



# COLORBLAZE 72

POWERED BY CHROMACORE



Color Kinetics® ColorBlaze™ 72 is a Chromacore®-powered product, in the bColor Series, designed for washing large areas with far-reaching, rich, saturated colors, and color changing effects. ColorBlaze 72's on-board power supply and addressing capabilities eliminate the need for special equipment, simplifying specification and installation, and the auto-switching power supply is suited for both domestic and international use. The streamlined, six-foot fixture is a simple yet powerful solution for large-area scenery and wash lighting for venues such as theaters, TV studios, concerts, events, casinos, and exhibits. ColorBlaze 72 is the perfect foot light for TV productions and Broadway shows.

The stylish and rugged extruded aluminum housing features attached mounting brackets, each with three, 1/2-inch (1.3 cm) mounting holes for use with Cheeseborough clamps or pipe clamps. Locking knobs located on the mounting brackets allow for 360° rotation, locking, and adjustment without the use of special tools. The housing is equipped to affix spread lenses, louvers, and other attachments and is available in a black powder coat finish. A single 3-wire, 4-foot (1.2 m) cable provides power directly from a 100VAC to 240VAC power source via a 2-pole, 3-wire, grounded, 20A plug (not included).

Each ColorBlaze 72 has 12 individual circuit board assemblies with 18 high-intensity LEDs per board, making it sequentially controllable in 6-inch increments by a Color Kinetics controller or a third-party DMX 512 controller. Data can be daisy-chained from fixture to fixture with an RJ45 data cable or an XLR-5 data cable.

For protection from damage due to excessive temperature, ColorBlaze 72 has been designed with a temperature monitoring feature. If operating temperatures rise beyond a permissible level, ColorBlaze 72 operation is interrupted, causing the lights to turn dull red. After identifying and correcting the thermal problem, simply power cycle the fixture to return it to normal operation.

## COLORBLAZE 72 SPECIFICATIONS

<b>COLOR RANGE</b>	16.7 million (24bit) additive RGB colors; continuously variable intensity output range
<b>SOURCE</b>	High intensity light emitting diodes (LEDs)
<b>BEAM ANGLE</b>	22°
<b>HOUSING</b>	Extruded Aluminum with black or white finish
<b>POWER CONNECTOR</b>	2-pole, 3-wire, grounded, 15A (not included)
<b>DATA CONNECTORS</b>	RJ45 or XLR-5
<b>LISTINGS</b>	C-UL US listed, CE certified, pending

## COMMUNICATION SPECIFICATIONS

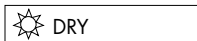
<b>DATA INTERFACE</b>	DMX 512
<b>CONTROL</b>	Color Kinetics full line of controllers or other DMX512 controllers

## ELECTRICAL SPECIFICATIONS

<b>VOLTAGE REQUIREMENT</b>	100-240VAC
<b>POWER CONSUMPTION</b>	420W, 3.7A nominal at full intensity (full RGB)

## ENVIRONMENTAL SPECIFICATIONS

<b>TEMPERATURE RANGE</b>	-4°F to 122°F (-20°C to 50°C)
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ITEM# 116-000007-00 (Black)  
116-000007-01 (White)

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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BR0113 Rev 01

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.

## 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.

# COLORBLAZE 72

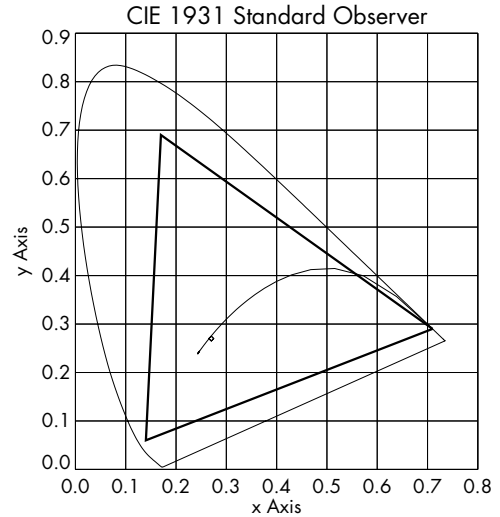
## PHOTOMETRIC PERFORMANCE

Photometric data is based on test results from an independent testing lab.

### SOURCE SPECIFICATIONS

Optics:	Clear polycarbonate
Source:	216 LEDs (72 Red, 72 Green, 72 Blue)
Beam Angle:	22° (at 50% of peak illuminance)
Distribution:	Symmetric direct illumination
CCT:	Adjustable 1,000–10,000K
CRI:	Not measurable (CIE 13.3-1995)

### GAMUT

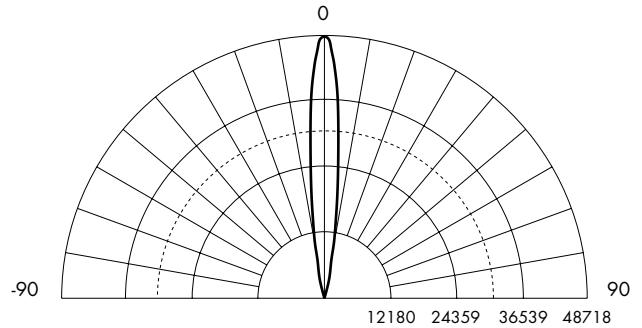


### ILLUMINANCE DISTRIBUTION

1.9	4.4	12.3	12.3	4.4	1.9	6.0'/2.0m
20.5	47.4	132.4	132.4	47.4	20.5	
2.8	9.9	59.4	59.4	9.9	2.8	
30.1	106.6	639.4	639.4	106.6	30.1	
3.6	19.5	379.0	379.0	19.5	3.6	
38.8	209.9	4079.6	4079.6	209.9	38.8	
3.6	16.9	510.0	510.0	16.9	3.6	3.0'/1.0m
38.8	181.9	5489.6	5489.6	181.9	38.8	
3.2	9.2	47.0	47.0	9.2	3.2	
34.4	99.0	505.9	505.9	99.0	34.4	
3.7	6.3	11.4	11.4	6.3	3.7	0.0'/0.0m
39.8	67.8	122.7	122.7	67.8	39.8	
3.0'/1.0m		0'/0m			3.0'/1.0m	

Units: Footcandles/Lux  
 Measured on: White  
 Distance from surface: 3'/1m (from bottom of grid with light at a 45° angle)  
 Multipliers: 0.31 Red, 0.51 Green, 0.26 Blue

### CANDLE POWER DISTRIBUTION



### ILLUMINANCE

COLOR	3'	6'	9'	15'
	1m	2m	3m	3m
WHITE	5413.1	1353.3	601.5	216.5
	58266.6	14566.9	6474.5	2330.4
RED	1678.1	419.5	186.5	67.1
	18063.1	4515.5	2007.5	722.3
GREEN	2760.7	690.2	306.7	110.4
	29716.2	7429.3	3301.3	1188.3
BLUE	1407.4	351.9	156.4	56.3
	15149.3	3787.9	1683.5	606.0

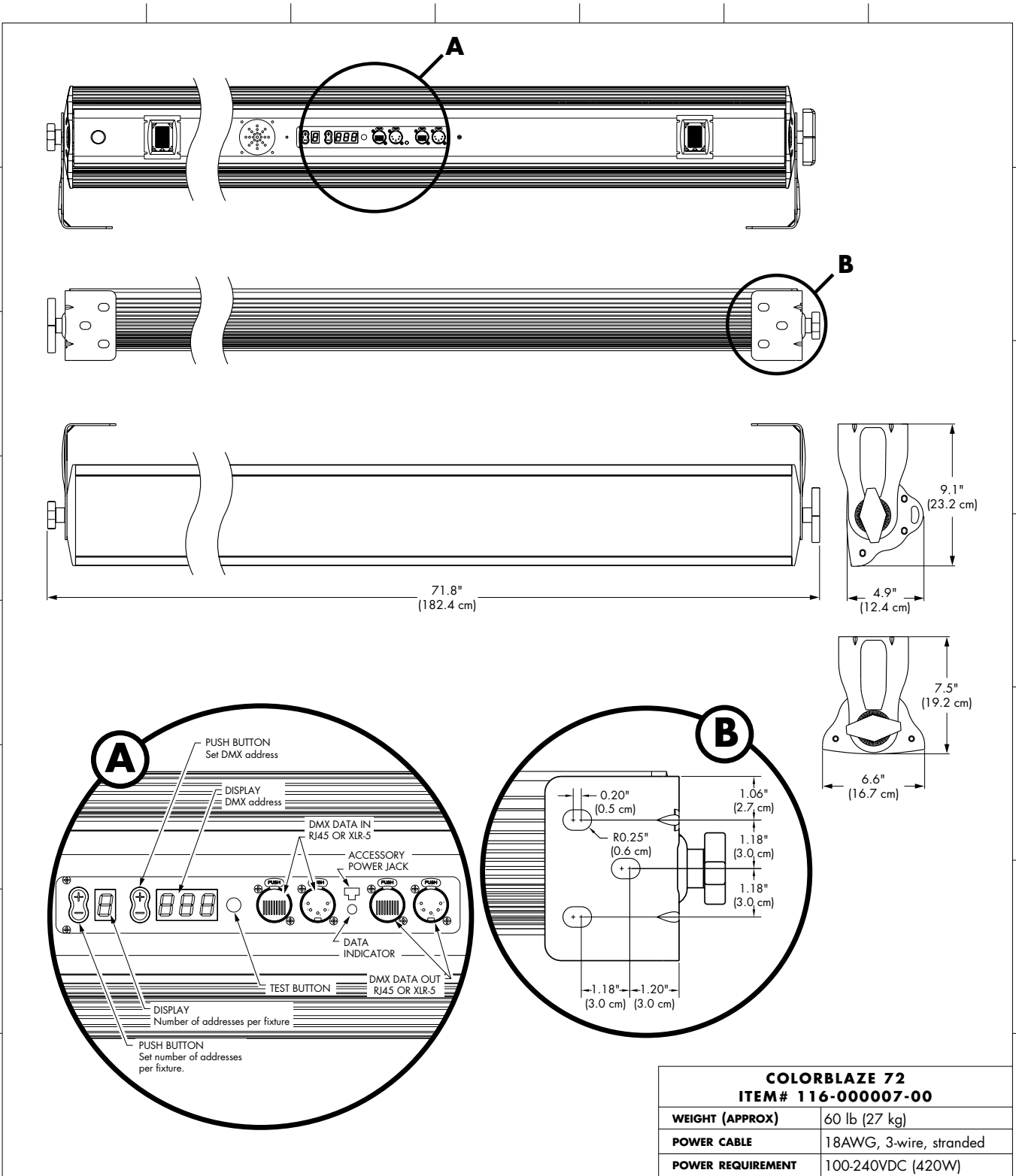
Measured in Footcandles/Lux on axis.

### LIGHT OUTPUT

COLOR	TOTAL OUTPUT (LUMENS)	POWER (WATTS)	EFFICACY (lm/w)
WHITE	2729.0	382.0	7.1
RED	846.0	166.0	5.1
GREEN	1391.8	166.0	8.4
BLUE	709.5	166.0	4.3

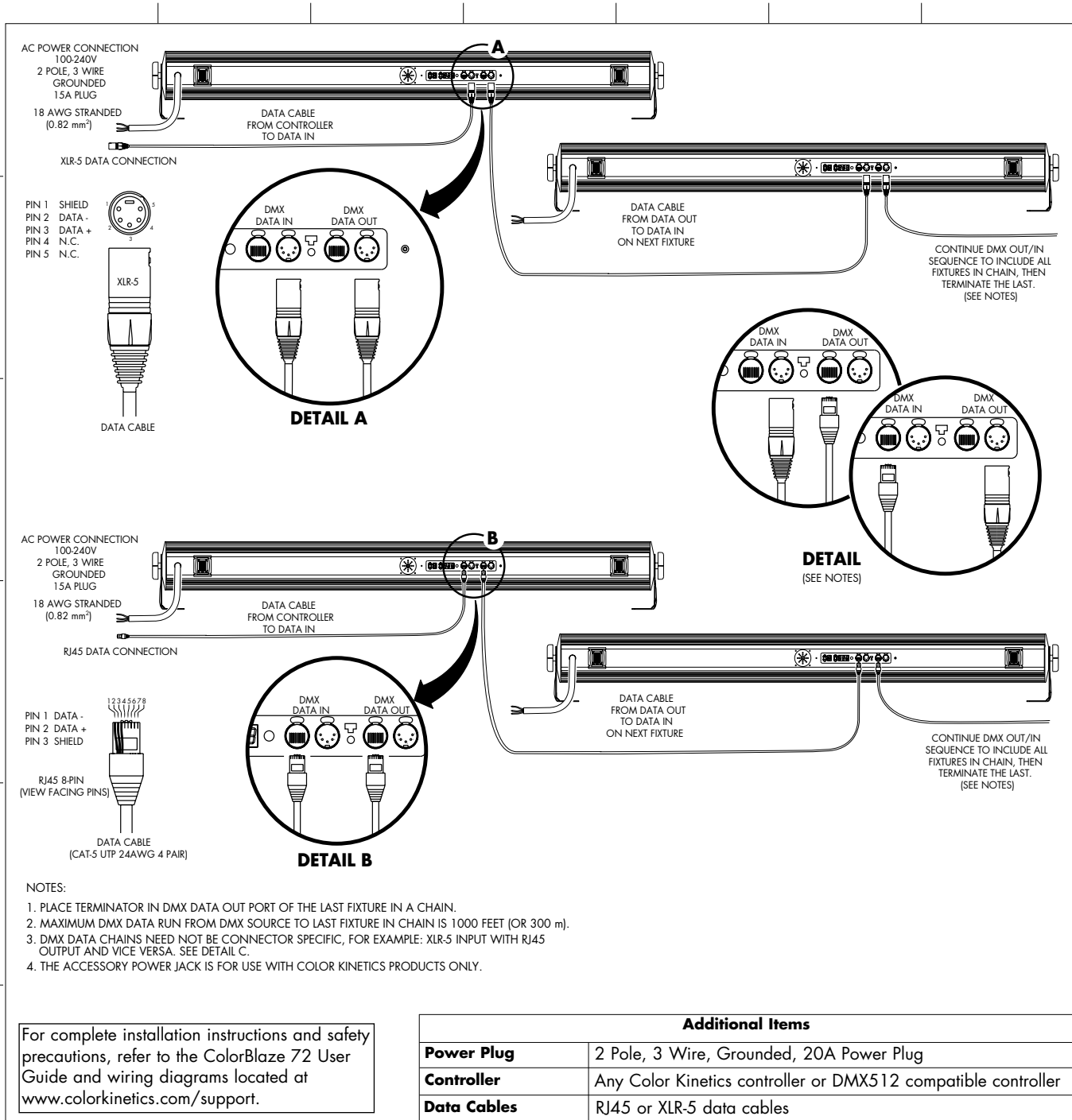
# COLORBLAZE 72

## PHYSICAL DIMENSIONS



# COLORBLAZE 72

## FUNCTIONAL FLOW DIAGRAM



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

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