



# COLORBLAST 6

POWERED BY CHROMACORE®



Color Kinetics® ColorBlast® 6 is a Chromacore®-powered product, in the bColor Series, designed for washing walls with rich, saturated colors and color changing effects. ColorBlast 6 provides lighting designers and architects a small, sleek solution for dynamic color lighting.

ColorBlast 6 is a sealed product designed for both indoor and outdoor installations. The stylish and rugged die-cast aluminum housing meets or exceeds specifications for use in wet and damp locations. ColorBlast 6 is available with a soft-focus, tempered glass lens or a clear tempered glass lens. The soft-focus lens produces a soft-edge 22° beam of light, while the clear lens offers a 10° beam angle for extended light projection. The housing is also equipped to affix spread lenses, louvers, and other attachments and is available in either a black or white finish to match its environment and prevent oxidation. A single 3-wire, 60-foot (18.3 m) cable, which provides both power and data to the light fixture, is rated for outdoor installations.

Designed to quickly aim the fixture without the need of special tools, ColorBlast 6 includes an industrial-grade constant torque hinge. Set screws and an Allen wrench are included for installations requiring locked positioning. The versatile base of ColorBlast 6 can be mounted to a junction box on a wall, ceiling, or floor. ColorBlast 6 includes a separate canopy, liquid-tight cable fitting, and swivel bracket. For a more finished look, mount the canopy to the base and mounting surface. The liquid-tight cable fitting seals the canopy opening. The swivel bracket allows for flexible fixture positioning. ColorBlast 6 can be controlled by a Color Kinetics controller or a third-party controller. Each fixture comes pre-addressed to light number one. Simple effects, such as fixed color and color wash, require no additional addressing. Other 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.

For protection from extreme temperatures, ColorBlast 6 has been designed with a temperature monitoring feature. If operating temperatures rise to an unsafe level, a compensation circuit is triggered and ColorBlast 6 operation is interrupted causing the lights to turn dull red. After 30 minutes the lights will auto-cycle and return to full intensity.

## COLORBLAST SPECIFICATIONS

<b>COLOR RANGE</b>	16.7 million (24-bit) additive RGB colors; continuously variable intensity output range
<b>SOURCE</b>	High intensity power light emitting diodes (LEDs)
<b>BEAM ANGLE</b>	10° clear lens, 22° ground lens
<b>HOUSING</b>	Die Cast Aluminum in black or white
<b>LENSES</b>	Clear tempered glass or soft-focus tempered glass
<b>CONNECTORS</b>	Unified power and data cable
<b>LISTINGS</b>	UL/cUL, CE

## COMMUNICATION SPECIFICATIONS

<b>DATA INTERFACE</b>	Color Kinetics data interface system
<b>CONTROL</b>	Color Kinetics full line of controllers or other DMX512 (RS485) compatible when using Color Kinetics power/data supply

## ELECTRICAL SPECIFICATIONS

<b>POWER REQUIREMENT</b>	24VDC
<b>POWER CONSUMPTION</b>	25W Max. at full intensity (full RGB)
<b>POWER SUPPLY</b>	PDS-150e (ITEM# 109-000008-01) - Maximum of 6 fixtures/supply PDS-60 24V (ITEM# 109-000017-00/01/02) - Maximum of 2 fixtures/supply

## ENVIRONMENTAL SPECIFICATIONS

<b>TEMPERATURE RANGE</b>	-40°F to 122°F (-40°C to 50°C) operating temperature -4°F to 122°F (-20°C to 50°C) starting temperature
<b>PROTECTION RATING</b>	IP66

## LED SOURCE LIFE

In traditional lamp sources, lifetime is defined as the point at which 50% of the lamps fail. This is also termed Mean Time Between Failure [MTBF]. LEDs are semiconductor devices and have a much longer MTBF than conventional sources. However, MTBF is not the only consideration in determining useful life. Color Kinetics uses the concept of useful light output for rating source lifetimes. Like traditional sources, LED output degrades over time (lumen depreciation) and this is the metric for SSL lifetime.

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. Lumen depreciation information is based on LED manufacturers' source life data as well as other third party testing. Low temperatures and controlled effects have a beneficial effect on lumen depreciation. Overall system lifetime could vary substantially based on usage and the environment in which the system is installed.

Temperature and effects will affect lifetime. Color Kinetics rates product lifetime using lumen depreciation to 50% of original light output. When the fixture is running at room temperature using a color wash effect, the range of lifetime is in the range of 80,000-100,000 hours. This is LED manufacturers' test data. High output is defined as any LED device that is 1/2 watt or above. For more detailed information on source life, please see [www.colorkinetics.com/lifetime](http://www.colorkinetics.com/lifetime).

CHROMACORE®  
BY COLOR KINETICS

OPTIBIN®  
BY COLOR KINETICS



- ITEM# 116-000013-00 (White, Frosted)
- 116-000013-01 (Black, Frosted)
- 116-000013-02 (White, Clear)
- 116-000013-03 (Black, Clear)

This product is protected by one or more of the following patents: U.S. Patent Nos. 6,016,038, 6,150,774 and other patents listed at <http://colorkinetics.com/patents/>. Other patents pending.

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BRO088 Rev 07

Specifications subject to change without notice. Refer to [www.colorkinetics.com](http://www.colorkinetics.com) for the most recent data sheet versions.

# COLORBLAST 6 CLEAR LENS

## PHOTOMETRIC PERFORMANCE

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

### SOURCE SPECIFICATIONS

Optics:	Clear tempered glass
Source:	18 LEDs (6 Red, 6 Green, 6 Blue)
Beam Angle:	10°
Distribution:	Symmetric direct illumination
CCT:	Adjustable 1,000K-10,000K
CRI:	Not measurable (CIE 13.3-1995)

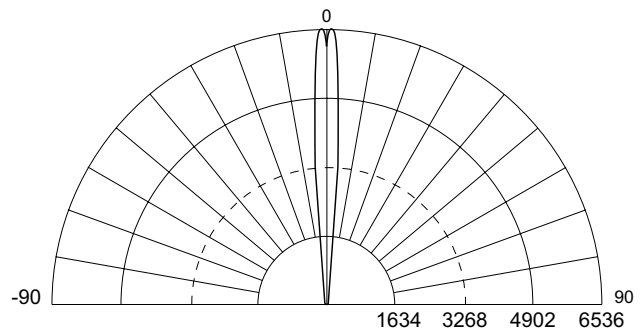
### ILLUMINANCE DISTRIBUTION

1.0 10.8	1.6 17.2	1.9 20.5	1.7 18.3	1.3 14.0	0.9 9.7	6.0'/2.0m
1.3 14.0	4.0 43.1	6.4 68.9	4.7 50.6	2.0 21.5	1.1 11.8	5.0'/1.5m
1.7 18.3	14.3 153.9	28.1 302.5	18.8 202.4	4.6 49.5	1.4 15.1	4.0'/1.2m
1.7 18.3	15.0 161.5	38.9 418.7	38.6 415.5	14.7 158.2	1.7 18.3	3.0'/1.0m
1.3 14.0	5.0 53.8	20.0 215.3	29.3 315.4	14.7 158.2	1.6 17.2	2.0'/0.6m
0.8 8.6	1.9 20.5	5.2 56.0	7.3 78.6	4.3 46.3	1.1 11.8	1.0'/0.3m
3.0'/1.0m		0'/0m		3.0'/1.0m		

Units: Footcandles (top)/Lux (bottom)  
10.8 lux = 1 fc

Measured on: All, reflectance model 80/50/20%  
Distance from surface: Bottom of grid,, 3' (1.0 m) from surface, light at a 45° angle off horizontal

### CANDLE POWER DISTRIBUTION



Measured on: White  
Beam center: 6536 cd  
Thin dashed line: Indicates 50% of peak  
Multipliers: 0.35 Red, 0.48 Green, 0.17 Blue

### ILLUMINANCE

COLOR	3' 1m	6' 2m	9' 3m	15' 5m
WHITE	682.0 7341.0	170.0 1829.9	75.6 813.8	27.2 292.8
RED	241.0 2594.3	60.1 646.7	26.7 287.6	9.6 103.5
GREEN	325.4 3502.4	81.1 873.0	36.1 388.2	13.0 139.7
BLUE	114.5 1232.6	28.5 307.2	12.7 136.6	4.6 49.2

Measured in Footcandles (top)/Lux (bottom) on axis.  
Measured on: All, reflectance 0.

### LIGHT OUTPUT

COLOR	TOTAL OUTPUT (lumens)	POWER (Watts)	EFFICACY (Lm/w)
WHITE	307	25.0	12.3
RED	108.5	9.6	11.3
GREEN	146.5	9.6	15.3
BLUE	51.5	9.6	5.4

# COLORBLAST 6 GROUND LENS

## PHOTOMETRIC PERFORMANCE

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

### SOURCE SPECIFICATIONS

Optics:	Tempered soft focus glass diffuser
Source:	18 LEDs (6 Red, 6 Green, 6 Blue)
Beam Angle:	22°
Distribution:	Symmetric direct illumination
CCT:	Adjustable 1,000K-10,000K
CRI:	Not measurable (CIE 13.3-1995)

### ILLUMINANCE DISTRIBUTION

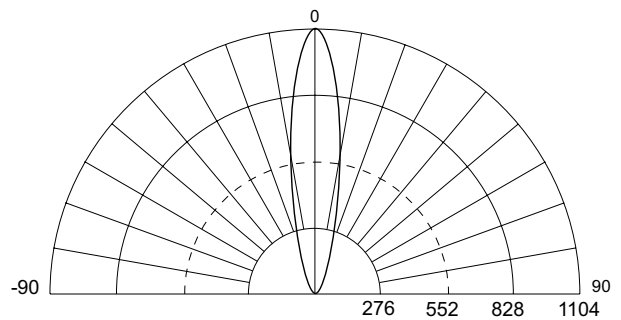
1.6 17.2	2.5 26.9	3.1 33.4	2.8 30.1	2.1 22.6	1.4 15.1	6.0'/2.0m
2.2 23.7	4.8 51.7	6.9 74.3	5.9 63.5	3.4 36.6	1.8 19.4	5.0'/1.5m
2.9 31.2	8.9 95.8	14.8 159.3	12.4 133.5	5.9 63.5	2.4 25.8	4.0'/1.2m
3.1 33.4	10.8 116.3	20.7 222.8	19.7 212.1	9.6 103.3	3.0 32.3	3.0'/1.0m
2.5 26.9	7.7 82.9	16.7 179.8	18.8 202.4	10.3 110.9	3.0 32.3	2.0'/0.6m
1.6 17.2	3.8 40.9	8.2 88.3	10.2 109.8	6.4 68.9	2.2 23.7	1.0'/0.3m
3.0'/1.0m		0'/0m			3.0'/1.0m	

Units: Footcandles (top)/Lux (bottom)  
10.8 lux = 1 fc

Measured on: All, reflectance model 80/50/20%

Distance from surface: Bottom of grid, 3' (1.0 m) from surface, light at a 45° angle off horizontal

### CANDLE POWER DISTRIBUTION



Measured on: White  
Beam center: 1104 cd  
Thin dashed line: Indicates 50% of peak  
Multipliers: 0.33 Red, 0.49 Green, 0.18 Blue

### ILLUMINANCE

COLOR	3' 1m	6' 2m	9' 3m	15' 5m
WHITE	123.0 1324.0	30.7 330.5	13.6 146.4	4.9 52.7
RED	40.6 436.9	10.1 109.1	4.5 48.3	1.6 17.4
GREEN	60.3 648.7	15.0 161.9	6.7 71.7	2.4 25.8
BLUE	21.6 233.0	5.4 58.2	2.4 25.8	0.9 9.3

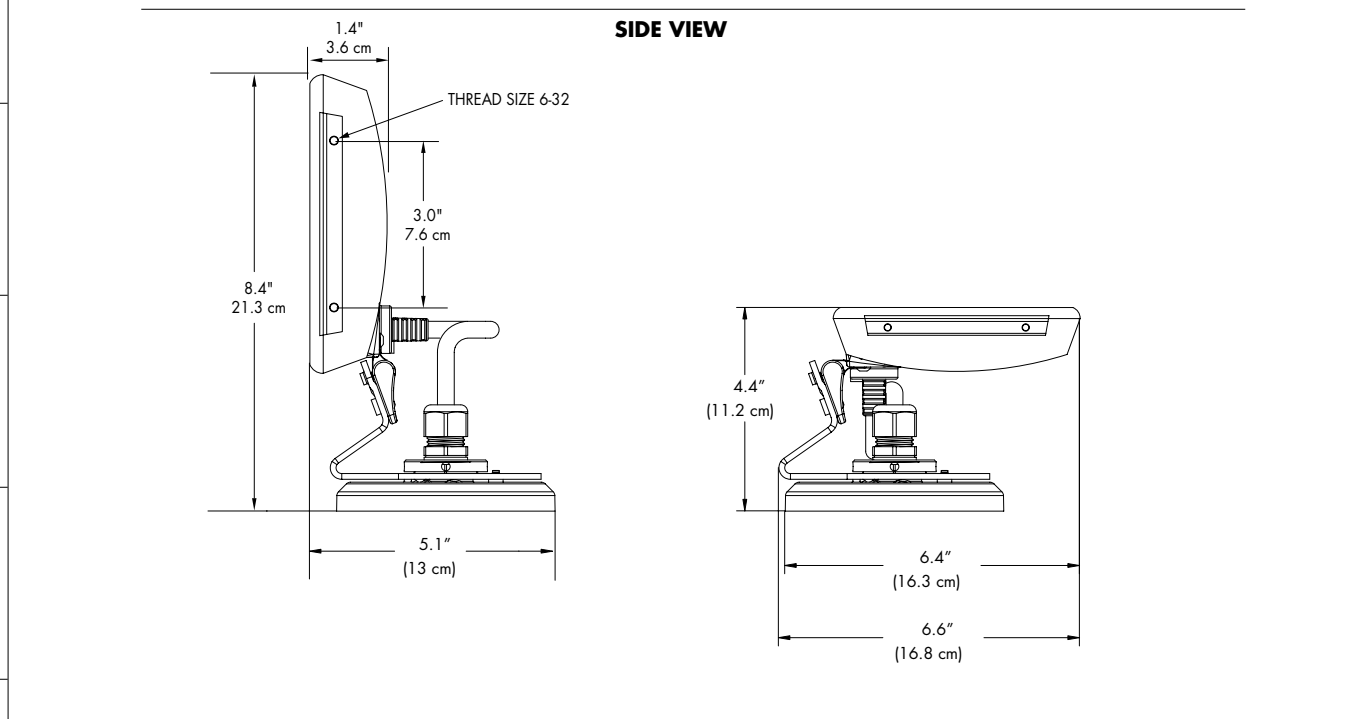
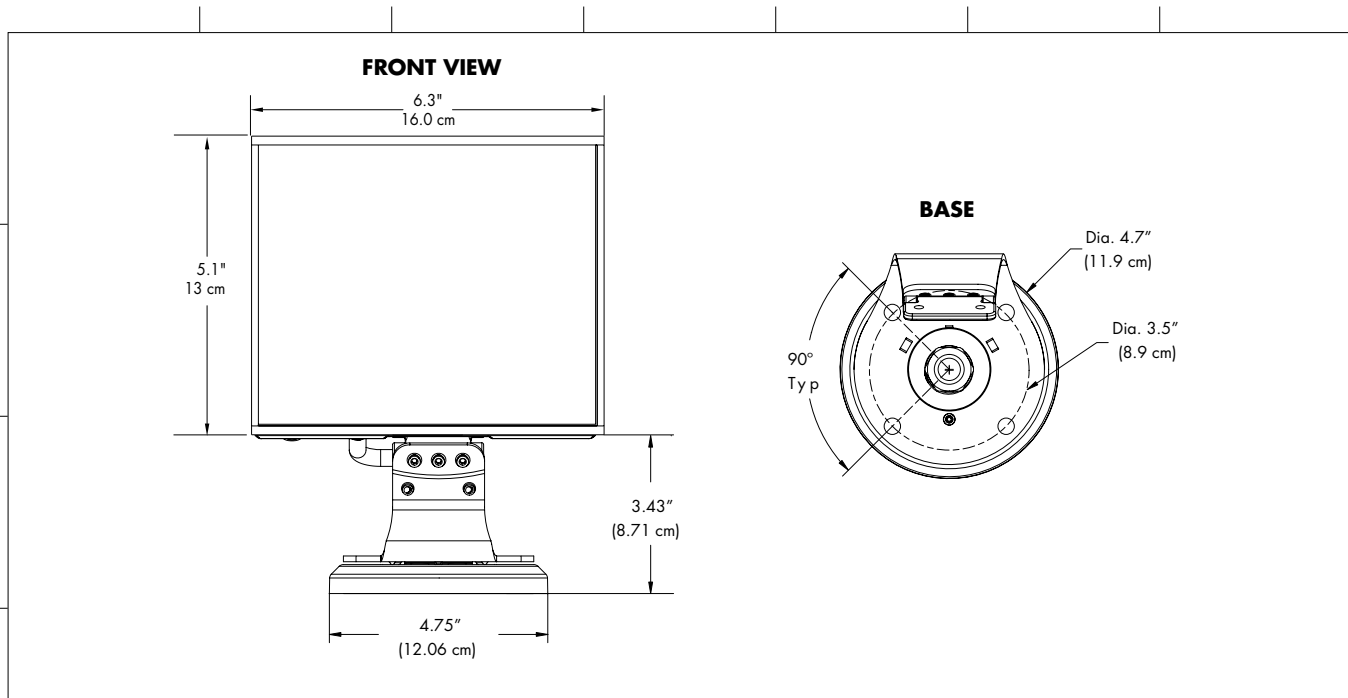
Measured in Footcandles (top)/Lux (bottom) on axis.  
Measured on: All, reflectance 0.

### LIGHT OUTPUT

COLOR	TOTAL OUTPUT (lumens)	POWER (Watts)	EFFICACY (Lm/w)
WHITE	301	25.0	12.0
RED	99.3	9.6	10.3
GREEN	147.5	9.6	15.4
BLUE	53.0	9.6	5.5

# COLORBLAST 6

## PHYSICAL DIMENSIONS

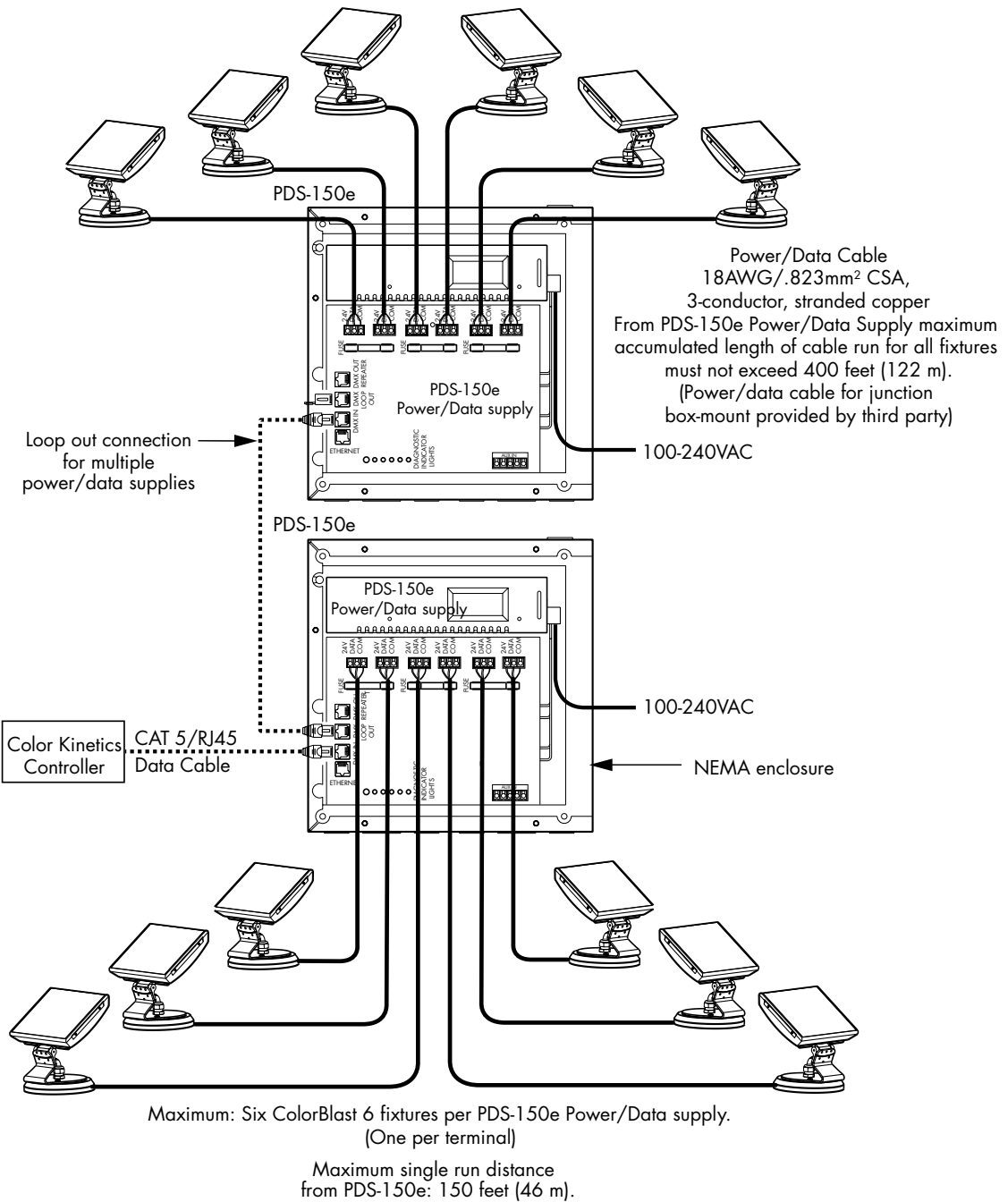


<b>COLORBLAST 6</b>	
<b>ITEM# 116-000013-00/01/02/03</b>	
<b>WEIGHT</b>	6.0 lb (2.7 kg) with cord
<b>POWER CONNECTOR</b>	Unified power and data cable
<b>POWER REQUIREMENT</b>	24VDC (25W)

# COLORBLAST 6

## FUNCTIONAL FLOW DIAGRAM

### ColorBlast 6 with PDS-150e



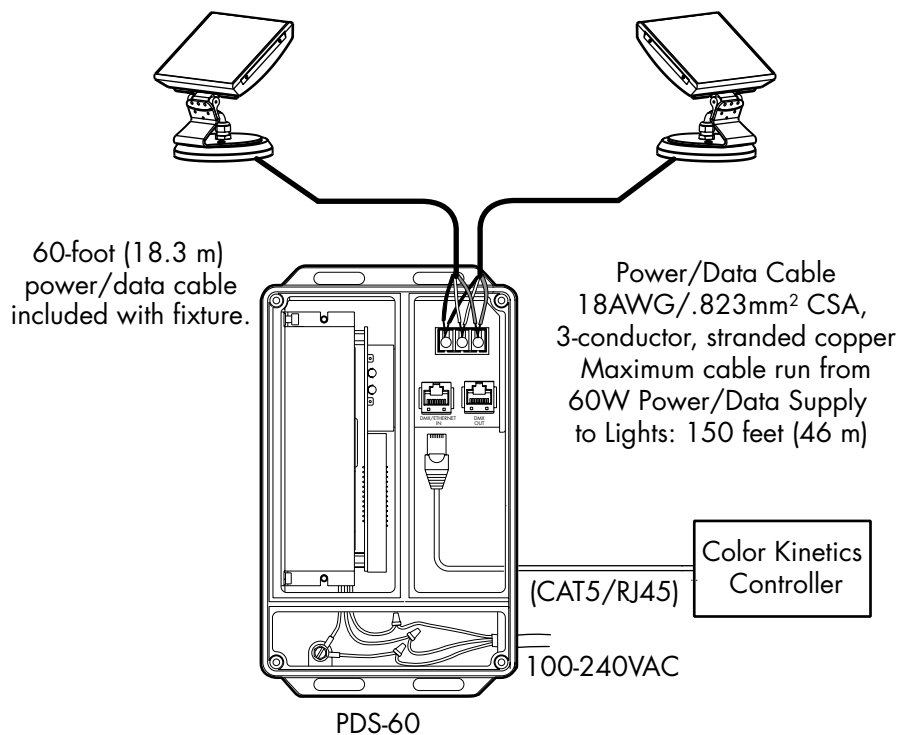
For complete installation instructions and safety precautions, refer to the ColorBlast 6 User Guide and wiring diagrams located at [www.colorkinetics.com/support](http://www.colorkinetics.com/support).

Additional Items	
<b>Power/Data Supply</b>	PDS-150e (ITEM# 109-000008-01)
<b>Controller</b>	Any Color Kinetics controller or DMX512 compatible controller
<b>Address Unit</b>	Serialized Addressing Software (SAS) or Zapi (ITEM# 103-000005-00/01)

# COLORBLAST 6

## FUNCTIONAL FLOW DIAGRAM

### ColorBlast 6 with PDS-60



Maximum: Two ColorBlast 6 fixtures per PDS-60 power/data supply.

For complete installation instructions and safety precautions, refer to the ColorBlast 6 User Guide and wiring diagrams located at [www.colorkinetics.com/support](http://www.colorkinetics.com/support).

#### Additional Items

<b>Power/Data Supply</b>	PDS-60 (ITEM# 109-000017-00/01/02)
<b>Controller</b>	Any Color Kinetics controller or DMX512 compatible controller
<b>Address Unit</b>	Serialized Addressing Software (SAS) or Zapi (ITEM# 103-000005-00/01)

#### 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.