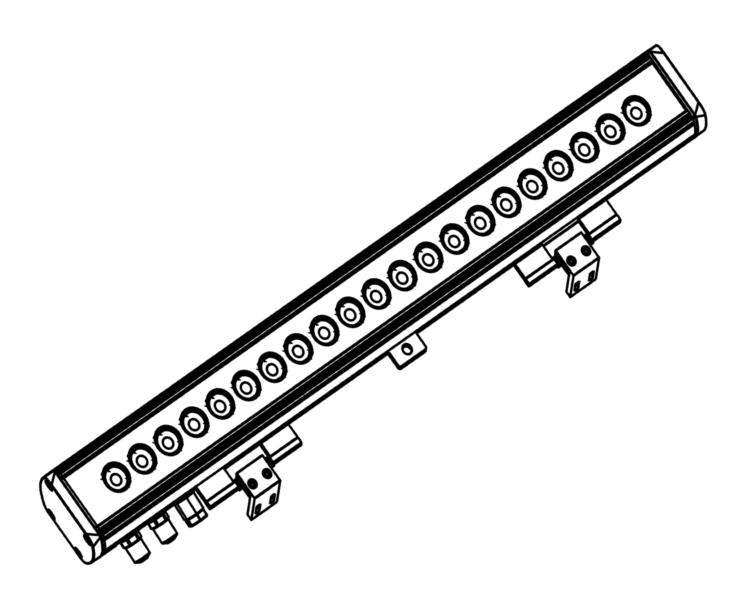
Ilumiline 21g2 IP Optic RGB

User Manual





Edition Notes

The Ilumiline 21g2 IP Optic RGB User Manual Rev. 3 covers the description, safety precautions, installation, programming, operation, and maintenance of the Ilumiline 21g2 IP Optic RGB. ILUMINARC® released this edition of the Ilumiline 21g2 IP Optic RGB User Manual Rev. 3 in October 2015.

Trademarks

The ILUMINARC® logo, the ILUMINARC® name and all other trademarks in this document related to services or products by ILUMINARC® are trademarks owned or licensed by ILUMINARC®, its affiliates or subsidiaries. Any other product names, logos, brands, company names, trademarks featured or referred to within this document are the property of their respective trademark holders.

Copyright Notice

The entire content of this document, except where applicable and unless otherwise noted, is solely owned by ILUMINARC®, a wholly owned trademark of Chauvet & Sons, Inc.

© Copyright 2015 ILUMINARC®.

All rights reserved.

Electronically published by ILUMINARC® in the United States of America.

Manual Usage

ILUMINARC® authorizes its customers to download and print this manual for professional information purposes only. ILUMINARC® expressly prohibits the usage, copy, storage, distribution, modification, or printing of this manual or its content for any other purpose without its written consent.

Document Printing

For better results, print this document in color, on letter size paper (8.5 x 11 in), double-sided. If using A4 paper (210 x 297 mm), configure your printer to scale the content of this document to A4 paper.

Intended Audience

Any person in charge of installing, operating, and/or maintaining the Ilumiline 21g2 IP Optic RGB should read all of both the guide that shipped with it and this User Manual before installing, operating, or maintaining this product.

Disclaimer

ILUMINARC® believes that the information contained in this manual is accurate in all respects. However, ILUMINARC® assumes no responsibility for any error or omissions in this document. ILUMINARC® reserves the right to revise this document and to make changes from time to time in the content hereof without obligation of ILUMINARC® to notify any person or company of such revision or changes. This does not constitute in any way a commitment by ILUMINARC® to make such changes. ILUMINARC® may issue a revision of this manual or a new edition of it to incorporate such changes.

Document Revision

The Ilumiline 21g2 IP Optic RGB User Manual Rev. 3 supersedes all previous versions of this manual. Please discard any older versions of this manual you may have, whether in printed or electronic format, and replace them with this version.

Author	Date	Editor	Date
D. Couppe	10/27/15		



Table of Contents

1. Introduction	1
What Is In The Box Unpacking Instructions Claims Text Conventions Safety Notes Personal Safety Mounting and Installation Power and Wiring Operation	11222
2. Product Description	3
Features Additional Features Options Overview Dimensions	3 3
3. Installation	6
Mounting Orientation Installation Procedure AC Power Power Consumption AC Plug Power Wiring DMX Linking	6 6 7 7



4. Operation	11
ILUMICODE ADDRESSER	11
Ilumicode Panel Description	11
Control Options	
Programming	
DMX Personality	
DMX Starting Address	11
Static Colors	12
Dimmer	
Color	
Whites Setting	
Reset to Factory Settings	
Menu Map	_
DMX Values	
ARC FULL	
ARC 1	
ARC 1 + D	
SOLID	14
5. Technical Information	15
Product Maintenance	15
Product Repairs	
Troubleshooting Guide	
Photometrics	
LED Disclaimer	
LED Life	
LED Binning	_
Color Rendering Index (CRI)	
Returns Procedure	
Technical Specifications	



1. Introduction



Critical installation, configuration, or operation information. Failure to comply with this information may render the product partially or completely inoperative, damage third-party equipment, or cause harm to the user

Important installation or configuration information. Failure to comply with this information may prevent the product from functioning correctly.



Useful information.

The term "DMX" used throughout this document refers to the USITT DMX512-A transmission protocol.

What Is In The Box

- Ilumiline 21g2 IP Optic RGB
- Warranty Card
- Quick Reference Guide

Unpacking Instructions

Immediately upon receiving a product from ILUMINARC®, carefully unpack the carton. Check the contents of the box to ensure that all parts are present and that they are in good condition.

Claims

The carrier is responsible for any damage incurred during shipping. Therefore, if the received merchandise appears to have been damaged during shipping, the customer must submit the damage report and any related claims to the carrier, not ILUMINARC®. The customer must submit the report upon receipt of the damaged merchandise. Failure to do so in a timely manner may invalidate the customer's claim with the carrier.

For other issues such as missing components or parts, damage not related to shipping, or concealed damage, the customer must make claims to ILUMINARC® within 7 days of receiving the merchandise.

Text Conventions

Convention	Meaning	
1~512	A range of values in the text	
50/60	A set of mutually exclusive values in the text	
"ILUMICON UM"	The name of another publication or manual	
<set></set>	A button on the product's control panel	
Settings A product function or a menu option		
MENU > Settings A sequence of menu options		
1~10 A range of menu values from which to choose in a menu		
Yes/No A set of two mutually exclusive menu options in a menu		
ON	A unique value to enter or select in a menu	



There are no user-serviceable parts inside this product. Any reference to servicing you may find in this User Manual will only apply to properly certified ILUMINARC®

technicians. Do not open the housing or attempt any repairs unless you are certified to do so.

Refer to all applicable local codes and regulations for the proper installation of this product.

Keep this manual for future consultation. If you sell this product to another user, make sure that they also receive this manual.

In the unlikely event that your Ilumiline 21g2 IP Optic RGB may require service, contact ILUMINARC® Customer Support.

Safety Notes

Please read all the following Safety Notes carefully because they include important information on how to install, use, and maintain this product safely.

Personal Safety

- · Avoid direct eye exposure to the light source while the product is on.
- · Always disconnect this product from its power source before servicing.
- · Always connect this product to a grounded circuit to avoid the risk of electrocution.
- · Do not touch this product's housing when operating because it may be very hot.

Mounting and Installation

- This product is for outdoor use and can be submerged (IP67). However, do not submerge deeper than 1 m for more than thirty (30) minutes.
- This product weighs 7 lbs (3.18 kg). Always ask for help when mounting this product to avoid personal injuries or damage to the product.
- · Make sure there are no flammable materials close to this product while it is operating.
- CAUTION: When transferring product from extreme temperature environments,
 (e.g. cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow product to fully acclimate to the surrounding environment before connecting it to power.
- · When hanging this product, always secure it to a fastening device using a safety cable.

Power and Wiring

- · Always make sure that you are connecting this product to the proper voltage, as per the specifications in this manual or on the product's sticker.
- · Never connect this product to a dimmer pack.
- · Make sure that the power input cable is not cracked, crimped, or damaged.
- · Never disconnect this product by pulling or tugging on the power input cable.

Operation

- The maximum ambient temperature is 113° F (45° C). Do not operate this product at a higher temperature.
- · In case of a serious operating problem, stop using this product immediately!



2. Product Description

The Ilumiline 21g2 IP Optic RGB is a linear wash product that may be used to light a variety of both indoor and outdoor applications.

The Ilumiline 21g2 IP Optic RGB consists of the main housing and two surface mounting brackets. The DMX input and output is located on rear of the product.

Features

- · 1, 3, 4, or 7-channel RGB LED linear wash product
- Operating modes:

1-channel: Dimmer 3-channel: RGB control 4-channel: RGB, dimmer

7-channel: RGB, dimmer, color macro, strobe, dimmer speed

- RGB color mixing with or without DMX control
- · Color temperature presets (3,200~10,000 K)
- Built-in automated programs via DMX
- IP67 stainless steel gland nuts for cable entry
- Integrated Cooling EnhancementTM

Additional Features

- Adjustable bracket
- · Humidity-controlling GORE® valve
- · Impact-resistant glass lens cover
- · Cast aluminum, IP67 housing
- 5 distinct dimming curves

Options

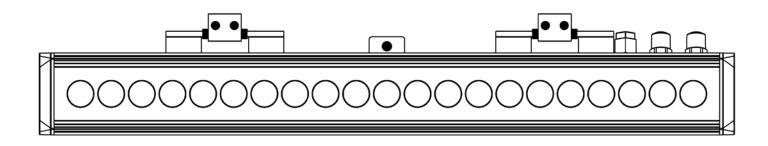
· ILUMICODE ADDRESSER (for product configuration)

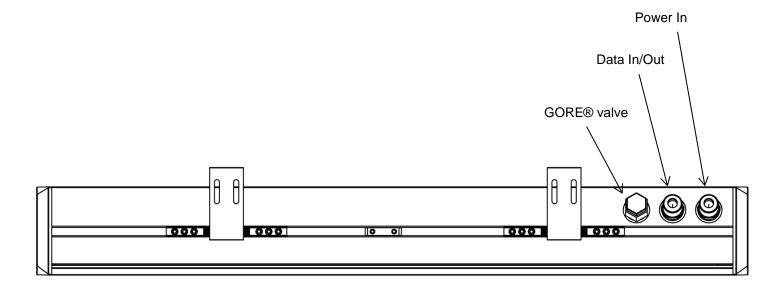


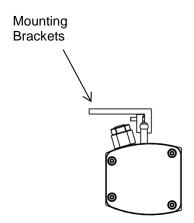
- The RDM2go, which includes a built in ilumicode addresser along with many other useful features is now available.
- · The Ilumicoode addresser is required for product configuration (sold separately).



Overview

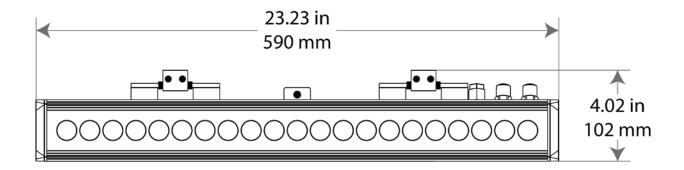


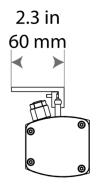


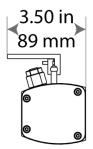




Dimensions









3. Installation

Mounting

Before mounting this product, read and follow the safety recommendations indicated in the Safety Notes.

Orientation

Always mount this product in a safe position, making sure there is adequate room for ventilation, configuration, and maintenance.

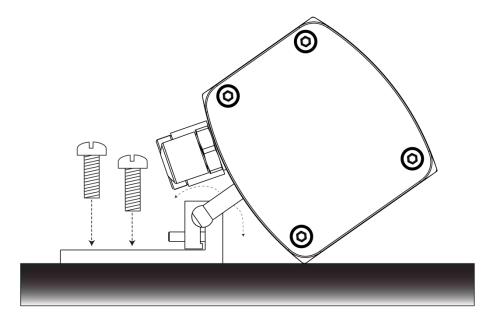
Installation

The Ilumiline 21g2 IP Optic RGB comes with two adjustable brackets with 3 mm slot openings to mount the product on any firm, non-flammable surface. Once mounted the angle of the product can also be adjusted and locked into place. ILUMINARC® recommends following the general guidelines below when mounting the Ilumiline 21g2 IP Optic RGB.

- When selecting an installation location, consider ease of access to the product for operation, programming adjustments and routine maintenance.
- Make sure the product's mounting location can support its weight. Please see the
 <u>Technical Specifications</u> section of this manual for the weight requirement of this
 product.

Procedure

The Ilumiline 21g2 IP Optic RGB comes with two adjustable brackets with 3 mm slot openings to mount the product on any firm, non-flammable surface. These feet also serve as floor or wall mount supports. You will have to use two mounting points per product.



Make sure to mount this product away from any flammable material as indicated in the Safety Notes.



Always connect the Ilumiline 21g2 IP Optic RGB to a protected circuit with an appropriate electrical ground to avoid the risk of electrocution or

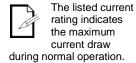
Never connect the Ilumiline 21g2 IP Optic RGB to a

rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0% to 100% switch.



Make sure to connect the Ilumiline 21q2 IP

Optic RGB to a power line with the proper voltage and frequency, as per the specifications in this manual or on the product's sticker.



If you choose to bury the power or signal distribution boxes, make sure that they are IP67-rated or greater.

AC Power

The Ilumiline 21g2 IP Optic RGB has an auto-ranging power supply that works with an input voltage range of 100~240 VAC, 50/60 Hz.

Make sure that you are connecting this product to the proper voltage, as per the specifications in this User Manual or on the product's sticker.

Power Consumption

To determine the power requirements for the Ilumiline 21g2 IP Optic RGB, refer to the label affixed to the side of the product. You may also refer to the Technical Specifications.

The listed current rating indicates the maximum current draw during normal operation.

AC Plug

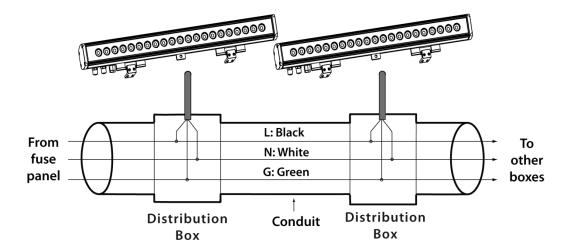
The Ilumiline 21g2 IP Optic RGB comes with a bare-ended power input cord for hardwire installation. Use the table and the illustration below to wire a plug.

Connection	Wire (U.S.)	Screw Color (U.S.)	Wire (Europe)	IP67 Pin
AC Live	Black	Yellow or Brass	Brown	1
AC Neutral	White	Silver or Gray	Blue	2
AC Ground	Green/Yellow	Green	Green/Yellow	3

Power Wiring

You can connect the bare-ended, IP67-rated AC power cable from the product to an IP67-rated power connector or IP67-rated junction box.

If using junction boxes, make sure to use IP67-rated conduit for surface installations.

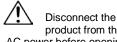




The Ilumiline 21q2 IP Optic RGB must be linked using

DMX cable in a daisy chain (serial) fashion. To comply with the EIA-485 standard, no more than 32 products should be connected on one daisy chain without using a DMX optically isolated splitter. Doing otherwise may result in deterioration of the digital DMX signal.

USITT recommends limiting the total length of the DMX cable (from the first product/controller to the last product) to 300~455 m (985~1,500 ft).



product from the AC power before opening

The signal cable must match or exceed the electrical characteristics of the Belden® 9841 cable for EIA RS-485 applications. You may also use CAT5, 5e, or CAT6 LAN cable.

DMX Linking

You may link the Ilumiline 21g2 IP Optic RGB to a DMX controller using a standard DMX serial connection. If using other DMX products compatible with the Ilumiline 21g2 IP Optic RGB, you can control each individually with a single DMX controller.

If you are not familiar with the DMX standard, or if you need information about the DMX cables needed to link the Ilumiline 21g2 IP Optic RGB to a DMX controller, you may download the "DMX Primer" from the ILUMINARC® website at http://www.iluminarc.com/reports/dmxprimer.

DMX Modes

The Ilumiline 21g2 IP Optic RGB uses the standard DMX data connection for its all its DMX personalities. Refer to the <u>Introduction</u> chapter for a brief description of these modes. Refer to the Operation chapter to learn how to configure the Ilumiline 21g2 IP Optic RGB to work in these modes. The DMX Values section provides detailed information regarding the DMX modes.

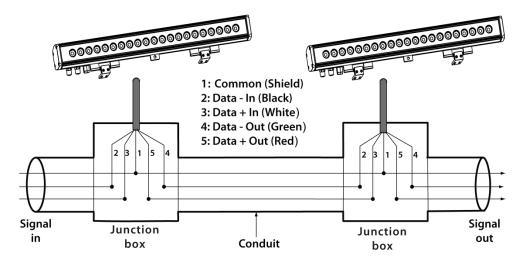
DMX Mode	DMX Address
ARC FULL	506
ARC1	510
ARC1+D	509
SOLID	512

Signal Wiring

To provide signal for the Ilumiline 21g2 IP Optic RGB, you can connect the bare-ended, IP67-rated signal cable from the product to two IP67-rated signal connectors (DMX In/DMX Out) or use an IP67-rated junction box. In this case, make sure to use IP67-rated conduit.

Protocol Connectivity

The Ilumiline 21g2 IP Optic RGB uses USITT DMX 512 protocol. The procedure below illustrates the recommended connection method.



If you have not configured the DMX starting address and DMX mode for each product, they will all use their default values. This means that all products will operate in unison.

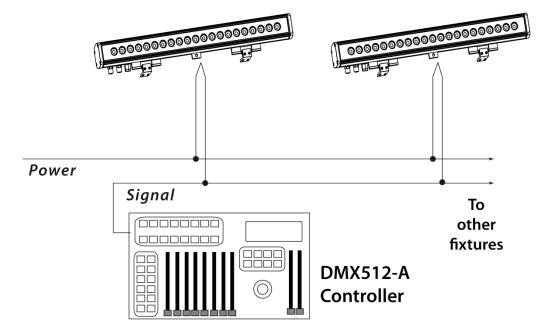
Controllers

The Ilumiline 21g2 IP Optic RGB can operate with a standard DMX controller or the ILUMICODE ADDRESSER. The sections below provide information on how to connect these products to the corresponding controllers. The instructions to operate these products with each of the above controllers are in the Operation chapter of this manual.

DMX Controller

The Ilumiline 21g2 IP Optic RGB can work with a standard DMX controller. The channel assignments will depend on the chosen personality (see the corresponding Menu Map section) and the DMX address assigned to each product (see the <u>Programming</u> section).

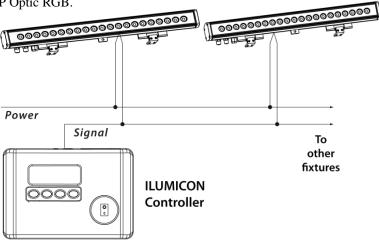
The figure below illustrates how to connect the DMX controller to the Ilumiline 21g2 IP Optic RGB.



ILUMICON

The Ilumiline 21g2 IP Optic RGB can also work with the ILUMICON controller instead of a standard DMX controller. Please refer to the ILUMICON User Manual to learn how to use this controller with the Ilumiline 21g2 IP Optic RGB.

The figure below illustrates how to connect the ILUMICON controller to the Ilumiline 21g2 IP Optic RGB.



The RDM2go, which includes a built in ilumicode addresser along with many other useful features is now available.

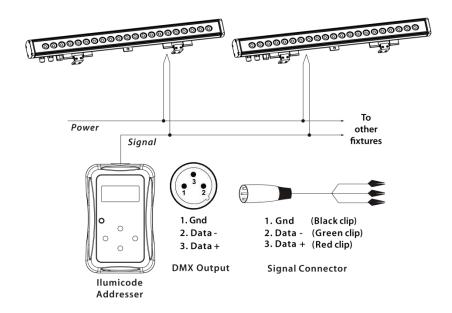
ILUMICODE ADDRESSER

The Ilumiline 21g2 IP Optic RGB uses the ILUMICODE ADDRESSER ("Ilumicode") for configuration purposes. The diagram below shows how to connect the Ilumicode to this product. This connection will control multiple products at the same time, all having the same DMX address.

Important: The RDM2go, which includes a built in ilumicode addresser along with many other useful features is now available. The Ilumicode must be used to configure this product. The Ilumicode or RDM2go can be purchased separately.



ILUMINARC® suggests that you connect no more than 20 products in this mode and keep the total distance to less than 60 m (197 ft). Otherwise, you might need to use an optically isolated signal amplifier.





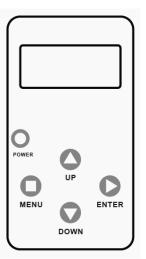
4. Operation

ILUMICODE ADDRESSER

The Ilumiline 21g2 IP Optic RGB needs an external controller, such as the ILUMICODE ADDRESSER ("Ilumicode"), or RDM2go to change its configuration.

Ilumicode Panel Description

Button	Function	
<menu></menu>	Exits from the current menu or function	
<enter></enter>	Enables the currently displayed menu or sets the currently selected value into the selected function	
<up></up>	Navigates upwards through the menu list and increases the numeric value when in a function	
<down></down>	Navigates downwards through the menu list and decreases the numeric value when in a function	
<power></power>	Turns the unit on. The unit will turn off automatically after 30 seconds of inactivity	



Control Options

You can set the Ilumiline 21g2 IP Optic RGB starting address in the 001~512 DMX range. This allows for the control of up to 73 products in the 7-channel ARC FULL personality.

Programming

Carry out all the programming procedures indicated below from the control panel. Refer to the Menu Map section to learn how the menu options relate to each other.

Use **<ENTER>** and **<MENU>** to change levels in the Menu Map, moving right and left respectively. Use **<UP>** and **<DOWN>** to move vertically within the Menu Map.

DMX Personality

- 1. Go to **PERSON** and select any DMX personality.
- 2. Make sure to rearrange the DMX addresses of all products in the current DMX universe to avoid address overlapping.

DMX Starting Address

- 1. Go to **DMX**.
- 2. Select a starting DMX address (001~512).

When you scroll through the menu options, you will see many of them that do not correspond with the menu map. Skip them, as they do not work with the RGB only output products.

DIM1 is the fastest dimming

curve and DIM4 is the slowest.



Static Colors

- 1. Go to STATIC.
- 2. Select a color or effect (RED, GREN, BLUE, or STRB).
- 3. Select a color value (000~255) or a strobe frequency (00~20).

Dimmer

This setting gives the user four different options to simulate the dimming curve of an incandescent lighting product.

- 1. Go to DIMMER.
- 2. Select a dimming curve (OFF or DIM1~4).

Procedure:

DIMMER	Description	
OFF	Dimmer curve is linear with fader	
DIM1	Non-linear (fastest)	
DIM2	Non-linear (fast)	
DIM3	Non-linear (slow)	
DIM4	Non-linear (slowest)	

Color

- 1. Go to SETTINGS > COLOR.
- 2. Select the color method (OFF, RGBTOW, or UC).

Details:

OFF

When the RGB faders are all set to "255", the output is maximum.

RGBTOW

When the RGB faders are all set to "255", the output is the selected White color (see Whites Setting).

UC

When the RGB faders are all set to "255", the output matches the same color output of previous versions of this product.

Whites Setting

- 1. Go to CALIB.
- 2. Select a white color (WHITE 1~11) or RGB TO W.
- 3. Select an RGB color (RED, GREN, or BLUE).
- 4. Configure the color value (000~255).
- 5. Repeat steps 3 and 4 for the other RGB colors to obtain a white color.
- 6. Repeat steps 2 through 5 for the other white colors.

Reset to Factory Settings

- 1. Go to SETTINGS > RESET.
- 2. Select an option (YES/NO).



Menu Map

Main Level	Program	ning Levels		Description
DMX	001~512	N/A		Sets the DMX starting address
PERSON	ARC 1	N/A		3-channel: RGB control
	ARC 1 + D	7		4-channel: RGB control + dimmer
	ARC FULL			7-channel: RGB control, dimmer, color macro, strobe, dimmer speed
	REMOTE	7		Allows use of the ILUMICON
	SOLID			1-channel: dimmer
CALIB	WHITE (1~11)	RED GREN	000~255	Determines the white balance for the color macros
	RGBTOW	BLUE		Determines the white balance when RGBTOW is active
DIMMER	OFF			Dimmer works in linear mode
	DIM 1			Dimmer works in non-linear mode, from fast to slow
	DIM 2			
	DIM 3			
	DIM 4			
STATIC	RED	000~2	55	Configures the static color and effects
	GREN			
	BLUE	7		
	STRB			
SETTINGS	COLOR	OFI	7	Maximum output, unbalanced white
		RGBT	ow	White output is as per CALIB > RGBTOW settings
		UC NO/YES		Output matches that of product's previous versions
	RESET			Resets unit to factory default settings



DMX Values

ARC FULL

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ó 255	0~100%
2	Red	000 ó 255	0~100%
3	Green	000 ó 255	0~100%
4	Blue	000 ó 255	0~100%
5	Color Macros	031 6 050 051 6 070 071 6 090 091 6 110 111 6 130 131 6 150 151 6 200 201 6 215 226 6 230 231 6 235 236 6 240 241 6 245 251 6 255	No function R: 100% G: 0~100% B: 0 R: 100%~0 G: 100% B: 0 R: 0 G: 100% B: 0~100% R: 0 G: 100%~0 B: 100% R: 0~100% G: 0 B: 100%~0 R: 100% G: 0 B: 100%~0 R: 100% G: 0 B: 100%~0 R: 100% G: 0 B: 100% B: 0~100% R: 100% G: 100%~0 B: 100% R: 100% G: 100% B: 100% White 1 White 2 White 3 White 4 White 5 White 6 White 7 White 8 White 9 White 10 White 10
6	Strobe	000 ó 009 010 ó 255	No function Slow~Fast
7	Dimmer Speed	000 6 009 010 6 069 070 6 129 130 6 189 190 6 255	Off Speed 1 (Fastest) Speed 2 Speed 3 Speed 4 (Slowest)

ARC 1

Channel	Function	Value	Percent/Setting
1	Red	000 ó 255	0~100%
2	Green	000 ó 255	0~100%
3	Blue	000 ó 255	0~100%

ARC 1 + D

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ó 255	0~100%
2	Red	000 ó 255	0~100%
3	Green	000 ó 255	0~100%
4	Blue	000 ó 255	0~100%

SOLID

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ó 255	0~100%

5. Technical Information

Product Maintenance

To maintain optimum performance and minimize wear, clean the products frequently. Usage and environment are contributing factors in determining the cleaning frequency. As a general guideline, products should be cleaned at least twice a month. Dust build-up reduces light output, performance, and can cause overheating. This can lead to reduced light source life.

For products containing external optical lenses, clean them periodically to optimize light output. The cleaning frequency depends on the environment in which the product operates. Damp, smoky, or particularly dirty surrounding can cause greater accumulation of dirt on the product's optics, requiring more frequent cleaning.

To clean a product:

- · Unplug the product from power.
- · Wait until the product has cooled.
- Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external vents and reachable internal components.
- · Clean all external glass optics and glass surfaces with a mild solution of glass cleaner or isopropyl alcohol, and a soft, lint-free cotton cloth or lens-cleaning tissue.
- Apply the solution directly to the cloth or tissue and wipe any dirt and grime to the outside edge of the lens.
- · Gently polish the external glass surfaces until they are free of haze and lint.

Product Repairs

ILUMINARC® strongly advises you against attempting any repairs to this product unless you are an authorized ILUMINARC® technician.

ILUMINARC® presents the information contained in the <u>Troubleshooting Guide</u> as potential solutions only. In most cases, opening the product's housing will invalidate its warranty.

Always dry the external optics and glass surfaces carefully after cleaning them.





Troubleshooting Guide

Symptom	Cause(s)	Action(s)	
Circuit breaker/fuse keeps tripping/blowing	Excessive circuit load	Check total load placed on the electrical circuit	
	Short circuit along the power wires	Check for a short in the electrical wiring	
Product does not power up	No power	Check for power on power outlet	
	Loose or damaged power cord	Check power cord	
	Faulty internal power supply	Return for service to ILUMINARC®	
Product does not respond to	Wrong DMX addressing	Check Control Panel and product addressing	
DMX	Damaged DMX cables	Check DMX cables	
	Wrong polarity on the controller	Check polarity switch settings on the controller	
	Loose DMX cables Check cable connections		
	Faulty DMX interface	Return for service to Iluminarc®	
	Faulty Display/Main board	Return for service to Iluminarc®	
DMX signal problems	Non-DMX cables	Use only DMX-compatible cables	
	Bouncing signals	Install terminator as suggested in the "DMX Primer" from the ILUMINARC® website at http://www.iluminarc.com/reports/dmx-primer	
	Long cable/low level signal	Install an optically coupled DMX splitter right after the product with the strong signal	
	Too many products	Install an optically coupled DMX splitter after product #32 or before	
	Interference from AC wires	Keep DMX cables separated from power cables or fluorescent/black lights	

Photometrics

ILUMINARC®

Filename: ILUMILINE 21g2 IP Optic 60x10 RGB at

full

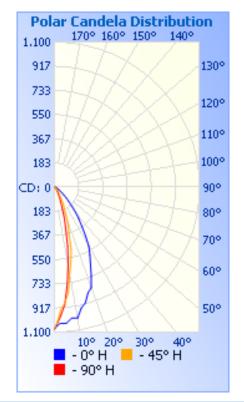
Manufacturer: ILUMINARC Luminaire: 7R+7G+7B

Lamp Cat: ILUMILINE 21g2 IP Optic 60x10 RGB Lamp Output: 1 lamp, rated Lumens/lamp: 1000 Max Candela: 1,080.8 at Horizontal: 0°, Vertical: 0°

Input Wattage: 29.5 Luminous Point Opening:

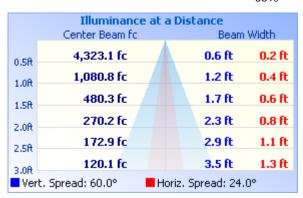
Test: YJAT20120921
Test Date: 2012-09-21
Test Lab: ILUMINARC R&D

Photometry: Type B
CIE Class: Direct



Flood Summary

			•		
Efficiency		Lumens	Horizontal Spread	Vertical Spread	
Field (10%):		477.1	48.6	99.2	
Beam (50%):		268.8	24	60	
Total:	58%	579.8			



Photometrics Pro 1.3.21 copyright 2003-2012 by jSolutions, Inc. Reported data calculated from manufacturer's data file, based on IES recommended methods.

LED Disclaimer

LED Life

ILUMINARC® rates LED lifetime based on lumen depreciation of 70% of the original output, with data provided by the manufacturer of the LED. Data from the manufacturer of the LED are not independently verified or measured by ILUMINARC®. When the product is operating in optimal environmental conditions, the LED lifetime is rated to be 50,000 to 70,000 hours by the LED manufacturer.

LED Binning

LED manufacturers sort LEDs into "bins," based on variances in color, output intensity, and the frequency at which the semiconductor operates. ILUMINARC® strives to hold its LED manufacturers to the highest standards of binning to optimize consistency in output from product to product. However, the availability of a single bin cannot be guaranteed. With that in mind, ILUMINARC® has developed a rigorous control system to seek the best-achievable consistency in color and output.

Color Rendering Index (CRI)

CRI is an industry standard method to compare properties of different types of light sources. There are known limitations and inconsistencies related to CRI. Results may vary depending on the environmental factors involved. For this reason, the U.S. Department of Energy (DOE) states that CRI should be considered as one point of reference among others in evaluating white LED products and systems.

The following is an excerpt of recommendations from the DOE:

- Identify the visual tasks to be performed under the light source. If color fidelity
 under different light sources is critically important (for example, in a space where
 color or fabric comparisons are made under both daylight and electric lighting),
 CRI values may be a useful metric for rating LED products.
- 2. CRI may be compared only for light sources of equal correlated color temperature. This applies to all light sources, not only to LEDs. Also, differences in CRI values of less than five points are not significant, e.g., light sources with 80 and 84 CRI are essentially the same.
- 3. If color appearance is more important than color fidelity, do not exclude white light LEDs solely on the basis of relatively low CRI values. Some LED products with CRIs as low as 25 still produce visually pleasing white light.
- 4. Evaluate LED systems in person and, if possible, on-site when color fidelity or color appearance are important issues.

Source: DOE publication: PNNL-SA-56891, January 2008



Returns Procedure

ILUMINARC® reserves the right to use its own discretion to repair or replace returned product(s).

You must send the merchandise prepaid, in the original box, and with its original packing and accessories. ILUMINARC® will not issue call tags.

Call ILUMINARC® and request a Return Merchandise Authorization Number (RMA#) before shipping the product. Be prepared to provide the model number, serial number, and a brief description of the cause for the return.

The user must clearly label the package with an RMA #. ILUMINARC® will refuse any product returned without an RMA #. DO NOT write the RMA # directly on the box. Instead, write it on a properly affixed label.

Once you receive the RMA #, please include the following information on a piece of paper inside the box:

- Your name
- Your address
- Your phone number
- The RMA#
- A brief description of the problem

Be sure to pack the product properly. Any shipping damage resulting from inadequate packaging will be the customer's responsibility. FedEx packing or double-boxing are recommended.

will need those to ship the product back to ILUMINARC®.

Contact

Us

Always keep the

original box and

all packaging material as you

USA WORLD HEADQUARTERS

General Information – ILUMINARC **Technical Support**

Address: 5200 NW 108th Avenue Voice: (800) 762-1084

> support@iluminarc.com Sunrise, FL 33351 Email:

Voice: (954) 923-3680

Fax: (800) 544-4898 World Wide Web www.iluminarc.com

EUROPE

General Information - Chauvet Europe BVBA **Technical Support**

Address: Stokstraat 18 Email: Eutech@chauvetlighting.eu

9770 Kruishoutem

World Wide Web www.chauvetlighting.eu Belaium

Voice: +32 9 388 93 97

General Information - Chauvet Europe Ltd. **Technical Support**

Address: Unit 1C

Email: uktech@iluminarc.com **Brookhill Road Industrial Estate**

Pinxton, Nottingham, UK World Wide Web

NG16 6NT www.chauvetlighting.co.uk

Voice: +44 (0)1773 511115 Fax: +44 (0)1773 511110

MEXICO

General Information - Chauvet Mexico Technical Support

Address: Av. Santa Ana 30 Email: servicio@iluminarc.com.mx

Parque Industrial Lerma

Lerma, Mexico C.P. 52000 World Wide Web www.chauvet.com.mx

+52 (728) 285-5000 Voice:

Outside the U.S., United Kingdom, Ireland, Mexico, or Benelux contact the dealer of record. Follow their instructions to request support or to return a product. Visit our website for contact details.





Technical Specifications

Dimensions and	Length	Width	Height	Weight	
Weight	23.23 in (590 mm)	4.02 in (102 mm)	3.5 in (89 mm)	7 lbs (3.18 kg)	
	Note: Dimensions in inches rounded to the nearest decimal digit.				
Electrical	Power Supply Type	Rar	nge	Voltage Selection	
	Switching (internal)	100~240 V	, 50/60 Hz	Auto-ranging	
	Parameter	120 V,	60 Hz	230 V, 50 Hz	
	Consumption	28 W (0	.405 A)	27 W (0.222 A)	
	Power I/O	Inp	out	Output	
	Connectors	Open	Wire	N/A	
	Cord plug	Open	Wire	N/A	
Light Source	Туре	Pov	ver	Lifespan	
	LED	1.	W	50,000 hours	
	Color	Quai	ntity	Current	
	Red	7	1	350 mA	
	Green	7	•	350 mA	
	Blue	7	,	350 mA	
Photometrics	Parameter	Standard 60 ^o	x10º Optics		
	Illuminance @ 5 m	43.2	7 lx		
	Beam angle	24.	.0°		
	Field angle	48.	.6°		
Thermal	Max. External Temperat	ure Cooling	System		
	113° F (45° C)	Integrated Enhance			
DMX	I/O Connectors	Connect	or Type	Channel Range	
	Open Wire	Open	Wire	1, 3, 4, 7	
Ordering	Product Name	Item (Code	UPC Number	
J	Ilumiline 21g2 IP Optic R	GB 0161	0557	781462209056	



