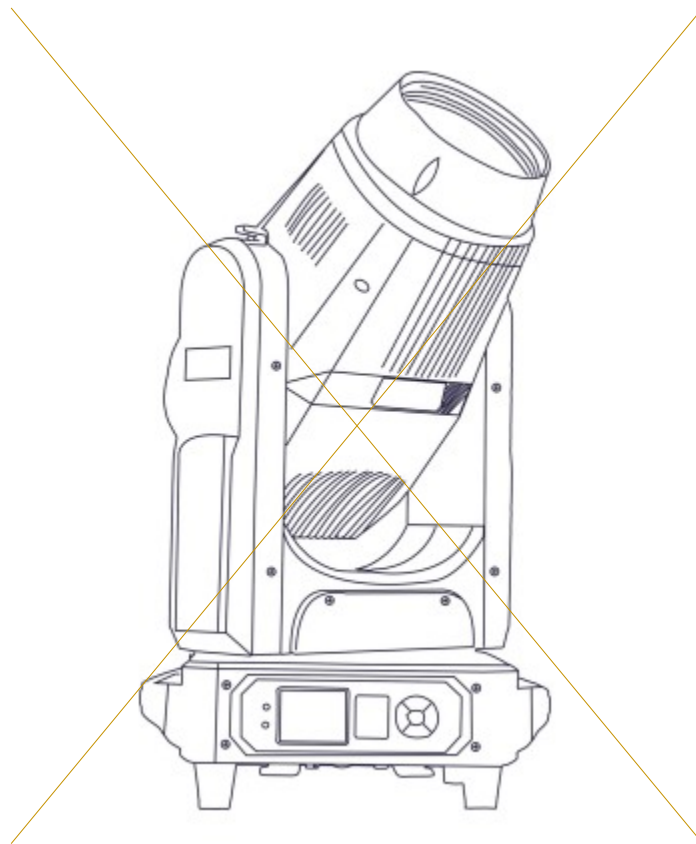




TX-6 450 Z

450w Spot/Beam Hybrid



User Manual

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1. Introduction and Setup

Unpacking and In the Box

Thank you for choosing our TX-6 Z. For your own safety, please read this manual before installing or using the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual for future needs.

In the box you will find:

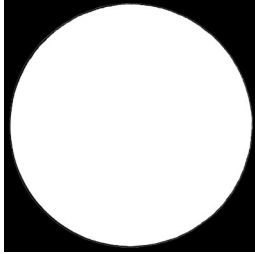
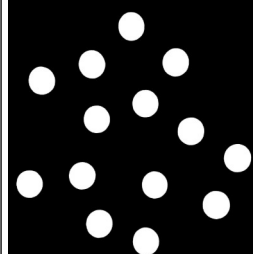
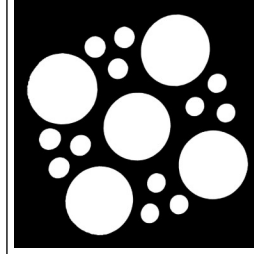
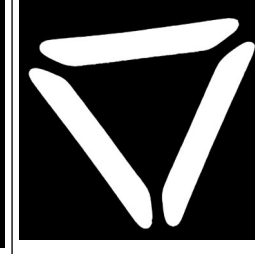
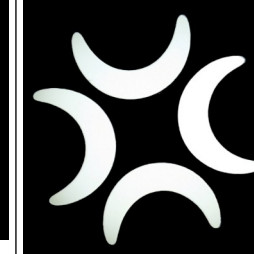
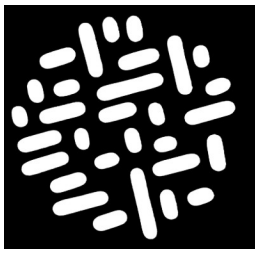
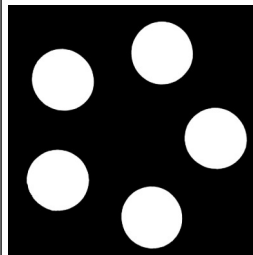
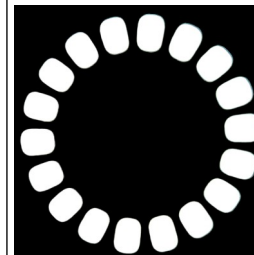
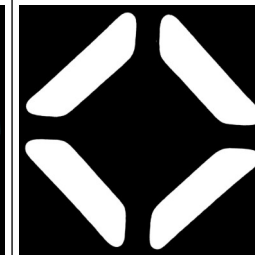
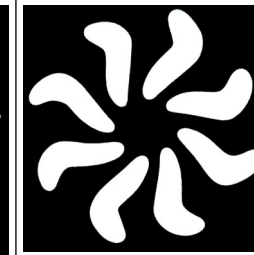
- TX-6 Z Fixture 1
- Folding Pro Clamps 2
- PowerCon compatible power cable 1
- 3-Pin DMX Cable 1
- Safety Cable 1

Features

- 450w White-LED Source Moving Head Spot, 7500k Color Temperature
- 4° – 50° Motorized Zoom
- CMY Color Mixing
- 8-Color Fixed Color Wheel
- Variable CTO
- 0-100% Electronic Dimming
- Electronic Focus
- 11 Fixed and 7 Rotating/Replaceable Gobos
- Stack-able 8-Facet Circular and 6-Facet Linear Prisms, with Fully Independent Control and Rotation
- 540° Pan and 270° Tilt
- 0-30 Hz Electronic Strobe
- DMX-512 and RDM Control

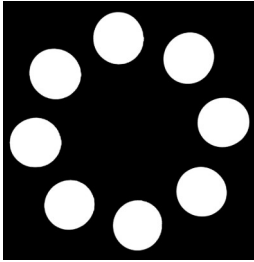
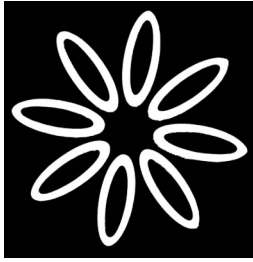



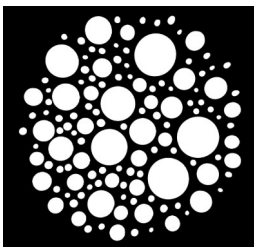

Colors, Gobos, and Prisms:

Fixed Gobo Wheel

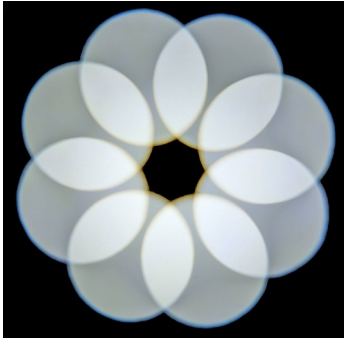

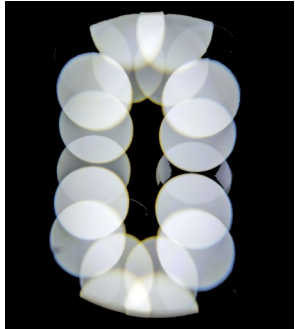
1	2	3	4	5
				
6	7	8	9	10
				

Rotating Gobos

Gobo Size 22.8mm OD, 16mm Image

1	2	3	4	5
				
6	7			
				

Prisms:

Prism 1	Prism 2	Combined
		

Mounting and Operation

Clamp Mounting: The TX-6 Z provides omega brackets which you can attach clamps to for typical clamp mounting. Once the clamps are attached to the omega brackets, you can attach the omega brackets to the fixture via the 1/4 turn fasteners.

As an added safety measure be sure to attach at least one properly rated safety cable to the fixture using the integrated safety attachment point.

Safety Precautions

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Do NOT operate if the fixture is not capable of a full range of unrestricted motion.

Move any objects away from the unit, do not allow the moving head to hit any objects. Failure to do so may cause damage outside of scope of the warranty.

Caution: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture.

From a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5ft) away from any flammable materials (decoration etc.).

Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

DO NOT connect the device to any dimmer pack.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, and it will decrease gradually within 15 minutes.

Don't try to modify the fixture without any instruction by the manufacturer.

Warranty is voided if there are any malfunctions from not following the user manual while operating or any hazardous operation, like shock, short circuit, electronic shock, etc.

Fixture must be 1' from any flammable materials. Do not light any flammable objects closer than 6.5 feet.

Do not allow other fixtures to shine a focused beam upon the display on lens of this fixture.

Customer Support

WARRANTY POLICY

GAMMA LED Vision warrants its products for the periods set below from the date of purchase to be free of manufacturer and workmanship defects. Warranty does not cover normal wear and tear caused by force, negligence or misuse of products. GAMMA LED Vision is not responsible for any damages or injury caused by misuse or improper handling of the products and in accordance with instructions and specifications of manual.

Warranty terms are as follows:

LED Fixtures:

Indoor: 2 Years

Outdoor (IP 54 or higher): 1 Year

Lamp Fixtures: 1 year / excludes the lamp

LED Video Products:

Indoor: 2 Years

Outdoor (IP 54 or higher): 1 Year

Controllers: 2 years

Batteries: 6 months

All Trussing Related Products and Accessories: 1 Year

Please visit WWW.GAMMALEDVISION.COM for complete Limited Warranty terms and contact information.

2. Setup and Operation

Pan and Tilt Locks

The TX-6 Z is equipped with Pan and Tilt locks for assistance when moving or hanging the fixture. **Before powering on the TX-6 Z, ensure all Pan/Tilt Locks are OFF and the fixture is able to move freely.** Pan and Tilt locks are enabled/disable by pressing and sliding the lock handles on the casing.

Using the LCD Menu and Buttons

After turning on the fixture, press the **ENTER/OK** button to enter the menu mode, use the **UP, DOWN, LEFT, and RIGHT** buttons to find the menu item, and **ENTER/OK** to enter the menu. At factory default settings, the menu will close after a short period of inactivity.

Press the **MENU** button to return, or wait for one moment to exit the menu mode automatically.

Menu Operation

Menu Option	Sub Menu or Options	Description
DMX Address	001-512	Set DMX Address
Mode/Workmode	DMX CTRL, Auto Run, Sound Ctrl, Scene Mode, M/S Choose	Set the mode, either for DMX or auto modes. When DMX Signal is present, the fixture will ONLY work in DMX mode.
	Auto Run	Automatic Programs
	Sound Ctrl	Sound-active Mode
	Scene Mode	Choose an Auto-Scene Mode
	M/S Choose	Select a master/slave for auto modes.
Display	Language	Chinese/English
	Screen Saver	Set a Screen Saver Mode
	Screen Rot	Set Screen Rotation for Hanging/Sitting, or leave in Auto for Automatic Rotation
	DMX Indicate	Set the Mode for the DMX Indicator Light

Menu Option	Sub Menu or Options	Description
	Signal Bright	N/A
	Screen Light	Set the LCD Screen Backlight Brightness
	Touch Enable	Enable/Disable the Touch Screen
	Touch Rectify	Calibrate the Touchscreen, Restart the fixture to save
Scene	--	The Scene Menu allows you to customize the built-in scenes by DMX channel for stand-alone operation.
Advanced	Pan Invert	Invert the Pan Control
	Tilt Invert	Invert the Tilt Control
	P/T Rectify	Turn on/off the Pan/Tilt Correction
	Pan Offset	Set a Offset "Zero Point" for Pan. Default Setting is 010
	Tilt Offset	Set a Offset "Zero Point" for Tilt. Default Setting is 010
	Data Hold	Set Behavior When DMX is Lost
	Dimmer Mode	Choose Between 3 Dimmer Modes
	Factory Setting	Factory Reset of Menu Options
Status	--	View Status Information on Motors, Sensors, Etc

DMX Setup

DMX Basics

DMX512 stands for digital multiplex 512. This means that 512 channels are controlled digitally through 1 data cable.

A channel is a set of 255 steps that are assigned to control attributes in each light. This may be a color like red, green or blue, and intensity, strobe, pan/tilt or other attributes.

Multiple sets of 512 “universes” may be used. Only 1 universe will travel on a DMX cable, but through networked DMX (Art-Net or sACN E1.31), many universes can travel over a network.

DMX Wiring

DMX works by connecting 1 or multiple lights to the output of a DMX lighting console or software with a DMX interface.

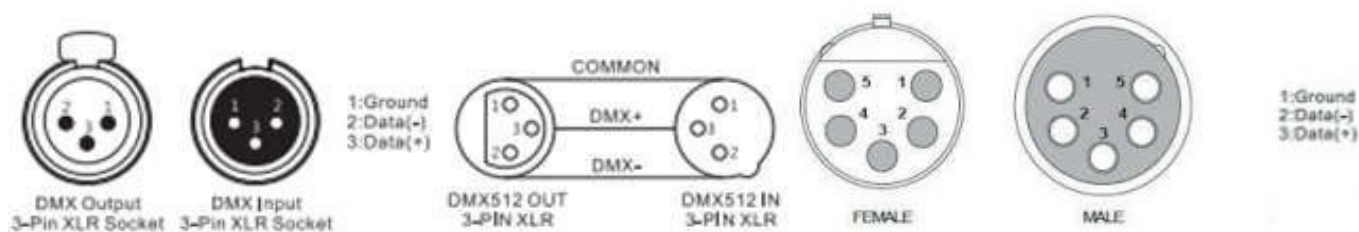
DMX lights connect in what is called a “daisy-chain”. Your first DMX cable will plug its male DMX connector into the female DMX connector on your lighting console. The remaining female connector will then connect to the DMX input on your first light.

You may then connect your next fixture to the output of your first light, and continue the chain.

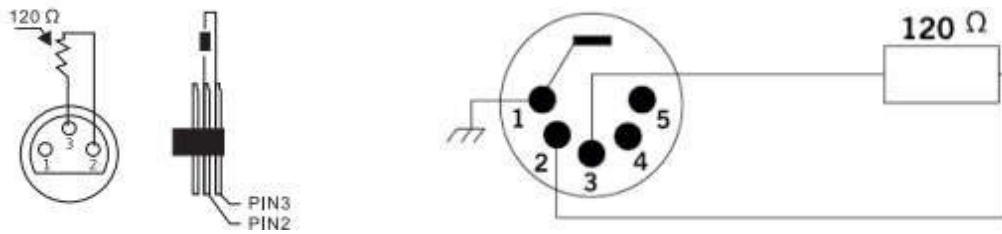
32 Fixture Rule – DMX only allows you to connect up to 32 fixtures in a single daisy chain for signal strength. Sometimes, depending on the fixtures and cable length, this number is less (or more).

DMX Cables can be 3-pin or 5-pin. These use the same type of data, and in the 5-pin only pins 1, 2, and 3 are used. The cable should be a 2 conductor, shielded cable of at least 110 ohms resistance. Microphone cable is not DMX cable.

Please refer to the diagram below:



For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise and reflections. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below:



DMX Channels

Note: Most consoles/software should list this fixture by it's name, however Chamsys MagicQ does not copy/rename profiles. In Chamsys, you should be able to patch this fixture as "BOS Lighting / Amadeus H400".

23 CH	Function	Channel Value	Description
1	Pan	0-255	Pan, 540°
2	Pan Fine	0-255	Fine Control of Pan
3	Tilt	0-255	Tilt, 270°
4	Tilt Fine	0-255	Fine Control of Tilt
5	P/T Speed	0-255	Pan/Tilt Speed, Fast to Slow
6	Dimmer	0-255	Intensity Control
7	Strobe	0-3	Closed
		4-103	Strobe, Slow to Fast
		104-107	Open
		108-155	Falling Strobe, Slow to Fast
		156-207	Rising Strobe, Slow to Fast
		208-212	Open
		213-251	Random Strobe, Slow to Fast
		252-255	Open
8	Color Wheel 1	0-1	Open
		2-127	Linear Color Wheel
		128-131	Red
		132-135	Green

23 CH	Function	Channel Value	Description
		136-139	Blue
		140-143	Amber
		144-147	Magenta
		148-151	Yellow
		152-155	Cyan
		156-159	Pink
		160-163	Open/Red
		164-167	Red/Green
		168-171	Green/Blue
		172-175	Blue/Amber
		176-179	Amber/Magenta
		180-183	Magenta/Yellow
		184-187	Yellow/Cyan
		188-191	Cyan/Pink
		192-220	CCW Rotation, Fast to Slow
		221-225	Stop
226-255	CW Rotation, Slow to Fast		
9	CTO	0-255	Linear CTO. Note: Linear CTO and Color Wheel 1 are on the same wheel, and CTO has priority. If CTO is enabled, Color Wheel 1 will not work until it is returned to zero.
10	Cyan	0-255	Cyan Color Mixing, Linear
11	Magenta	0-255	Magenta Color Mixing, Linear
12	Yellow	0-255	Yellow Color Mixing, Linear
13	Fixed Gobo Wheel	0-4	Gobo 1 – Reducer 1
		5-9	Gobo Open
		10-14	Gobo 2 – Dots Square
		15-19	Gobo 3 – Assorted Dots

23 CH	Function	Channel Value	Description
		20-24	Gobo 4 - Triangle
		25-29	Gobo 5 - Moons
		30-34	Gobo 6 – Pills
		35-39	Gobo 7 - Gatling
		40-44	Gobo 8 – Circle Circle
		45-49	Gobo 9 – Square Wedge
		50-54	Gobo 10 – Sunshine
		55-59	Open
		60-64	Gobo 1 Shake
		65-69	Gobo 3 Shake
		70-74	Gobo 4 Shake
		75-79	Gobo 5 Shake
		80-84	Gobo 6 Shake
		85-89	Gobo 7 Shake
		90-94	Gobo 8 Shake
		95-99	Gobo 9 Shake
		100-104	Gobo 10 Shake
		105-109	Gobo 11 Shake
		110-127	Open
		128-190	CCW Gobo Scroll, Fast to Slow
191-192	Stop		
193-255	CW Gobo Scroll, Slow to Fast		
14	Zoom	0-255	4° – 50° Zoom
15	Focus	0-255	Motorized Focus
16	Rotating Gobo Wheel	0-9	Open
		10-19	Rotating Gobo 1
		20-29	Rotating Gobo 2
		30-39	Rotating Gobo 3

23 CH	Function	Channel Value	Description
		40-49	Rotating Gobo 4
		50-59	Rotating Gobo 5
		60-69	Rotating Gobo 6
		70-79	Rotating Gobo 7
		80-89	Gobo Shake 1 – Slow to Fast
		90-99	Gobo Shake 2 – Slow to Fast
		100-109	Gobo Shake 3 – Slow to Fast
		110-119	Gobo Shake 4 – Slow to Fast
		120-129	Gobo Shake 5 – Slow to Fast
		130-139	Gobo Shake 6 – Slow to Fast
		140-149	Gobo Shake 7 – Slow to Fast
		150-200	Gobo Scroll CW, Fast to Slow
		201-204	Stop
		206-255	Gobo Scroll CCW, Slow to Fast
17	Gobo Rotation	0-127	Gobo Index
		128-190	Gobo Rotate CW, Fast to Slow
		191-192	Stop
		193-255	Gobo Rotate CCW, Slow to Fast
18	Prism 1: Circular 8 Facet	0-127	Open
		128-255	Prism 1 Inserted
19	Prism 1 Rotate	0-127	Prism Indexing
		128-187	CW Rotate, Fast to Slow
		188-195	Stop
		196-255	CCW Rotate, Slow to Fast
20	Prism 2: Linear 6-Facet	0-127	Open
		128-255	Prism 2 Inserted
21	Prism 2 Rotate	0-127	Prism Indexing
		128-187	CW Rotate, Fast to Slow

23 CH	Function	Channel Value	Description
		188-195	Stop
		196-255	CCW Rotate, Slow to Fast
22	Frost	0-127	Open
		128-255	Frost Inserted
23	Reset	0-209	No Function
		210-215	Reset Pan/Tilt
		216-219	No Function
		220-235	Reset Effects Motors
		236-239	No Function
		240-255	Reset All

3. Maintenance

Routine Maintenance

The cleaning of lens must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smokey, or particularly dirty surrounding can cause greater accumulation of dirt on the fixture's optics.

- Clean with a damp, soft cloth.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days in demanding environments.

Troubleshooting Problems

The following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work:

- Check that the unit is plugged in to a working power connector.
- Press the menu button to confirm that the unit is powered on. If the screen does not light up, the unit has no power.

B. Not Responding to the DMX Controller:

- Check DMX cables to verify that they are plugged in and functional.
- Check the DMX address and mode – does it match the address and mode patched in the lighting console or software?
- Plug the light directly into the DMX controller with a cable that you know is good. Unplug all other lights – does it work?
- Try to use another DMX controller.

4. Technical Specifications

- LED Source: 450 W LED
- Rated Power 600W max, AC110-240v, 50/60 Hz
- Measured at 4.9amps max at 122.6v
- 16bit Tilt, 270°
- 16bit Pan, 540°
- Control: USITT DMX512, RDM
- Modes: 23CH
- Cooling: Variable-Speed Fan Control
- 3 pin DMX input and output
- PowerCon Compatible Input and Output
- Ingress Protection: IP20
- Temperature Range: -4° F to 104° F
- Dimensions: 14.96" x 10.63" x 25.29"
- Weight: 50.71lbs

5. Photometrics

All Brightness Measurements below are in FC. The TX6 Features a Hot-Spotted LED Source.

Distance	Zoom in – 11° Beam Angle, 3° Field Angle	Zoom out – 65° Beam Angle 117° Field Angle	Zoom Center - 20° Beam Angle 22° Field Angle
5'	64800	996	7330
10'	16200	277	2140
15'	6690	128	1130
20'	4050	69	535
25'	2267	43	370
30'	1672	32	282

CRI, TM-30, and Spectral Distribution

