Nano Beam

60w LED Beam with RGBW Color Mixing

User Manual

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1. Introduction and Setup

Unpacking and In the Box

Thank you for choosing our Nano Beam. 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:
- Nano Beam Fixture: 1
- IEC Power Cable: 1
- DMX Signal Cable   1
- Omega Bracket   1

Mounting and Operation

Clamp Mounting: The Nano Beam moving head provides a unique mounting bracket assembly that integrates the bottom of the base, and the safety cable rigging point in one unit.

When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the "omega bracket".

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

- 60w RGBW Beam LED fixture with a 2 degree beam angle.

- Fast 540 degree pan and 270 degree tilt.

- DMX, Master/Secondary, Sound-Active Modes

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 the supplied 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

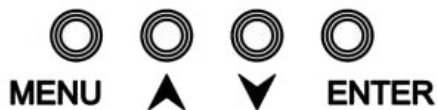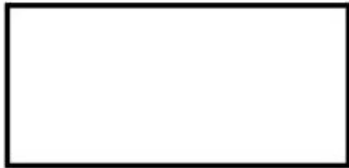All Trussing Related Products and Accessories: 1 Year

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

2. Setup and Operation

Using the LCD Menu and Buttons

Turn on the light, press the **MENU** button to enter the menu mode, use the **UP** and **DOWN** buttons to find the menu,

LCD DISPLAY

MENU   ▲   ▼   ENTER

When the preset menu is displayed on the display screen, press the **ENTER** button to confirm, use the **UP** and **DOWN** buttons to select the sub menu, press the **ENTER** button to save the settings or automatically return to the previous menu.

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

Menu Operation

MENU	Addr	Address	1-512
	Chnd	Channel Mode	13CH
			15CH
	SLnd	Secondary Mode	Master
			Secondary 1
			Secondary 2
	Shnd	Show Mode	Show 1-4
	Sens	00-99	Sound Sensitivity Level, 00-99
	LED	On/Off	Turn the LCD Display On/Off when the menu is not active.
	Disp	On/Off	Display Flip – On is for floor-mounted, Off is for Hanging
	Rpan	On/Off	Flip Pan
	Rtil	On/Off	Flip Tilt
	Rest		Reset the Fixture

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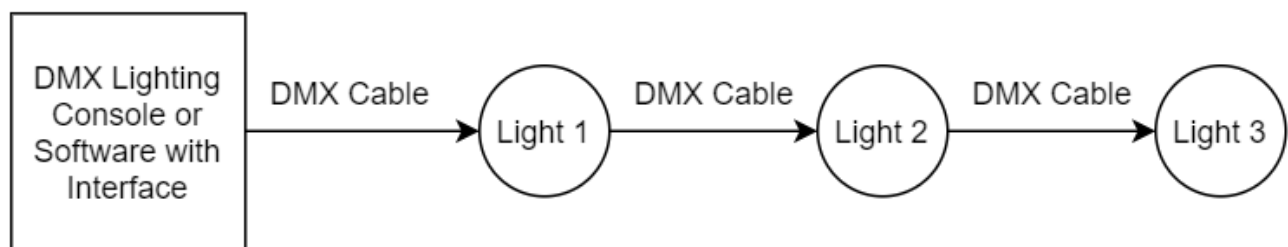
32 Fixture Rule – DMX only allows you to connect up to 32 fixtures in a single daisy chain for signal strength. Sometimes, depending on the fixtures and cable length, this number is less (or more).

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:

1:Ground
2:Data(-)
3:Data(+)

DMX Output
3-Pin XLR Socket

DMX Input
3-Pin XLR Socket

COMMON

DMX+

DMX-

DMX512 OUT
3-PIN XLR

DMX512 IN
3-PIN XLR

FEMALE

MALE

1:Ground
2:Data(-)
3:Data(+)
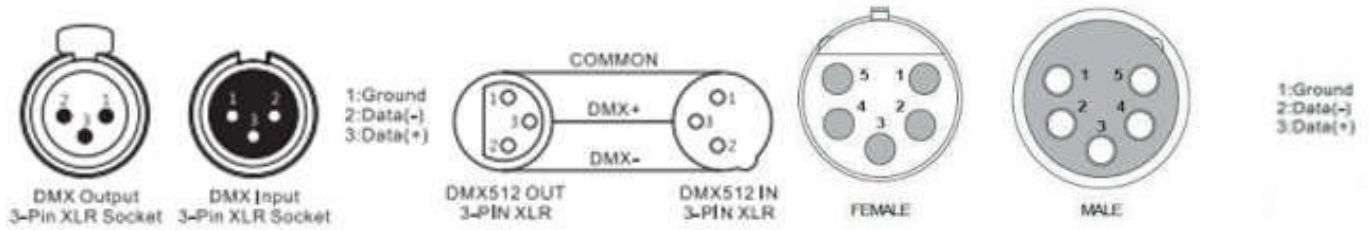
For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise and reflections. The DMX terminator is simply an XLR plug with 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:
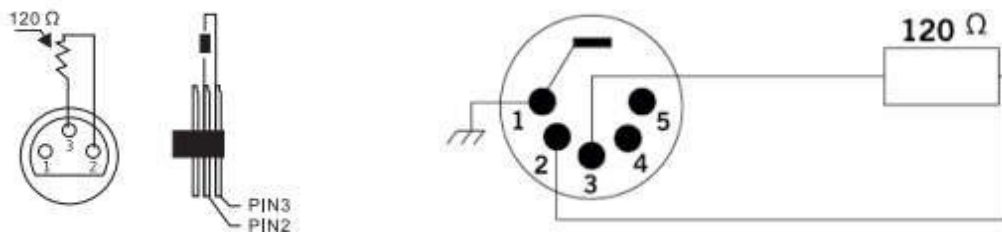
DMX Modes and Configuration

The Nano Beam 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.*

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

DMX Channel Mode Sheet:

On the left side of the sheet you will see the different modes and which channel corresponds to each function listed on the right in the given mode.

13CH	15CH	Function	Channel Value	Description
1	1	Pan	0-255	540 Degree Pan
	2	Pan Fine	0-255	Fine Pan Control
2	3	Tilt	0-255	270 Degree Tilt
	4	Tilt Fine	0-255	Fine Tilt Control
3	5	Pan Tilt Speed	0-255	Fast to Slow
4	6	Dimmer	0-255	Intensity Level
5	7	Strobe	0-9	Open
			10-250	Strobe, Slow to Fast
			251-255	Open
6	8	Red	0-255	Red Dimming
7	9	Green	0-255	Green Dimming
8	10	Blue	0-255	Blue Dimming
9	11	White	0-255	White Dimming
10	12	Color Macros	0-7	No Function
			8-127	Static Color Macros

			128-255	Flash Between Colors, Slow to Fast
11	13	Movement Macros 1	0-59	No Function
			60-255	Movement Macros 1
12	14	Movement Macros 2 and Control	0-20	No Function
			21-249	Movement Macros 2
			250-255	Fixture Reset
13	15	Reserved	0-255	Reserved

Standalone Mode and Configuration

By linking the units with DMX cable in a Master/Secondary connection, the first unit will control the other units to give an automatic, sound-activated, synchronized light show when the Nano Beam is placed into Standalone mode by the on-board menu and keys. There are multiple Secondary unit id's selected via the menu to make different units sync with each other in different ways.

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

- ○ Voltage: AC90-240V, 50/60HZ

- ○ Light source: 1* 60W red, green, blue, white

- ○ Control mode: DMX512, master, slave, voice control;

- ○ Pan: 540 °

- ○ Tilt: 270 °

- ○ Wattage: 80w Max