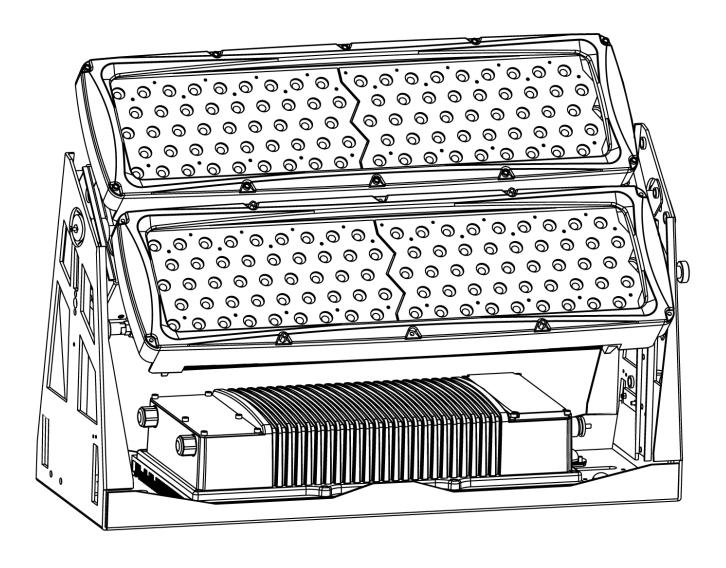
Ilumipanel 180 IP Optic 15/30 RGB

User Manual





Edition Notes

The Ilumipanel 180 IP Optic 15/30 RGB User Manual Rev. 4 covers the description, safety precautions, installation, programming, operation, and maintenance of the Ilumipanel 180 IP Optic 15/30 RGB. ILUMINARC® released this edition of the Ilumipanel 180 IP Optic 15/30 RGB User Manual Rev. 4 in November 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 Ilumipanel 180 IP Optic 15/30 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 Ilumipanel 180 IP Optic 15/30 RGB User Manual Rev. 4 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 | 5/4/15 | | |



Table of Contents

| 1. | Introduction | . 1 |
|----|--|---------------------------------|
| | What Is In The Box | . 1 |
| | Unpacking Instructions | . 1 |
| | Claims | |
| | Text Conventions | |
| | Personal Safety | |
| | Mounting and Installation | |
| | Power and Wiring | |
| | Operation | |
| 2. | Product Description | . 3 |
| | Features | 3 |
| | Options | 3 |
| | Product Overview | . 4 |
| | Product Dimensions | . 5 |
| | | |
| 3. | Installation | . 6 |
| 3. | | |
| 3. | Mounting | . 6 |
| 3. | | 6 |
| 3. | Mounting Orientation Installation AC Power | 6 6 6 |
| 3. | Mounting Orientation Installation AC Power Power Consumption | 6 6 7 |
| 3. | Mounting Orientation Installation AC Power Power Consumption AC Plug | 6 6 7 7 |
| 3. | Mounting Orientation Installation AC Power Power Consumption AC Plug Power Wiring | 6 6 7 7 |
| 3. | Mounting Orientation Installation AC Power Power Consumption AC Plug Power Wiring DMX Linking DMX Modes | 6 6 7 7 7 |
| 3. | Mounting Orientation Installation AC Power Power Consumption AC Plug Power Wiring DMX Linking DMX Modes Signal Wiring | 6 6 7 7 7 |
| 3. | Mounting Orientation Installation AC Power Power Consumption AC Plug Power Wiring DMX Linking DMX Modes Signal Wiring Protocol Connectivity. | 6 6 7 7 7 8 |
| 3. | Mounting Orientation Installation AC Power Power Consumption AC Plug Power Wiring DMX Linking DMX Modes Signal Wiring Protocol Connectivity. Controllers | 6 6 7 7 7 8 8 |
| 3. | Mounting Orientation Installation AC Power Power Consumption AC Plug Power Wiring DMX Linking DMX Modes Signal Wiring Protocol Connectivity. | 6 6 7 7 8 8 |



| 4. Operation | 12 |
|-----------------------------|----|
| ILUMICODE ADDRESSER | 12 |
| Ilumicode Panel Description | |
| Control Options | |
| Programming | |
| DMX Personality | |
| DMX Starting Address | |
| Static Colors | |
| Dimmer | _ |
| Color | 13 |
| Whites Setting | |
| Reset to Factory Settings | |
| Menu Map | |
| DMX Values | |
| ARC FULL | |
| ARC 1 | 15 |
| ARC 1 + D | 15 |
| SOLID | 16 |
| SPECIAL 1 | 16 |
| 5. Technical Information | 17 |
| Product Maintenance | 17 |
| Product Repairs | |
| Troubleshooting Guide | |
| Photometrics | |
| LED Disclaimer | |
| LED Life | |
| LED Binning | |
| Color Rendering Index (CRI) | 21 |
| Returns Procedure | |
| Technical Specifications | |



1. Introduction



This icon indicates 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.

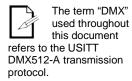


This icon indicates important

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



This icon indicates useful, non-critical



What Is In The Box

- One Ilumipanel 180 IP Optic 15/30 RGB
- · One Power Input Cable (Bare-Ended)
- One Data Input/Output Cable (Bare-Ended)
- · 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 seven (7) days of receiving the merchandise.

Text Conventions

| Convention | tion 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> A button on the product's control panel</set> | | |
| 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.

Please 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 llumipanel 180 IP Optic 15/30 RGB may require service, please contact ILUMINARC® Technical 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.
- 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.
- This product weighs 89 lbs. (40.3 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.
- 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 104° F (40° 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 Ilumipanel 180 IP Optic 15/30 RGB is a high-intensity wash product that may be used to light a variety of both indoor and outdoor applications.

The Ilumipanel 180 IP Optic 15/30 RGB consists of steel base and two adjustable panels. The base contains the power supply and the control unit. The panels are attached to the steel arms that come from the base and are individually adjustable. The DMX and power input and output are located on the power supply.

Features

- 1, 3, 4, 6, or 7-channel RGB LED array light
- Operating modes:

1-channel: Dimmer
3-channel: RGB control
4-channel: RGB, dimmer
6-channel: RGB control per pod

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

- · Five distinct dimming curves
- Dual Vector ArrayTM LED panel positioning
- · High-power 5 W (700~1,000 mA) RGB LEDs
- · IP67 with 316 stainless steel hardware
- GORETM valve
- Cast and extruded aluminum with Integrated Cooling EnhancementTM

Options

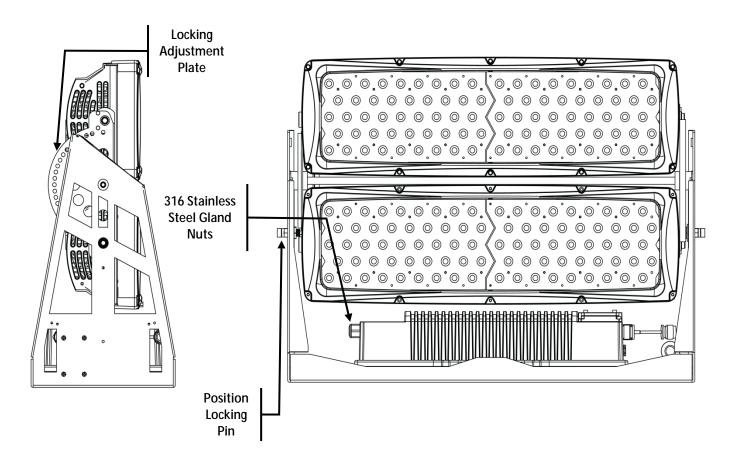
· ILUMICODE ADDRESSER (for product configuration)

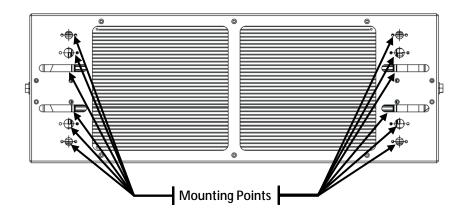


- The RDM2go, which includes a built in ilumicode addresser along with many other useful features is now available.
- The Ilumicoode addresser is required for product configuration (sold separately).



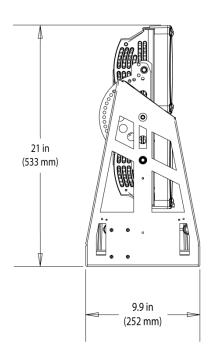
Product Overview



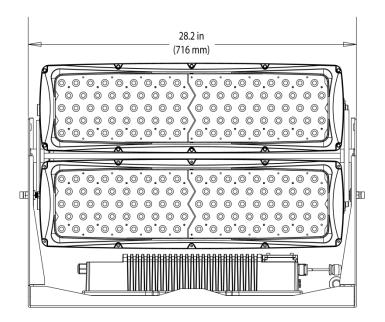




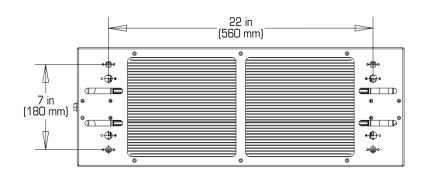
Product Dimensions



Side View



Front View



Bottom View

3. Installation

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

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 Ilumipanel 180 IP Optic 15/30 RGB has twelve (12) mounting points on the base of the product to secure it to almost any surface provided that it can support the product's weight. ILUMINARC® recommends following the general guidelines below when mounting the Ilumipanel 180 IP Optic 15/30 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> for the weight-bearing requirements of this product.

Always connect the Ilumipanel 180 IP Optic 15/30 RGB to a protected circuit with an appropriate electrical ground to avoid the risk of electrocution or

fire.

Never connect the Ilumipanel 180 IP Optic 15/30 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 Ilumipanel 180 IP Optic 15/30 RGB to a power line with the proper voltage and frequency, as per the specifications in this manual or on the product's sticker.



The listed current rating indicates the maximum

current draw during normal operation.

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

AC Power

The Ilumipanel 180 IP Optic 15/30 RGB has an auto-ranging power supply that can work 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 Ilumipanel 180 IP Optic 15/30 RGB, refer to the label affixed to the side of the product. Alternatively, you may refer to the Technical Specifications.

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

AC Plug

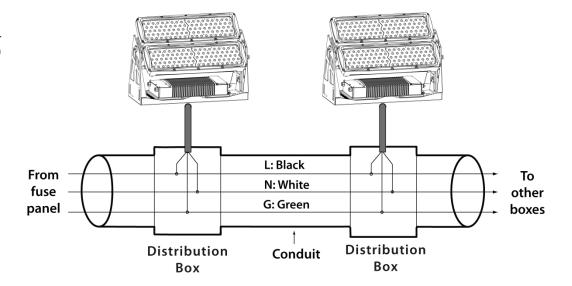
The Ilumipanel 180 IP Optic 15/30 RGB comes with a bare-ended power input cord for hardwire installation. Use the table and the illustration below to wire a plug.

| 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 Ilumipanel 180 IP Optic 15/30 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 985~1,500 ft. (300~455 m).

Disconnect the product from the AC power before opening it.

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 Ilumipanel 180 IP Optic 15/30 RGB to a DMX controller using a standard DMX serial connection. If using other DMX products compatible with the Ilumipanel 180 IP Optic 15/30 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 Ilumipanel 180 IP Optic 15/30 RGB to a DMX controller, download the "DMX Primer" from the ILUMINARC® website at http://www.iluminarc.com/reports/dmx-primer.

DMX Modes

The Ilumipanel 180 IP Optic 15/30 RGB uses the standard DMX data connection for its **ARC1**, **ARC1+D**, **ARC FULL**, **REMOTE**, **SOLID**, and **SPECIAL 1**.

Refer to the <u>Introduction</u> for a brief description of these modes. Refer to <u>Operation</u> to learn how to configure the Ilumipanel 180 IP Optic 15/30 RGB to work in these modes. The <u>DMX Values</u> section provides detailed information regarding the <u>DMX</u> modes.

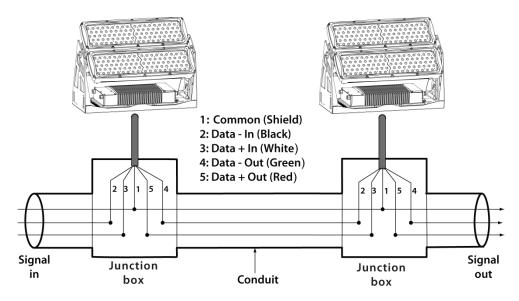
| DMX Mode | DMX Address | DMX Mode | DMX Address |
|----------|-------------|----------|-------------|
| ARC FULL | 506 | SOLID | 512 |
| ARC1 | 510 | SPECIAL1 | 507 |
| ARC1+D | 509 | | |

Signal Wiring

To provide signal for the Ilumipanel 180 IP Optic 15/30 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 Ilumipanel 180 IP Optic 15/30 RGB uses the USITT DMX 512 Protocol. The procedure below illustrates the recommended connection method.





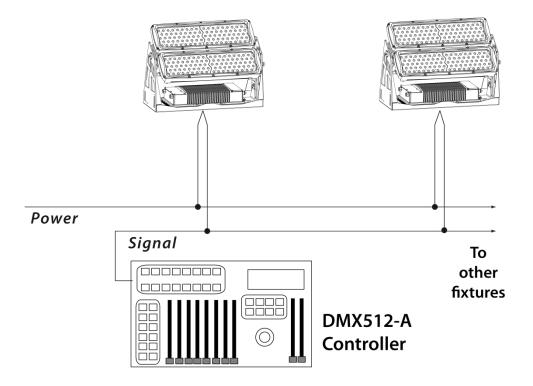
Controllers

The Ilumipanel 180 IP Optic 15/30 RGB can operate with a standard DMX controller, the ILUMICON 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 Operation.

DMX Controller

The Ilumipanel 180 IP Optic 15/30 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 Programming section).

The figure below illustrates how to connect the DMX controller to the Ilumipanel 180 IP Optic 15/30 RGB.

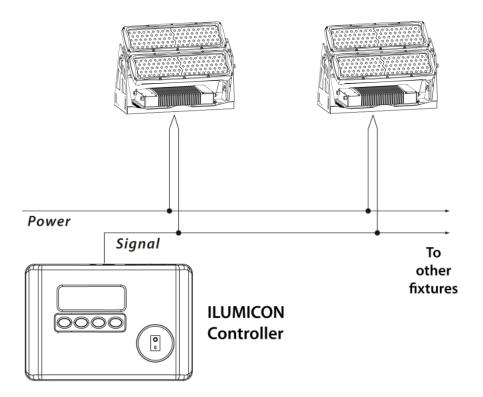


ILUMICON

Refer to Operation to learn how to enable the Ilumipanel 180 IP Optic 15/30 RGB to operate with the ILUMICON controller.

The Ilumipanel 180 IP Optic 15/30 RGB can also work with the ILUMICON controller instead of a standard DMX controller. See the ILUMICON User Manual to learn how to use this controller with the Ilumipanel 180 IP Optic 15/30 RGB product.

The figure below illustrates how to connect the ILUMICON controller to the Ilumipanel 180 IP Optic 15/30 RGB.



ILUMICODE ADDRESSER

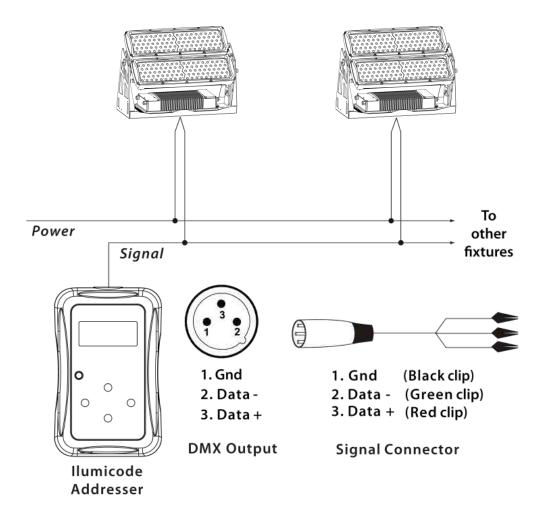
The RDM2go, The Ilumipanel 180 IP Optic 15/30 RGB uses the ILUMICODE ADDRESSER ("Ilumicode") for configuration purposes. The diagram below shows how to connect the Ilumicode to this product. This connection will control multiple products at the same time, all having the same DMX address.

> Important: The Ilumicode must be used to configure this product. The Ilumicode can be purchased separately through your ILUMINARC® sales representative.

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

To assign individual DMX addresses to each product, you must connect the Ilumicode to each product, individually.

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.





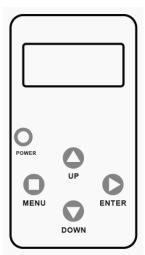
4. Operation

ILUMICODE ADDRESSER

The Ilumipanel 180 IP Optic 15/30 RGB needs an external controller, the Ilumicode, to change its configuration.

Ilumicode Panel Description

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



Control Options

You can set the Ilumipanel 180 IP Optic 15/30 RGB start 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**, **Green**, **Blue**, or **Strobe**).
- 3. Select a color value (000~255) or a strobe frequency (0~20).

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**, **RGB TO W**, or **UC**).

Details:

OFF

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

RGB TO W

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, Green, or Blue).
- 4. Configure the color value $(0\sim255)$.
- 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 | Prograi | mming Levels | | Description |
|------------|--------------|--------------|-------|---|
| DMX | 001~512 | N/A | | Sets the DMX starting address |
| PERSON | ARC 1 | | | 3-channel: RGB control |
| | ARC 1 + D | | | 4-channel: RGB control + dimmer |
| | ARC FULL | N/A | | 7-channel: RGB control, dimmer, color macro, strobe, dimmer speed |
| | REMOTE | | | Allows use of the ILUMICON |
| | SOLID | | | 1-channel: dimmer |
| | SPECIAL 1 | | | 6-channel: RGB per module |
| CALIB | WHITE (1~11) | RED GREN | 0~255 | Determines the white balance for the color macros |
| | RGBTOW | BLUE | 0~255 | Determines the white balance when RGBTOW is active |
| | OFF | | • | Dimmer works in linear mode |
| | DIM 1 | | | Dimmer works in non-linear mode, from fast to slow |
| DIMMER | DIM 2 | N/A | | |
| | DIM 3 | | | |
| | DIM 4 | | | |
| | RED | | | Configures the static color and effects |
| STATIC | GREN | 0~25 | 5 | |
| SIAIIC | BLUE | 0~25 | 3 | |
| | STRB | | | |
| | | OFF | י | Maximum output, unbalanced white |
| SETTINGS | COLOR | RGBTO | OW | White output is as per CALIB > RGBTOW settings |
| SETTINGS | | UC | | Output matches that of product's previous versions |
| | RESET | NO/YI | ES | 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 | 071 6 090 091 6 110 111 6 130 131 6 150 151 6 170 171 6 200 201 6 210 211 6 215 226 6 230 231 6 235 236 6 240 241 6 245 246 6 250 251 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% R: 100% G: 0% B: 100%~0 R: 100% G: 0% B: 100%~0 R: 100% G: 0~100% B: 0~100% R: 100%~0 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 11 |
| 6 | Strobe | 000 ó 009 010 ó 255 | No function Slow~Fast |
| 7 | Dimmer Speed | 000 6 009 010 6 029 030 6 069 070 6 129 130 6 189 190 6 255 | Uses Ilumicode Settings 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 6 255 | 0~100% |

SPECIAL 1

| Channel | Function | Value | Percent/Setting |
|---------|----------------|------------------|-----------------|
| 1 | Module 1 Red | 000 ó 255 | 0~100% |
| 2 | Module 1 Green | 000 ó 255 | 0~100% |
| 3 | Module 1 Blue | 000 ó 255 | 0~100% |
| 4 | Module 2 Red | 000 ó 255 | 0~100% |
| 5 | Module 2 Green | 000 ó 255 | 0~100% |
| 6 | Module 2 Blue | 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 and increased mechanical wear.

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 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, unless there is a written indication to the contrary.

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





Troubleshooting Guide

| Symptom | Cause(s) | Action(s) | |
|--|---|--|--|
| The Market Control of the Control of | Dirty lens assembly | Clean the product regularly | |
| Low light intensity | Misaligned lens assembly | Return for service to Iluminarc® | |
| Constant III minuting | Faulty LED | Return for service to Iluminarc® | |
| Low light intensity Dirty lens assembly Misaligned lens assembly Faulty LED Faulty LED driver board Excessive circuit load Short circuit along the power No power Loose or damaged power con Faulty internal power supply Wrong DMX addressing Damaged DMX cables Wrong polarity on the control Loose DMX cables Faulty Display/Main board Non-DMX cables Bouncing signals DMX signal problems Long cable/low level signal | Faulty LED driver | Return for service to Iluminarc® | |
| One LED descriptions | Faulty LED | Return for service to Iluminarc® | |
| One LED does not illuminate | Dirty lens assembly Misaligned lens assembly Faulty LED Faulty LED driver Faulty LED driver Faulty LED driver Faulty LED driver board Faulty LED driver board Excessive circuit load Short circuit along the power wires No power Loose or damaged power cord Faulty internal power supply Wrong DMX addressing Damaged DMX cables Wrong polarity on the controller Loose DMX cables Faulty Display/Main board Non-DMX cables Bouncing signals Long cable/low level signal | Return for service to Iluminarc® | |
| N. LED. 'II' | Faulty LED board | Return for service to Iluminarc® | |
| No LEDs illuminate | Faulty LED driver board | Return for service to Iluminarc® | |
| | Excessive circuit load | Check total load placed on the electrical circuit | |
| tripping/blowing | Short circuit along the power wires | Check for a short in the electrical wiring | |
| | No power | Check for power on power outlet | |
| Product does not power up | Loose or damaged power cord | Check power cord | |
| | Faulty internal power supply | Return for service to ILUMINARC® | |
| | Wrong DMX addressing | Check Control Panel and product addressing | |
| | Damaged DMX cables | Check DMX cables | |
| | Wrong polarity on the controller | Check polarity switch settings on the controller | |
| DMX | Loose DMX cables | Check cable connections | |
| | Faulty DMX interface | Return for service to Iluminarc® | |
| | Faulty Display/Main board | Return for service to Iluminarc® | |
| | 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 | |
| DMX signal problems | 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 sp after product #32 or before | | |
| | Interference from AC wires | Keep DMX cables separated from power cables or fluorescent/black lights | |



Photometrics

Filename: Ilumipanel 180 IP Optic RGB 30 degree single panel at full

Manufacturer: ILUMINARC®

Luminaire: Ilumipanel 180 IP Optic RGB

single head 30 degrees

Luminaire Cat: 01620437

Lamp: 60 Red, 60 Green, 60 Blue

Lamp Output: 1 lamp(s), rated Lumens/lamp 2000

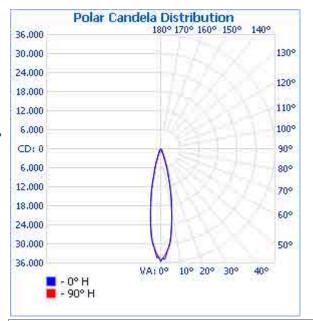
Max Candela: 35,453.7 at Horizontal: 0°, Vertical: 0°

Input Wattage: 284 Luminous Opening: Point

Test: 2011 ALL

Test Lab: ILUMINARC® R&D Optics Laboratory

Photometry: Type B CIE Class: Direct Cutoff Class: n/a

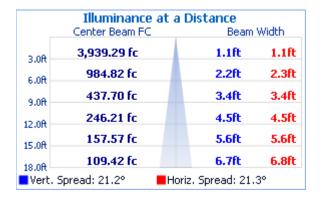


Flood Summary

Efficiency Lumens Horizontal Spread Vertical Spread

Field (10%): 2.8% 5,019.2 39.5 39.3 Beam (50%): 1.5% 2,659.8 21.3 21.2

Total: 3.2% 5,806.3



Photometics Pro 1.3.2 copyright 2003-2008 by jSolutions, Inc.

Reported data calculated from manufacturer's data file, based on IES recommended methods.



Filename: Ilumipanel 180 IP Optic RGB 15 degree single panel at full

Manufacturer: ILUMINARC®

Luminaire: Ilumipanel 180 IP Optic RGB single head 15 degrees

Luminaire Cat: 016204387

Lamp: 60 Red, 60 Green, 60 Blue

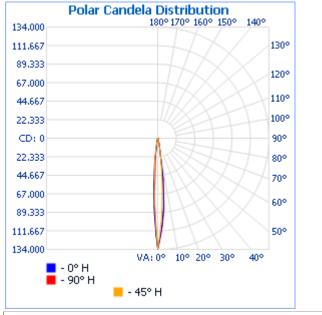
Lamp Output: 1 lamp(s), rated Lumens/lamp: 7960

Max Candela: 133,294.4 at Horizontal: 0, Vertical: 0

Input Wattage: 295.4 Luminous Opening: Point Test: 22011 ALL

Test Lab: ILUMINARC® R&D Optics Laboratory

Photometry: Type B
CIE Class: Direct
Cutoff Class: Full Cutoff



Flood Summary

| | Efficiency | Lumens | Horizontal Spread | Vertical Spread |
|--------------|------------|---------|----------------------|-----------------|
| Field (10%): | 30.5% | 4,274.3 | 19.8 | 19.9 |
| Beam (50%): | 10.9% | 1,527.3 | 9.8 | 10.2 |
| Total: | 42.7% | 5,984.9 | | |

Illuminance at a Distance Center Beam FC Beam Width 14,810.49 fc 0.5ft 0.5ft 3.0A 3,702.62 fc 1.1ft 1.0ft 6.08 1,645.61 fc 1.6ft 1.5ft 9.08 925.66 fc 2.1ft 2.1ft 12.0R 592.42 fc 2.7ft 2.6ft 15.0R 3.2ft 411.40 fc 3.1ft 18.0R ■Vert. Spread: 10.2° Horiz, Spread: 9.8°

Photometics Pro 1.3.2 copyright 2003-2008 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





Always keep the original box and all packaging material as you will need those to ship the product back to ILUMINARC®.

Returns Procedure

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

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. Proper FedEx packing or double-boxing are the shipping methods ILUMINARC® recommends.

Contact Us

USA WORLD HEADQUARTERS

General Information – ILUMINARC **Technical Support**

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

Email: support@iluminarc.com Sunrise, FL 33351

Voice: (954) 923-3680

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

EUROPE

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

Email: Eutech@chauvetlighting.eu Address: Stokstraat 18

9770 Kruishoutem

Belgium

Voice: +32 9 388 93 97

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

Address: Unit 1C

Brookhill Road Industrial Estate

Pinxton, Nottingham, UK

NG16 6NT

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

Email: uktech@iluminarc.com

World Wide Web www.chauvetlighting.eu

World Wide Web

www.chauvetlighting.co.uk

MEXICO

General Information - Chauvet Mexico

Address: Av. Santa Ana 30

Parque Industrial Lerma

Lerma, Mexico C.P. 52000

Voice: +52 (728) 285-5000 **Technical Support**

Email: servicio@iluminarc.com.mx

World Wide Web www.chauvet.com.mx

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 | 28.6 in (728 mm) | 9.9 in (252 mm) | 21.0 in (533 mm) | 89 lbs. (40.3 kg) |

Note: Dimensions in inches rounded to the nearest decimal digit.

| Electrical | Power Supply Type | Range | Voltage Selection |
|-----------------|----------------------------------|--|------------------------------------|
| | Switching (internal) | 100~240 V, 50/60 Hz | Auto-ranging |
| | Parameter | 120 V, 60 Hz | 230 V, 50 Hz |
| | Consumption | 592 W (4.7 A) | 561 W (2.5 A) |
| | Power I/O | Input | Output |
| | Connectors | Hard Wired | N/A |
| | Cord plug | Open Wire | N/A |
| Light Source | Туре | Power | Lifespan |
| | LED | 5 W | 50,000 hours |
| | Color | Quantity | Current |
| | Red | 60 | 700 mA |
| | Green | 60 | 1,000 mA |
| | Blue | 60 | 1,000 mA |
| Photometrics | Parameter | 30º Optics | 15º Optics |
| | Illuminance @ 5 m | 1,696 lx | 6,377 lx |
| | Beam angle | 21.3° | 10.0° |
| | Field angle | 39.4° | 19.9° |
| Thermal | Max. External Temperature | Cooling System | |
| | | Fan assisted convection | |
| | 104° F (40° C) | via Integrated Cooling Enhancement TM | |
| DMX | 104° F (40° C) | via Integrated Cooling | Channel Range |
| DMX | , , | via Integrated Cooling Enhancement TM | Channel Range 1, 3, 4, 6, 7 |
| DMX Ordering | I/O Connectors | via Integrated Cooling Enhancement TM Connector Type | |
| | I/O Connectors Open Wire | via Integrated Cooling Enhancement TM Connector Type N/A | 1, 3, 4, 6, 7 |
| | I/O Connectors Open Wire Product | via Integrated Cooling Enhancement TM Connector Type N/A Item Number | 1, 3, 4, 6, 7 |







