TORRENT™

KEYFRAME 600

❄ blizzard

TABLE OF CONTENTS

1. GETTING STARTED

What's Included?

- 1 x Torrent™ Keyframe 600
- 1 x Power Cord
- 2 x Mounting Brackets
- 1 x User Manual
- 1 x ATA Spec Road Case

Unpacking Instructions

Congratulations on purchasing Torrent™ Keyframe 600, professional framing spot fixture. Now that you've got your Torrent™ Keyframe 600, you should carefully unpack it 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 and keep any packing material for inspection. If a fixture must be returned to the factory, it is important that the fixture be returned in its original packaged condition.

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, visit 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.

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J. Thomas	2/4/2021	J. Thomas	2/4/2021

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 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! With the exception of removing the covers for general maintenance and cleaning as outlined in this manual, 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 TORRENT™ KEYFRAME 600

Main Features

- 600W, 6500K white LED light source
- 4 blade framing shutter system with rotation (+/- 45°)
- Rotating gobo wheel with 6 gobos (2 glass & 4 metal) +open
- Fixed gobo wheel with 8 metal gobos +open
- 6 color wheel + white (open)
- CMY + CTO color mixing system
- Variable CRI filter (71 ~ 91)
- P/T ranges: 540°, 360°, 180° pan / 270°, 180°, 90° tilt
- 16-bit smooth dimming + 4 selectable dimming curves
- 7-40° linear motorized zoom
- Frost, iris, and continuous animation effect wheel
- 3-facet circular + 4-facet linear rotating prisms
- 0-25Hz strobe + variable, pulse, and random effects
- Flicker-free + 6 PWM setting options
- 8-16 bit focus (1M to infinite + auto)
- 6-button control panel with touchscreen LCD display
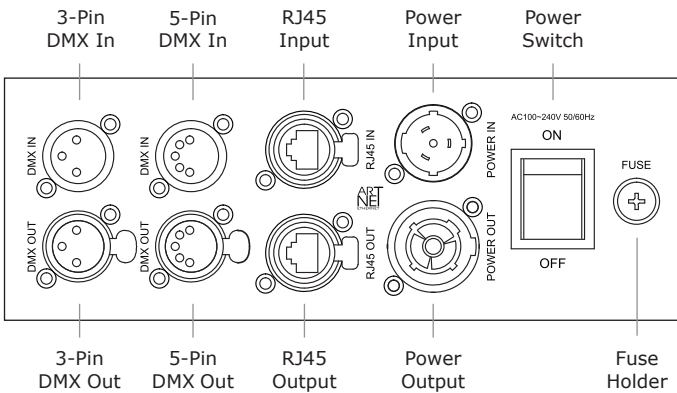- Protocol: USITT DMX-512, Art-Net, sACN, RDM

DMX Quick Reference (36/52-Channel Modes)

36CH	52CH	What It Does	36CH	52CH	What It Does
1	1	Pan	--	27	Blade 2, Motor 2 (fine)
2	2	Pan (fine)	22	28	Blade 3, Motor 1
3	3	Tilt	--	29	Blade 3, Motor 1 (fine)
4	4	Tilt (fine)	23	30	Blade 3, Motor 2
5	5	Pan/Tilt Speed	--	31	Blade 3, Motor 2 (fine)
6	6	Dimmer	24	32	Blade 4, Motor 1
--	7	Dimmer (fine)	--	33	Blade 4, Motor 1 (fine)
7	8	Strobe	25	34	Blade 4, Motor 2
8	9	Cyan	--	35	Blade 4, Motor 2 (fine)
9	10	Magenta	26	36	Frame Rotation
10	11	Yellow	--	37	Frame Rotation (fine)
11	12	CTO	27	38	Focus
12	13	Color Wheel	--	39	Focus (fine)
13	14	Gobo Wheel #1	--	40	Auto Focus
14	15	Gobo Rotation	28	41	Zoom
--	16	Gobo Rotation (fine)	--	42	Zoom (fine)
15	17	Gobo Wheel #2	29	43	Prism 1
16	18	Animation Wheel	30	44	Prism 1 Rotation
17	19	Animation Wheel Rotate	31	45	Prism 2
18	20	Blade 1, Motor 1	32	46	Prism 2 Rotation
--	21	Blade 1, Motor 1 (fine)	33	47	Iris
19	22	Blade 1, Motor 2	34	48	Frost Filter
--	23	Blade 1, Motor 2 (fine)	35	49	CRI Filter
20	24	Blade 2, Motor 1	--	50	CMY Macros
--	25	Blade 2, Motor 1 (fine)	--	51	CMY Macro Speed
21	26	Blade 2, Motor 2	36	52	Control Functions

Torrent™ Keyframe 600 Pin-Up Picture

600W, 6500K
White LED

Head

Arms

Pan/Tilt
Lock

Carry
Handle

Control Panel
Menu

001

The Rear Connections

3-Pin DMX In	5-Pin DMX In	RJ45 Input	Power Input	Power Switch

DMX IN
DMX IN
RJ45 IN
POWER IN
AC100~240V 50/60Hz
ON
FUSE

ART
NET

DMX OUT
DMX OUT
RJ45 OUT
POWER OUT
OFF

3-Pin DMX Out	5-Pin DMX Out	RJ45 Output	Power Output	Fuse Holder

3. SETUP

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

Fuse Replacement

Remove the fuse holder from of its housing. Then take out the damaged fuse from its holder and replace with exact same type of fuse. Reattach the fuse holder, and then reconnect power.

Connecting A Bunch of Torrent Keyframe 600's

This fixture can receive DMX, Art-Net, or sCAN signals. It is equipped with both 3-pin and 5-pin DMX input/output, and RJ45 input/output connections.

DMX Connections

To link fixtures together via DMX, 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.

Connect your controller to the DMX input of the first fixture, and then the DMX output of the first fixture to the DMX input of the next in line. Continue to connect the outputs to the inputs of any following fixtures until all are connected together. Up to 32 fixtures, or 1,000 feet of total cable length (whichever comes first) can be connected.

Note: We recommended the use of a DMX terminator on the last fixture.

Art-Net™ and sACN

This fixture is equipped with an RJ45 input socket for Ethernet input connection and RJ45 output socket for daisy chaining fixtures.

Art-Net™ communication protocol is a 10 Base T Ethernet protocol based on the TCP/IP. Its purpose is to allow transfer of large amounts of DMX-512 data over a wide area using standard network technology.

To configure the fixture network settings for use with Art-Net™ or sACN, navigate the main menu to reach Network Setup where you can adjust the IP Mode (Manual, DHCP, or Static), Universe, IP, and the SubMask settings (see Control Panel Menu Structure, p.11).

Mounting Points

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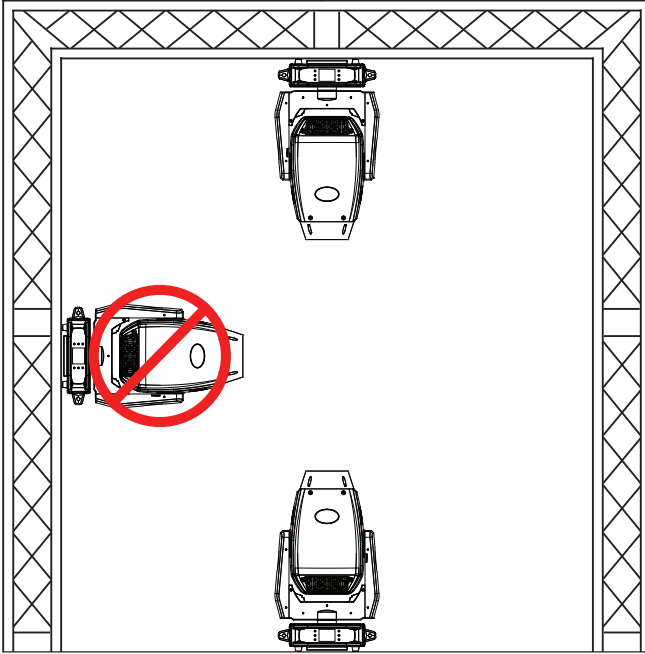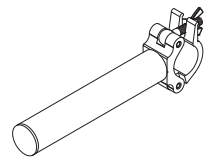

This unit can be mounted upside down, or upright on a flat level surface. Due to the inertia of the fixture when it moves and its weight, sideways mounting is not recommended.

Be sure the fixture is kept at least 12m (40ft) away from any flammable materials, and always install a safety cable as a measure to prevent accidental damage and/or injury if the clamps fail.

Instead of sideways mounting, you may consider hanging the fixture vertically on an sidearm rated for at least 200 lbs.

Caution!

Please be aware, you should have a qualified electrician performing all of your electrical connection needs.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Clamp Mounting

This fixture provides a mounting bracket assembly that secures the bottom base, mounting brackets, and safety cable rigging point together. When mounting to truss, be sure to use an appropriately rated clamp fitted through the center hole of the mounting bracket.

1.) Clamp
2.) Mounting bracket
3.) ¼ Turn quick lock fasteners
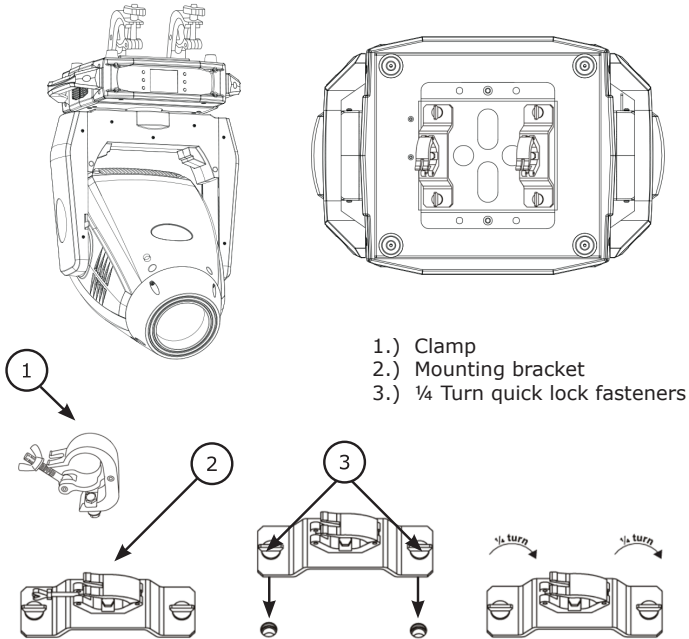
Securing the Fixture

Regardless of the rigging option you choose for your fixtures, always be sure to secure them with a safety cable. Be sure to use the designated rigging point found on the underside of the base assembly for the safety cable.

1. Attach clamps to both brackets through the hole in the bracket.

2. Fasten the mounting brackets to the base by inserting the quick-lock fasteners into the holes, and turn them clockwise to tighten.

3. Hang the fixture using the clamps and tighten. Fasten a safety cable through the bottom of the base, and over the support.

4. OPERATING ADJUSTMENTS

The Control Panel

All the features and different modes possible with Torrent™ Keyframe 600 can be accessed by using the control panel on the front of the fixture. It has a touchscreen display, and 6 control buttons. Navigate the display by using the buttons, or touching the desired menu option on the display. The touchscreen can be calibrated and locked in the settings options in the menu.

<UP>

Scrolls through menu items and numbers in ascending order.

<MENU>

Is used to navigate to the previous higher-level menu item.

<DOWN>

Scrolls through menu items and numbers in descending order.

<LEFT>

Navigates through menu items moving towards the left.

<ENTER>

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

<RIGHT>

Navigates through menu items moving towards the right.
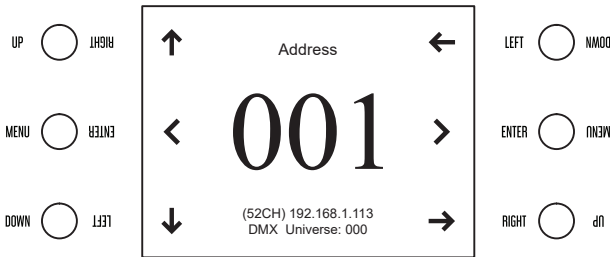
The control panel LCD display shows the menu items you select from the menu map on page #11. When a menu function is selected, the display will immediately show the first available options for the selected menu function. To select a menu item, press **<ENTER>**.

Use the touchscreen icons, or the **<UP>**, **<DOWN>**, **<LEFT>**, and **<RIGHT>** buttons to navigate the menu options. Press **<ENTER>** 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.

Note: The screen invert settings of **NO/YES** or **AUTO** can be adjusted by navigating to **Settings** > **Screen Reverse**.

Control Panel Menu Structure

Address	001-512		Set the starting address	
Network Setup	IP Mode		Manual (manually set IP address)	
			DHCP (network sets IP address)	
			Static (product sets IP address)	
	Universe		0-255/1-256	
	IP		002.243.075.222	
	SubMask		255.000.000.000	
Personality	DMX Mode		36CH/52CH	
Settings	Control Mode		DMX/ArtNet/sACN	
	Pan Reverse		NO/YES	
	Tilt Reverse		NO/YES	
	Screen Reverse		NO/YES/AUTO	
	Pan Angle		540/360/180	
	Tilt Angle		270/180/90	
	BL. O. P/T Move		NO/YES (p/t movement blackout)	
	BL. O. Color Move		NO/YES (color movement blackout)	
	BL. O. Gobo Move		NO/YES (gobo movement blackout)	
	Calibration		NO/YES (calibrate touchscreen)	
	Touchscreen Lock		NO/YES (touchscreen on/off)	
	Swap XY		NO/YES (swap pan/tilt)	
	Backlight Timer		30s/1m/5m/ON	
	Loss of Data		Hold (last signal) / Close (blackout)	
	Fans		Auto/Full/ECO (ECO = quiet mode)	
	Theatrical Dimming		ON/OFF	
	Dimmer Curve		Linear/Square/I Square/S-Curve	
	Dimmer Speed		Smooth/Fast	
	PWM Option (Hz)		600/1200/2000/4000/6000/15000	
	Reset Function		Pan/Tilt	Frost/Animation
			Iris/Prism	All
			Color/CMY/Blade	Factory Settings
			Gobo/Gobo Rot.	
Test	Auto Test		NO/YES (auto test all functions)	
	Manual Test (0-255, manually test all settings using the control panel)			
	Pan	Gobo	Blade 2-2 Fine	Focus Auto
	Fine Pan	Gobo Rotate	Blade 3-1	Zoom
	Tilt	Gobo Index	Blade 3-1 Fine	Zoom Fine
	Fine Tilt	Gobo 2	Blade 3-2	Prism
	P/T Speed	Animation	Blade 3-2 Fine	Prism Rotate
	Dimmer	Animation Rotate	Blade 4-1	Prism 2
	Dimmer Fine	Blade 1-1	Blade 4-1 Fine	Prism 2 Rotate
	Shutter	Blade 1-1 Fine	Blade 4-2	Iris
	Cyan	Blade 1-2	Blade 4-2 Fine	Frost
	Magenta	Blade 1-2 Fine	Blade Rotate	CRI Filter
	Yellow	Blade 2-1	Blade Rotate Fine	CMY Macro
	CTO	Blade 2-1 Fine	Focus	CMY Macro Speed
	Color	Blade 2-2	Focus Fine	Special Function
Info	Fixture Information (shows current information)		Ver (version)	IP
			Running Mode	SubMask
			DMX Address	MAC
			Temperature	Error Info
			Fixture Hours	--
	Channel Information (shows all current values from input signals)			
Calibration	Password: **3323**. Hold menu key for 2s on the standby screen to reset.			

DMX Values In-Depth (36/52-Channel Modes)

| 36CH	52CH	Value	What It Does
1	1	000 <-> 255	Pan
2	2	000 <-> 255	Fine Pan (16-bit)
3	3	000 <-> 255	Tilt
4	4	000 <-> 255	Fine Tilt (16-bit)
5	5	000 <-> 255	Pan/Tilt Speed (fast <-> slow)
6	6	000 <-> 255	Dimmer
--	7	000 <-> 255	Fine Dimmer (16-bit)
7	8		**Strobe**
		000 <-> 003	Closed
		004 <-> 007	Open
		008 <-> 076	Strobe
		077 <-> 145	Pulse (slow <-> fast)
		146 <-> 215	Random (slow <-> fast)
		216 <-> 255	Open
8	9	000 <-> 255	Cyan (0% <--> 100%)
9	10	000 <-> 255	Magenta (0% <--> 100%)
10	11	000 <-> 255	Yellow (0% <--> 100%)
11	12	000 <-> 255	CTO (0% <--> 100%)
12	13		**Color Wheel**
		000 <-> 007	Open
		008 <-> 015	Red
		016 <-> 023	Green
		024 <-> 031	Blue
		032 <-> 039	Yellow
		040 <-> 047	Orange
		048 <-> 059	Magenta
		060 <-> 187	Index Rotation (0-360º)
		188 <-> 219	Forward Scroll (fast <-> slow)
		220 <-> 223	Stop
		224 <-> 255	Backwards Scroll (slow <-> fast)
13	14		**Gobo Wheel #1 (Rotating)**
		000 <-> 008	Open
		009 <-> 017	Gobo 1 - Red Gatling Gun
		018 <-> 026	Gobo 2 - Blue Sun
		027 <-> 035	Gobo 3 - Quarter Circle
		036 <-> 044	Gobo 4 - Waves
		045 <-> 053	Gobo 5 - Vortex
		054 <-> 063	Gobo 6 - Dotted Bar
		064 <-> 073	Gobo 6 Shake - Dotted Bar
		074 <-> 082	Gobo 5 Shake - Vortex
		083 <-> 091	Gobo 4 Shake - Waves
		092 <-> 100	Gobo 3 Shake - Quarter Circle
		101 <-> 109	Gobo 2 Shake - Blue Sun
		110 <-> 118	Gobo 1 Shake - Red Gatling Gun
		119 <-> 127	Open
		128 <-> 191	Counterclockwise Scroll (slow <-> fast)
		192 <-> 255	Clockwise Scroll (slow <-> fast)
14	15		**Gobo Rotation**
		000 <-> 063	Gobo Index
		064 <-> 145	Counterclockwise Rotation (fast <-> slow)
		146 <-> 149	Stop
		150 <-> 231	Clockwise Rotation (fast <-> slow)
		232 <-> 255	Gobo Rotation (bi-directional rainbow effect)
--	16	000 <-> 255	Fine Gobo Rotation (16-bit)

DMX Values In-Depth (36/52-Channel Modes)

36CH	52CH	Value	What It Does
15	17		**Gobo Wheel #2 (Static)**
		000 <-> 006	Open
		007 <-> 013	Gobo 1 - Pick-up Sticks
		014 <-> 020	Gobo 2 - Segmented Ring
		021 <-> 027	Gobo 3 - Spiral
		028 <-> 034	Gobo 4 - Cross Hatch
		035 <-> 041	Gobo 5 - Breakup
		042 <-> 048	Gobo 6 - Stars
		049 <-> 055	Gobo 7 - Dots
		056 <-> 063	Gobo 8 - Square Tiles
		064 <-> 069	Open
		070 <-> 075	Gobo 8 Shake - Square Tiles
		076 <-> 081	Gobo 7 Shake - Dots
		082 <-> 087	Gobo 6 Shake - Stars
		088 <-> 093	Gobo 5 Shake- Breakup
		094 <-> 099	Gobo 4 Shake - Cross Hatch
		100 <-> 105	Gobo 3 Shake - Spiral
		106 <-> 111	Gobo 2 Shake - Segmented Ring
		112 <-> 117	Gobo 1 Shake - Pick-up Sticks
		118 <-> 127	Open
		128 <-> 191	Counterclockwise Gobo Scroll (slow <-> fast)
		192 <-> 255	Clockwise Scroll (slow <-> fast)
16	18	000 <-> 255	Animation Wheel
17	19		**Animation Wheel Rotation**
		000 <-> 124	Counterclockwise Rotation (fast <-> slow)
		125 <-> 130	Stop
		131 <-> 255	Clockwise Rotation (slow <-> fast)
18	20	000 <-> 255	Framing Blade 1, Motor 1
--	21	000 <-> 255	Framing Blade 1, Motor 1 (fine, 16-bit)
19	22	000 <-> 255	Framing Blade 1, Motor 2
--	23	000 <-> 255	Framing Blade 1, Motor 2 (fine, 16-bit)
20	24	000 <-> 255	Framing Blade 2, Motor 1
--	25	000 <-> 255	Framing Blade 2, Motor 1 (fine, 16-bit)
21	26	000 <-> 255	Framing Blade 2, Motor 2
--	27	000 <-> 255	Framing Blade 2, Motor 2 (fine, 16-bit)
22	28	000 <-> 255	Framing Blade 3, Motor 1
--	29	000 <-> 255	Framing Blade 3, Motor 1 (fine, 16-bit)
23	30	000 <-> 255	Framing Blade 3, Motor 2
--	31	000 <-> 255	Framing Blade 3, Motor 2 (fine, 16-bit)
24	32	000 <-> 255	Framing Blade 4, Motor 1
--	33	000 <-> 255	Framing Blade 4, Motor 1 (fine, 16-bit)
25	34	000 <-> 255	Framing Blade 4, Motor 2
--	35	000 <-> 255	Framing Blade 4, Motor 2 (fine, 16-bit)
26	36	000 <-> 255	Framing System Rotation
--	37	000 <-> 255	Framing System Rotation (fine, 16-bit)
27	38	000 <-> 255	Focus
--	39	000 <-> 255	Fine Focus (16-bit)
--	40		**Auto Focus**
		000 <-> 010	No function
		011 <-> 127	Automatic focus gobo wheel 2 (static)
		128 <-> 255	Automatic focus gobo 1 wheel 1 (rotating)
28	41	000 <-> 255	Zoom (narrow <-> wide)
--	42	000 <-> 255	Fine Zoom (16-bit)

DMX Values In-Depth (36/52-Channel Modes)

| 36CH	52CH	Value	What It Does
29	43		**Prism 1**
		000 <-> 004	No Function
		005 <-> 255	Prism 1 Effect
30	44		**Prism 1 Rotation**
		000 <-> 127	Rotating Position
		128 <-> 189	Counterclockwise Rotation (fast <-> slow)
		190 <-> 193	Stop
		194 <-> 255	Clockwise Rotation (slow <-> fast)
31	45		**Prism 2**
		000 <-> 004	No Function
		005 <-> 255	Prism 2 Effect
32	46		**Prism 2 Rotation**
		000 <-> 127	Rotating Position
		128 <-> 189	Clockwise Rotation (fast <-> slow)
		190 <-> 193	Stop
		194 <-> 255	Counterclockwise Rotation (slow <-> fast)
33	47		**Iris**
		000 <-> 063	Big to Small
		064 <-> 127	Auto Change (slow <-> fast)
		128 <-> 191	Slow Shrink, Fast Expand (slow <-> fast)
		192 <-> 255	Slow Expand, Fast Shrink (slow <-> fast)
34	48	000 <-> 255	Frost Filter (0% <-> 100%)
35	49		**CRI Filter**
		000 <-> 004	No Function
		005 <-> 255	CRI Filter Effect
--	50		**CMY Macros**
		000 <-> 009	No Function
		010 <-> 255	CMY Macro Functions
--	51	000 <-> 255	CMY Macro Speed
36	52		**Control Functions**
		000 <-> 007	No function
		008 <-> 015	XY blackout
		016 <-> 023	C blackout
		024 <-> 031	G blackout
		032 <-> 039	XYC blackout
		040 <-> 047	XYG blackout
		048 <-> 055	XYCG blackout
		056 <-> 095	No function
		096 <-> 103	X reset
		104 <-> 111	Y reset
		112 <-> 119	Color reset
		120 <-> 127	Fixed & rotating gobo reset
		128 <-> 135	No function
		136 <-> 143	Prism reset
		144 <-> 151	Framing system reset
		152 <-> 159	All channels reset
		160 <-> 167	Iris reset
		168 <-> 175	Frost reset
		176 <-> 183	Zoom reset
		184 <-> 191	CMY reset
		192 <-> 199	Fan low speed
		200 <-> 207	Fan full speed
		208 <-> 215	Fan auto
		216 <-> 225	No function
		226 <-> 230	Dimming Curve 1 (Linear)
		231 <-> 235	Dimming Curve 2 (Square Law)
		236 <-> 240	Dimming Curve 3 (Inverse Square Law)
		241 <-> 245	Dimming Curve 4 (S-Curve)
		246 <-> 255	No function

Gobo Replacement

1. Remove the gobo cover by removing the four screws on the top of the fixture head.
2. Remove the slot-n-lock gobo from the wheel by lifting up slightly and sliding it out.
3. Using a small tool, pry the tension ring from the gobo holder.
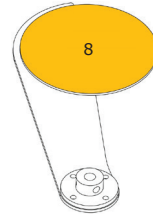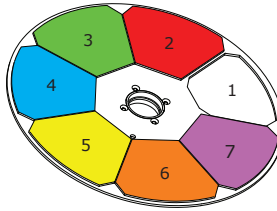4. Remove the old gobo, insert the new gobo, and replace using the reverse steps.

Gobo holder   Gobo   Tension ring

Rotating Gobos

1   2   3   4

5   6

Static Gobos

1   2   3   4

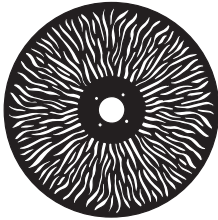5   6   7   8
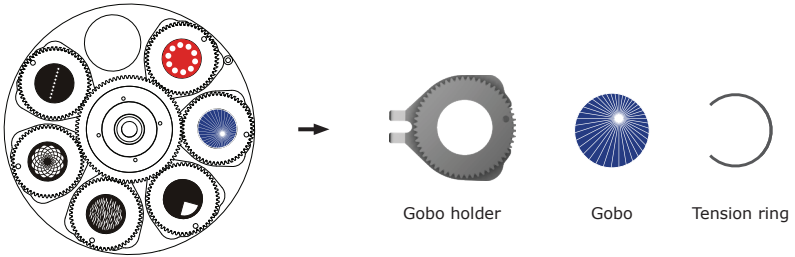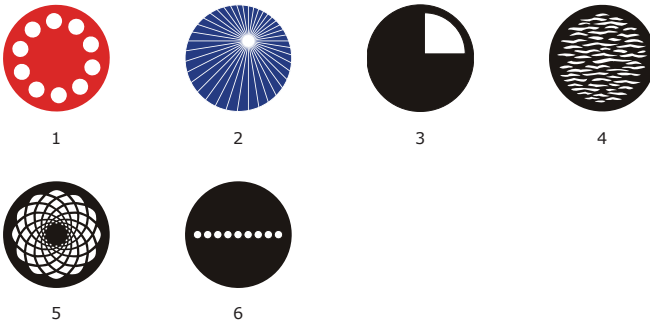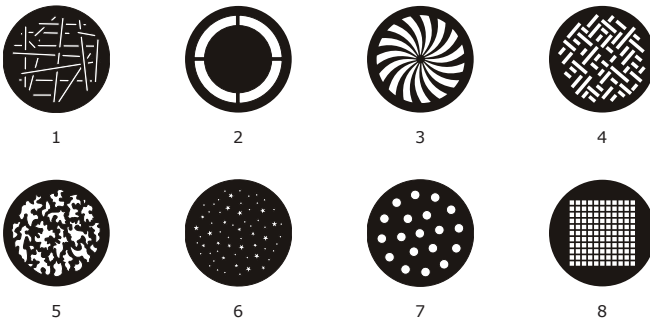
Color Wheel

1. Open
2. Red
3. Green
4. Blue
5. Yellow
6. Orange
7. Magenta
8. CRI filter

CRI = 71 (91 with filter)

Animation Wheel

When used in conjunction with focus, the radial animation wheel can create soft textures and depth within the wash field, or it can add sharp animated projections & mid-air beam effects.

Dimmer Modes

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

Linear	Square Law	Inv. Square Law	S-Curve
Output / DMX%	Output / DMX%	Output / DMX%	Output / DMX%
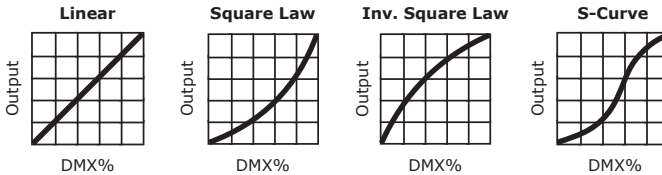
Fault Detection

If a problem is detected, the following error codes may be displayed. If an issue persists after performing a reset, visit www.blizzardpro.com/support to open a support ticket.

Code	Description	Code	Description
Focus	Focus Fault	MAGENTA	CMY Red Fault
Zoom	Zoom Fault	YELLOW	CMY Yellow Fault
Prism	Prism 1 Fault	CTO	CMY CTO Fault
Prism2	Prism 2 Fault	X_op	Pan Optocoupler Fault
Prism2.R	Prism 2 Rotation Fault	Y_op	Tilt Optocoupler Fault
Gobo	Rotating Gobo Wheel Fault	BladeR	Framing System Rotation Fault
Gobo.R	Gobo Rotation Fault	R-OPEN	Temp Disconnection Fault
Gobo2	Fixed Gobo Wheel Fault	R-SHORT	Temp Short Circuit Fault
Color	Color Wheel Fault	LED_HOT	LED Overheat Fault
Iris	IRIS Fault	BladeR	Framing System Rotation Fault
CYAN	CMY Cyan Fault	--	--

5. APPENDIX

Keeping Your Torrent™ Keyframe 600 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.

Use a new microfiber rag to gently clean your lenses (paper towels and cotton towels will scratch them). To clean the fans, gently brush them with an eyelash brush and vacuum up any leftover debris - and make sure to hold the fans so they do not spin when vacuuming. *Do not use compressed air, this will push the dirt further into your fixture.

In transit, keep your 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 fixtures.

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	17.2 inches (435.5 mm)
Depth	11.6 inches (293 mm)
Height	29.7 inches (754 mm)
Weight	71.6 lbs. (32.5kg)

Power	
Operating Voltage	100V-240VAC, 50-60Hz
Power Consumption	930W, 8.49A, PF: .99
Fuse	10A, 250V

Light Source	
LED	600W white LED light source
Color Temperature	6500K
CRI	Variable (71 ~ 91)

Optical	
Beam Angle	7°- 40° beam angle
Gobo Size	27mm outer, 22mm inner, 1.2mm thickness

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

Movement Range	
Pan	540°, 360°, 180° (8-16 bit resolution)
Tilt	270°, 180°, 90° (8-16 bit resolution)

| Control	
Protocol	USITT DMX-512, Art-Net, sACN, RDM
Modes/Personalities	36/52-channel modes
Data	3/5-pin XLR in/out, RJ45 in/out
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LEDs.

Troubleshooting

Symptom	Solution
Fixture Auto-Shut Off	Check the fan in the fixture. If it is stopped or moving slower than normal, the unit may have shut itself off due to high heat. This is to protect the fixture from overheating. Clear the fan of obstructions, or return the unit for service.
Beam is Dim	Check optical system and clean excess dust/grime.
No Power	Check fuse, AC cord and circuit for malfunction.
Blown Fuse	Check AC cord and circuit for damage, verify that moving parts are not restricted and that unit's ventilation is not obstructed
Slow Movement	Check that speed channels are set appropriately.
Fixture Not Responding / Responding Erratically	Make sure all connectors are seated properly and securely. Use Only DMX Cables. Install a Terminator. Check all cables for defects. Reset fixture(s).

Dimensional Drawings
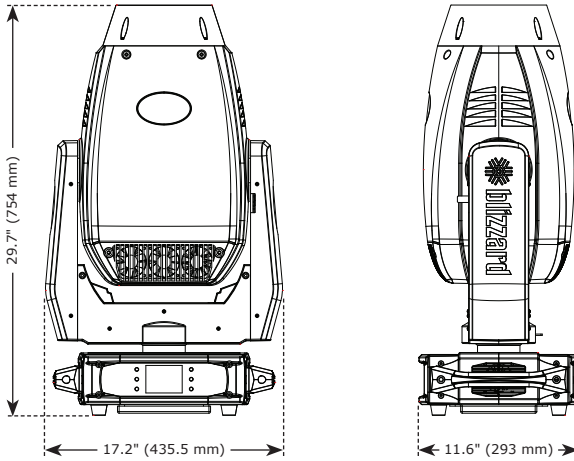
Photometric Data
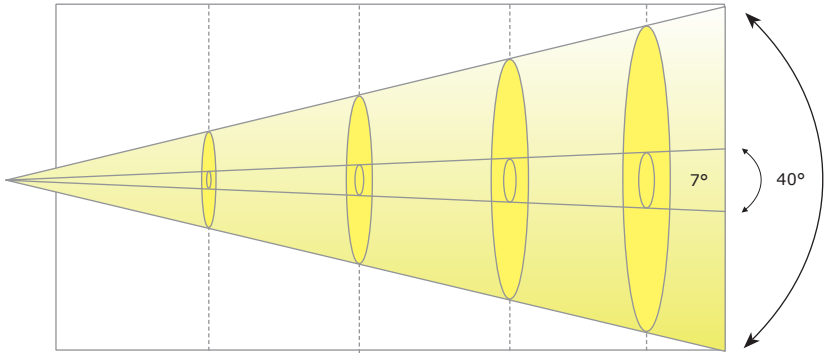
Distance:	3m	5m	7m	9m
7° beam dia.	1.3' (38 cm)	2.1' (63 cm)	2.9' (89 cm)	2.9' (90 cm)
40° beam dia.	7.1' (216 cm)	11.9' (360 cm)	16.6' (504 cm)	21.3' (648 cm)

Luminous Intensity:

Beam	3m lux	3m fc	5m lux	5m fc	7m lux	7m fc	9m lux	9m fc
7°	84,545	7,854.5	29,165	2,709.6	14,705	1,366.2	8,564	795.7
40°	6,282	583.7	2,319	215.5	1,197	111.2	734	68.2

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