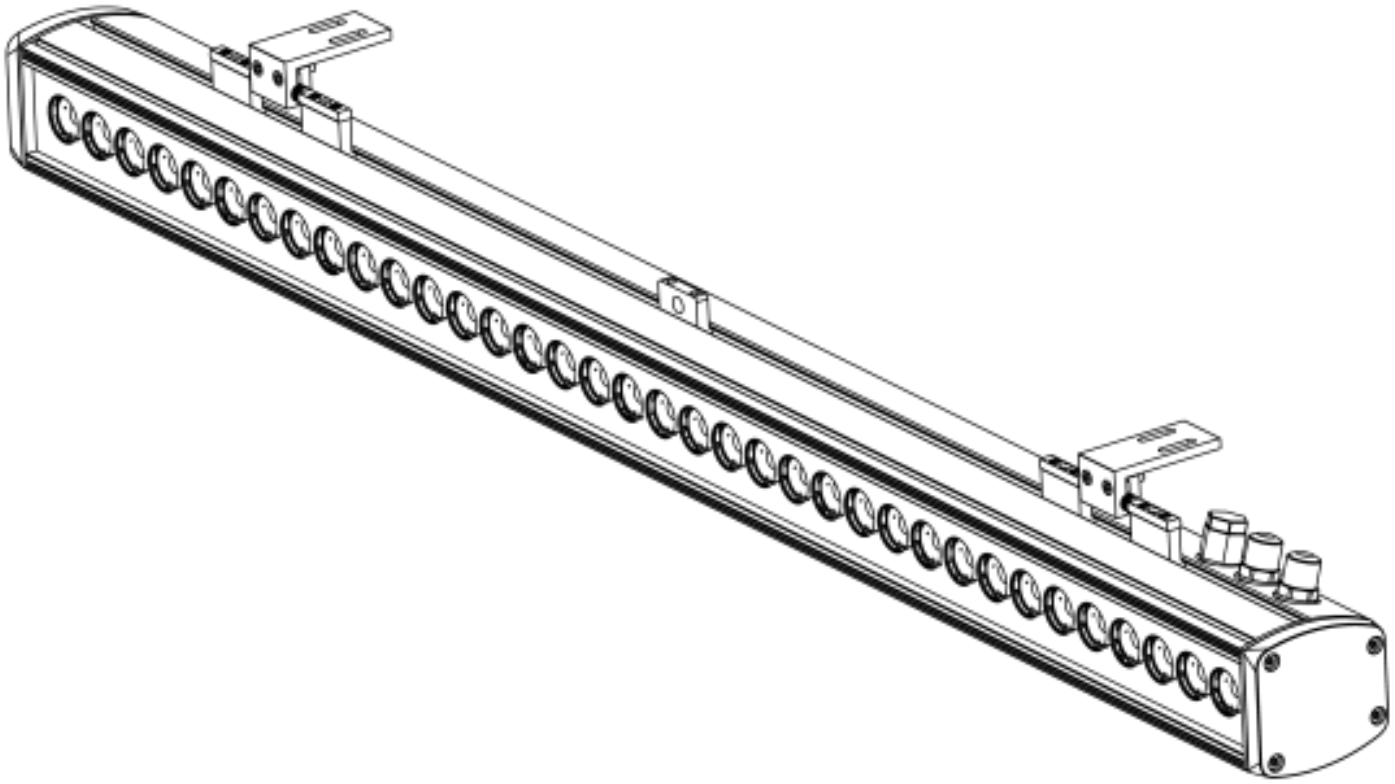
Ilumiline 36 IP Optic Series

User Manual

- Ilumiline 36 IP Optic VW
- Ilumiline 36 IP Optic RGB



ILUMINARC®

Edition Notes

The Ilumiline 36 IP Optic Series User Manual Rev. 7 covers the description, safety precautions, installation, programming, operation, and maintenance of the Ilumiline 36 IP Optic (RGB or VW). ILUMINARC® released this edition of the Ilumiline 36 IP Optic Series User Manual Rev. 7 in October 2015.

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Document Printing

For better results, print this document in color, on letter size paper (8.5 x 11 inches), 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 36 IP Optic (RGB or VW) should read the Guide that shipped with it and this manual in their entirety before installing, operating, or maintaining this product.

Disclaimer

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Document Revision

The Ilumiline 36 IP Optic Series User Manual Rev. 7 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

This icon indicates useful, although non-critical information.

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

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

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

What Is In the Box

- One Ilumiline 36 IP Optic (VW or 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. If any part appears damaged from shipping, or if the carton shows signs of mishandling, see the *Claims* section in the *Technical Information* chapter.

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>	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

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.
- Make sure there are no flammable materials close to this product while 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!

There are no user serviceable parts inside this product. Any reference to servicing you may find from now on 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 Ilumiline 36 IP Optic (RGB or VW) may require service, please contact ILUMINARC® Technical Support.

2. Product Description

The Ilumiline 36 IP Optic Series User Manual includes two products:

- Ilumiline 36 IP Optic VW
- Ilumiline 36 IP Optic RGB

These products are available with 60° x 10° optics. The Ilumiline 36 IP Optic, both the RGB and the VW, consist of a stainless steel body containing a power supply, control unit, impact resistant glass cover, and 36 LEDs.

Common Features

- Remotely addressable DMX-512 LED linear wash light
- IP67 ingress protection
- IP67 stainless steel gland nuts for cable entry
- Extruded aluminum housing
- Five distinct dimming curves
- Integrated Cooling Enhancement™
- Gore™ valve controlled humidity
- Ilumicode compatible

VW Features

- Operating modes:
  - 1-channel: Dimmer
  - 2-channel: Warm white, cool white control
  - 3-channel: Warm white, cool white, dimmer
- High power 1 W (350 mA) warm white and cool white LEDs
- Static color temperature control with or without a DMX controller
- SpectraWhite™ mixing with or without DMX controller
- Installed (non-changeable) optical system:
  - 60°x10° lenses - Product order code: 12036006

RGB Features

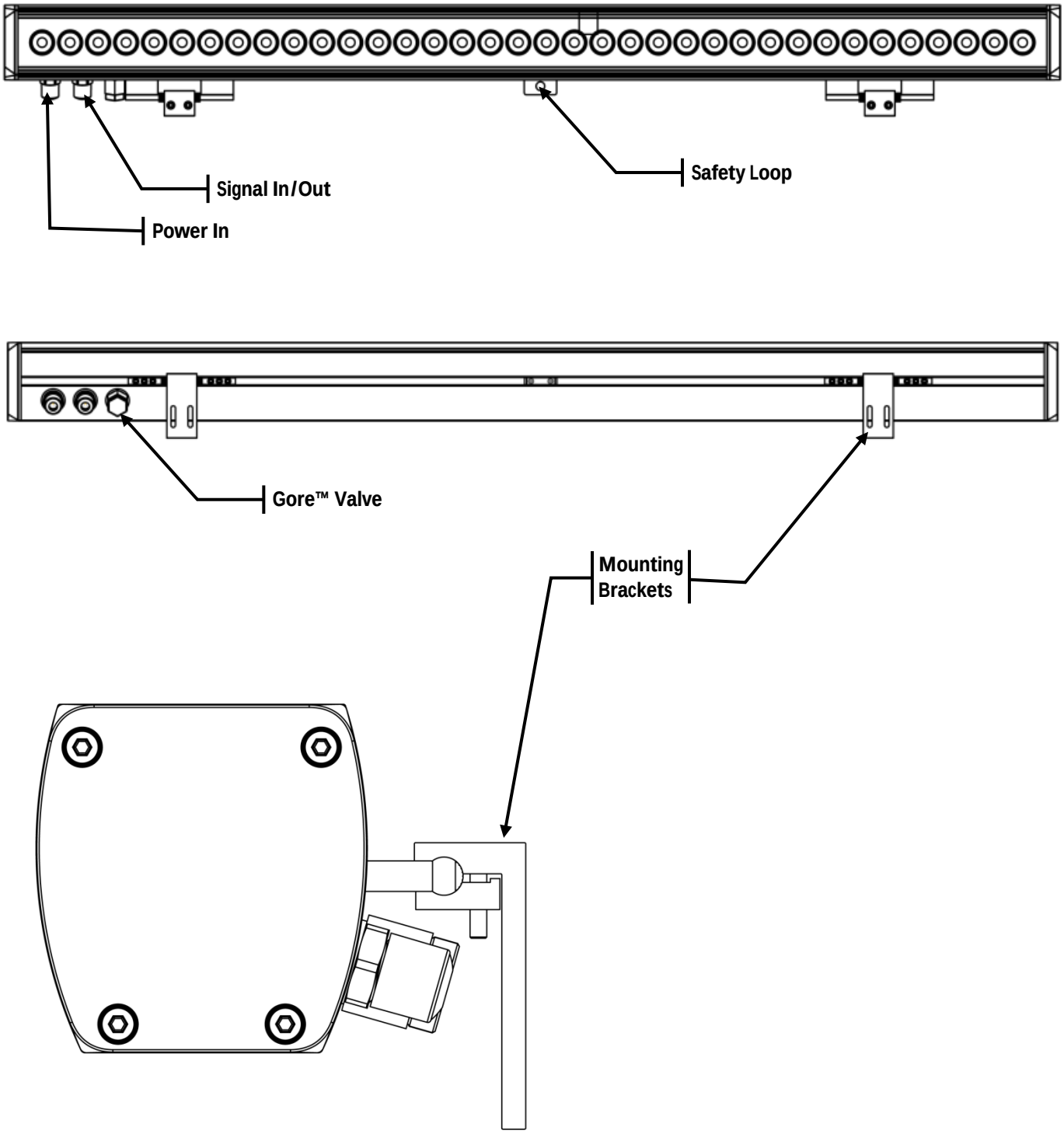
- Operating modes:
  - 1-channel: Dimmer
  - 3-channel: RGB control
  - 4-channel: RGB, dimmer
  - 7-channel: RGB, dimmer, color macro, strobe, dimmer speed
- High power 1 W (350 mA) RGB LEDs
- RGB color mixing with or without DMX controller
- Installed (non-changeable) optical system:
  - 60°x10° lenses - Product order code: 12036005

Options

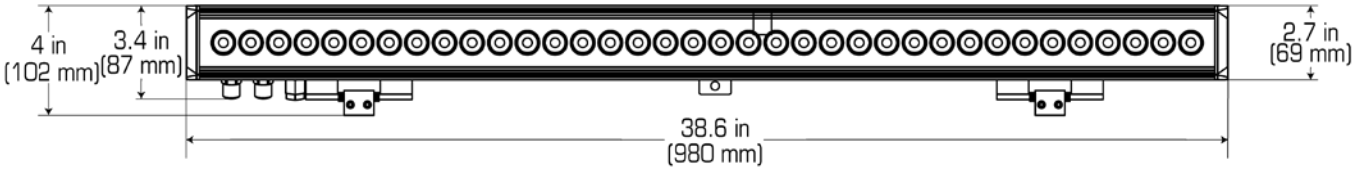
- Ilumicode addresser (required for product configuration)

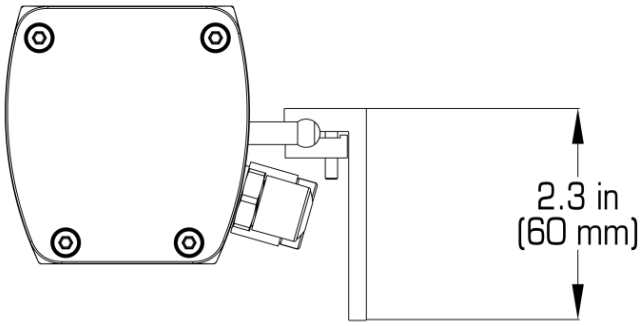
- The RDM2go, which includes a built in ilumicode addresser along with many other useful features is now available.
- The Ilumicoode addresser is required for product configuration (sold separately).

Product Overview



Product Dimensions





3. Installation

Always connect the Ilumiline 36 IP Optic (RGB or VW) to a protected circuit with an appropriate electrical ground to avoid the risk of electrocution or fire.

Never connect the Ilumiline 36 IP Optic (RGB or VW) 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 36 IP Optic (RGB or VW) 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 Ilumiline 36 IP Optic (RGB or VW) 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 manual or on the product's sticker.

Power Consumption

To determine the power requirements for the Ilumiline 36 IP Optic (RGB or VW), see the label affixed to the side of the product. Alternatively, you may refer to the specifications chart in the *Technical Information* chapter of this manual.

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

AC Plug

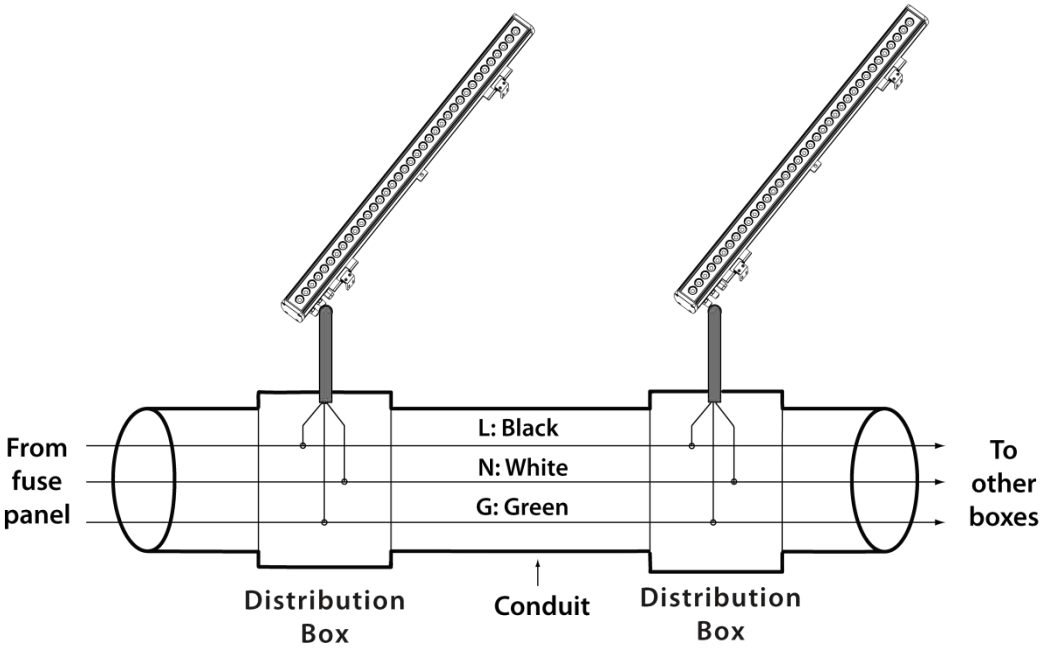
The Ilumiline 36 IP Optic (RGB or VW) comes with a bare-ended power input cord for hardwire installation. Use the table and the illustration below to wire a plug.

Connection	Wire (US)	Screw Color (US)	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 36 IP Optic (RGB or VW) 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).

Disconnect the product from the AC power before opening it.

DMX Linking

You may link the Ilumiline 36 IP Optic (RGB or VW) to a DMX controller using a standard DMX serial connection. If using other DMX products compatible with the Ilumiline 36 IP Optic (RGB or VW), 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 36 IP Optic (RGB or VW) to a DMX controller, you may download the *DMX Primer* document from the ILUMINARC® Web site at www.iluminarc.com.

DMX Modes

The Ilumiline 36 IP Optic (RGB or VW) uses the standard DMX data connection for all its DMX personalities. Refer to the *Introduction* chapter for a brief description of these modes. Refer to the *Operation* chapter to learn how to configure the Ilumiline 36 IP Optic (RGB or VW) to work in these modes. The *DMX Values* section will provide you with detailed information regarding the DMX modes.

VW

DMX Mode	DMX Address
VW	511
VW + D	510
SOLID	512

RGB

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

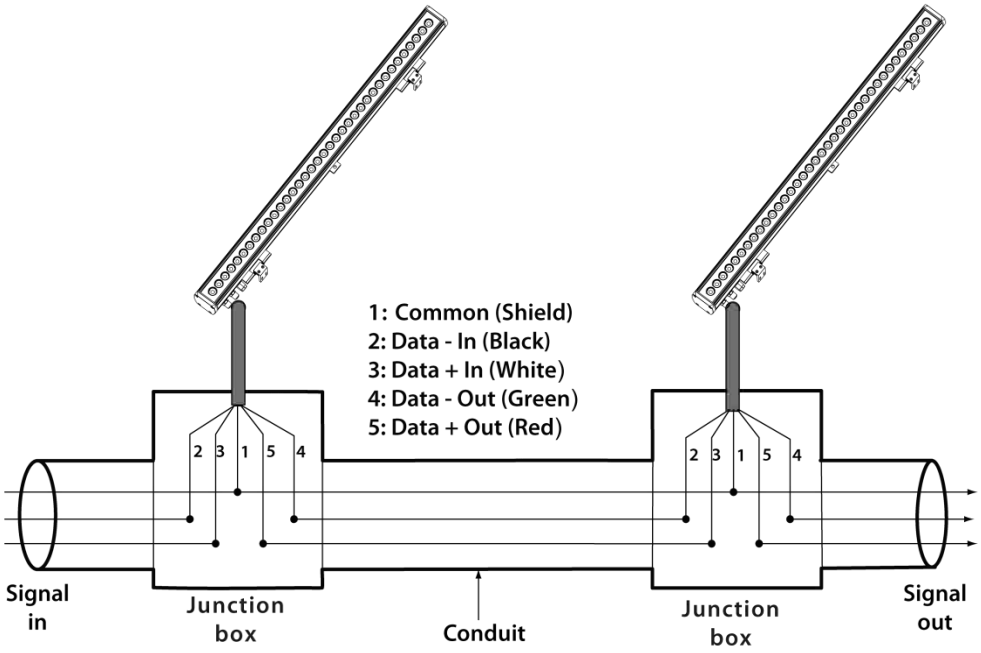
Signal Wiring

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.

To provide signal for the Ilumiline 36 IP Optic (RGB or VW), you can connect the bare-ended IP67 rated signal cable from the product to two IP67 rated signal connectors (DMX in and DMX Out), or use an IP67 rated junction box. In this case, make sure to use IP67 rated conduit.

Protocol Connectivity

The Ilumiline 36 IP Optic (RGB or VW) uses USITT DMX 512 Protocol. The procedure below illustrates the recommended connection method.



Controllers

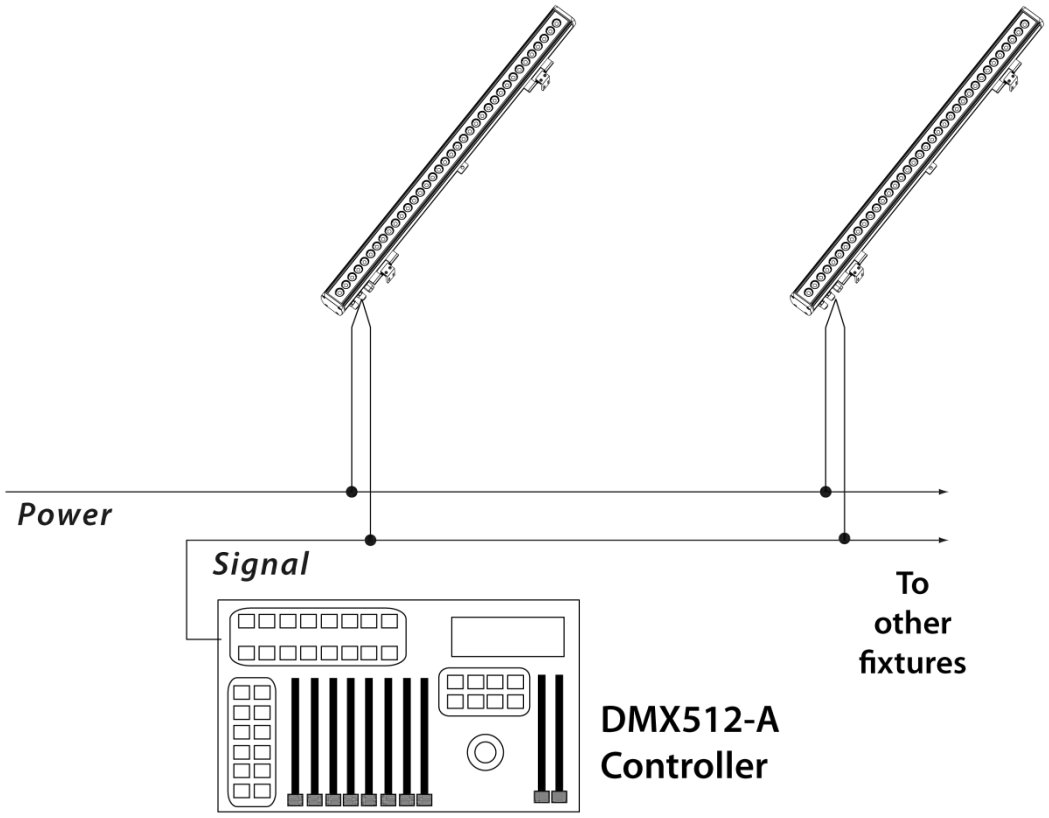
If you have not configured the DMX starting address and DMX mode for each product, they will all use their default values. This means that all products will operate in unison.

Each product in the Ilumiline 36 IP Optic Series 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 36 IP Optic (RGB or VW) can work with a standard DMX controller. The channel assignments will depend on the chosen personality (see the corresponding *Menu Map* on pages 13 and 14) and the DMX address assigned to each product (see *Programming* on page 14).

The figure below illustrates how to connect the DMX controller to the Ilumiline 36 IP Optic (RGB or VW).

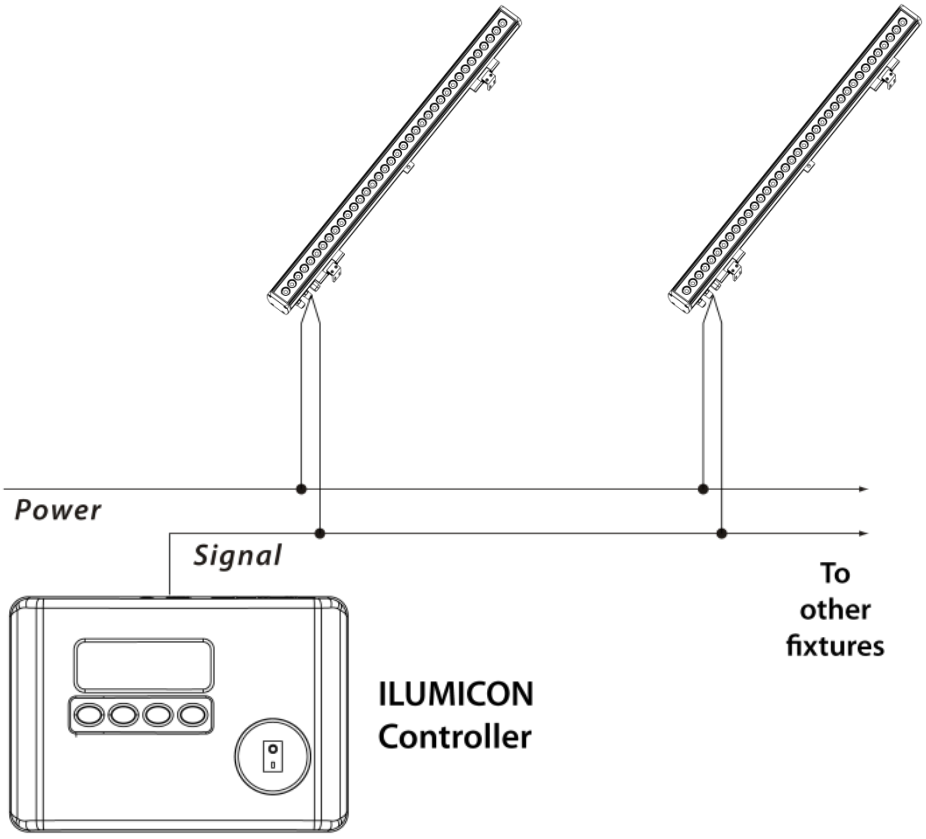


ILUMICON

Refer to the *Operation* chapter of the ILUMICON User Manual to learn how to enable the Ilumiline 36 IP Optic RGB to operate with the ILUMICON controller.

The Ilumiline 36 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 36 IP Optic RGB.

The figure below illustrates how to connect the ILUMICON controller to the Ilumiline 36 IP Optic RGB.



Ilumicode

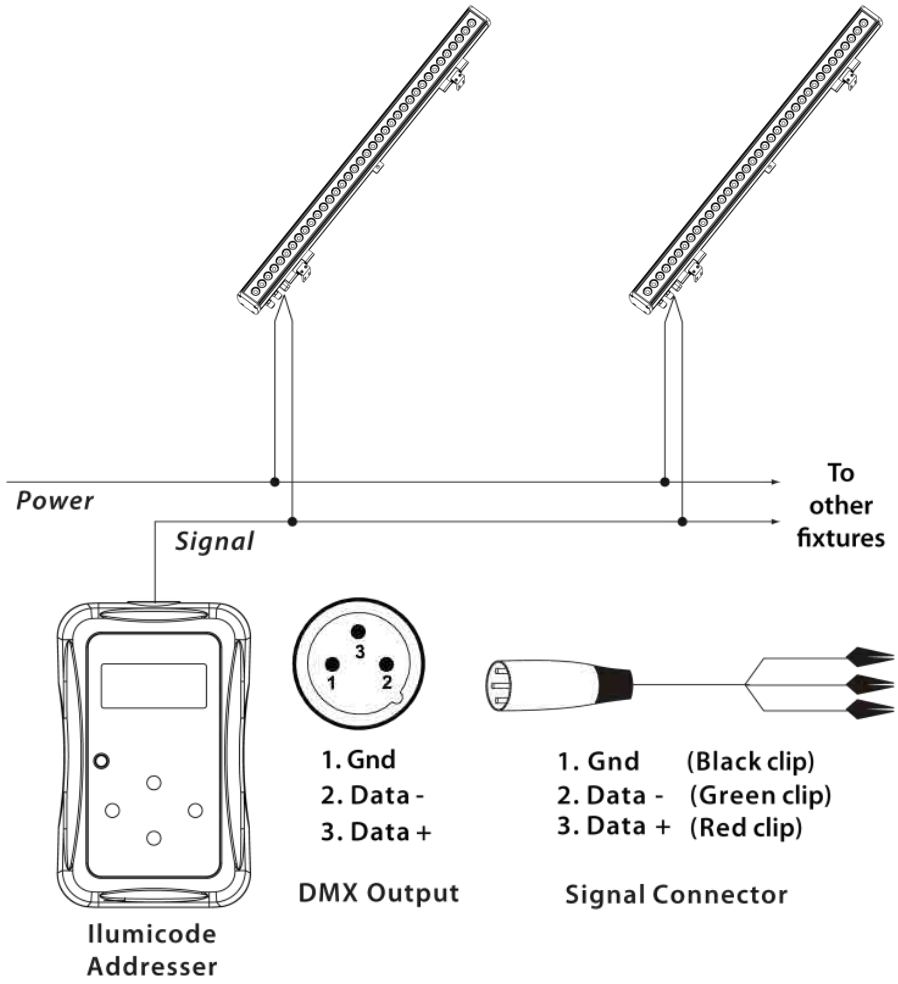
The Ilumiline 36 IP Optic (RGB or VW) uses the Ilumicode for configuration purposes. The diagram below shows how to connect the Ilumicode to this product. This connection will control multiple products at the same time, all having the same DMX address.

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

The RDM2go, 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.



Mounting

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

Orientation

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

Installation

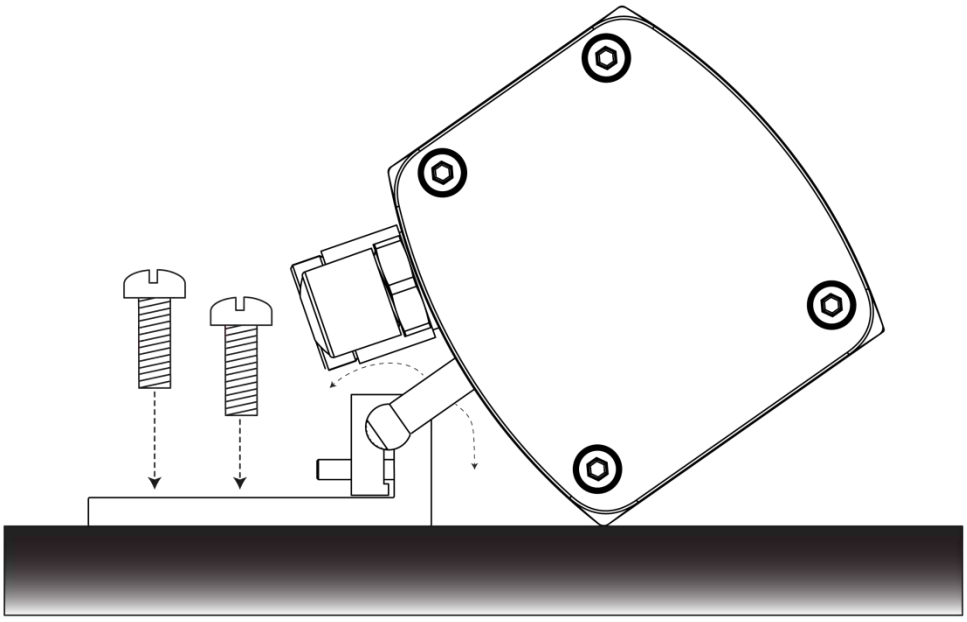
⚠ Make sure to mount this product away from any flammable material as indicated in the Safety Notes.

The Ilumiline 36 IP Optic (RGB or VW) comes with two adjustable brackets with 3mm 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 36 IP Optic (RGB or VW).

- 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 *Technical Specifications* section of this manual for the weight requirement of this product.

Procedure

The Ilumiline 36 IP Optic (RGB or VW) comes with two adjustable brackets with 3mm 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.



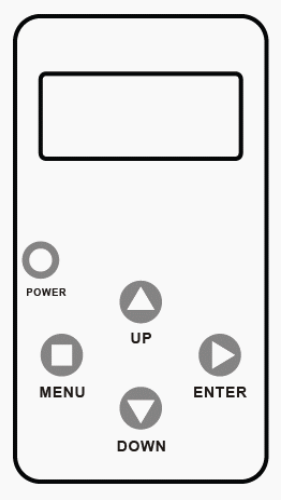
4. Operation

Ilumicode

The Ilumiline 36 IP Optic (RGB or VW) needs an external controller, the Ilumicode addresser, to change its configuration.

Ilumicode Panel Description

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



Menu Map

The products in the Ilumiline 36 IP Optic Series have distinct menu maps based on the colors they produce, whether RGB or VW. The Ilumicode includes the functions for both types of products.

VW Functions Menu Map

(Ilumiline 36 IP Optic VW)

This menu map shows you which parameters of the Ilumicode controller correspond to the Ilumiline 36 IP Optic VW product.

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

Main Level	Programming Levels		Description
DMX	**001~512**	N/A	Sets the DMX starting address
PERSON	**VW**	N/A	3-channel: SpectraWhite control
	VW+D		4-channel: SpectraWhite control + dimmer
	SOLID		1-channel: dimmer
DIMMER	**OFF**	N/A	Dimmer work in linear mode
	DIM 1		Dimmer works in non-linear mode, from fast to slow.
	DIM 2		
	DIM 3		
	DIM 4		
STATIC	**COOL**	**0~255**	Configures the static color and effect
	WARM		

RGB Functions Menu Map

(Ilumiline 36 IP Optic RGB)

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.

Main Level	Programming Levels			Description
DMX	**001~512**	N/A		Sets the DMX starting address
PERSON	**ARC1**	N/A		3-channel: RGB control
	ARC1+D			4-channel: RGB control + dimmer
	ARC FULL			7-channel: RGB control, dimmer, color macro, strobe, dimmer speed
	REMOTE			Allows using the ILUMICON unit
	SOLID			1-channel: dimmer
CALIB	**WHITE (1~11)**	**RED GREN BLUE**	**0~255**	Determines the white balance for the color macros
	RGBTOW			Determines the white balance when RGBTOW is active
DIMMER	**OFF**	N/A		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**	**0~255**		Configures the static color and effect
	GREN			
	BLUE			
	STRB			
SETTINGS	**COLOR**	**OFF**		Maximum output, unbalanced white
		RGBTOW		White output is as per **CALIB > RGBTOW** settings
		UC		Output matches that of product's previous versions
	RESET	**NO/YES**		Resets unit to factory default settings

Programming

Carry out all the programming procedures indicated below from the control panel. Refer to the *Menu Map* above 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 **PERS** 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**).

Static Colors

(Ilumiline 36 IP Optic **RGB**, only)

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**).

(Ilumiline 36 IP Optic **VW**, only)

1. Go to **STATIC**.
2. Select a color or effect (**Cool** or **Warm**).
3. Select a color value (**000~255**).

Dimmer

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

__DIM1__ is the fastest dimmer curve and __DIM4__ is the slowest.

1. Go to **DIMMER.**
2. Select a dimmer 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**, **UC**).

Procedure:

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

(Ilumiline 36 IP Optic **RGB**, only)

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 (**0~255**).
5. Repeat steps 3 and 4 for the other RGB colors to obtain a white color.
6. Repeat steps 2 to 5 for the other white colors.

Reset to Factory Settings

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

DMX Values

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%

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 Macro + White Balance**	000 ó 010	No Function
		011 ó 030	Red 100% Green Up Blue 0%
		031 ó 050	Red Down Green 100% Blue 0%
		051 ó 070	Red 0% Green 100% Blue Up
		071 ó 090	Red 0% Green Down Blue 100%
		091 ó 110	Red Up Green 0% Blue 100%
		111 ó 130	Red 100% Green 0% Blue Down
		131 ó 150	Red 100% Green Up Blue Up
		151 ó 170	Red Down Green Down Blue 100%
		171 ó 200	Red 100% Green 100% Blue 100%
		201 ó 205	White 1: 3,200 K
		206 ó 210	White 2: 3,400 K
		211 ó 215	White 3: 4,200 K
		216 ó 220	White 4: 4,900 K
		221 ó 225	White 5: 5,600 K
		226 ó 230	White 6: 5,900 K
		231 ó 235	White 7: 6,500 K
		236 ó 240	White 8: 7,200 K
		241 ó 245	White 9: 8,000 K
		246 ó 250	White 10: 8,500 K
		251 ó 255	White 11: 10,000 K
6	**Strobe**	000 ó 004	No Function
		005 ó 255	0 ~ 20 Hz
7	**Dimming Speed**	000 ó 009	Dimmer is set by Ilumicode
		010 ó 029	OFF (Dimmer is linear)
		030 ó 069	DIM1 (Fastest dimmer curve)
		070 ó 129	DIM2
		130 ó 189	DIM3
		190 ó 255	DIM4 (Slowest dimmer curve)

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%

VW

Channel	Function	Value	Percent/Setting
1	Warm White	000 ó 255	0 ~ 100%
2	Cool White	000 ó 255	0 ~ 100%

VW + D

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ó 255	0 ~ 100%
2	Warm White	000 ó 255	0 ~ 100%
3	Cool White	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, the user should clean the products frequently. Usage and environment are contributing factors in determining the cleaning frequency. As a rule, the user should clean the products at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced light source life.

To clean a product, follow the below recommendations:

- Unplug the product from power.
- Wait until the product has cooled.
- 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 a lens cleaning tissue.
- Apply the solution directly to the cloth or tissue and drag any dirt and grime to the outside of the lens.
- Gently polish the external glass surfaces until they are free of haze and lint.

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

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 Troubleshooting Table as a guide only. In most cases, opening the product's housing will invalidate its warranty, unless there is a written indication on the contrary.

If you still experience technical problems after trying the solutions in the Troubleshooting Table, contact ILUMINARC® Technical Support.

Troubleshooting Guide

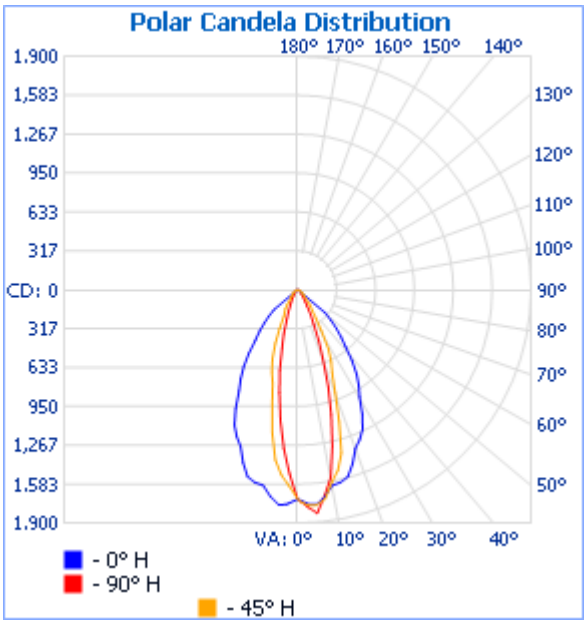
Symptom	Cause(s)	Action(s)
Product does not light up	Dimmer fader set to “0”	Increase the value of the dimmer channel
	All color faders set to “0”	Increase the value of the color channels
	All colors in STATIC are set to “0”	Increase the values of the colors
	Unit is being configured with Ilumicode	Complete the configuration process.
	No power	Verify external power circuit and wiring
	Faulty internal power supply	Return for service to ILUMINARC®
	Faulty main control board	Return for service to ILUMINARC®
One LEDs does not work	Faulty LED	Return for service to ILUMINARC®
	Faulty LED module	
	Faulty LED driver	
The wrong LEDs light up when using DMX	Wrong personality	Change the personality
	Wrong DMX address	Change the DMX address
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 DMX	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
	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
	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

Ilumiline 36 IP Optic 60x10 VW

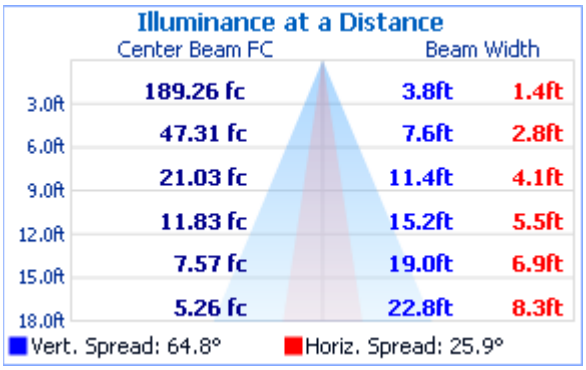
Item Number: 12036006

Filename: **Ilumiline 36 IP VW Optic 60x10 100% ALL**
Manufacturer: ILUMINARC
Luminaire: Ilumiline 36 IP VW Optic 60x10
Luminaire Cat: 12036005
Lamp: 12 COOL WHITE, 24 WARM WHITE
Lamp Output: 1 lamp(s), rated Lumens/lamp: 2,680
Max Candela: 1,826.6 at Horizontal: 90°, Vertical 5°
Input Wattage: 48.5
Luminous Opening: Point
Test: 20101207VW
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%):	35.4%	948.2	52.2	101.4
Beam (50%):	19.6%	525.1	25.9	64.8
Total:	39.3%	1,052.8		

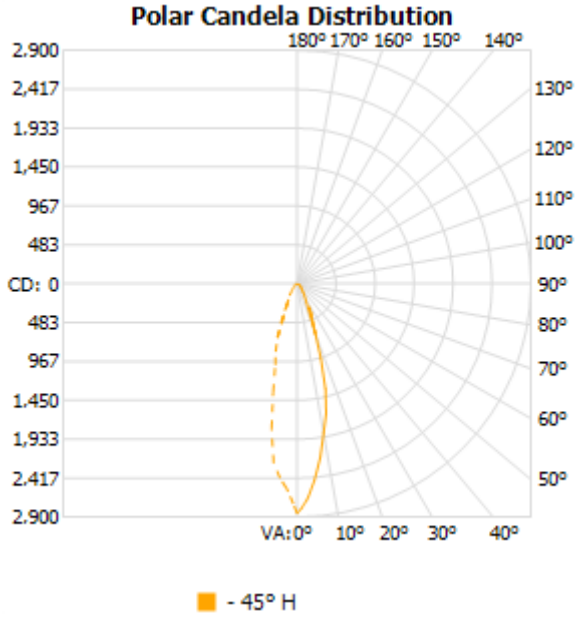


Reported data calculated from manufacturer's data file, based on IES recommended methods.

Ilumiline 36 IP Optic 60x10 RGB

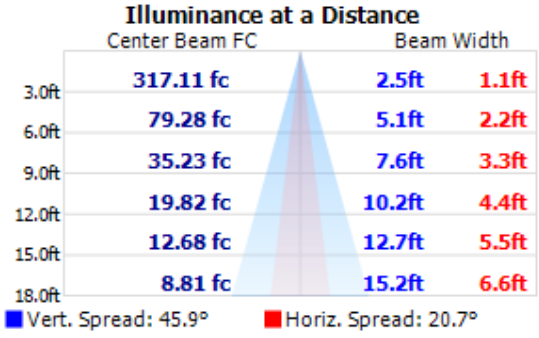
Item Number: 12036005

Filename: **Ilumiline 36 IP RGB Optic 60x10 100% ALL**
Manufacturer: ILUMINARC
Luminaire: Ilumiline 36 IP RGB Optic 60x10
Luminaire Cat: 12036005
Lamp: 12 RED, 12 GREEN , 12 BLUE
Lamp Output: 1 lamp(s), rated Lumens/lamp: 2,854
Max Candela: 2,854 at Horizontal: 0, Vertical: 0
Input Wattage: 45.3
Luminous Opening: Point
Test: 20101207RGB
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%):	46.2%	909.8	44	94.7
Beam (50%):	21.9%	431.4	20.7	45.9
Total:	55.5%	1,092.3		



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 US 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:

1. 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 CCT. 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

DO NOT write the RMA # directly on the box. Instead, write it on a properly affixed label.

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

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

Returns Procedure

The user 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 a Return Merchandise Authorization Number (RMA #). ILUMINARC® will refuse any product returned without an RMA #.

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. As a suggestion, proper FedEx packing or double-boxing is the shipping method ILUMINARC® recommends.

Claims

The carrier is responsible for any damage incurred during shipping. Therefore, if the received merchandise appears to have damages caused during shipping, the customer must submit the damage report and any related claims with the carrier, not ILUMINARC®. The customer must submit the report upon reception 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.

Contact Us

USA WORLD HEADQUARTERS

General Information – ILUMINARC
Address: 5200 NW 108th Avenue
Sunrise, FL 33351
Voice: (954) 923-3680
Fax: (800) 544-4898

Technical Support
Voice: (800) 762-1084
Email: support@iluminarc.com

World Wide Web www.iluminarc.com

EUROPE

General Information - Chauvet Europe BVBA
Address: Stokstraat 18
9770 Kruishoutem
Belgium
Voice: +32 9 388 93 97

Technical Support
Email: Eutech@chauvetlighting.eu

World Wide Web www.chauvetlighting.eu

General Information - Chauvet Europe Ltd.
Address: Unit 1C
Brookhill Road Industrial Estate
Pinxton, Nottingham, UK
NG16 6NT
Voice: +44 (0)1773 511115
Fax: +44 (0)1773 511110

Technical Support
Email: uktech@iluminarc.com

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 VW Products

Dimensions and Weight

Length	Width	Height	Weight
38.6 in (980 mm)	4.0 in (102 mm)	3.5 in (89 mm)	10.3 lbs (4.7 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	43 W (0.6 A)	41 W (0.4 A)
Inrush current	0.2 A	0.3 A

Power I/O	Input	Output
Connectors	Hard-wired	N/A
Cord plug	Bare-ended	N/A

Light Source

Type	Power	Current	Lifespan
LED	1W	350 mA	50,000 hours

Color	Quantity
Cool	12
Warm	24

Photometrics

Parameter	60°x10° Optics
Illuminance @ 5 m	82 lux
Beam angle	64.8° x 25.9°
Field angle	101.4° x 52.2°

Thermal

Max. External Temperature	Cooling System
104° F (40° C)	Convection

DMX

I/O Connectors	Connector Type	Channel Range
IP Gland Nut	N/A	1,2,3

Ordering

36 IP Optic 60x10 VW
12036006

CONFORMS TO UL STD. 1573

CERTIFIED TO CSA STD. C22.2 No. 166

3144482

Technical Specifications RGB Products

Dimensions and Weight

Length	Width	Height	Weight
38.6 in (980 mm)	4.0 in (102 mm)	3.5 in (89 mm)	10.3 lbs (4.7 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	43 W (0.6 A)	41 W (0.4 A)
Inrush current	0.2 A	0.3 A

Power I/O	Input	Output
Connectors	Hard-wired	N/A
Cord plug	Bare-ended	N/A

Light Source

Type	Power	Current	Lifespan
LED	1W	350 mA	50,000 hours

Color	Quantity
Red	12
Green	12
Blue	12

Photometrics

Parameter	60°x10°
Illuminance @ 5 m	137 lux
Beam angle	45.9° x 20.7°
Field angle	94.7° x 44°

Thermal

Max. External Temperature	Cooling System
104° F (40° C)	Convection

DMX

I/O Connectors	Connector Type	Channel Range
IP Gland Nut	N/A	1,3,4,6,7

Ordering

36 IP Optic 60x10 RGB
12036005

CE

INTERTEK ETL LISTED C US 3144482

CONFORMS TO UL STD. 1573

CERTIFIED TO CSA STD. C22.2 No. 166