blizzard

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What's In The Box?

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- 1 x Ever-So-Handy Power Cord
- This Lovely User Manual

Getting It Out Of The Box

Congratulations on purchasing the Weather System™ EXA, the most far-out, feature-packed portable LED lighting systems on the market today! Now that you've got your Weather System™ EXA (or hopefully, *EXAs!*), you should carefully unpack the box and check the contents to ensure that all parts are present and in good condition. If anything looks as if it has been damaged in transit, notify the shipper immediately and keep the packing material for inspection. Again, please save the carton and all packing materials. If a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Powering Up!

All fixtures must be powered directly off a switched circuit and **cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch**.

AC Voltage Switch - Not all fixtures have a voltage select switch, so please verify that the fixture you receive is suitable for your local power supply. See the label on the fixture or refer to the fixture's specifications chart for more information. A fixture's listed current rating is its average current draw under normal conditions. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

Warning! *Verify that the voltage select switch on your unit matches the line voltage applied. Damage to your fixture may result if the line voltage applied does not match the voltage indicated on the voltage selector switch. All fixtures must be connected to circuits with a suitable Ground (Earthing).*

Getting A Hold Of Us
If something is wrong, please just visit our website at www.blizzardlighting. 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.blizzardlighting.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.

• 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 this unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please visit http://www.blizzardlighting.com/support.

2. MEET THE WEATHER SYSTEM™ EXA

MAIN FEATURES

- 8 fixtures, each with 3* 15W 6-in-1 RGBAW+UV LEDs, 100,000 hours
- Independent fixture swivel & tilt positioning
- Wireless rechargeable battery powered footswitch
- Built-in color macros and auto programs via DMX
- Color mixing ability in standalone mode
- Easy to use LED digital control panel
- User selectable 32-bit dimming curves
- Flicker-free constant-current 1500HZ LED driver
- Adjustable stand, dual hanging brackets, & carrying case
- 6CH/7CH/12CH/18CH/30CH/48CH or 54-channel DMX modes
- Heavy duty, black aluminum housing
- Natural convection cooled, totally silent operation
- 3-pin XLR input and output connections
- PowerCon™ compatible AC power In/Out connectors

DMX Quick Reference - 54/48/30/18-Channel Modes

54CH	48CH	30CH	18CH	What it Does	54CH	48CH	30CH	18CH	What it Does
1	--	1	1	Dimmer	28	27	--	--	Blue 5
2	1	2	2	Red 1	29	28	--	--	Amber 5
3	2	3	3	Green 1	30	29	--	--	White 5
4	3	4	4	Blue 1	31	30	--	--	UV 5
5	4	5	5	Amber 1	32	31	--	--	Red 6
6	5	6	6	White 1	33	32	--	--	Green 6
7	6	7	7	UV 1	34	33	--	--	Blue 6
8	7	8	8	Red 2	35	34	--	--	Amber 6
9	8	9	9	Green 2	36	35	--	--	White 6
10	9	10	10	Blue 2	37	36	--	--	UV 6
11	10	11	11	Amber 2	38	37	--	--	Red 7
12	11	12	12	White 2	39	38	--	--	Green 7
13	12	13	13	UV 2	40	39	--	--	Blue 7
14	13	14	--	Red 3	41	40	--	--	Amber 7
15	14	15	--	Green 3	42	41	--	--	White 7
16	15	16	--	Blue 3	43	42	--	--	UV 7
17	16	17	--	Amber 3	44	43	--	--	Red 8
18	17	18	--	White 3	45	44	--	--	Green 8
19	18	19	--	UV 3	46	45	--	--	Blue 8
20	19	20	--	Red 4	47	46	--	--	Amber 8
21	20	21	--	Green 4	48	47	--	--	White 8
22	21	22	--	Blue 4	49	48	--	--	UV 8
23	22	23	--	Amber 4	50	--	26	14	Strobe/Shutter
24	23	24	--	White 4	51	--	27	15	Auto
25	24	25	--	UV 4	52	--	28	16	Auto Color
26	25	--	--	Red 5	53	--	29	17	Auto Speed
27	26	--	--	Green 5	54	--	30	18	32-bit Dimming
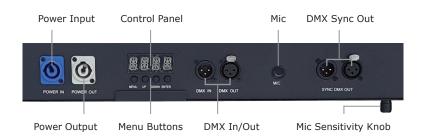
DMX Quick Reference - 12/7/6-Channel Modes

CH	12-Channel Mode	7-Channel Mode	6-Channel Mode
1	Dimmer	Dimmer	Red Intensity
2	Red Intensity	Red Intensity	Green Intensity
3	Green Intensity	Green Intensity	Blue Intensity
4	Blue Intensity	Blue Intensity	Amber Intensity
5	Amber Intensity	Amber Intensity	White Intensity
6	White Intensity	White Intensity	UV Intensity
7	UV Intensity	UV Intensity	--
8	Strobe/Shutter	--	--
9	Auto	--	--
10	Auto Color	--	--
11	Auto Speed	--	--
12	32-bit Dimming	--	--

Figure 1: The Weather System™ EXA Pin-Up Picture

Mounting
Bracket

Mounting
Bracket

24x 15-Watt
RGBAW+UV 6-in-1 LEDs

3.6 to 6.3 Foot
Adjustable Tripod
Lighting Stand

Figure 2: The Rear Connections

Power Input

Control Panel

Mic

DMX Sync Out

POWER IN   POWER OUT

MENU UP DOWN ENTER

DMX IN   DMX OUT

MIC

SYNC DMX OUT

Power Output

Menu Buttons

DMX In/Out

Mic Sensitivity Knob

3. SETUP

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

Fuse Replacement

CAUTION! The Weather System™ EXA 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 Weather System™ fuse require replacement, please contact Blizzard Lighting for instructions, or to return for service.

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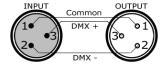
To link fixtures together you'll need data cables. You should use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

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.

120-ohm, 1/4-watt resistor

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:
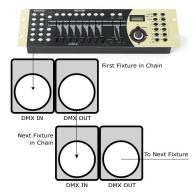
Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data 1- (Primary Data Link)	Pin 2	Pin 2
Data 1+ (Primary Data Link)	Pin 3	Pin 3
Data 2- (Optional Secondary Data Link)	Pin 4	Pin 4
Data 2+ (Optional Secondary Data Link)	Pin 5	Pin 5

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.
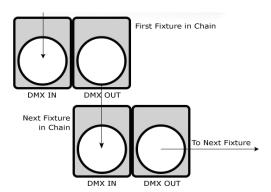
Step 2: Connect the female connector of the DMX cable to the first fixture's male connector (input). *Note:* It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture 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.

First Fixture in Chain

DMX IN   DMX OUT

Next Fixture in Chain

To Next Fixture

DMX IN   DMX OUT

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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.

First Fixture in Chain

DMX IN   DMX OUT

Next Fixture in Chain

DMX IN   DMX OUT

To Next Fixture

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 suitable "C" or "O" type clamps. Clamps 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.

• When mounting the head, 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 Weather System™ EXA 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>
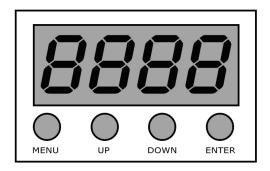
Scrolls through menu items and numbers in ascending order.

<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>**.

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.

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Control Panel Menu Structure

ADDR	001-512		\<ENTER\>	To choose the DMX address
STAT	R		0-255	Red intensity (0% <--> 100%)
	G		0-255	Green intensity (0% <--> 100%)
	B		0-255	Blue intensity (0% <--> 100%)
	A		0-255	Amber intensity (0% <--> 100%)
	W		0-255	White intensity (0% <--> 100%)
	UV		0-255	UV intensity (0% <--> 100%)
	SHUT		0-255	Flash / strobe speed (slow <--> fast)
SET	CHMD (channel mode)		54CH	54-channel mode
			48CH	48-channel DMX mode
			30CH	30-channel DMX mode
			18CH	18-channel DMX mode
			12CH	12-channel DMX mode
			7CH	7-channel DMX mode
			6CH	6-channel DMX mode
	DIM (dimming mode)		LIN	Linear
			SQR	Square law
			ISQR	Inverse square law
			SCUR	S-curve
			LIN.	Linear (smooth)
			SQR.	Square law (smooth)
			ISQR.	Inverse square law (smooth)
			SCUR.	S-curve (smooth)
	DISY (display set)		ON	LED menu display is continually on
			2M	LED menu display off after 2 minutes
	WADD (wireless address)		0-F	Set to match the footswitch frequency address
AUTO	INTE (intensity)		0-255	Set the intensity level (dim to bright)
	ACCT		No/1-255	Automatic color change after set number of auto loops
	ATMD (auto mode)		STEP	Auto Step Mode (individual steps)
			0SHT	Auto "One Shot" Mode (run program once)
			LOOP	Auto Loop (loop program)
			BPM	Beats Per Minute (tap sync)
	AT01		0-255	Auto program 1, speed (0-255)
	AT02		0-255	Auto program 2, speed (0-255)
	AT03		0-255	Auto program 3, speed (0-255)
	AT04		0-255	Auto program 4, speed (0-255)
	AT05		0-255	Auto program 5, speed (0-255)
	AT06		0-255	Auto program 6, speed (0-255)
	AT07		0-255	Auto program 7, speed (0-255)
	AT08		0-255	Auto program 8, speed (0-255)
	AT09		0-255	Auto program 9, speed (0-255)
	AT10		0-255	Auto program 10, speed (0-255)
	AT11		0-255	Auto program 11, speed (0-255)
	AT12		0-255	Auto program 12, speed (0-255)
	AT13		0-255	Auto program 13, speed (0-255)
	AT14		0-255	Auto program 14, speed (0-255)
	AT15		0-255	Auto program 15, speed (0-255)
	AT16		0-255	Auto program 16, speed (0-255)
	AT17		0-255	Auto program 17, speed (0-255)
	AT18		0-255	Auto program 18, speed (0-255)
	AT19		0-255	Auto program 19, speed (0-255)
	AT20		0-255	Auto program 20, speed (0-255)
	AT21		0-255	Auto program 21, speed (0-255)
	AT22		0-255	Auto program 22, speed (0-255)
	SOU1		\<ENTER\>	Sound Active Mode 1 (color changing)
	SOU2		\<ENTER\>	Sound Active Mode 2 (white strobe)
	SOU3		\<ENTER\>	Sound Active Mode 3 (color chase)
INFO	SOFT		Vx.x	Software version information
	POW		\<ENTER\>	Display current power reduction percentage
LOAD	YES/NO		\<ENTER\>	Reset all factory defaults (except for ADDR and WADD)

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DMX Mode

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

Setting the Starting DMX Address:

1.) To select a starting DMX address for your fixture, navigate the main menu to reach **ADDR**, then press **<ENTER>**. Now use the **<UP/DOWN>** buttons to select any stating DMX address value ranging between **001-512**, then press **<ENTER>** to confirm your choice.

Setting the DMX Channel Mode:
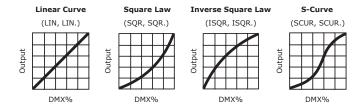
1.) To select a DMX channel mode, navigate the main menu to reach **SET**, then press **<ENTER>**. Then use the **<UP/DOWN>** buttons to highlight **CHMD,** and press **<ENTER>**. From here you can select your desired DMX channel mode, and press **<ENTER>** to confirm.

Slave Mode:

1.) Daisy chain the fixtures via **DMX In/Out**, with the controller at the beginning.
2.) Set starting DMX channels and DMX channel modes all to match the master fixture.
3.) The first fixture in the DMX chain is the master fixture, and the following are slave fixtures. For **wireless footswitch** master/slave setup, see **Footswitch Setup** on page 13.

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 dot.

Linear Curve	**Square Law**	**Inverse Square Law**	**S-Curve**
(LIN, LIN.)	(SQR, SQR.)	(ISQR, ISQR.)	(SCUR, SCUR.)

*The curve settings with the trailing dot 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 **DIM**, and press the **<ENTER>** button.
2.) Now use the **<UP/DOWN>** buttons to highlight either **LIN** (Linear), **SQR** (Square), **ISQR** (Inverse Square), **SCUR** (S-Curve), **LIN.** (Smooth Linear), **SQR.** (Smooth Square), **ISQR.** (Smooth Inverse Square), or **SCUR.** (Smooth S-Curve), then hit **<ENTER>**.

Static Colors and Strobe Effects:

Allows the user to manually adjust RGBAW+UV color balance and strobe.

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **STAT** and press **<ENTER>**, then **<UP/DOWN>** buttons to select **R/G/B/A/W/UV** or **SHUT** (strobe) and press the **<ENTER>** button.
2.) Now use the **<UP/DOWN>** buttons to highlight any value ranging from **0-255** to adjust the intensity level, and press the **<ENTER>** button to confirm.

LED Display On/Off:

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **SET** and press **<ENTER>**, then navigate to **DISY**, and press the **<ENTER>** button.
2.) In **DISY,** you can set the LED menu display to be continually on by selecting **ON**, or shut off after 2 minute of inactivity by selecting **2MIN**. Press **<ENTER>** to confirm.

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Auto Mode and Auto Speed Settings:

Set single or Master/Slaved units to run in auto mode 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 **AT01-AT22,** and press **<ENTER>**.

3.) From here, you can now adjust the auto speed. Use the **<UP/DOWN>** buttons to select a value ranging from 0-255 (fast <--> slow), and press **<ENTER>** to confirm.

4.) In this same menu level as **AT01-AT22,** you can also edit **INTE** (overall LED intensity output level: 0-255), **ACCT** (color change after set number of loops: 1-255), and **ATMD** which allows for 4 different auto mode selection types: **STEP** (individual steps, triggered by **TAP SYC** on footswitch), **1SHT** (run program once, triggered by **TAP SYC** on footswitch), **LOOP** (loops a running auto program), and **BPM** (auto-run speed will match the rate that the **TAP SYC** footswitch is tapped on, either fast or slow).

Sound Active Mode:

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **AUTO** and press **<ENTER>**, then with the **<UP/DOWN>** buttons navigate to **SOU1** (color change)**, or SOU2** (white strobe only), and press the **<ENTER>** button.

Fixture Reset Functions:

Allows users to reset the fixture to factory default settings with the exception ADDR or WADD.

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **LOAD** and press **<ENTER>**, then use the **<UP/DOWN>** buttons to highlight **YES** or **NO**, then press **<ENTER>**.

2.) The reset function will reset all default values *with the exception of* those in **ADDR** (address), and **WADD** (wireless address).

Footswitch Setup:

Set the Footswitch Wireless Address:

1.) Navigate the main menu of the fixture(s) to be controlled by the footswitch to reach **SET** and then press **<ENTER>**.

2.) Use the **<UP/DOWN>** buttons to scroll to **WADD**, and press **<ENTER>**.

3.) Now use the **<UP/DOWN>** buttons to select any frequency from **0-F**, and press **<ENTER>**.

4.) On the footswitch, use the channel selection button to choose the same frequency that is set on the fixture(s) from **0-F**.

Master/Slave Multiple Wireless Fixtures

1.) Set the WADD (wireless address) of master fixture as 0.

2.) Set the address of the foot pedal to 0.

3.) Set the WADD of the slave fixture to anything other than 0.

4.) Set the DMX address on both fixtures to 001.

5.) Set the channel mode (CHMD) on both fixtures to 48ch.

6.) Connect a 3-Pin DMX cable from the Sync DMX output of the master fixture and plug it into the DMX Input of the slave.

*Note #1: When the footswitch channel selection button is **not in use for 10s,** the LED display will change and revert to showing the remaining battery power level from **0-9**.*

*Note #2: The first fixture in the DMX chain is the only fixture needing to use the **Sync Dmx Out** port. Both of the **Sync Dmx Out** rear connections (male and female) are **outputs**.*

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The Weather System™ EXA Footswitch Controller

Important: Be sure to swivel the antennas of the footswitch and fixture(s) to their outward extended positions to ensure the best possible signal reception. And note that when the channel selection button of the footswitch is not in use for 10s, the LED display will show the remaining battery power level from 0-9.

Pedal 1: Mode

The mode switch gives you the option to select built-in auto programs and sound active modes. After the first press to activate it, continue to use the mode switch to cycle through all of its built-in programs ranging from **AT01-AT22**, then its sound active modes **SOU1-SOU3**. The running speed for each auto program can be adjusted using the fixture's LED control panel menu, or by using the Tap Sync switch when the auto mode is set to loop.

Pedal 2: Color

When you step on the color switch, it triggers an instant change in color to any running auto program. Tip: for full fixture solid color control with no chase patterns, set the fixture to Auto Mode: Loop, then Program 1 (**AT01**), and use the color switch to change color.

Pedal 3: Blackout

When you step on the blackout footswitch, it will blackout the currently running program. Step on this pedal again, and the Weather System™ EXA will continue running the program where it left off.

Pedal 4: Tap Sync

When **ATMD** (auto mode) in the control panel menu is set to **LOOP**, the Tap Sync footswitch adjusts the running speed **(0-255)**, then step on the **Mode** switch to save. When **ATMD** is set to **STEP** (individual steps), **ONE-SHOT** (run program once), or **BPM** (tap controlled speed) the Tap Sync switch will trigger an action.

Charging the Battery

The battery in the wireless footswitch controller can last up to 18 hours on a single charge. You can use the included USB to Micro-USB cable to charge it via USB port, or plug it into a standard wall socket using the included USB-AC Adapter. A full battery charge can take up to 5 hours, and the charge LED indicator will illuminate green when complete.

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DMX Value In-Depth Reference Guide

Function	Value	What It Does
Dimmer	000 <--> 255	(0% <--> 100%)
Red Intensity	000 <--> 255	(0% <--> 100%)
Green Intensity	000 <--> 255	(0% <--> 100%)
Blue Intensity	000 <--> 255	(0% <--> 100%)
Amber Intensity	000 <--> 255	(0% <--> 100%)
White Intensity	000 <--> 255	(0% <--> 100%)
UV Intensity	000 <--> 255	(0% <--> 100%)
Strobe	000 <--> 020	No strobe
	021 <--> 060	Normal strobe (slow <--> fast)
	061 <--> 100	Electronic sine wave (slow <--> fast)
	101 <--> 140	Random strobe (slow <--> fast)
	141 <--> 180	Opening pulse (slow <--> fast)
	181 <--> 220	Closing pulse (slow <--> fast)
	221 <--> 255	Electronic square wave (slow <--> fast)
Effect	000 <--> 005	No Function
	006 <--> 010	AUTO1: Footswitch triggered; LOOP: open, 0SHT/STEP: flash
	011 <--> 015	AUTO2: One fixture step running
	016 <--> 020	AUTO3: Two fixture step running
	021 <--> 025	AUTO4: Two fixture two space step running
	026 <--> 030	AUTO5: Four fixture step running
	031 <--> 035	AUTO6: Fixture 1 to 8 open then dark
	036 <--> 040	AUTO7: Fixture 1 to 8 open then 8 to 1 open
	041 <--> 045	AUTO8: Two fixture random
	046 <--> 050	AUTO9: One fixture random
	051 <--> 055	AUTO10: Center to side open then dark
	056 <--> 060	AUTO11: Side to center open then dark
	061 <--> 065	AUTO12: Fixture 1 to 8 open
	066 <--> 070	AUTO13: Two fixture left to right open
	071 <--> 075	AUTO14: Two fixture left to right open then reverse
	076 <--> 080	AUTO15: Fixture 1 to 8 step running then reverse
	081 <--> 085	AUTO16: Fixture 1 to 8 open then dark with background color
	086 <--> 090	AUTO17: Two fixture left to right with background color
	091 <--> 095	AUTO18: Fixture 1 to 8 open with background color
	096 <--> 100	AUTO19: Four piece step running with background color
	101 <--> 105	AUTO20: Center to side with background color
	106 <--> 110	AUTO21: Each fixture changes color individually
	111 <--> 115	AUTO22: Auto programs AT01-AT20
	116 <--> 235	No Function
	236 <--> 240	Sound active mode 1 (color change)
	241 <--> 245	Sound active mode 2 (white strobe)
	246 <--> 250	Sound active mode 3 (color chase)
	251 <--> 255	No Function
Auto Color	000 <--> 010	No Function
	011 <--> 020	Red
	021 <--> 030	Green
	031 <--> 040	Blue
	041 <--> 050	Amber
	051 <--> 060	White
	061 <--> 070	UV
	071 <--> 080	Red + Green
	081 <--> 090	Red + Blue
	091 <--> 100	Green + Blue
	101 <--> 110	Red + Amber
	111 <--> 120	RGBAW+UV
	121 <--> 130	Orange
	131 <--> 140	Magenta
	141 <--> 255	No Function
Auto Speed	000 <--> 255	Auto Speed (fast <--> slow)
Dimming Mode	000 <--> 010	**32-Bit Dimmer**
	011 <--> 020	As set in the control menu display
	021 <--> 030	Linear curve not smooth
	031 <--> 040	Square law curve not smooth
	041 <--> 050	Inverse square law curve not smooth
	051 <--> 060	S-curve not smooth
	061 <--> 070	Linear curve and smooth
	071 <--> 080	Square law curve and smooth
	081 <--> 090	Inverse square law curve and smooth
	091 <--> 255	S-curve and smooth

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DMX In-Depth Reference: 54-Channel Mode

Channel	Name	Channel	Name
1	Dimmer (0%<--> 100%)	28	Blue 5 (0%<--> 100%)
2	Red 1 (0%<--> 100%)	29	Amber 5 (0%<--> 100%)
3	Green 1 (0%<--> 100%)	30	White 5 (0%<--> 100%)
4	Blue 1 (0%<--> 100%)	31	UV 5 (0%<--> 100%)
5	Amber 1 (0%<--> 100%)	32	Red 6 (0%<--> 100%)
6	White 1 (0%<--> 100%)	33	Green 6 (0%<--> 100%)
7	UV 1 (0%<--> 100%)	34	Blue 6 (0%<--> 100%)
8	Red 2 (0%<--> 100%)	35	Amber 6 (0%<--> 100%)
9	Green 2 (0%<--> 100%)	36	White 6 (0%<--> 100%)
10	Blue 2 (0%<--> 100%)	37	UV 6 (0%<--> 100%)
11	Amber 2 (0%<--> 100%)	38	Red 7 (0%<--> 100%)
12	White 2 (0%<--> 100%)	39	Green 7 (0%<--> 100%)
13	UV 2 (0%<--> 100%)	40	Blue 7 (0%<--> 100%)
14	Red 3 (0%<--> 100%)	41	Amber 7 (0%<--> 100%)
15	Green 3 (0%<--> 100%)	42	White 7 (0%<--> 100%)
16	Blue 3 (0%<--> 100%)	43	UV 7 (0%<--> 100%)
17	Amber 3 (0%<--> 100%)	44	Red 8 (0%<--> 100%)
18	White 3 (0%<--> 100%)	45	Green 8 (0%<--> 100%)
19	UV 3 (0%<--> 100%)	46	Blue 8 (0%<--> 100%)
20	Red 4 (0%<--> 100%)	47	Amber 8 (0%<--> 100%)
21	Green 4 (0%<--> 100%)	48	White 8 (0%<--> 100%)
22	Blue 4 (0%<--> 100%)	49	UV 8 (0%<--> 100%)
23	Amber 4 (0%<--> 100%)	50	Strobe
24	White 4 (0%<--> 100%)	51	Effect
25	UV 4 (0%<--> 100%)	52	Auto Color (fast <--> slow)
26	Red 5 (0%<--> 100%)	53	Auto Speed (fast <--> slow)
27	Green 5 (0%<--> 100%)	54	32-Bit Dimming Modes

DMX In-Depth Reference: 48-Channel Mode

Channel	Name	Channel	Name
1	Red 1 (0%<--> 100%)	25	Red 5 (0%<--> 100%)
2	Green 1 (0%<--> 100%)	26	Green 5 (0%<--> 100%)
3	Blue 1 (0%<--> 100%)	27	Blue 5 (0%<--> 100%)
4	Amber 1 (0%<--> 100%)	28	Amber 5 (0%<--> 100%)
5	White 1 (0%<--> 100%)	29	White 5 (0%<--> 100%)
6	UV 1 (0%<--> 100%)	30	UV 5 (0%<--> 100%)
7	Red 2 (0%<--> 100%)	31	Red 6 (0%<--> 100%)
8	Green 2 (0%<--> 100%)	32	Green 6 (0%<--> 100%)
9	Blue 2 (0%<--> 100%)	33	Blue 6 (0%<--> 100%)
10	Amber 2 (0%<--> 100%)	34	Amber 6 (0%<--> 100%)
11	White 2 (0%<--> 100%)	35	White 6 (0%<--> 100%)
12	UV 2 (0%<--> 100%)	36	UV 6 (0%<--> 100%)
13	Red 3 (0%<--> 100%)	37	Red 7 (0%<--> 100%)
14	Green 3 (0%<--> 100%)	38	Green 7 (0%<--> 100%)
15	Blue 3 (0%<--> 100%)	39	Blue 7 (0%<--> 100%)
16	Amber 3 (0%<--> 100%)	40	Amber 7 (0%<--> 100%)
17	White 3 (0%<--> 100%)	41	White 7 (0%<--> 100%)
18	UV 3 (0%<--> 100%)	42	UV 7 (0%<--> 100%)
19	Red 4 (0%<--> 100%)	43	Red 8 (0%<--> 100%)
20	Green 4 (0%<--> 100%)	44	Green 8 (0%<--> 100%)
21	Blue 4 (0%<--> 100%)	45	Blue 8 (0%<--> 100%)
22	Amber 4 (0%<--> 100%)	46	Amber 8 (0%<--> 100%)
23	White 4 (0%<--> 100%)	47	White 8 (0%<--> 100%)
24	UV 4 (0%<--> 100%)	48	UV 8 (0%<--> 100%)

DMX In-Depth Reference: 30-Channel Mode

Channel	Name	Channel	Name
1	Dimmer (0%<--> 100%)	16	Blue 3 (0%<--> 100%)
2	Red 1 (0%<--> 100%)	17	Amber 3 (0%<--> 100%)
3	Green 1 (0%<--> 100%)	18	White 3 (0%<--> 100%)
4	Blue 1 (0%<--> 100%)	19	UV 3 (0%<--> 100%)
5	Amber 1 (0%<--> 100%)	20	Red 4 (0%<--> 100%)
6	White 1 (0%<--> 100%)	21	Green 4 (0%<--> 100%)
7	UV 1 (0%<--> 100%)	22	Blue 4 (0%<--> 100%)
8	Red 2 (0%<--> 100%)	23	Amber 4 (0%<--> 100%)
9	Green 2 (0%<--> 100%)	24	White 4 (0%<--> 100%)
10	Blue 2 (0%<--> 100%)	25	UV 4 (0%<--> 100%)
11	Amber 2 (0%<--> 100%)	26	Strobe
12	White 2 (0%<--> 100%)	27	Effect
13	UV 2 (0%<--> 100%)	28	Auto Color (fast <--> slow)
14	Red 3 (0%<--> 100%)	29	Auto Speed (fast <--> slow)
15	Green 3 (0%<--> 100%)	30	32-Bit Dimming Modes

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DMX In-Depth Reference: 18/12-Channel Modes

18-Channel	Name	12-Channel	Name
1	Dimmer (0%<--> 100%)	1	Dimmer (0%<--> 100%)
2	Red 1 (0%<--> 100%)	2	Red (0%<--> 100%)
3	Green 1 (0%<--> 100%)	3	Green (0%<--> 100%)
4	Blue 1 (0%<--> 100%)	4	Blue (0%<--> 100%)
5	Amber 1 (0%<--> 100%)	5	Amber (0%<--> 100%)
6	White 1 (0%<--> 100%)	6	White (0%<--> 100%)
7	UV 1 (0%<--> 100%)	7	UV (0%<--> 100%)
8	Red 2 (0%<--> 100%)	8	Strobe
9	Green 2 (0%<--> 100%)	9	Effect
10	Blue 2 (0%<--> 100%)	10	Auto Speed (fast <--> slow)
11	Amber 2 (0%<--> 100%)	11	Virtual Color Wheel
12	White 2 (0%<--> 100%)	12	32-Bit Dimming Modes
13	UV 2 (0%<--> 100%)	--	--
14	Strobe	--	--
15	Effect	--	--
16	Auto Color (fast <--> slow)	--	--
17	Auto Speed (fast <--> slow)	--	--
18	32-Bit Dimming Modes	--	--

DMX In-Depth Reference: 7/6-Channel Modes

7-Channel	Name	6-Channel	Name
1	Dimmer (0%<--> 100%)	1	Red (0%<--> 100%)
2	Red (0%<--> 100%)	2	Green (0%<--> 100%)
3	Green (0%<--> 100%)	3	Blue (0%<--> 100%)
4	Blue (0%<--> 100%)	4	Amber (0%<--> 100%)
5	Amber (0%<--> 100%)	5	White (0%<--> 100%)
6	White (0%<--> 100%)	6	UV (0%<--> 100%)
7	UV (0%<--> 100%)	---	---

5. APPENDIX

A Quick Lesson On DMX

DMX (aka DMX-512) was created in 1986 by the United States Institute for Theatre Technology (USITT) as a standardized method for connecting lighting consoles to lighting dimmer modules. It was revised in 1990 and again in 2000 to allow more flexibility. The Entertainment Services and Technology Association (ESTA) has since assumed control over the DMX512 standard. It has also been approved and recognized for ANSI standard classification.

DMX covers (and is an abbreviation for) Digital MultipleXed signals. It is the most common communications standard used by lighting and related stage equipment.

DMX provides up to 512 control "channels" per data link. Each of these channels was originally intended to control lamp dimmer levels. You can think of it as 512 faders on a lighting console, connected to 512 light bulbs. Each slider's position is sent over the data link as an 8-bit number having a value between 0 and 255. The value 0 corresponds to the light bulb being completely off while 255 corresponds to the light bulb being fully on.

DMX data is transmitted at 250,000 bits per second using the RS-485 transmission standard over two wires. As with microphone cables, a grounded cable shield is used to prevent interference with other signals.

There are five pins on a DMX connector: a wire for ground (cable shield), two wires for "Primary" communication which goes from a DMX source to a DMX receiver, and two wires for a "Secondary" communication which goes from a DMX receiver back to a DMX source. Generally, the "Secondary" channel is not used so data flows only from sources to receivers. Hence, most of us are most familiar with DMX-512 as being employer over typical 3-pin "mic cables," although this does not conform to the defined standard.

DMX is connected using a daisy-chain configuration where the source connects to the input of the first device, the output of the first device connects to the input of the next device, and so on. The standard allows for up to 32 devices on a single DMX link.

Troubleshooting

Symptom	Solution
No Light Output	Check to ensure fixture is operating under correct mode, IE sound active/auto/DMX/Etc., if applicable.
Chase Speed Too Fast/Slow	Check to ensure proper setup of speed adjustment.
Bad Wireless Reception	Make sure the antenna on fixture(s) and footswitch are swiveled to their outward position. Improve the line-of-sight between units.
Blown Fuse	Check AC cord and circuit for damage, verify that moving parts are not restricted and that unit's ventilation is not obstructed
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 and/or check cables for defects Install a Terminator. Reset fixture(s).

Keeping Your Weather System™ EXA 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 go to our website and open a support ticket at www.blizzardlighting.com/support, 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.
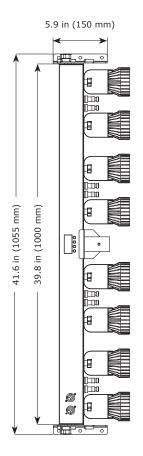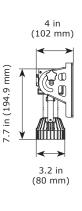
Tech Specs!

Weight & Dimensions	
Width	41.6 inches (1055 mm)
Depth	4 inches (102 mm)
Height	Fixture: 7.7 inches (194.9 mm) Minimum height w/stand: 3.6 ft (110 cm) Maximum height w/stand: 6.3 ft (190 cm)
Weight	14.8 lbs. (6.7 kg)

Power	
Operating Voltage	100-264VAC, 47-63 Hertz
Power Consumption	210W, 1.73A, PF: .99

Light Source	
LED	24* 15W 6-in-1 RGBAW+UV LEDs, 100,000 hours

Optical							
Beam Angle	25° beam angle						
UV Wavelength	380-400 nm						
Luminous Intensity	Lux/m	Red	Green	Blue	Amber	White	All
	1M	1,810	2,677	2,518	1,357	3,024	11,220
	2M	754	1,143	1,038	569	1,321	4,570

Wireless Footswitch	
Charge Input Voltage	5V input (not to exceed 6V)
Charge Time	5 hours
Battery Duration	18 hours
Frequency Band	2.4 GHz

Thermal	
Max. Operating Temp.	104 degrees F (40 degrees C) ambient

Control	
Protocol	USITT DMX-512
DMX Channels	6CH/7CH/12CH/18CH/30CH/48CH or 54-channel
Input	3-pin XLR Male
Output	3-pin XLR Female
Other Operating Modes	Standalone, Master/Slave, Sound Active, Color Preset

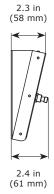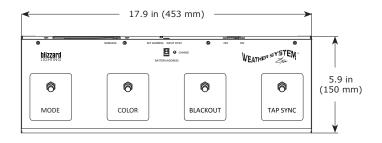| Other Information	
I keep all my best selfies in a folder titled "funeral slideshow".	
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LEDs.

DISCLAIMER:
The power connector 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 power-CON® are registered trademarks of Neutrik AG.

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Dimensional Drawings

5.9 in (150 mm)

4 in (102 mm)

7.7 in (194.9 mm)

41.6 in (1055 mm)

39.8 in (1000 mm)

3.2 in (80 mm)

2.3 in (58 mm)

2.4 in (61 mm)

17.9 in (453 mm)

WIRELESS   SET ADDRESS   INPUT DC5V   OFF   ON

blizzard
LIGHTING

CHARGE
BATTERY/ADDRESS

WEATHER SYSTEM
EXA

5.9 in (150 mm)

MODE   COLOR   BLACKOUT   TAP SYNC

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