NICREW 86051

NICREW HyperReef 100 Gen 2 Reef LED Light Instruction Manual

Model: HyperReef 100 Gen 2 | Brand: NICREW

INTRODUCTION

The NICREW HyperReef 100 Gen 2 is a high-performance LED lighting system designed for reef aquariums, providing optimal light for SPS and LPS corals. This manual provides essential information for setup, operation, maintenance, and troubleshooting to ensure the longevity and optimal performance of your unit.
Key features include:

- The proven and enhanced violet and blue spectrum offers ideal wavelengths and intensity for better coral growth and fluorescence.
- A custom designed wide-angle optical system achieves extensive coverage, gets even PAR distribution, and eliminates hotspots.
- Advanced heat management features a new fan and a redesigned heatsink that ensures superior heat dispersion with minimal noise.
- With 2 USB-C control ports, the HyperReef can be easily connected to an external controller (sold separately) for endless customization.
- Various mounting options for the HyperReef Gen 2 are available, featuring multiple light mounting systems, single light mounting arms, and hanging kits.

Figure 1: NICREW HyperReef 100 Gen 2 LED Light with included mounting arm.

SETUP

Unboxing and Components

Upon opening the package, ensure all components are present:

- HyperReef 100 Gen 2 LED Light fixture

- Power Adapter
- AC Power Cord (4 ft)
- HyperReef Mount System
- Quick Start Guide

Video 1: NICREW HyperReef Gen 2 Unboxing Video. This video demonstrates the contents of the package and initial handling of the light fixture.

Mounting the Light

The HyperReef 100 Gen 2 comes with a versatile mount system. You can adjust the height and position to best suit your aquarium setup. It is recommended to mount the HyperReef 8-10 inches above the water surface for optimal light spread and intensity.

Figure 2: Extensive Mounting Options for the HyperReef Gen 2. The included mount system allows for flexible positioning.

Video 2: NICREW HyperReef Mount System Installation Guide. This video provides step-by-step instructions for assembling and installing the mount system.

Ensure all screws are tightened securely, but do not overtighten, as this may cause damage to the aquarium or the

edge clamp.

OPERATING

Basic Control

The HyperReef 100 Gen 2 features three control buttons on the unit itself for basic operation:

- **Power Button:** Press to turn on/off or cycle through preset color settings. Hold to turn off the HyperReef.
- **Up Arrow:** Press to increase light intensity by 5%. Hold to increase light intensity rapidly.
- **Down Arrow:** Press to decrease light intensity by 5%. Hold to decrease light intensity rapidly.

Specifications

HyperReef 100 Gen 2

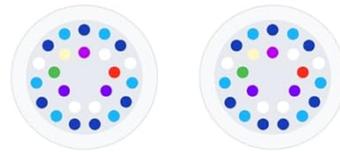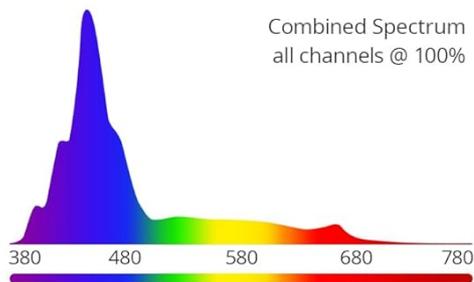**Dimensions**
9.8 in x 6.3 in x 1.4 in
25 cm x 16 cm x 3.5 cm

Power Consumption
100W at full power

Maximum Coverage
24 in x 24 in / 60 cm x 60 cm

Spectrum

Combined Spectrum
all channels @ 100%

Symbol	Color	LEDs
○	Cool White	10
●	Royal Blue	14
●	Blue	12
●	Violet	4
●	UV	2
●	Green	2
●	Red	2
○	Warm White	2

Figure 3: Control buttons on the HyperReef 100 Gen 2 for adjusting settings.

Advanced Control with External Controller

For endless customization and precise control over the 5 programmable channels, the HyperReef can be connected to an external controller (sold separately) via its 2 USB-C control ports. This allows for detailed scheduling and

spectrum adjustments to meet the specific needs of your corals.

Video 3: NICREW HyperReef Gen 2 Overview. This video demonstrates the light's features, including its spectrum and control capabilities with an external controller.

PAR Distribution and Spectrum

The HyperReef 100 Gen 2 is designed to provide even PAR distribution across your tank, minimizing hotspots and ensuring all corals receive adequate light. The enhanced violet and blue spectrum is crucial for coral growth and fluorescence.

PAR Distribution

60 gallon 24" cube tank. 8" height above water.
With a standard 120° lens. Features the AB+ spectrum.

210
148
142 131 141
120 135
147
161 127 97 153

- PAR was measured with an Apogee MQ-510 PAR meter.
- The AB+ spectrum intensities are: Violet: 100%; Blue: 100%; White: 25%; Green: 25%; Red: 25%.
- For testing purposes only; this does not reflect the actual PAR requirements of these corals in this tank.

Figure 4: Example PAR Distribution for HyperReef 100 Gen 2 on a 60-gallon cube tank.

MAINTENANCE

To ensure optimal performance and longevity of your HyperReef 100 Gen 2, regular maintenance is essential:

- **Cleaning:** Regularly clean the light's lens and heatsink to prevent salt creep and dust buildup. Disconnect the

unit from power before cleaning. Use a soft, damp cloth to wipe the lens. For stubborn deposits, isopropyl alcohol can be used sparingly.

- **Fan Maintenance:** Periodically check the cooling fan for any obstructions or excessive noise. Ensure the fan is running freely to maintain proper heat dissipation.
- **Port Covers:** Keep silicone covers for USB-C ports plugged in when the ports are not in use to prevent water and dust ingress.

TROUBLESHOOTING

If you encounter issues with your HyperReef 100 Gen 2, refer to the following common problems and solutions:

Issue	Resolution
Light fails to turn on or flickers	Check the power supply's constant indicator light to ensure proper functionality. Ensure the power outlet is working properly.
Buttons are unresponsive	Ensure the light is disconnected from HyperReef Controller. Unplug the power cord from the outlet, wait 15 seconds, then power back on.
Indicator light blinks red	Ensure the fan is running. Ensure the light has sufficient airflow/clearance.
Fan does not run	Fan only activates when the temperature sensor detects 105°F/40°C or higher.

If you have followed the above troubleshooting steps and the issue persists, please reach out to NICREW customer support for further assistance.

SPECIFICATIONS

Feature	Detail
Model Name	HyperReef 100 Gen 2
Item Model Number	86051
Wattage	100 watts
Light Source Type	LED
Color	Black
Material	Aluminum, Polycarbonate (PC), Acrylonitrile Butadiene Styrene, Acrylic
Item Dimensions (LxWxH)	16.14 x 11.02 x 7.09 inches
Item Weight	7.56 pounds
Mounting Type	Wall Mount (with included HyperReef Mount System)

Feature	Detail
Included Components	HyperReef 100 Gen 2; Power Adapter; AC Power Cord (4 ft); HyperReef Mount System; Quick Start Guide
Date First Available	November 8, 2024

WARRANTY AND SUPPORT

Warranty Information

NICREW products carry a one-year limited warranty from the date of purchase. This warranty is valid on items taken outside the country they were originally bought in or shipped to directly from an authorized online purchase. NICREW is not responsible for and makes no warranties to the following: 1) product failures or damage due to normal wear and tear, abuse, modifications, defects or conditions of the environment, misuse, abuse, modifications, and alterations; and 2) minor imperfections that do not affect the product's structural integrity or use.
Warranties on all replacements follow the same warranty timeframe of the original defective item or 3 months after being replaced, whichever is longer. Warranties on products are void after having been fully refunded.

Customer Support

For technical support or warranty claims, please reach out to NICREW customer support. You can find more information and contact details on the official NICREW website or through your purchase platform.
For general inquiries or to obtain warranty service, please visit the NICREW Store on Amazon or contact their support directly.