Motif™ metro.

IP65

SUITABLE FOR OUTDOOR USE

blizzard

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TABLE OF CONTENTS

1. GETTING STARTED

What's In The Box?

- 1 x Motif™ Metro
- 1 x IP Rated AC Power Cord
- 2 x Mounting Brackets
- This Lovely User Manual

Getting It Out Of the Box

Congratulations on purchasing the Motif™ Metro, the ultra-bright and durable IP65-rated LED wash fixture. Now that you've got your Motif™ Metro, 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**.

Warning! All fixtures must be connected to circuits with a suitable Ground (Earthing).

Getting A Hold Of Us

If something happens to go wrong, please visit www.blizzardpro.com/support and open a support ticket. We'll be happy to help, honest.

Disclaimer: The information and specifications contained in this document are subject to change without notice. Blizzard Lighting™ assumes no responsibility or liability for any errors or omissions that may appear in this user manual. Blizzard Lighting™ reserves the right to update the existing document or to create a new document to correct any errors or omissions at any time. You can download the latest version of this document from www.blizzardpro.com.

Author:	Date:	Last Edited:	Date:
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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.

• 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.

• ALWAYS secure mounted fixtures with a safety cable. 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 MOTIF™ METRO

Main Features

- 60* 10W ultra-bright 4-in-1 RGBW LEDs
- IP65 rated, suitable for outdoor use
- 7* built-in color presets + color mixing
- Flash, fade, and pulse effects with speed control
- 4* user selectable dimming curves
- 0% - 100% electronic dimming
- 40 degree beam angle, flicker-free LEDs
- 180 degree manual tilt head
- Barndoor attachment for light shaping
- Tough-as-nails aluminum/ABS enclosure
- IP rated locking power and 5-pin DMX connections
- Dual omega brackets with 1/4-turn fasteners

Control

- Protocol: USITT DMX-512
- DMX channels: 4/6/9-channel modes
- 3-pin, IP65-rated DMX input/output
- Easy-to-use 4-button control panel with LCD display
- Operating modes: DMX512, master/slave, auto

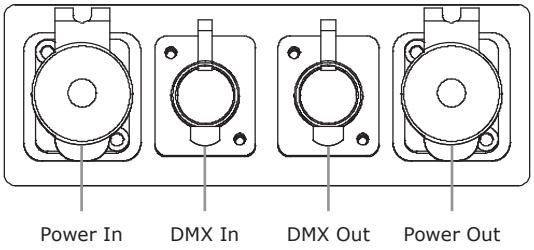
DMX Quick Reference (4/6/9-Channel Modes)

4CH	6CH	9CH	What It Does
--	1	1	Dimmer
--	2	2	Strobe
1	3	3	Red Intensity (0% <--> 100%)
2	4	4	Green Intensity (0% <--> 100%)
3	5	5	Blue Intensity (0% <--> 100%)
4	6	6	White Intensity (0% <--> 100%)
--	--	7	Static Colors
--	--	8	Auto Mode
--	--	9	Auto Speed (slow <--> fast)

Motif™ Metro Pin-Up Picture

Note: If the barndoor assembly is removed, the fastening screws must be installed back into the screw holes, and resealed with a silicone sealant to keep moisture and water from entering the fixture.

The Rear Connections



3. SETUP

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

Fuse Replacement

The Motif™ Metro 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 the fuse require replacement, please contact Blizzard Lighting for instructions, or to return your unit for service.

Connecting A Bunch of Motif™ Metro Fixtures

You will need a serial data link to run light shows using a DMX-512 controller or to run shows on two or more fixtures set to sync in master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Fixtures on a serial data link must be daisy chained in one single line. Also, connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal. The maximum recommended cable-run distance is 500 meters (1640 ft). The maximum recommended number of fixtures on a serial data link is 32 fixtures.

Data/DMX Cabling

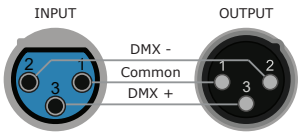
To link fixtures together you'll need data cables. You should use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

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

2-conductor twisted pair plus a shield
Maximum capacitance between conductors – 30 pF/ft.
Maximum capacitance between conductor & shield – 55 pF/ft.
Maximum resistance of 20 ohms / 1000 ft.
Nominal impedance 100 – 140 ohms

Cable Connectors

Cables must have a male XLR connector on one end and a female XLR connector on the other end. (Duh!)



A Word on Termination:

DMX is a resilient communication protocol, however errors still occasionally occur. Termination reduces signal errors, and therefore best practices include use of a terminator in all circumstances. If you are experiencing problems with erratic fixture behavior, especially over long signal cable runs, a terminator may help improve performance.

To build your own DMX Terminator:

Obtain a 120-ohm, 1/4-watt resistor, and wire it between pins 2 & 3 of the last fixture. They are also readily available from specialty retailers.

CAUTION: Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

3-Pin??? 5-Pin??? Huh?!?

If you use a controller with a 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 Link)	Pin 2	Pin 2
Data 1+ (Primary Data Link)	Pin 3	Pin 3
Data 2- (Optional Secondary Data Link)	--	Pin 4 - Do Not Use
Data 2+ (Optional Secondary Data Link)	--	Pin 5 - Do Not Use

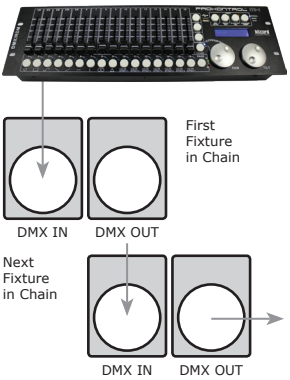
Take It To The Next Level: Setting Up DMX Control

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).

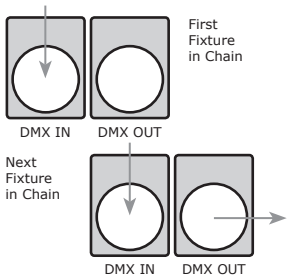
Note: It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture number first, and so on.

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. Secondarily, the fixtures that follow may also require a slave setting.

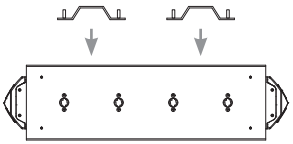
Check the "**Operating Adjustments**" section in this manual for complete instructions for this type of setup and configuration.

Mounting & Rigging

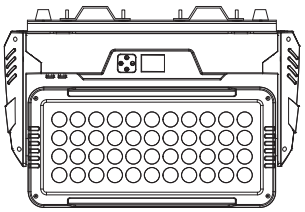
This fixture may be mounted in any SAFE position provided there is enough room for ventilation. The fan or vent pathway must never be obstructed.

A mounting bracket assembly is provided that secures the bottom of the base, the Omega bracket, and the safety cable rigging point together. When mounting to truss, be sure to secure an appropriately rated clamp to the omega bracket.

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



Attach the 2x ¼-turn quick lock Omega brackets to the base, and the clamps to the brackets.



Mount the fixture using a suitable "C" or "O" type clamps. The clamps 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. Improper installation can result in bodily injury.

4. OPERATING ADJUSTMENTS

The Control Panel

All of the features and different modes possible with this fixture are accessed by using the control panel on the front of the fixture. There are 4 control buttons next to 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>

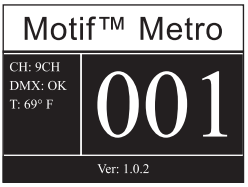
Scrolls through menu items and numbers in ascending order.

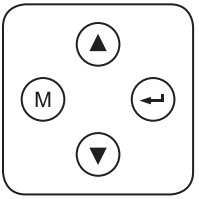
<DOWN>

Scrolls through menu items and numbers in descending order.

<ENTER>

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





The home screen displays the current DMX channel, channel mode, DMX signal verification (OK or No), internal temperature, and software version.

Pressing any button from the home screen will show the selectable menu items from the menu map on page #11. When a menu function is selected, the display will immediately show 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

1. DMX	1. Address	Set the starting address (001-512)
	2. Channel Mode	4-channel
		6-channel
		9-channel
2. Manual	1. Dimmer	Dimmer (0-255)
	2. Strobe	Strobe (slow <-> fast)
	3. Red	Red Intensity (0-255)
	4. Green	Green Intensity (0-255)
	5. Blue	Blue Intensity (0-255)
	6. White	White Intensity (0-255)
3. Auto	1. Run Mode	Stop
		Flash
		Fade
		Pulse
	2. Speed	Auto Speed (0-255)
4. System	1. Host Mode	ON (master)
		OFF
	2. Language	English
		Chinese
	3. Backlight	Off - Blackout LCD after 30s (Auto & Manual modes) or Flash (if Lost DMX)
		On - Always On
	4. Curve	Curve 1 (Square Law)
		Curve 2 (Linear)
		Curve 3 (Inverse Square Law)
		Curve 4 (S-Curve)
	5. Frequency	2K (2,000 Hz, PWM)
		10K (10,000 Hz, PWM)
5. Information	1. Run Time (hrs.)	Displays the total running hours
	2. Software Ver.	Displays the software version

DMX Mode

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

Starting DMX Address

1.) Navigate the main menu until you reach **DMX**, and press the **<ENTER>** button.
2.) Then highlight **Address**, and press **<ENTER>.**
3.) Use the **<UP/DOWN>** buttons to select a starting DMX address ranging from 1-512, and press the **<ENTER>** button to confirm.

DMX Channel Mode

1.) Navigate the main menu until you reach **DMX**, and press the **<ENTER>** button.
2.) Then highlight **Channel Mode**, and press **<ENTER>.**
3.) Use the **<UP/DOWN>** buttons to select **4-channel**, **6-channel**, or **9-channel**, and press the **<ENTER>** button to confirm.

M/S Mode

1.) Daisy chain the DMX input/output connections of the fixtures.
2.) On the 1st fixture, navigate to **System** and press **<ENTER>**.
3.) Use the **<UP/DOWN>** buttons to highlight **Host Mode**, and then press **<ENTER>**. Then highlight **ON**, and press **<ENTER>**.
4.) On following fixtures, verify that this setting is set to **OFF**.
5.) If the DMX signal is lost while operating, it will default to the set Auto Mode, or Manual Mode (Manual Mode if Auto is set to Stop).

Auto Mode & Manual Adjustments

Allows a single or daisy chained units to run factory installed programs.

Auto Mode

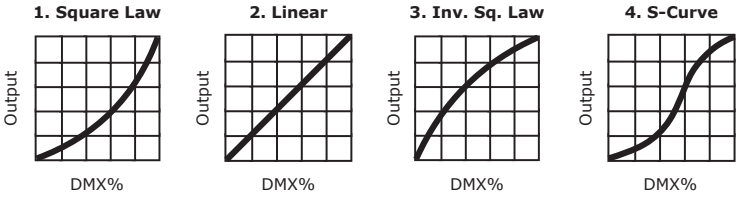
1.) Navigate the main menu until you reach **Auto**, and press the **<ENTER>** button.
2.) Use the **<UP/DOWN>** buttons to highlight **Run Mode**, and press the **<ENTER>** button.
3.) Use the **<UP/DOWN>** buttons to highlight **Flash, Fade, or Pulse**, and press the **<ENTER>** button.
4.) To stop an auto program, use the **<UP/DOWN>** buttons to highlight **Stop**, and press **<ENTER>**.
5.) To adjust the auto speed, highlight **Speed** and press **<ENTER>**.
6.) Now you can adjust the speed from 0-255 (slow <-> fast).

Manual Mode

1.) Navigate to **Manual**, and press **<ENTER>**.
2.) Use the **<UP/DOWN>** buttons to highlight **Dimmer, Strobe, Red, Green, Blue, or White**, and press **<ENTER>**.
3.) Adjust the levels from 0-255, and press the **<ENTER>** button.

Dimming Modes

Allows users to set the fixture to use 1 of 4 dimming curve settings for smoother (and slower) dimming capabilities.



1.) Navigate the main menu until you reach **System**, and press **<ENTER>**.
2.) Then highlight **Curve**, and press the **<ENTER>** button.
3.) Use the **<UP/DOWN>** buttons to select **Curve 1** (Square Law), **Curve 2** (Linear), **Curve 3** (Inverse Square Law), or **Curve 4** (S-Curve), and press the **<ENTER>** button to confirm.

DMX Values In-Depth (4/6/9-Channel Modes)

4CH	6CH	9CH	Value	What It Does
--	1	1	000 <-> 255	Dimmer (0% <--> 100%)
--	2	2		**Strobe**
			000 <-> 003	No Function
			004 <-> 255	Strobe (slow <-> fast)
1	3	3	000 <-> 255	Red Intensity (0% <--> 100%)
2	4	4	000 <-> 255	Green Intensity (0% <--> 100%)
3	5	5	000 <-> 255	Blue Intensity (0% <--> 100%)
4	6	6	000 <-> 255	White Intensity (0% <--> 100%)
--	--	7		**Static Colors**
			000 <-> 031	No Function
			032 <-> 063	Red
			064 <-> 095	Green
			096 <-> 127	Blue
			128 <-> 159	White
			160 <-> 191	Yellow
			192 <-> 223	Magenta
			224 <-> 255	Cyan
--	--	8		**Auto Mode**
			000 <-> 100	No Function
			101 <-> 150	Flash
			151 <-> 200	Fade
			201 <-> 255	Pulse
--	--	9		**Auto Speed**
			000 <-> 255	Speed (slow <-> fast)

5. APPENDIX

Keeping Your Motif™ Metro 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!

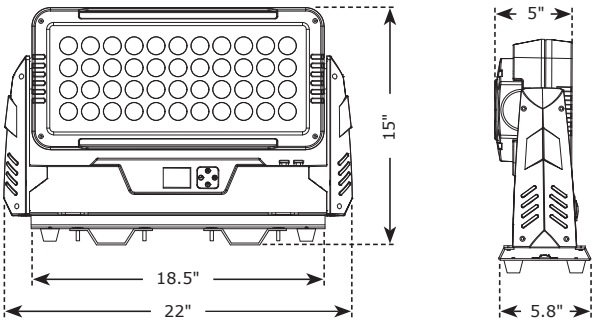
Shipping Issues

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	22 inches (557.5 mm)
Depth	5.8 inches (147 mm)
Height	15 inches (379.5 mm)
Weight	32.75 lbs. (14.86 kg)
Power	
Operating Voltage	100-240VAC, 50-60 Hz
Power Consumption	409W, 3.41A, PF: .99
Light Source	
LED	60* 10W 4-in-1 RGBW LEDs
Optical	
Beam Angle	40° beam angle
Luminous Intensity	13,220 lux @ 2.5-meters 3,414 lux@ 5-meters 1,610 lux @ 7.5-meters 887 lux @ 10-meters
Movement Range	
Tilt	180° manual tilt
Thermal	
Max. Operating Temp.	104° F (40 degrees C) ambient
Control	
Protocol	USITT DMX-512
DMX Channels	4/6/9-channel
Input/Output	3-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