

Oculus 40

12x40w RGBW LED Wash with Pixel Mapping



User Manual

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1. Introduction and Setup

Unpacking and In the Box

Thank you for choosing our Oculus 40. 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:

Oculus 40 Fixture -	1
Omega Clamps -	2
Power Cable -	1
DMX Signal Cable	1

Mounting and Operation

Clamp Mounting: The Oculus 40 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

- ◆ 12*40w LED Wash light
- ◆ 12 Pixel-Mappable Zones
- ◆ 7°-70° Zoomable Beam Angle
- ◆ Adjustable Strobe and Dimmer Effect

Safety Precautions

Do not expose this fixture to rain or moisture.

Do not spill water or other liquids into or on your unit.

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.), and that .5m is kept around the fixture for ventilation.

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.

- Don't try to modify the fixture without any instruction by the manufacturer or the appointed repairing agencies.

- 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.GAMMALEDVISION.COM for complete Limited Warranty terms and contact information.

2. Setup and Operation

Using the LCD Menu and Buttons

The Oculus features Up/Down/Menu/Enter Buttons to navigate the menu. Use "ENTER" to go into the menu, UP/DOWN to make selections, and MENU to go back to a previous menu.

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.

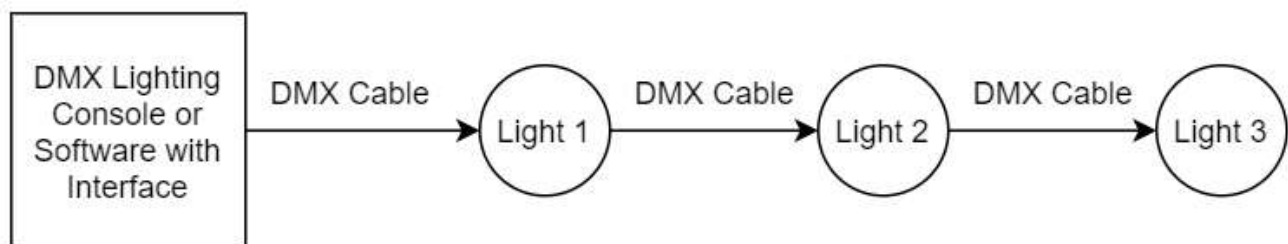
Multiple sets of 512 "universes" may be used. Only 1 universe will travel on a DMX cable, but through networked DMX (Art-Net or sACN E1.31), many universes can travel over a network.

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.

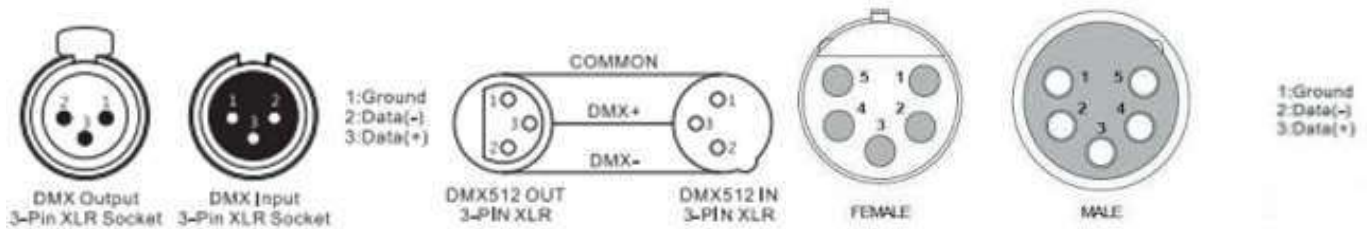
You may then connect your next fixture to the output of your first light, and continue the chain.



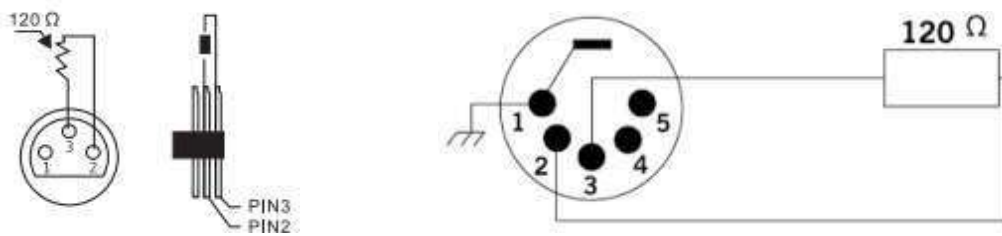
32 Fixture Rule – DMX only allows you to connect up to 32 fixtures in a single daisy chain for signal strength. Sometimes, depending on the fixtures and cable length, this number is less (or more).

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 Modes and Configuration

The Oculus 40 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:

See below for the DMX channel layouts of the Oculus 40:

18CH	24CH	68CH	Function	Channel Value	Description
1	1	1	Pan	0-255	
2	2	2	Pan Fine	0-255	
3	3	3	Tilt	0-255	
4	4	4	Tilt Fine	0-255	
5	5	5	PTSpeed	0-255	
	6	6	Zoom	0-255	
6	7	7	Dimmer	0-255	
7			Dimmer Fine	0-255	
8	8	8	Strobe	0-255	
9	9	9*	Red	0-255	RGBW for each cell from channels 9-56
10	10	10*	Green	0-255	RGBW for each cell from channels 9-56
11	11	11*	Blue	0-255	RGBW for each cell from channels 9-56
12	12	12*	White	0-255	RGBW for each cell from channels 9-56
13	13	57	CTO	0-255	Color Temperature Correction

14	14	58	Fixed Color Macros	0-255	Color Macros on entire front lens
15	15	59	Shapes Macros	0-255	Macros that use segments of the front lens
	16	60	Macro Set 1	0-255	
	17	61	Background Red	0-255	Background is the color for parts of the lens not used in the current Shapes Macro.
	18	62	Background Green	0-255	Background is the color for parts of the lens not used in the current Shapes Macro.
	19	63	Background Blue	0-255	Background is the color for parts of the lens not used in the current Shapes Macro.
	20	64	Background White	0-255	Background is the color for parts of the lens not used in the current Shapes Macro.
	21	65	N/A		
	22	66	Macro Speed	0-255	
16			BG Dimmer	0-255	Overall Intensity for the background color.
17			Zoom	0-255	7°-70°
18	23	67	Reset	1-9	No Function
				10-255	Reset
	24	68	Reset with light off	1-239	No Function
				240-255	Reset with Light Off

Pixel Layout – 68 Channel Mode:



3. Maintenance

Routine Maintenance

Fan Cleaning

Periodically do a visual inspection of the fans. If they are dirty, power off the unit and use a small electronics vacuum to clean the fans out. Do not use a can of CO2 or an Air Compressor. These will simply blow the dust into the unit and may leave other residue.

Front Lens and Shutter Blade Cleaning

The front lens should be cleaned so that light output is maintained.

With the light powered off, use a moist, lint-free cloth. Never use alcohol or solvents to clean the fixture.

Never spray any cleaners on 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:

- 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

- Input voltage: AC100–240 V, 50/60 Hz
- Power: 500W
- Light source: 12pcs 40W osram led, RGBW 4in1 mixing color
- Working lifetime: About 50000 hours
- IP rating: IP20
- Working temperature:-20°C-40°C
- Control mode: DMX 512, Auto, Master-slave, Sound
- Channel modes: 18, 24, 68
- Pan: 540° (16bit) Electric correction
- Tilt: 270° (16bit) Electric correction
- Zoom range: 7°-70°
- Dimmer: 0-100% dimmer
- Display panel: Blue LCD screen
- Net weight: 14.5kg