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

TOURNADO™

ZOOM RGBAW

IP65

SUITABLE FOR OUTDOOR USE

blizzard LIGHTING

Blizzard Lighting, LLC
www.blizzardlighting.com
Waukesha, WI USA

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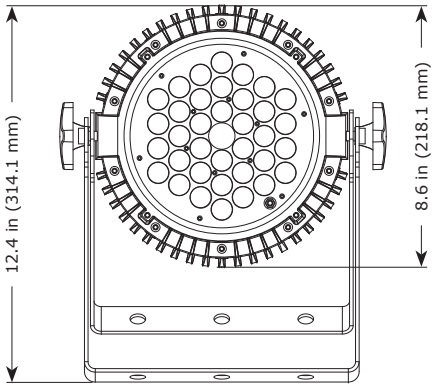
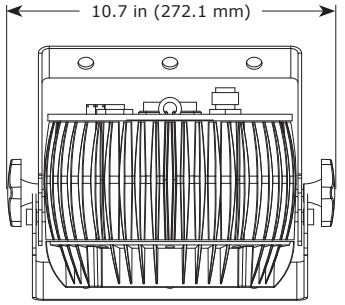
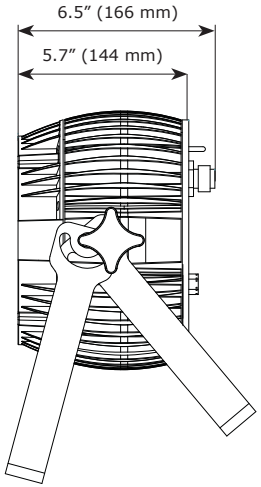
Dimensional Drawings







Tech Specs!

Weight & Dimensions							
Width	10.7 inches (272.1 mm)						
Depth	5.7 inches (144 mm)						
Height	12.4 in (314.1 mm)						
Weight	11.5 lbs. (5.2 kg)						
Power							
Operating Voltage	100-264VAC, 47-63 Hertz						
Power Consumption	82W, 1.07A, PF: .62						
Light Source							
LED	36x 3W R/G/B/A/W LEDs, 100,000 hours						
Optical							
Beam Angle	25 degree optics standard						
Luminous Intensity	Lux/m	Red	Green	Blue	Amber	White	All
Narrow	1M	4,740	8,190	8,510	2,804	9,800	34,200
	2M	1,503	2,567	2,728	1,034	3,588	10,900
Wide	1M	1,377	2,316	2,385	1,203	2,728	8,430
	2M	347	602	668	326	839	2,512
Thermal							
Max. Operating Temp.	104 degrees F (40 degrees C) ambient						
Control							
Protocol	USITT DMX-512						
DMX Channels	5/7/9 or 11-channel						
Input	3-pin XLR Male						
Output	3-pin XLR Female						
Other Operating Modes	Standalone, Master/Slave, Color Preset						
Other Information							
I just wanted this to be in the user manual.							
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LEDs.						

1. GETTING STARTED

What's In The Box?

- 1 x Tournado™ Zoom RGBAW Fixture
- An Ever-So-Handy Power Cord
- One Really Classy DMX Cable
- This Lovely User Manual

Getting It Out Of The Box

Congratulations! You're now the proud owner of one tough, slightly pumpkin shaped PAR fixture! Now that you've got your TOURnado™ (or hopefully, TOURnados!), 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:
J. Thomas	10/13/2016	J. Thomas	10/13/2016

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 or replacing fuse and be sure to replace with same fuse size and type.

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

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

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

- NEVER connect the device to a dimmer pack.

- Make sure the power cord is never crimped or damaged.

- Never disconnect the power cord by pulling or tugging on the cord.

- Avoid direct eye exposure to the light source while it is on.

Caution! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please open a support ticket at www.blizzardlighting.com/support.

Keeping Your Tournado™ Zoom RGBAW 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.

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
Fixture Auto-Shut Off	Check the fan in the fixture. If it is stopped or moving slower than normal, the unit may have shut itself off due to high heat. This is to protect the fixture from overheating. Clear the fan of obstructions, or return the unit for service.
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.
No Power	Check fuse, AC cord and circuit for malfunction.
Blown Fuse	Check AC cord and circuit for damage, verify that moving parts are not restricted and that unit's ventilation is not obstructed
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).

2. MEET THE TOURNADO™ ZOOM RGBAW

MAIN FEATURES

- IP65 rated with 36x 3W R/G/B/A/W LEDs, 100,000 hours
- Built-in auto programs in standalone and M/S
- Color mixing ability in standalone mode
- Preset or user adjustable white balance settings
- Fixture data sync upload feature
- User selectable 32-bit dimming curves
- USITT DMX-512 (5/7/9/11 Channels)

OPTICAL:

- 36x 3w LEDs: Red(6), Green(8), Blue(8), Amber(6), White(8)
- Beam Angle: 10º-40º
- Flicker-free, constant-current LED driver (PWM >400Hz)

ADDITIONAL FEATURES

- LED control panel with 4* touch sensitive buttons
- Natural convection cooled, totally silent operation
- Dual mounting brackets for positioning flexibility
- 3-pin XLR input and output connections
- PowerCon™ compatible AC power In/Out connectors

DMX Quick Reference - 11/9/7-Channel Modes

Channel	11-Channel	9-Channel	7-Channel
1	Dimmer	Dimmer	Dimmer
2	Red Intensity	Red Intensity	Red Intensity
3	Green Intensity	Green Intensity	Green Intensity
4	Blue Intensity	Blue Intensity	Blue Intensity
5	Amber Intensity	Amber Intensity	Amber Intensity
6	White Intensity	White Intensity	White Intensity
7	Strobe	Strobe	Zoom
8	Zoom	Zoom	---
9	Built-in Programs	32-bit Dimming + Reset	---
10	Auto Speed	---	---
11	32-bit Dimming + Reset	---	---

DMX Quick Reference - 5-Channel Mode

Channel	5-Channel
1	Red Intensity
2	Green Intensity
3	Blue Intensity
4	Amber Intensity
5	White Intensity

Figure 1: The Tournado™ Zoom Pin-Up Picture

Figure 2: The Rear Connections

DMX Values In-Depth (5/7/9/11-Channel Modes)

5CH	7CH	9CH	11CH	Value	What It Does
--	1	1	1	000 <--> 255	**Dimmer (0% <--> 100%)**
1	2	2	2	000 <--> 255	**Red Intensity (0% <--> 100%)**
2	3	3	3	000 <--> 255	**Green Intensity (0% <--> 100%)**
3	4	4	4	000 <--> 255	**Blue Intensity (0% <--> 100%)**
4	5	5	5	000 <--> 255	**Amber Intensity (0% <--> 100%)**
5	6	6	6	000 <--> 255	**White Intensity (0% <--> 100%)**
--	--	7	7	 000 <--> 010 011 <--> 255	**Strobe** No Function Strobe (Slow <--> Fast)
--	7	8	8	 000 <--> 255	**Zoom** Focus/Zoom (Wide <--> Narrow)
--	--	--	9	 000 <--> 010 011 <--> 020 021 <--> 030 031 <--> 040 041 <--> 050 051 <--> 060 061 <--> 070 071 <--> 080 081 <--> 090 091 <--> 100 101 <--> 110 111 <--> 120 121 <--> 130 131 <--> 140 141 <--> 150 151 <--> 160 161 <--> 170 171 <--> 180 181 <--> 190 191 <--> 200 201 <--> 210 211 <--> 255	**Built-In Programs** No Function White 1: 3200K White 2: 3400K White 3: 4200K White 4: 4900K White 5: 5600K White 6: 5900K White 7: 6500K White 8: 7200K White 9: 8000K White 10: 8500K Auto 1 Auto 2 Auto 3 Auto 4 Auto 5 Auto 6 Auto 7 Auto 8 Auto 9 Auto 10 (Auto modes 1-9) No Function
--	--	--	10	 0 <--> 255	**Auto Speed** Auto 1-10 Speed (fast <--> slow)
--	--	9	11	 000 <--> 010 011 <--> 020 021 <--> 030 031 <--> 040 041 <--> 050 051 <--> 060 061 <--> 254 255	**32-Bit Dimmer** As set in the control menu display Dimmer off (no delay) Mode 1 Mode 2 Mode 3 Mode 4 (slowest delay) As set in the control menu display Fixture reset after 5 seconds

Fixture Reset Functions:

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

Fixture Reset

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

Restore Factory Program Settings

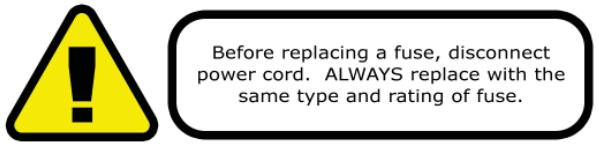
1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **LOAD** and press **<ENTER>**, then use the **<UP/DOWN>** buttons to highlight **YES** or **NO**, and press **<ENTER>**.
2.) Use the **<UP/DOWN>** buttons to highlight either **YES** or **NO**, then press **<ENTER>**.
3.) The reset function will reset all of the factory default values ***with the exception of*** those in **ADDR** (address).

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.) Information for **ADDR** (address), or **CAL** (calibrate) will not be sent.
5.) After the data has been transferred, the receiving fixture will be automatically be reset.

3. SETUP



Fuse Replacement

CAUTION! The Tournado™ Zoom RGBAW 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 Tournado™ Zoom RGBAW fuse require replacement, please contact Blizzard Lighting for instructions, or to return your unit for service.

Connecting A Bunch of Tournado™ Zoom RGBAW 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

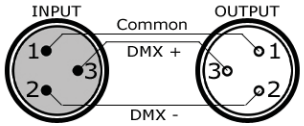
To link fixtures together you'll need data cables. You should use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

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

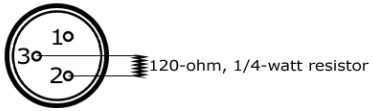
Cable Connectors

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 5-pin DMX output connector, it's no problem! you can simply use the installed 5-pin DMX input and/or output connections found on the back of your fixture(s).

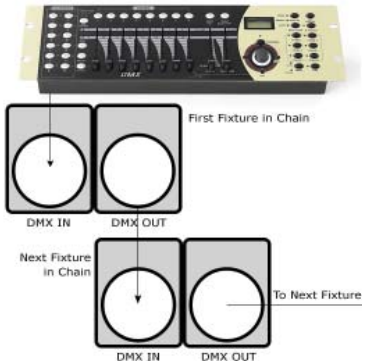
Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data 1- (Primary Data Link)	Pin 2	Pin 2
Data 1+ (Primary Data Link)	Pin 3	Pin 3
Data 2- (Optional Secondary Data Link)	Pin 4	Pin 4
Data 2+ (Optional Secondary Data Link)	Pin 5	Pin 5

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.



Color Temperature Based White Balance:

This is used to setup and store up to 10 separate custom white balance settings using R/G/B/A/W values.

1.) Press the **<MENU>** button, then use the **<UP/DOWN>** buttons until the display reads **WTST** and press the **<ENTER>** button.
2.) Then use the **<UP/DOWN>** buttons to choose from **WT01** to **WT10** and press **<ENTER>**.
3.) Press the **<UP/DOWN>** buttons until the display reads **RED** (Red intensity, 0-255), **GREN** (Green intensity, 0-255), **BLUE** (Blue intensity, 0-255), **WHIT** (White intensity, 0-255), or **AMB** (Amber intensity, 0-255) and adjust to your desired values.
4.) Push the **<ENTER>** button to confirm your choice.

Color Calibration Settings:

Allows the user to setup and save 1 customized R/G/B/A/W 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 **CAL** and press **<ENTER>**.
2.) Use the **<UP/DOWN>** buttons to highlight either **RED** (red), **GREN** (green), **BLUE** (blue), **AMB** (amber), or **WHIT** (white), then press **<ENTER>**.
3.) Now using the **<UP/DOWN>** buttons, select the maximum level for each color between 000-255 (000=off), and press **<ENTER>** to confirm your choice.
4.) You have now just setup and saved a custom global color calibration setting that you can use at you convenience. To use your custom setting now (or later), press the **<UP/DOWN>** buttons to reach **USE**, and press **<ENTER>**. Then choose either **ON** or **OFF** and press **<ENTER>**. When you select **ON,** it enables this custom color calibration globally, and when choosing **OFF** the fixture will use the default settings. Your customized settings will be saved for later use even after powering off the fixture. It can be altered to your liking at any time. Just remember to return to this setting to either enable or disable it when needed.

Manual Color Mixing, Zoom, and Strobe:

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **STAT** and press **<ENTER>**, then **<UP/DOWN>** buttons to select any color and press **<ENTER>**. Adjust the intensity level values from **0-255** to your liking and press **<ENTER>** to save.
2.) In the same manner, you can adjust **ZOOM** (zoom level), or select **SHUT** to add strobe.

32-Bit Dimmer Mode Settings:

- Dimming Mode 1 = 32-bit, 0-25% intensity range
- Dimming Mode 2 = 32-bit, 0-50% intensity range
- Dimming Mode 3 = 32-bit, 0-75% intensity range
- Dimming Mode 4 = 32-bit, full intensity dimming

1.) Press the **<MENU>** button, then use the **<UP/DOWN>** buttons until the display reads **DIM** and press the **<ENTER>** button.
2.) Then use the **<UP/DOWN>** buttons to choose from **DIM1** to **DIM4** .
3.) Push the **<ENTER>** button to confirm your choice.

DMX Mode

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

Setting the DMX Address:

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

Setting the DMX Channel Mode:

1.) To select a DMX channel mode, navigate the main menu to reach **CHMD**, then hit **<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 fixtures DMX in/out, having the controller at the beginning of the line.
2.) There is nothing else to it! The first fixture in the DMX chain is the master fixture, and the following fixtures will follow the master.

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-AT10,** 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 **SP**, and press the **<ENTER>** button.
2.) Make a selection from **0-255,** and press **<ENTER>** to choose a speed.

LED Display On/Off:

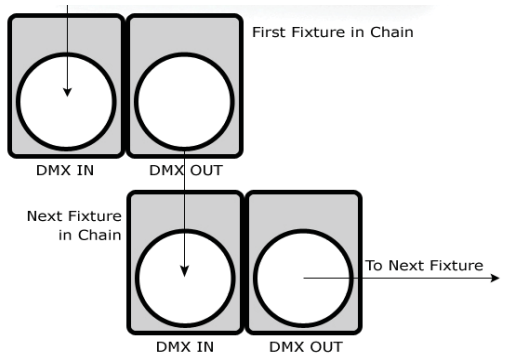
1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **DISY**, and press the **<ENTER>** button.
2.) Select **ON** or **1M**, and press **<ENTER>** to save. Setting to **ON** will keep the display on continually. Setting to **1M** will turn off the display after 1 minute of inactivity.

Auto Lock Key Setting:

1.) Use the **<MENU>** and **<UP/DOWN>** buttons to navigate to **LOCK**, and press the **<ENTER>** button.
2.) Select **YES** or **NO**, and press **<ENTER>** to save. Setting to **YES** will disable the functionality of the buttons after 2 minutes of inactivity. To exit the locked state, press: **<MENU>**, **<UP>**, **<DOWN>**, **<ENTER>, <MENU>**, **<UP>**, **<DOWN>**, **<ENTER>, <MENU>**, **<UP>**, **<DOWN>**, **<ENTER>** with no longer than 2 seconds between each button press.

Fixture Linking (Master/Slave Mode)

1. Connect the (male) 3-pin connector side of the DMX cable to the output (female) 3-pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3-pin connector to the input connector of the next fixture consisting of a (male) 3-pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.



A quick note: Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via either settings in the control panel or DIP-switches. Secondarily, the fixtures that follow may also require a slave setting.

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

Mounting & Rigging

This fixture may be mounted in any SAFE position provided there is enough room for ventilation.

It is important never to obstruct the fan or vents pathway. Mount the fixture using a suitable "C" or "O" type clamp. The clamp should be rated to hold at least 10x the fixture's weight to ensure structural stability. Do not mount to surfaces with unknown strength, and ensure properly "rated" rigging is used when mounting fixtures overhead.

Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

- When selecting installation location, take into consideration lamp replacement access (if applicable) and routine maintenance.
- Safety cables MUST ALWAYS be used.
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

4. OPERATING ADJUSTMENTS

The Control Panel

All the goodies and different modes possible with the Tournado™ Zoom 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>

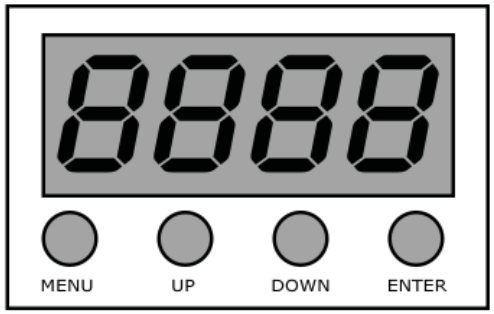
Scrolls through menu items and numbers in ascending order.

<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.

Control Panel Menu Structure

ADDR	001-512	To choose the DMX address
STAT	RED	Red intensity (0% <--> 100%)
	GREN	Green intensity (0% <--> 100%)
	BLUE	Blue intensity (0% <--> 100%)
	AMB	Amber intensity (0% <--> 100%)
	WHIT	White intensity (0% <--> 100%)
	SHUT	Flash / strobe speed (slow <--> fast)
	ZOOM	Zoom (wide <--> narrow)
AUTO	AT01	Auto program 1
	AT02	Auto program 2
	AT03	Auto program 3
	AT04	Auto program 4
	AT05	Auto program 5
	AT06	Auto program 6
	AT07	Auto program 7
	AT08	Auto program 8
	AT09	Auto program 9
	AT10	Auto program 10
	SP	Auto speed (0-255)
WTST	**<ENTER>**	White Balance Setting - R/G/B/A/W (000-255)
CAL	RED	Red intensity (0% <--> 100%)
	GREN	Green intensity (0% <--> 100%)
	BLUE	Blue intensity (0% <--> 100%)
	AMB	Amber intensity (0% <--> 100%)
	WHIT	White intensity (0% <--> 100%)
	USE	Use custom global RGBAW caliberation (YES/NO)
CHMD	11CH	11-channel DMX mode
	9CH	9-channel DMX mode
	7CH	7-channel DMX mode
	5CH	5-channel DMX mode
DIM	OFF	Dimming off (no deleay)
	DIM1	Dimming mode 1
	DIM2	Dimming mode 2
	DIM3	Dimming mode 3
	DIM4	Dimming mode 4 (slowest delay)
DISY	ON	LED menu display is continually on
	1M	LED menu display off after 1 minute
LOAD	YES/NO	Restore factory program settings
REST	YES/NO	Reset fixture
SEND	YES/NO	Sync settings between fixtures via DMX
LOCK	YES/NO	Unlock code: **<MENU>**, **<UP>**, **<DOWN>**, **<ENTER>**... 3x in a row within 2 seconds between each button press.
TEM	**<ENTER>**	LED board temperature in Celsius degrees (xxx C)
POW	**<ENTER>**	Displays the current power output level (xxx%)