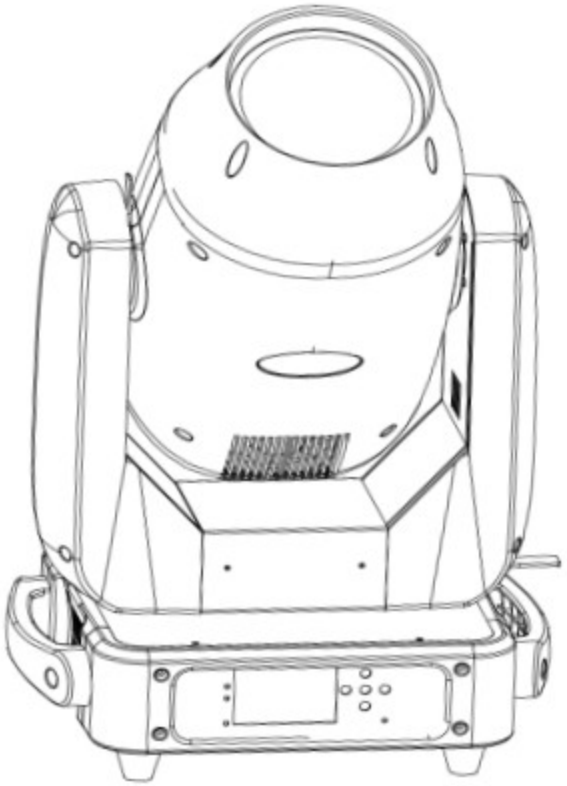
TX-6 Z

350w LED Spot with CMY Color Mixing



User Manual

GAMMA

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Table of Contents

1. Introduction and Setup

Unpacking and In the Box

Thank you for choosing the TX-6 Z from GAMMA LED Vision. You will see you have acquired a powerful and versatile moving light.

Inside the box you should find:

- TX-6 Z Fixture: 1
- Attached, Fold-Down Clamps with Omega Brackets 2
- DMX Cable 1
- 1m PowerCon to Edison Cable 1

(Flight case and Safety cable are optional, please contact your dealer)

Please check carefully that there is no damage from shipping. Should there be any problems, please consult your dealer and don't use the light until you've verified it's good to go!

Mounting and Operation

Before installation, please read the user manual carefully, then prepare Omega Brackets (2 pcs), Clamps (2 pcs), and Safety Cable (1 pc).

Clamp Mounting: The TX-6 Z provides provides fold-down clamps which sit attached to Omega Brakcets which then attach to base on the unit. *We promise it's less confusing than it sounds.*

The folding clamps can swivel freely, and the swivel is tightened down via an allen wrench. The clamps do not have to be removed for floor-standing operation.

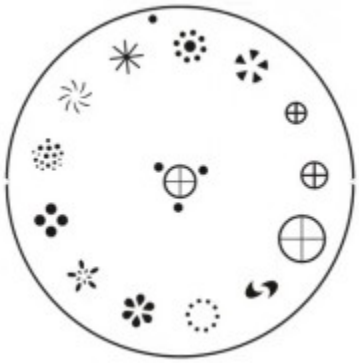
As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly.

Features

- High Brightness 350w LED Source with 50,000 Life Expectancy
- Motorized Zoom from 2º -22º
- 540 Degree Pan and 270 Degree Tilt
- CMY Color Mixing
- 7 Rotating and 12 Fixed Gobos
- Color Wheel with Variable CTO Filter
- Frost Filter
- Variable Strobe
- Dual, Independently Rotating Prisms
- Motorized Focus

Color and Variable CTO Wheel:

Fixed Gobo Wheel:



Rotating Gobos (22.7mm OD, 14mm Max Image Size)

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.

Caution: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were 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 items 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, lamp broken, etc.

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.GAMMALEDVISON.COM for complete Limited Warranty terms and contact information.

2. Setup and Operation

Using the LCD Menu and Buttons

The TX-6 Z features a standard LCD screen and buttons for operation. Press **Menu** to enter the menu. Use the **Up** and **Down** arrows to navigate through the options and press **Enter** to go into the menu or confirm your selection. The menu will automatically exit after a period of inactivity.

The TX-6 Z's display is also a touchscreen. You can use the touchscreen or buttons, your choice :)

Menu		
Address	Address, Channel Mode	Set the DMX starting address of the light and DMX channel mode.
Work Mode	DMX, Auto Run, Sound Ctrl, Scene Mode, M/S Choose	Set the Type of Control for the TX6 Z to use.
Display		Set display settings such as screen rotation, touch enable, etc. Under "Screen Saver", "Mode 1" will turn off the LCD when not in use.
Scene		Here you can manually test each feature of the fixture such as Pan/Tilt, Dimmer, Zoom, etc.
Advanced		Modify settings such as Pan Invert, Tilt Invert.
Status		View status' of the fixture such as running time and internal temperature.

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.

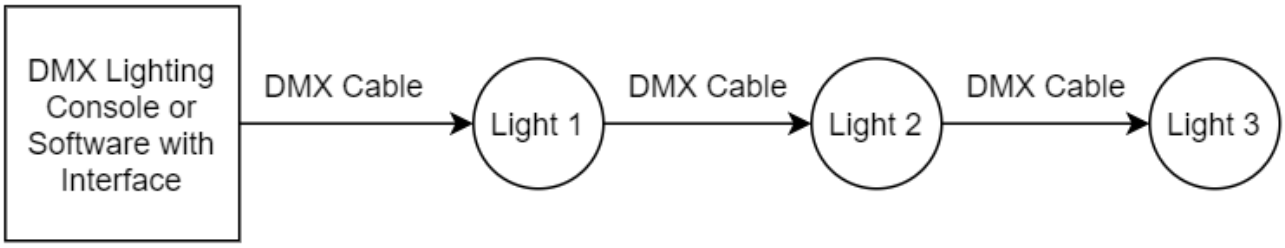
Multiple sets of 512 "universes" may be used. Only 1 universe will travel on a DMX cable, but through networked DMX (Art-Net or sACN E1.31), many universes can travel over a network.

DMX Wiring

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

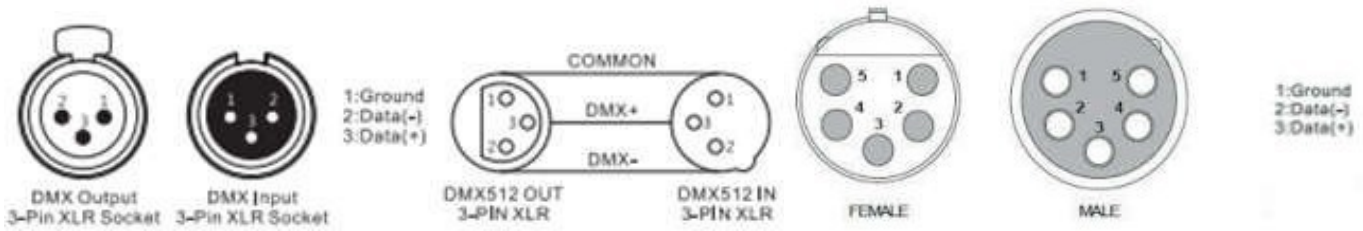
DMX lights connect in what is called a "daisy-chain". Your first DMX cable will plug it's male DMX connector into the female DMX connector on your lighting console. The remaining female connector will then connect to the DMX input on your first light.

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

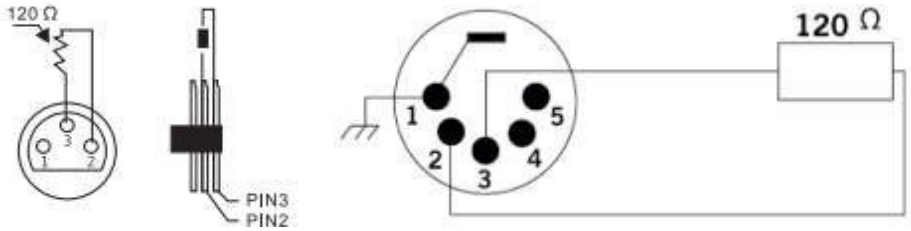


32 Fixture Rule – DMX only allows you to connect up to 32 fixtures in a single daisy chain for signal strength. Sometimes, depending on the fixtures and cable length, this number is less (or more).

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 Modes and Configuration

The TX-6 Z has multiple DMX modes, sometimes called "personalities", "profiles", or as we will use here "modes".

In general, modes with more DMX channels offer a greater level of control or options but take up more of your output channels on your lighting console or software.

Modes with less DMX channels often offer less control, but may be plenty for your needs. *Depending on your needs and control solution, you may not need channels for automated programs, strobes, or macros – your console may have great effects! In this case, you can use a lesser channel mode and fit more lights per DMX universe.*

The TX-6 Z offers a 22 and 26 channel mode.

The 26 channel mode features 16-bit control for more parameters and a PT speed control, while still not taking many more channels.

We recommend using the 26 channel mode for best results.

View the DMX mode charts below to find the mode that best suits your needs.

26CH	22CH	Function	Value	Description/Options
1	1	Pan	0-255	0-540º Pan Control
2	2	Pan Fine	0-255	Fine Control for Pan
3	3	Tilt	0-255	0-270º Degree Tilt Control
4	4	Tilt Fine	0-255	Fine Control for Tilt
5		P/T Speed	0-255	Pan/Tilt Speed, Fast to Slow
6	5	Dimmer	0-255	Intensity Control
7	6	Strobe	0-3	Closed
			4-103	Pulse Strobe, From Slow to Fast
			104-107	Open
			108-155	Open Strobe from Slow to Fast
			156-207	Close Strobe from Slow to Fast
			208-212	Open
			213-251	Random Strobe

26CH	22CH	Function	Value	Description/Options
			252-255	Open
8	7	Color Wheel	0-9	Open
			10-19	Red
			20-29	Yellow
			30-39	Blue
			40-49	Green
			50-59	Cyan
			60-69	Magenta
			70-79	Amber
			80-89	UV
			90-99	Open+Red
			100-109	Red+Yellow
			110-119	Yellow+Blue
			120-129	Blue+Green
			130-139	Green+Cyan
			140-149	Cyan+Magenta
			150-159	Magenta+Amber
			160-169	Amber+UV
			170-179	UV+Open
			180-215	Color Wheel Rotate CW
			216-220	Stop
			211-255	Color Wheel Rotate CCW
9	8	Cyan	0-255	Variable Cyan Control
10	9	Magenta	0-255	Variable Magenta Control
11	10	Yellow	0-255	Variable Yellow Control

26CH	22CH	Function	Value	Description/Options
13	12	Fixed Gobo Wheel	0-4	Open
			5-9	Gobo 1
			10-14	Gobo 2
			15-19	Gobo 3
			20-24	Gobo 4
			25-29	Gobo 5
			30-34	Gobo 6
			35-39	Gobo 7
			40-44	Gobo 8
			45-49	Gobo 9
			50-54	Gobo 10
			55-59	Gobo 11
			60-64	Gobo 12
			65-69	Gobo 1 Shake, Slow to Fast
			70-74	Gobo 2 Shake, Slow to Fast
			75-79	Gobo 3 Shake, Slow to Fast
			80-84	Gobo 4 Shake, Slow to Fast
			85-89	Gobo 5 Shake, Slow to Fast
			90-94	Gobo 6 Shake, Slow to Fast
			95-99	Gobo 7 Shake, Slow to Fast
			100-104	Gobo 8 Shake, Slow to Fast
			105-109	Gobo 9 Shake, Slow to Fast
			110-114	Gobo 10 Shake, Slow to Fast
			115-119	Gobo 11 Shake, Slow to Fast
			120-127	Gobo 12 Shake, Slow to Fast
			128-190	Gobo Cycle, CW

26CH	22CH	Function	Value	Description/Options
			191-192	Stop
			193-255	Gobo Cycle, CCW
14	13	Rotating Gobo	0-9	Open
			10-19	Gobo 1
			20-29	Gobo 2
			30-39	Gobo 3
			40-49	Gobo 4
			50-59	Gobo 5
			60-69	Gobo 6
			70-79	Gobo 7
			80-89	Gobo 1 Shake, Slow to Fast
			90-99	Gobo 2 Shake, Slow to Fast
			100-109	Gobo 3 Shake, Slow to Fast
			110-119	Gobo 4 Shake, Slow to Fast
			120-129	Gobo 5 Shake, Slow to Fast
			130-139	Gobo 6 Shake, Slow to Fast
			140-149	Gobo 7 Shake, Slow to Fast
			150-200	Gobo Cycle, CW
			201-205	Stop
			206-255	Gobo Cycle, CCW
15	14	Gobo Rotation	0-127	0-400º Indexing
			128-190	Gobo Rotate CW, Fast to Slow
			191-192	Stop
			193-255	Gobo Rotate CCW, Fast to Slow
16		Gobo Rotation Fine	0-255	Fine Control for Gobo Rotation
17	15	Prism 1 (8-Facet)	0-127	Open

26CH	22CH	Function	Value	Description/Options
			128-255	Insert Prism
18	16	Prism 1 Rotation	0-127	0-400º Indexing
			128-187	Prism Rotate CW, Fast to Slow
			188-195	Stop
			196-255	Prism Rotate CCW, Fast to Slow
19	17	Prism 2 (3 Facet)	0-127	Open
			128-255	Insert Prism
20	18	Prism 2 Rotation	0-127	0-400º Indexing
			128-187	Prism Rotate CW, Fast to Slow
			188-195	Stop
			196-255	Prism Rotate CCW, Fast to Slow
21	19	Frost	0-127	Open
			128-255	Insert Frost
22				Reserved
23	20	Zoom	0-255	2º to 20º
24	21	Focus	0-255	Motorized Focus Control
25		Focus Fine	0-255	Fine Control for Focus
26	22	Reset	0-209	No Function
			210-255	Reset All

3. Maintenance

Routine Maintenance

Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics.

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

Use an air compressor (oil-free) on electronics vacuum to clean the fan inlets and outlets when you notice they are dusty or dirty. Like any other electronics fan, always use an object to block the fan from spinning while you clean it, and blow air so that the dirt blows out of the fixture!

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 and you do not hear any fans running when it's plugged in:

- Check that the unit is plugged in to a working power outlet.
- 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.

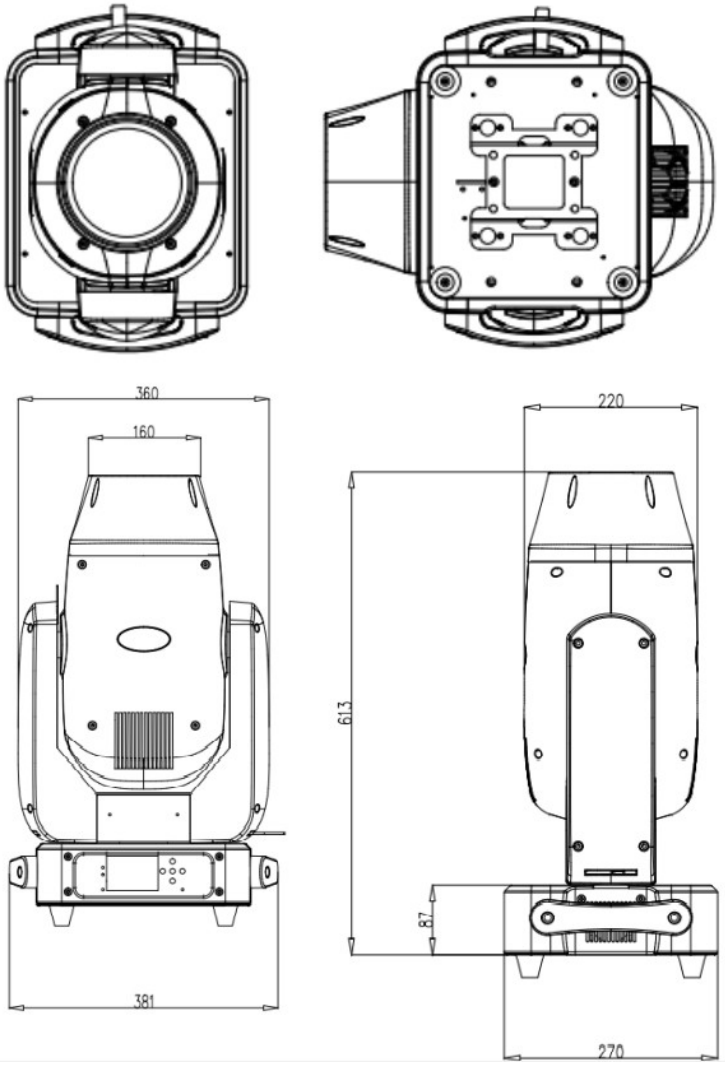
- Check the DMX address and mode – does it match the address and mode patched in the lighting console or software?
- Plug the light directly into the DMX controller with a cable that you know is good. Unplug all other lights – does it work?
- Try to use another DMX controller.

C. One of the functions is not working well

- The stepper motor might be damaged or the cable connected to the PCB is broken.
- The motor's drive IC on the PCB may be bad.

4. Technical Specifications

- Fully Featured Spot/Beam fixture with Zoom, CMY, Gobo Wheels, Prisms, and more!
- Motorized Zoom from 2º -22º
- Multiple DMX modes.
- AC100-240v, 50/60Hz autosensing
- 430w total power consumption from a 350w LED source
- Weight – 49.5 lbs
- Dimensions: 15”x10.6”x25.5”



Photometric Reports

Zoom In, Focused: 2º

Distance in Ft.	Full White Intensity in FC
10	16300
15	7800
20	4550
25	2950
50	735

Zoom Out, Focused: 22º

Distance in Ft.	Full White Intensity in FC
5	1840
10	476
15	208
20	118
25	72
50	18

Zoom 50%, Focused:10º

Distance in Ft.	Full White Intensity in FC
5	8100
10	2630
15	1120
20	632
25	398
50	99

CRI, TM-30, and Spectral Distribution:

CRI 71.8, 7583k Color Temperature