

## ICOLOR COVE EC

POWERED BY CHROMACORE®



Color Kinetics® iColor® Cove EC is a Chromasic™-driven, low-profile light in the iColor Series, and is designed for accent, perimeter, or cove lighting where lower light intensity and lower costs are desired. iColor Cove EC offers an economical way to bring subtle color-changing light and lighting effects to alcoves, task areas, accent areas, and other tight spaces.

iColor Cove EC is driven by the Color Kinetics Chromasic™ chip. Chromasic is a microchip that integrates power, communication, and control that enables the iColor Cove EC system to lower the cost of digital LED control, making it an affordable alternative for edge and alcove lighting.

The sleek, low-profile design of the iColor Cove EC allows for mounting is small areas, and the easy through-hole mounting feature and in-line power and data connection reduces the installation time. A mounting track is available for linear installations. Each fixture projects a soft-edge strip of light at a 120° by 120° beam angle and comes in fixed lengths of seven (7) and twelve (12) inches.

Power and data are daisy chained from fixture to fixture simplifying installation and making curves and complicated geometry easy to install. Power and data are supplied by PDS-60ca 24V, a dedicated Color Kinetics power/data supply which is available with Ethernet control, DMX512 control, or pre-programmed effects. Each power/data supply supports 30 fixtures-seven or twelve inches-and the compact size allows for discrete installations.

#### **ICOLOR COVE EC SPECIFICATIONS**

COLOR RANGE	64 billion (32bit) additive RGB colors; continuously variable intensity
	output range
BEAM ANGLE	120° by 120°
SOURCE	15 LEDs (12-inch), 9 LEDs (7-inch) Red, Green, and Blue
HOUSING	Rigid plastic housing
LISTINGS	C-UL US listed and CE certified, pending

#### COMMUNICATION SPECIFICATIONS

ATA INTERFACE	Color Kinetics Chromasic data interface system
ONTROL	Ethernet, DMX512 or stand-alone

#### **ELECTRICAL SPECIFICATIONS (LIGHTS)**

POWER REQUIREMENT	24VDC
POWER CONSUMPTION	2W Max. at full intensity (full RGB)
POWER SUPPLY	Color Kinetics PDS-60ca 24V

### ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE RANGE

RANGE -4°F to 122°F (-20°C to 50°C) based on testing of specific product

#### SOURCE LIFE

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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.

#### COLOR CONSISTENCY

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 the most consistent control of color and intensity from product to product.

#### **U.S. AND FOREIGN PATENTS AND PATENTS PENDING**

Color Kinetics Incorporated grants the purchaser of its lighting products and controllers a personal and non-transferable license to use Chromacore®, its patented technology for networkable control of LED-based color-changing lighting fixtures for illumination, display and design. This license is granted only by Color Kinetics Incorporated, and may not be transferred except by the grantor. The design, duplication, manufacture, or sale of other products using networkable control of LED-based color-changing lighting may be prohibited and is not licensed hereunder. Other patents pending.

DRY



#### ITEM# 101-000022-00 (12-inch) 101-000022-01 (7-inch)

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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> > BRO126 Rev 00

Specifications subject to change without notice.

### iCOLOR COVE EC - 7"

PHOTOMETRIC PERFORMANCE

#### SOURCE SPECIFICATIONS

Optics:	Clear polycarbonate
Source:	9 LEDs (3 Red, 3 Green, 3 Blue)
Beam Angle:	120° x 120° (at 50% of peak illuminance)
Distribution:	Symmetric direct illumination
CCT:	Adjustable 1,000–10,000K
CRI:	Not measurable (CIE 13.3-1995)



#### CANDLE POWER DISTRIBUTION



### iCOLOR COVE EC - 12"

PHOTOMETRIC PERFORMANCE

### SOURCE SPECIFICATIONS

Optics:	Clear polycarbonate
Source:	15 LEDs (5 Red, 5 Green, 5 Blue)
Beam Angle:	120° x 120° (at 50% of peak illuminance)
Distribution:	Symmetric direct illumination
CCT:	Adjustable 1,000–10,000K
CRI:	Not measurable (CIE 13.3-1995)



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## ICOLOR COVE EC

PHYSICAL DIMENSIONS



### ICOLOR COVE EC

#### FUNCTIONAL FLOW DIAGRAM

