- 1.) To view your newly created lighting masterpiece, use the <MENU> and <UP/DOWN> buttons to navigate to **Auto**, and press <ENTER>.
- 2.) Use the <UP/DOWN> buttons to highlight your choice of **Chase 1**, **Chase 2**, or **Chase 3** and press <ENTER>. These are directly accessible from the **built-in program channel** in DMX mode.

Auto Mode and Speed Settings

Set single or Master/Slaved units to run automated programs at user-selectable speeds.

Auto Mode:

- 1.) Use the <MENU> and <UP/DOWN> buttons to navigate to navigate to **Auto**, and press the <ENTER> button.
- 2.) Now use the <UP/DOWN> buttons to highlight any program ranging from **Auto 1-5**, and press <ENTER>.

Auto Speed:

- 1.) Use the <MENU> and <UP/DOWN> buttons to navigate to **Auto** and press <ENTER>, then with the <UP/DOWN> buttons navigate to **Auto Speed**, and press the <ENTER> button.
- 2.) Make a selection from **0-255**, and press <ENTER> to choose a speed (fast <--> slow).

Color Calibration Settings

*Allows the user to setup and save 1 customized R/G/B/L color balance setting and save it for future use.
This custom setting is global, and it will effect all modes.*

- 1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Set** and press **<ENTER>**, then while on **Calibrate**, push **<ENTER>** again.
- 2.) Use the **<UP/DOWN>** buttons to highlight either **Red**, **Green**, **Blue**, or **Lime**, then press the **<ENTER>** button.
- 3.) Now using the **<UP/DOWN>** buttons, select the maximum level for each color between 000-255 (000=off), and hit **<ENTER>** to confirm your choice.
- 4.) You have now set up and saved a custom global color calibration setting. To use your custom setting now (or later), press the **<UP/DOWN>** buttons to reach **USE**, and press **<ENTER>**. Then choose either **YES** or **NO** and press **<ENTER>**. Selecting **YES** enables this custom color calibration globally, and choosing **NO** keeps the fixture using the default color calibration settings. Your customized settings will be saved for later use even after powering off the fixture. They can be altered to your liking at any time. Just remember to return to this setting to either enable or disable it when needed.

Custom Static Colors

Allows the user to create and save up to 10 custom static colors for use in standalone or DMX mode.

- 1.) Navigate to **Custom** in the menu and press **<ENTER>**, then use the **<UP/DOWN>** buttons to select a color bank from **Color 1-10**, and push **<ENTER>** to confirm your selection.
- 2.) Now use the **<UP/DOWN>** buttons to highlight either **Red**, **Green**, **Blue**, or **Lime** and then press **<ENTER>**.
- 3.) Using the **<UP/DOWN>** buttons, select the maximum level for each color between 000-255 (000=off), and press **<ENTER>** to confirm your choice(s).
- 4.) These 10 custom colors can be accessed and edited to your liking at any time and will be saved even after powering off the fixture.
- 5.) These static colors are directly accessible from the **Effect Channel** in DMX mode.

Fixture Reset Functions

Allows users to reset the fixture to factory default settings without losing customized settings or to reset the custom programs exclusively.

- 1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Reset** and press **<ENTER>**. Then highlight either **Settings** or **Programs** and press **<ENTER>**.
- 2.) Use the **<UP/DOWN>** buttons to highlight either **Yes** or **No**, then press **<ENTER>**.
- 3.) The **Settings** reset function will reset all default values **except** those in **Address**, **Custom** (10 custom colors), and **Programs** (custom scenes and programs).
- 4.) The **Programs** reset function will only reset all customized program settings found in the **Programs** settings (custom scenes and programs).

Data Sync Feature

Users can transfer their custom settings from one fixture to another via DMX.

- 1.) Disconnect fixtures from any DMX controllers, and link them together via DMX in/out.
- 2.) On the sending fixture (DMX out), navigate the main menu using the **<UP/DOWN>** buttons to reach **Send**, and press the **<ENTER>** button.
- 3.) Select **YES**, and press the **<ENTER>** button to begin the transfer.
- 4.) The information in **Address**, and **Calibrate** will not be sent.
- 5.) After the data has been transferred, the receiving fixture will be automatically be reset.

Fixture Information

These are not editable features, they are for informational purposes only.

- 1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **Info** and press **<ENTER>**. Then use the **<UP/DOWN>** buttons to highlight **Software**, **Power**, or **Temp** and press **<ENTER>**.
- 2.) The **Software** information displays the current software version installed on the fixture, **Temp.** displays the temperature (C) of the LED board, and **Power** displays the fixture's current power level setting. Normally, it will be at 100%, but this fixture has built-in overheat protection that may automatically reduce the output level to 80%, or 50% in high temperature situations.

DMX Values In-Depth (4/6/10-Channel Modes)

4CH	6CH	10CH	Value	What It Does
--	1	1	000 <--> 255	Dimmer (0% <--> 100%)
1	2	2	000 <--> 255	Red Intensity (0% <--> 100%)
2	3	3	000 <--> 255	Green Intensity (0% <--> 100%)
3	4	4	000 <--> 255	Blue Intensity (0% <--> 100%)
4	5	5	000 <--> 255	Lime Intensity (0% <--> 100%)
--	6	6	000 <--> 005 006 <--> 020 021 <--> 060 061 <--> 100 101 <--> 140 141 <--> 180 181 <--> 220 221 <--> 255	Strobe No strobe Non-synchronous strobe (slow <--> fast) Synchronous strobe (slow <--> fast) Electronic sine wave (slow <--> fast) Random strobe (slow <--> fast) Opening pulse (slow <--> fast) Closing pulse (slow <--> fast) Electronic square wave (slow <--> fast)
--	--	7	000 <--> 005 006 <--> 010 011 <--> 015 016 <--> 020 021 <--> 025 026 <--> 030 031 <--> 035 036 <--> 040 041 <--> 045 046 <--> 050 051 <--> 055 056 <--> 060 061 <--> 065 066 <--> 070 071 <--> 075 076 <--> 080 081 <--> 110 111 <--> 115 116 <--> 120 121 <--> 125 126 <--> 130 131 <--> 135 136 <--> 140 141 <--> 145 146 <--> 150 151 <--> 155 156 <--> 160 161 <--> 165 166 <--> 170 171 <--> 175 176 <--> 180 181 <--> 185 186 <--> 190 191 <--> 195 196 <--> 200 201 <--> 220 221 <--> 225 226 <--> 230 231 <--> 235 236 <--> 255	Built-In Programs No Function Color 1 (custom color 1 in menu) Color 2 (custom color 2 in menu) Color 3 (custom color 3 in menu) Color 4 (custom color 4 in menu) Color 5 (custom color 5 in menu) Color 6 (custom color 6 in menu) Color 7 (custom color 7 in menu) Color 8 (custom color 8 in menu) Color 9 (custom color 9 in menu) Color 10 (custom color 10 in menu) Auto 1 Auto 2 Auto 3 Auto 4 Auto 5 Reserved Red Green Blue Lime RGL RGB Yellow Pink Cyan Orange Violet Golden 2700K White 3200K White 4000K White 5500K White 6500K White RGL No Function Custom program 1 (as set in menu) Custom program 2 (as set in menu) Custom program 3 (as set in menu) No Function

DMX Values In-Depth (4/6/10-Channel Modes), continued

4CH	6CH	10CH	Value	What It Does
--	--	8	000 <--> 255	Auto Speed (fast <--> slow)
--	--	9	000 <--> 010 011 012 <--> 050 051 052 <--> 090 091 092 <--> 130 131 132 <--> 170 171 172 <--> 210 211 212 <--> 250 251 <--> 255	Virtual Color Wheel No Function Blue Blue (+ green) Cyan Cyan (- blue) Green Green (+ red) Yellow Yellow (- green) Red Red (+ blue) Magenta Magenta (- red) Blue
--	--	10	000 <--> 010 011 <--> 020 021 <--> 030 031 <--> 040 041 <--> 050 051 <--> 060 061 <--> 070 071 <--> 080 081 <--> 090 091 <--> 255	Dimming Mode Default (as set in the LED menu) Linear curve Square law curve Inverse square law curve S-curve Linear curve (smooth) Square law curve (smooth) Inverse square law curve (smooth) S-curve (smooth) Default (as set in the LED menu)

Troubleshooting

Symptom	Solution
No Light Output	Check power connection and ensure that the fixture is operating under the correct working mode.
Dim Output	Check the overheat protection level in the menu. If it has been triggered, ensure that the fixture has sufficient ventilation.
Chase Speed Too Fast/Slow	Verify that the speed adjustment settings are correct.
Loss of DMX Control	Check the DMX and the power connections to make sure that they are connected. Make sure the DMX address setting is correct. Check to see if the channel mode setting is correct.
No Power	Verify that the power cord and circuit are functioning.
Blown Fuse	Check power cords and circuit for damage.
Fixture Not Responding / Responding Erratically	Make sure all connectors are seated properly and securely. Use only DMX cables and/or check cables for defects. Install a DMX signal terminator. Reset fixture(s).

5. APPENDIX

Keeping Your ToughPAR™ Neo RGBL 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. Cleaning the optics routinely with a suitable glass cleaner will greatly improve the quality of light output.

In transit, keep the fixtures in cases. 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 concentrate on designing a great light show. 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.

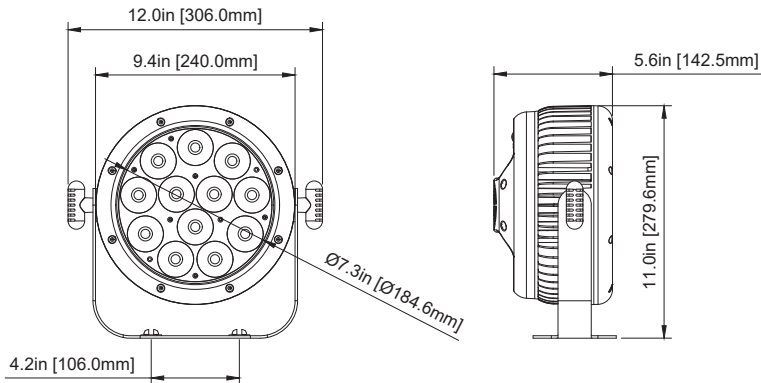
When returning your fixture for service, be sure to include the following:

- 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

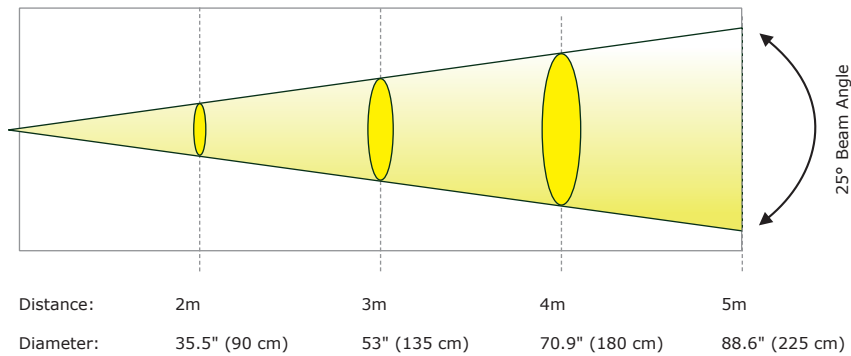
Damage incurred in shipping is the responsibility of the shipper, and must be reported to the carrier immediately upon receipt of the items. Claims must be made within seven (7) days of receipt.



Tech Specs!

Weight & Dimensions	
Width	12 inches (306 mm)
Depth	5.6 inches (142.5 mm)
Height	11 inches (279.6 mm)
Weight	11.1 lbs (5.04 kg)
Power	
Operating Voltage	AC 100V-240V/50-60Hz
Power Consumption	218W, 1.87A, PF: .99
Light Source	
LED	12x 20W RGBL 4-in-1 LEDs, 100,000 hrs.
Optical	
Luminous Intensity	10,662 Lux @ 2.5M, 2,244 Lux @ 5M
Beam Angle	25-degree beam
Thermal	
Max. Operating Temp.	104 degrees F (40 degrees C) ambient
Control	
Protocol	USITT DMX-512, RDM
DMX Channels	4/6/10-channel DMX modes
Input/Output	5-pin XLR Male/Female
Other Operating Modes	DMX512, M/S, Standalone, Auto Mode
Warranty	
2-year limited warranty, does not cover malfunction caused by damage to LEDs.	

Photometric Data



Luminous Intensity:

2-meter			3-meter		4-meter		5-meter	
Beam	Lux	fc	Lux	fc	Lux	fc	Lux	fc
25°	15,700	1,458.6	6,961	646.7	3,919	364.1	2,244	208.4



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