

# ECON Battery Par

*Battery-Powered, IP65 6x18w RGBWA+UV LED Par*



*User Manual*



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# 1. Introduction and Setup

## Unpacking

After receiving the device, please check whether any visible damage was caused during transport. If the power cord, housing or the light are damaged, do not operate the device. Contact your dealer or GAMMA LED Vision immediately.

Thank you for choosing our ECON Par. This light is designed by high strength die-casting aluminum which is able to endure high temperature, and is designed in a stylish form.

It uses high power Red, Green, Blue, White, Amber, and UV LED's for, low power consumption, high brightness, and excellent colors. The ECON par features DMX512 control, standalone, and sound-active modes.

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:

ECON Par LED -	1 pc
Power Cable -	1 pc
Wireless IR Remote -	1 pc
User Manual -	1 pc

## Mounting and Operation

Use a clamp rated for the full weight of the ECON Par to hang the fixture from the mount(s) on the fixture's yoke.

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 or on the yoke.

## Safety Precautions

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 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 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.

Allow the ECON Par LED to cool for at least 15 minutes before handling after use.

## **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](http://WWW.GAMMALEDVISION.COM) for complete Limited Warranty terms and contact information.

## 2. Setup and Operation

### Wireless IR Remote Controller Instructions

The ECON Par features a wireless IR remote control which can be used to select various colors and some standalone chases and automatic programs. For best results, point the remote at the antenna on the face of the ECON par when pressing commands.

### Blackout Mode

Press <BLACK OUT> once to blackout. Press again to return to the previously used program.

### Auto Mode

Automatic mode will enable you to run the automatic programs on the product. To turn on Automatic mode:

1. Press <AUTO> on the remote controller.
2. Press <+> or <-> to choose between the different auto programs.

### Sound-Active Mode

Sound-Active mode will enable the product to respond to the music using the built-in microphone.

To turn on Sound-Active mode:

1. Press <SOUND> on the remote controller.
2. Press <+> or <-> to choose between the different sound programs.

### Fade Mode

Fade mode offers a number of smooth fades between some different color palettes.

To enter Fade mode:

1. Press <FADE> on the remote controller.
2. Press <FADE> again to turn off the Fade mode.
3. Press <+> or <-> to either increase or decrease the speed of the program.

### Manual Color Mode

1. Press <MANUAL> one time and the menu display show “dIon”, turn on the remote controller.

2. Press <R>, <G>, <B>, <W>, <A> or <UV> (red, green, blue, white, amber, UV) to choose the desired color. Each time you press the button for each color, the brightness will increase in these steps of 20% from zero to 100%, then back to zero.

## Percentage Mode

Adjust the brightness of the color from the options on the selected keys in steps of 10% using the Percent key.

## Static Color Mode – Numbers 0-9

There are 9 pre-defined static colors on the numbers. Press <+> or <-> to either increase or decrease brightness

## Strobe Mode

In Auto mode, Sound-Active mode, Fade Mode, Manual mode, and 0-9 static color mode you can enable the strobe.

Press the <STROBE> button to begin. There are 8 speed settings which you can select with the <STROBE> button, beginning with the slowest and increasing in speed.

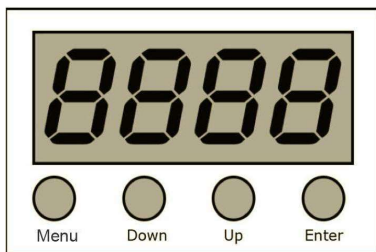
## Sensitivity Mode

The Sensitivity button pauses any effect or program that is running.

## Speed Mode

No function for this fixture.

## Using the LCD Menu and Buttons



**MENU:** Access the menu

**DOWN:** Lower the selected value.

**UP:** Increase the selected value

**ENTER:** Confirm/Store the Current Selection.

## Menu Operation

Use the Menu Key to enter the menu. The chart below shows the main options and explains the settings:

No	Display Show	Numerical value	Function and description
1	d001	001- 512	DMX512 address setting for 6-channel mode
2	A001	001- 512	DMX512 address setting for 10-channel

			mode
3	S-SL	SL / FA	DMX512 dimmer speed setting SL: slow dimming FA: fast dimming
4	d-Ho	Ho / oF	DMX signal loss mode setting: Ho: keep the last DMX signal state; oF: Turn off all LEDs
5	rFon	ON-OF	Wireless DMX control
6	Iron	ON-OF	IR remote control
7	r255	000 - 255	Red
8	G255	000 - 255	Green
9	b255	000 - 255	Blue
10	u255	000 - 255	White
11	Y255	000 - 255	Amber
12	P255	000 - 255	UV
13	I255	000-255	Intensity Control
14	FF00	000 - 255	Strobe: speed from slow to fast
15	CL01	000-255	15 static color selections
16	CC12	00- 15	Color Change: speed from slow to fast
17	DE15	00- 15	Color Fade: speed from slow to fast
18	CP13	00- 15	Color Pulse: speed from slow to fast
19	SU13	00- 15	Sound control: Sensitivity from low to high.
20	t 30	00-99	Current temperature display
21	VEr1		Version number
22	rSEt		Reset



# 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.

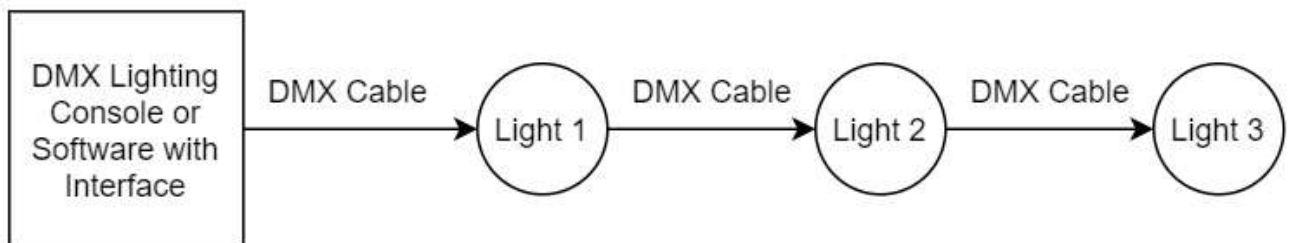
Multiple sets of 512 "universes" may be used. Only 1 universe will travel on a DMX cable, but through networked DMX (Art-Net or sACN E1.31), many universes can travel over a network.

## 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.

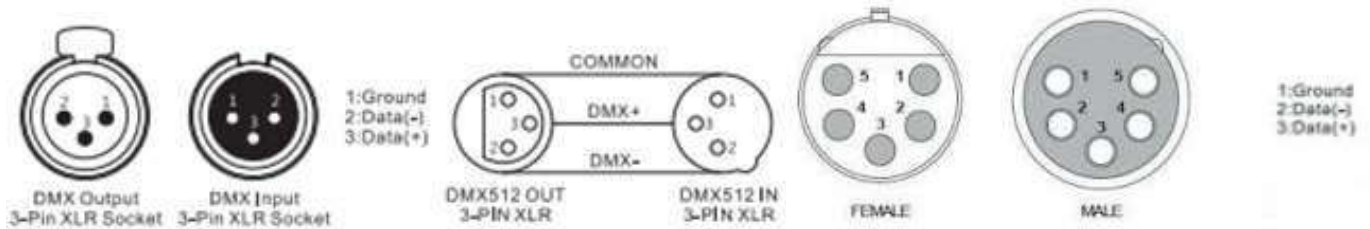
You may then connect your next fixture to the output of your first light, and continue the chain.



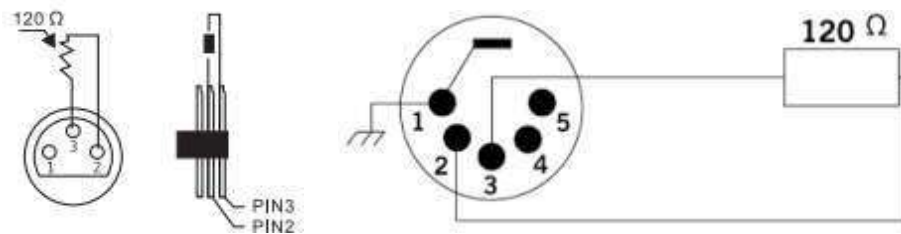
**32 Fixture Rule** – DMX only allows you to connect up to 32 fixtures in a single daisy chain for signal strength. Sometimes, depending on the fixtures and cable length, this number is less (or more).

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  $\Omega$  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 ECON Par 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.

<b>6CH (d001)</b>	<b>10 CH (a001)</b>	<b>Function</b>	<b>Channel Value</b>	<b>Description</b>
	1	Master Dimmer	0-255	Intensity Control
1	2	Red	0-255	Red Control
2	3	Green	0-255	Green Control
3	4	Blue	0-255	Blue Control
4	5	White	0-255	White Control
5	6	Amber	0-255	Amber Control
6	7	UV	0-255	UV Control
	8	Strobe	0-255	Strobe: Slow to Fast
	9	Macros	0-50	DMX Mode
			51-100	Color Choose
			101-150	Color Change
			151-200	Color Fade
			201-250	Color Pulse
			251-255	Sound-Active Mode
	10	Macro Speed	0-255	Slow to Fast

### **Setting the DMX Address:**

Choose d001 in the menu for 6-channel mode, choose a001 for 10-channel mode. Press enter to select and then use the Up and Down keys to set the number for the DMX address. **Press Enter to confirm and save your mode and address.**

## **Wireless DMX Operation**

The ECON wireless par includes a 2.4ghz wireless receiver built in.

1. Ensure Rf in on in the menu

Light on back of unit will flash red

Turn on transmitter to "red" mode on the selector switch

receiver (ECON PAR) should now blink green

Wireless DMX is now enabled.'

Wireless DMX transmitter is included with the package of 6 with flight case. Wire-  
less receiver is available for purchase separately as well.

## **3. Maintenance**

### **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

- ◆ Rated voltage: 90V-240VAC, 50/60Hz
- ◆ Power Consumption:72W
- ◆ LEDs: 6 \* 12 W RGBWA+UV (6 in 1)
- ◆ Lamp rated life: >50000 Hours Beam angle: 40 degree
- ◆ DMX512 Channels: 6/10 Dimming: 0-100%
- ◆ Built in battery & wireless dmx 512, with Infrared remote control
- ◆ Strobe: Independent electronic strobe, 0-20 times / second, the speed can be adjusted
- ◆ Battery working time:
  - (+/-) 4 hours Full color
  - (+/-) 20 hours single color Auto run
- ◆ Control Mode: DMX512 control, Auto Run, Master/Slave, Sound-Active
- ◆ IP Rating: IP 65
- ◆ Product size: 240 x 165 x 210 mm
- ◆ Packaging size: 200 x 200 x 250 mm
- ◆ Net Weight: 3 kgs
- ◆ Gross Weight: 4 kgs