



## iCOLOR MR g2

POWERED BY CHROMACORE®



# PRELIMINARY

Color Kinetics® iColor® MR g2 is an intelligent, color changing lamp that delivers intense, saturated color and color changing effects. The stylish, matte chrome housing fits into most standard MR16 fixtures, such as tracks, cables, rails, and pendants, and facilitates both new and retrofit installations. High-power LEDs with a 120° beam angle makes iColor MR g2 suitable for a wide-range of applications and environments, including, architectural, theatrical, and retail environments where custom effects and saturated bursts of color are required. An accessory/adaptor ring (Item# 101-000050-00) is available for attaching lighting accessories and to ensure a proper fixture fit.

iColor MR g2 receives power and data via Color Kinetics PDS-70mr 24V with Smartjuice® technology. Smartjuice multiplexes incoming power and data onto an outgoing two-wire circuit for use with up to 14 conventional MR16 lighting fixtures. Each PDS-70mr 24V is available with DMX, Ethernet, or preprogrammed data controls, and can be controlled by Color Kinetics full line of controllers, including Color Kinetics Light System Manager, or a third-party DMX controller.

iColor MR g2 can be controlled by a Color Kinetics controller or a third-party controller. Each iColor MR g2 comes pre-addressed to light number one. Simple effects, such as, fixed color and color wash, require no additional addressing. Chasing effects across multiple lights, including Chasing Rainbow or Color Sweep, require further addressing using one of the following Color Kinetics addressing tools: Serial Addressing Software (SAS) or Zapi 1.5. For large installations, Light System Manager simplifies installations for discovering and addressing lights in a network.

For protection from extreme temperatures, iColor MR g2 has been designed with a temperature monitoring feature. If operating temperatures rise to an unsafe level, a compensation circuit is triggered and iColor MR g2 operation is interrupted causing the lights to turn dull red. After correcting the problem, power-cycling will return the lamp to full intensity.

### iCOLOR MR G2 SPECIFICATIONS

<b>COLOR RANGE</b>	16.7 million (24-bit) additive RGB colors; continuously variable intensity output range
<b>SOURCE</b>	High power colored LEDs
<b>BEAM ANGLE</b>	120°
<b>HOUSING</b>	Matte chrome, die cast zinc, 2" (5 cm) diameter
<b>CONNECTORS</b>	Standard MR16 pins

### ENVIRONMENTAL SPECIFICATIONS

<b>TEMPERATURE RANGE</b>	Ambient: - 4°F to 104°F (- 20°C to 40°C); Surface: 167°F (75°C)
<b>HUMIDITY RANGE</b>	0 to 95% non-condensing humidity

### COMMUNICATION SPECIFICATIONS

<b>DATA INTERFACE</b>	Color Kinetics data interface system
<b>CONTROL</b>	Color Kinetics full line of controllers, including Light System Manager Ethernet protocol, or third-party DMX512

### ELECTRICAL SPECIFICATIONS

<b>POWER REQUIREMENT</b>	12 - 24VDC
<b>POWER CONSUMPTION</b>	Maximum: 5 Watt
<b>POWER/DATA</b>	Color Kinetics PDS-70mr 24V power/data supply



### ITEM# 101-000049-02

U.S. PATENTS 6,016,038, 6,150,774 AND 6,340,868  
EUROPEAN PATENT 1,016,062  
OTHER PATENTS PENDING

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Specifications subject to change without notice.

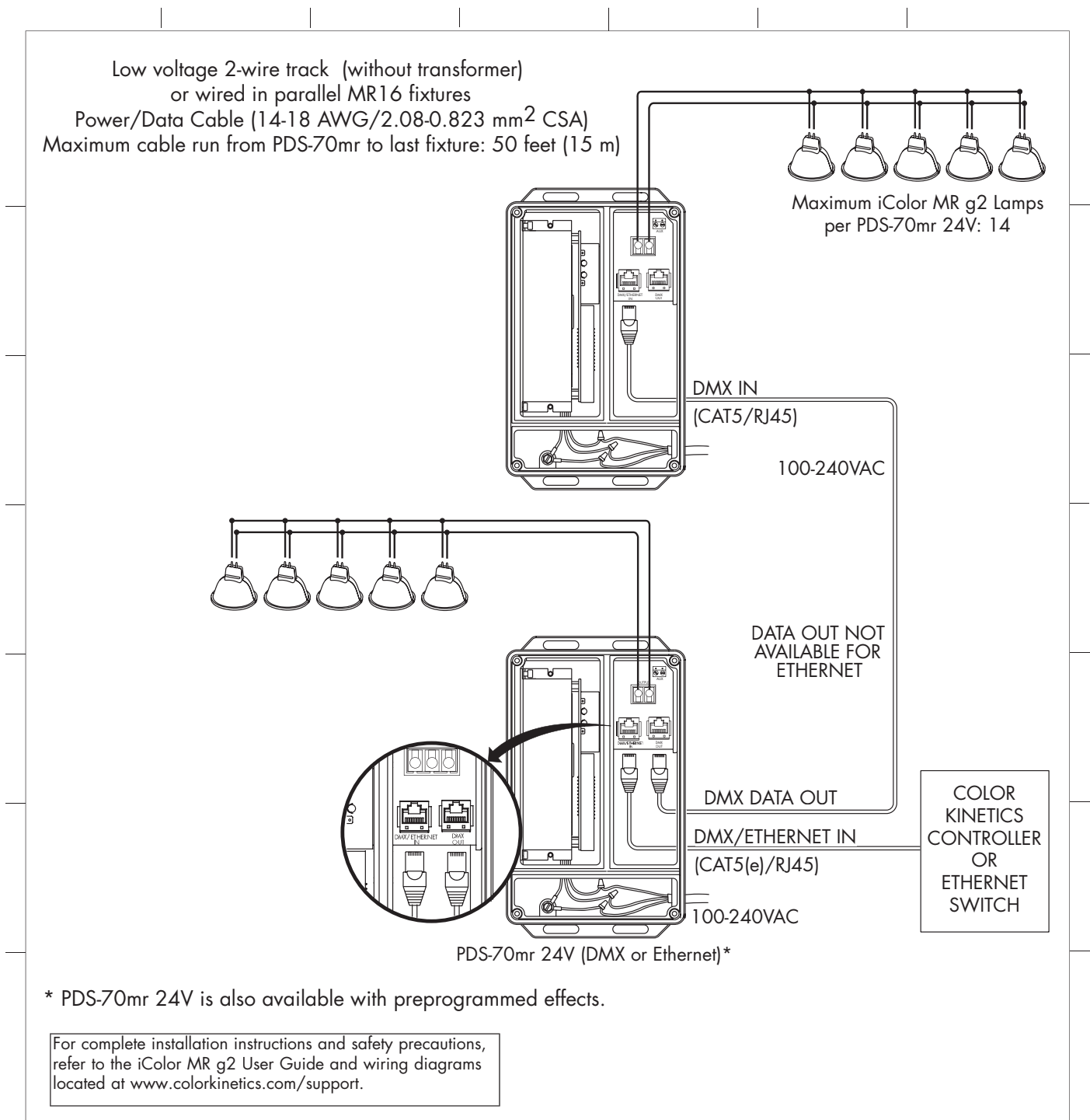
### SOURCE LIFE

Color Kinetics illumination products utilize high brightness LEDs as the illumination source. LED manufacturers predict LED life of up to 100,000 hours MTBF (mean time between failure), the standard used by conventional lamp manufacturers to measure source life. However, like all basic light sources, LEDs also experience lumen depreciation over time. So while LEDs can emit light for an extremely long period of time, MTBF is not the only consideration in determining useful life. LED lumen depreciation is affected by numerous environmental conditions such as ambient temperature, humidity and ventilation. Lumen depreciation is also affected by means of control, thermal management, current levels, and a host of other electrical design considerations.

Color Kinetics systems are expertly engineered to optimize LED life when used under normal operating conditions [ambient temperature: -4° F to 104° F (-20° C to 40° C), humidity: 0-95% non-condensing humidity, adequate ventilation and air volume] and when operated using typical color-changing effects. Long-term operation outside of these ranges or conditions, or at the upper limits of these ranges or conditions, may subject the product to further degradation of the LED source life, or in extreme cases, failure of internal components. Source life information is based on LED manufacturers' data, as well as other third party testing.

## iCOLOR MR g2

### FUNCTIONAL FLOW DIAGRAM

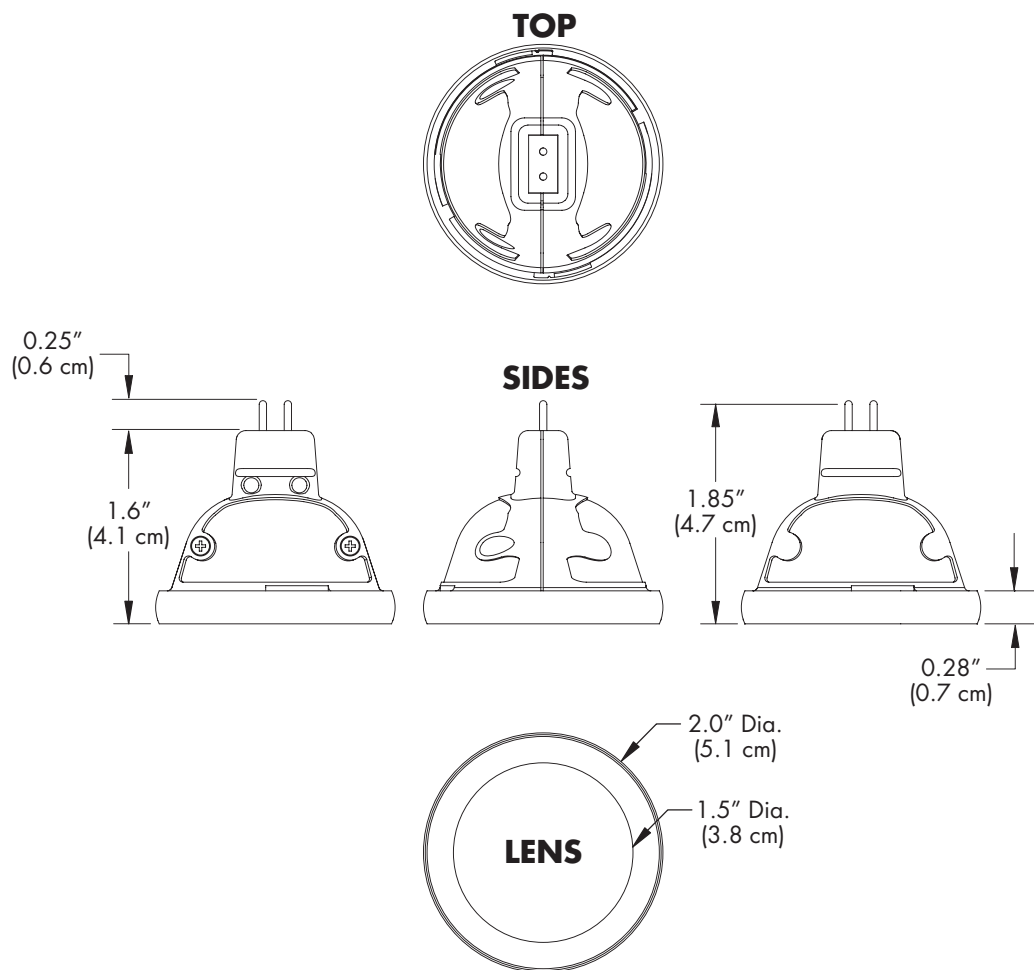


#### OPTIBIN™

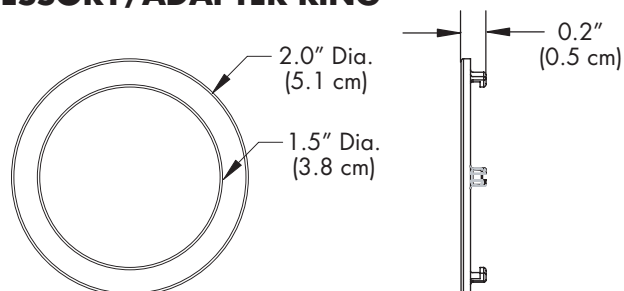
There are inherent variations in the fabrication processes of all semiconductor materials. For LEDs, this variance results in differences in the color and intensity of light output as well as electrical characteristics. Due to these differences, LED manufacturers sort production into "bins," but insuring the availability of a single bin is very difficult. To minimize this issue and achieve optimal color consistency in its products, Color Kinetics has developed and uses a proprietary technology called Optibin. Optibin is an advanced production binning optimization process that minimizes the effects of LED variance for the best possible output uniformity in the final product. Color Kinetics Optibin technology gives you the most consistent control of color and intensity from product to product.

## iCOLOR MR g2

### PHYSICAL DIMENSIONS



### ACCESSORY/ADAPTER RING



iCOLOR MR g2 ITEM# 101-000049-02	
WEIGHT	3.4oz (96g)
POWER CONNECTOR	Standard MR16 fixture
POWER CONSUMPTION	6 Watts

