

COLORBURST 6



The ColorBurst® 6 fixture is a Chromacore®-powered product designed to meet the needs of lighting professionals, providing them with a small, sleek solution for spotlighting and wall-washing with rich, saturated colors and color-changing effects.

Projecting a soft-edge beam of light, ColorBurst 6 is a sealed product designed for both indoor and outdoor installations. The fixture is fully enclosed in a stylish and rugged die-cast aluminum housing and meets or exceeds specifications for use in wet locations. Enclosed wiring gives ColorBurst 6 a neat appearance and optimum positioning. The housing is equipped with a three-screw accessory ring 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. ColorBurst 6 has three 18AWG wire leads and attaches to a standard junction box or an optional mounting base, which has a 60-foot (18.3 m) three-conductor cable. The 350° locking base swivel, with 350° locking fixture rotation, offers a versatile range of light positioning.

ColorBurst 6 can be controlled by a Color Kinetics® controller or a third-party controller. Each fixture comes pre-addressed to light number one. With a Color Kinetics controller, 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: Serialized Addressing Software (SAS) or Zapi. For protection from extreme temperatures, ColorBurst 6 has been designed with a temperature monitoring feature. If operating temperatures rise to an unsafe level, a compensation circuit is triggered and ColorBurst 6 operation is interrupted causing the light to turn dull red. After 30 minutes the light will auto-cycle and return to full intensity.

COLORBURST 6 SPECIFICATIONS

COLOR RANGE 16.7 million (24 bit) additive RGB colors; continuously variable intensity output range

SOURCE High intensity power light emitting diodes (LEDs)

BEAM ANGLE 12° clear lens, 22° ground lens

HOUSING Die cast aluminum in black or white

LISTINGS UL/cUL Listed

COMMUNICATION SPECIFICATIONS

DATA INTERFACE Color Kinetics data interface system

CONTROL Color Kinetics full line of controllers or DMX512 (RS485) compatible when using Color Kinetics power/data supply

ELECTRICAL SPECIFICATIONS

POWER REQUIREMENT 24VDC

POWER CONSUMPTION 25W Max. at full intensity (full RGB)

POWER SUPPLY PDS-150e (ITEM# 109-000008-01) - Maximum of 6 fixtures/supply
PDS-60 24V (ITEM# 109-000017-00/03) - Maximum of 2 fixtures/supply

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE RANGE -40°F to 122°F (-40°C to 50°C) operating temperature
-4°F to 122°F (-20°C to 50°C) starting temperature

PROTECTION RATING 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 lifetime is in the range of 80,000-100,000 hours. This is based on 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.

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.

CHROMACORE®
BY COLOR KINETICS

OPTIBIN®
BY COLOR KINETICS



ColorBurst 6 ITEM# 116-000014-00 (White, Frosted)
116-000014-01 (Black, Frosted)
116-000014-02 (White, Clear)
116-000014-03 (Black, Frosted)
ColorBurst Base ITEM# 116-000005-00 (White)
116-000005-01 (Black)

This product is protected by one or more of the following U.S. Patents and their foreign counterparts: 6,016,038, 6,150,774, 6,292,901, 6,340,868, 6,777,891, 6,788,011, 6,806,659, 6,969,954, and 6,975,079. Other patents pending.

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BR0100 Rev 08

Specifications subject to change without notice. Refer to www.colorkinetics.com for the most recent version.

COLORBURST 6 - CLEAR LENS

PHOTOMETRIC PERFORMANCE

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

SOURCE SPECIFICATIONS

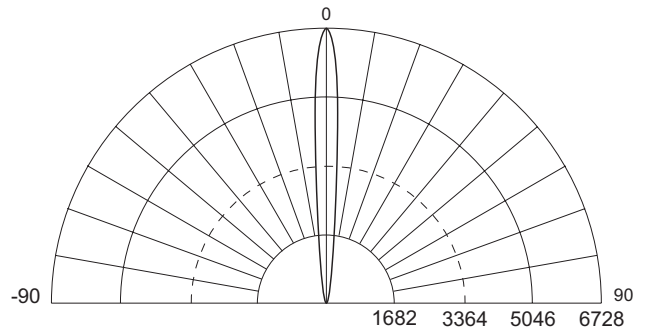
Optics: Clear tempered glass
 Source: 18 LEDs (6 Red, 6 Green, 6 Blue)
 Beam Angle: 12°
 Distribution: Symmetric direct illumination
 CCT: Adjustable 1,000K-10,000K
 CRI: Not measureable (CIE 13.3-1995)

ILLUMINANCE DISTRIBUTION

1.2 / 12.9	4.0 / 43.1	6.6 / 71.0	4.7 / 50.6	1.9 / 20.5	1.0 / 10.8	6.0' / 2.0m
1.6 / 17.2	14.4 / 155.0	28.5 / 306.8	19.1 / 205.6	4.6 / 49.5	1.2 / 12.9	5.0' / 1.5m
1.6 / 17.2	15.0 / 161.5	39.2 / 421.9	39.0 / 419.8	14.7 / 158.2	1.5 / 16.1	4.0' / 1.2m
1.0 / 10.8	4.9 / 52.7	20.1 / 216.4	29.5 / 317.5	14.6 / 157.2	1.4 / 15.1	3.0' / 1.0m
0.4 / 4.3	1.4 / 15.1	4.7 / 50.6	6.9 / 74.3	4.0 / 43.1	0.8 / 8.6	2.0' / 0.6m
0.3 / 3.2	0.4 / 4.3	0.8 / 8.6	1.2 / 12.9	0.8 / 8.6	0.4 / 4.3	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 center of grid, 3' (1.0 m) from surface, light at a 45° angle off horizontal

CANDLE POWER DISTRIBUTION



Measured on: White
 Beam center: 6728 cd
 Thin dashed line: Indicates 50% of peak
 Multipliers: 0.36 Red, 0.46 Green, 0.18 Blue

ILLUMINANCE

COLOR	3'	6'	9'	15'
	1m	2m	3m	5m
WHITE	750.0	187.0	83.2	29.9
	8073.0	2012.9	895.6	321.8
RED	269.3	67.2	29.9	10.7
	2899.0	722.8	321.6	115.6
GREEN	345.0	86.0	38.3	13.8
	3713.6	925.9	412.0	148.0
BLUE	134.3	33.5	14.9	5.4
	1445.1	360.3	160.3	57.6

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	295	24.7	11.9
RED	105.9	8.4	12.6
GREEN	135.7	8.4	16.2
BLUE	52.8	8.4	6.3

COLORBURST 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

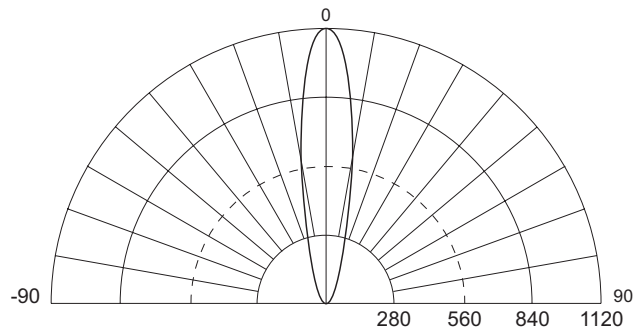
2.2 23.7	4.8 51.7	7.0 75.3	5.9 63.5	3.4 36.6	1.8 19.4	6.0'/2.0m
2.9 31.2	9.0 96.9	15.1 162.5	12.6 135.6	6.0 64.6	2.4 25.8	5.0'/1.5m
3.1 33.4	10.9 117.3	21.1 227.1	20.0 215.3	9.7 104.4	3.0 32.3	4.0'/1.2m
2.4 25.8	7.7 82.9	16.9 181.9	19.1 205.6	10.4 111.9	3.0 32.3	3.0'/1.0m
1.5 16.1	3.7 39.8	8.1 87.2	10.2 109.8	6.3 67.8	2.1 22.6	2.0'/0.6m
1.0 10.8	1.9 20.5	3.2 34.4	3.7 39.8	2.6 28.0	1.2 12.9	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 center of grid, 3' (1.0 m) from surface, light at a 45° angle off horizontal

CANDLE POWER DISTRIBUTION



Measured on: White
Beam center: 1120 cd
Thin dashed line: Indicates 50% of peak
Multipliers: 0.35 Red, 0.46 Green, 0.18 Blue

ILLUMINANCE

COLOR	3'	6'	9'	15'
	1m	2m	3m	5m
WHITE	124.0 1334.7	31.2 335.8	13.8 148.5	5.0 53.8
RED	43.9 472.5	11.0 118.9	4.9 52.6	1.8 19.1
GREEN	57.2 615.3	14.4 154.8	6.4 68.5	2.3 24.8
BLUE	21.9 236.2	5.5 59.4	2.4 26.3	0.9 9.5

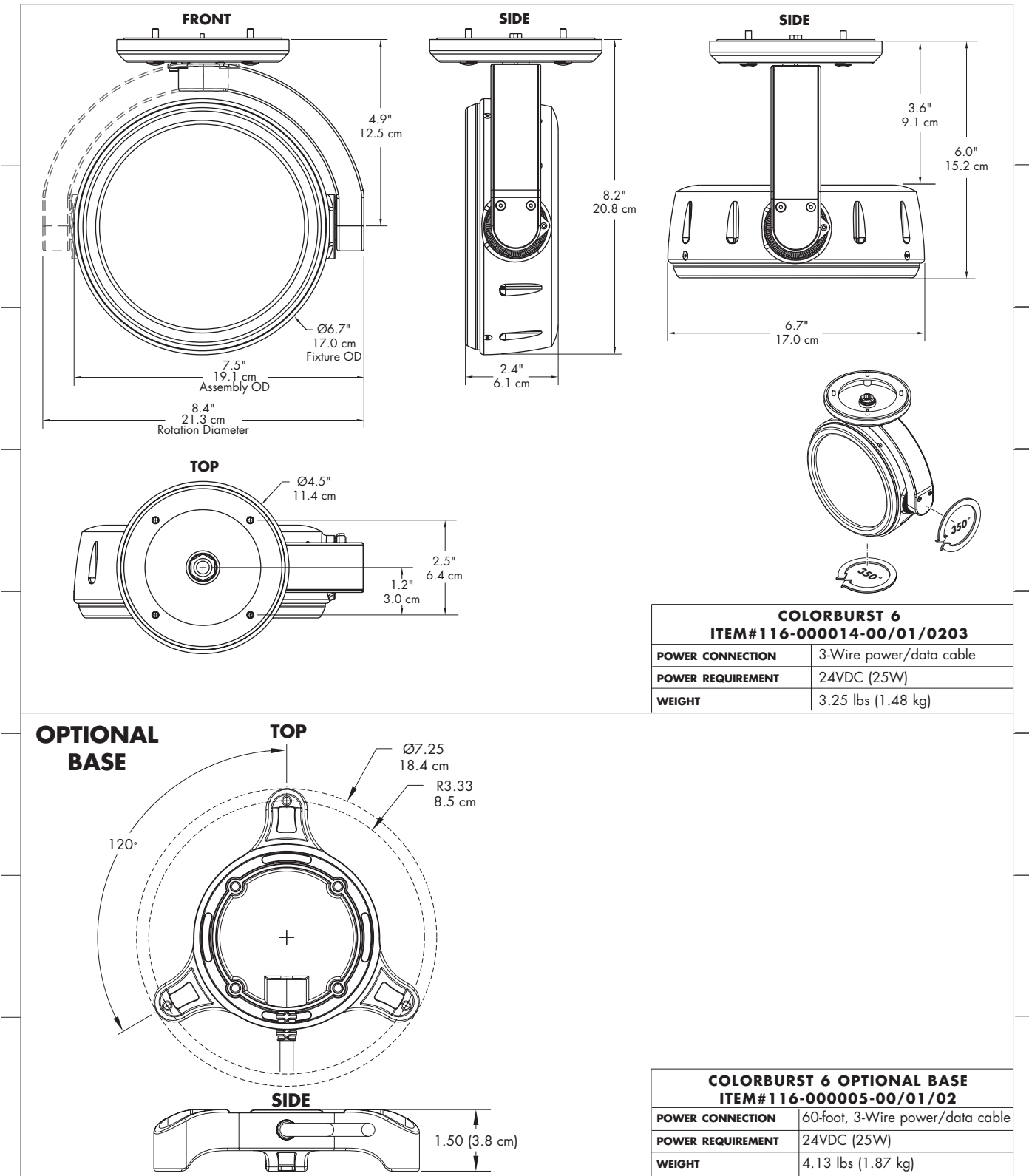
Measured in Footcandles (top)/Lux (bottom) on axis.
Measured on: All, reflectance 0.

LIGHT OUTPUT

COLOR	TOTAL OUTPUT (lumens)	POWER (Watts)	EFFICACY (Lm/w)
WHITE	291	24.7	11.8
RED	103.0	8.4	12.3
GREEN	134.2	8.4	16.0
BLUE	51.5	8.4	6.1

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PHYSICAL DIMENSIONS



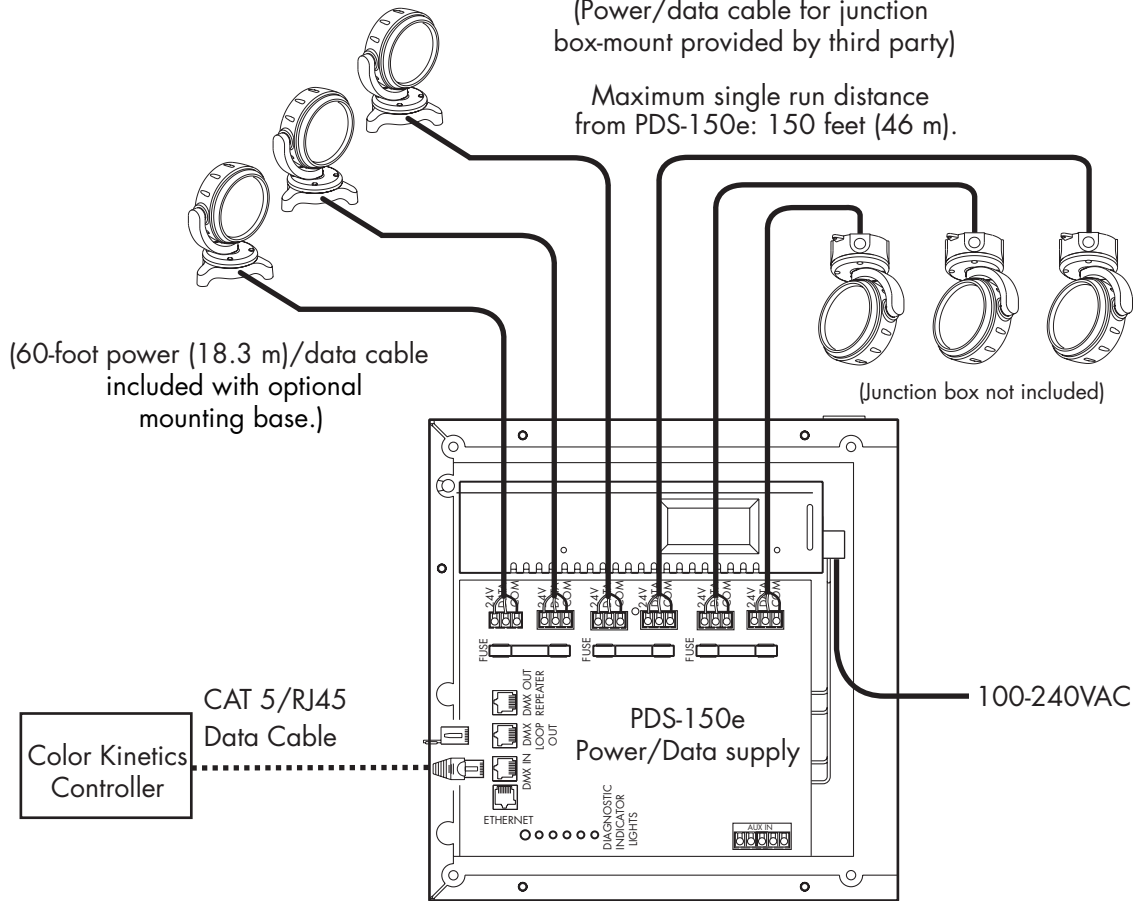
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FUNCTIONAL FLOW DIAGRAM

ColorBurst 6 with PDS-150e

Power/Data Cable
 18AWG/.823mm² CSA,
 3-conductor, stranded copper
 From PDS-150e Power/Data Supply maximum
 accumulated length of cable run for all fixtures
 must not exceed 400 feet (122 m).
 (Power/data cable for junction
 box-mount provided by third party)

Maximum single run distance
 from PDS-150e: 150 feet (46 m).



Maximum: Six ColorBurst 6 fixtures per PDS-150e Power/Data supply.
 (One per terminal)

Note: Do not daisy-chain ColorBurst 6 fixtures.

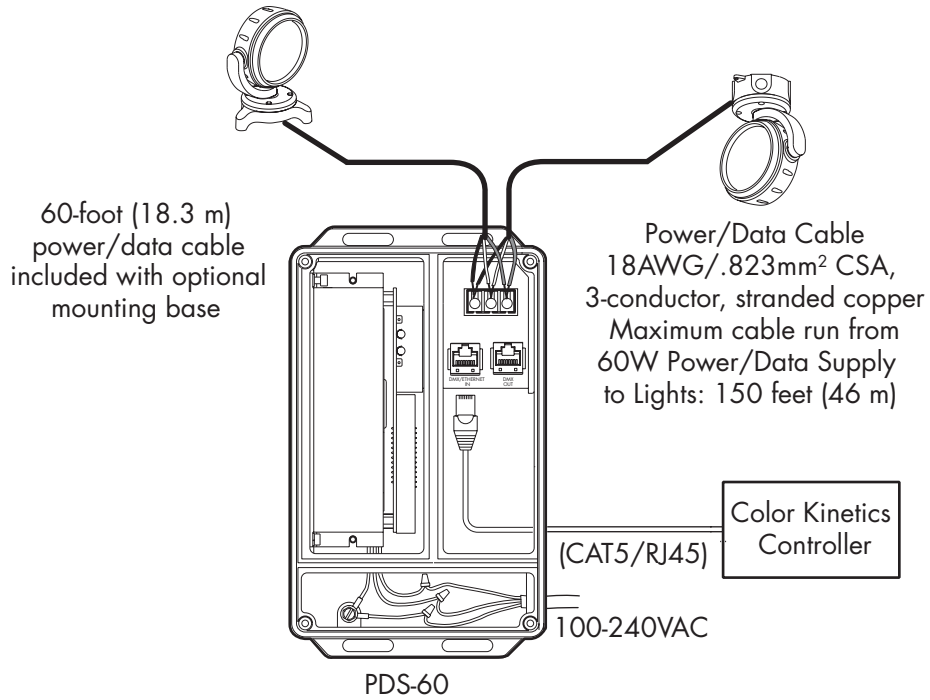
Additional Items	Applications
Power/Data Supply	PDS-150e ITEM# 109-000008-01
Controller	Any Color Kinetics controller or DMX512 compatible controller
Address Unit	Serialized Addressing Software (SAS) or Zapi (ITEM# 103-000005-00/01)
Mounting Base (optional)	ITEM# 116-000005-00 White ITEM# 116-000005-01 Black

For complete installation instructions and safety precautions, refer to the ColorBurst 6 User Guide and wiring diagrams located at www.colorkinetics.com/support.

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FUNCTIONAL FLOW DIAGRAM

ColorBurst 6 with PDS-60 (Preprogrammed)



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

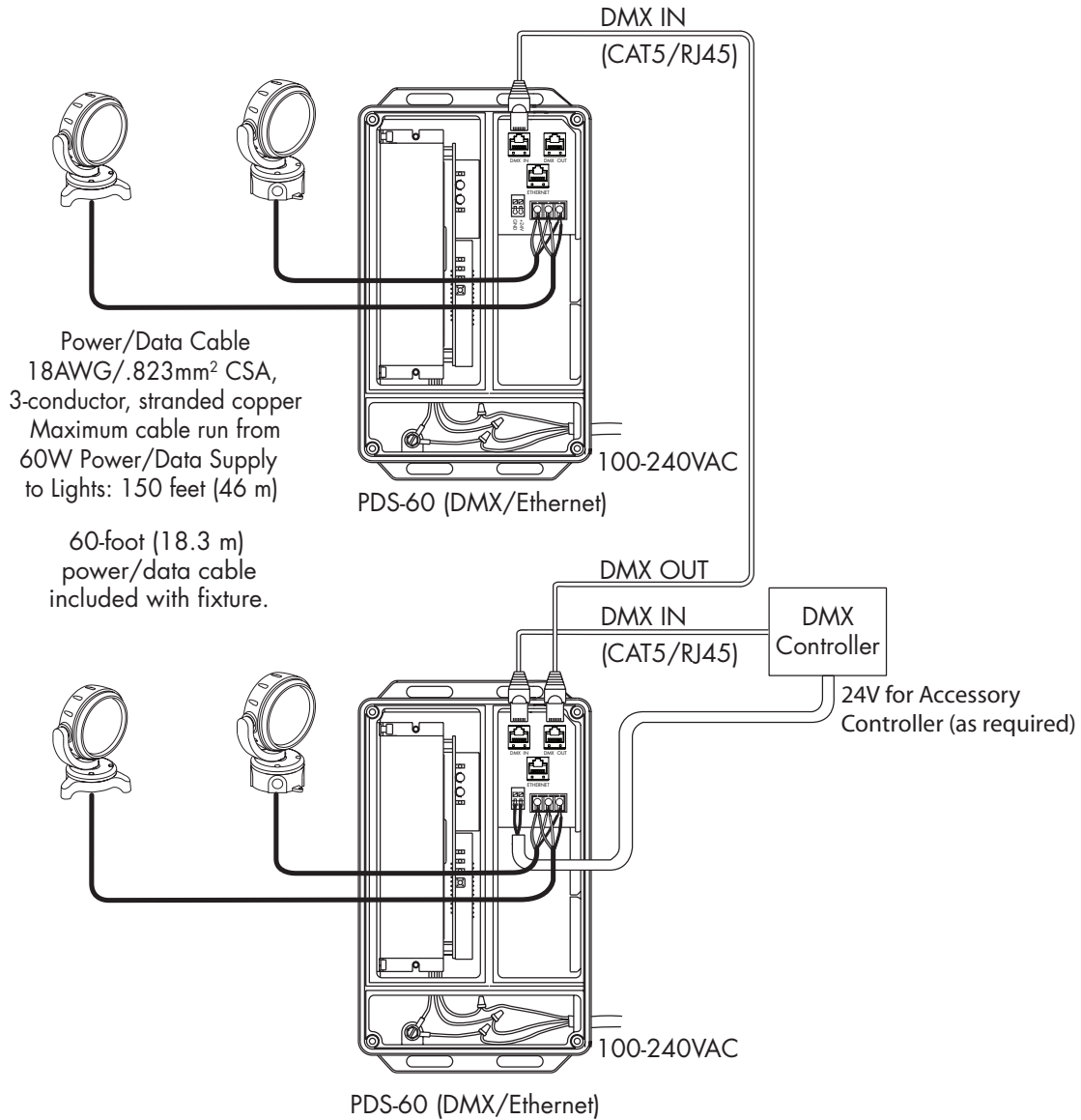
For complete installation instructions and safety precautions, refer to the ColorBurst 6 User Guide and wiring diagrams located at www.colorkinetics.com/support.

Additional Items	Applications
Power/Data Supply	PDS-60 24V (ITEM# 109-000017-00/03)
Controller	Any Color Kinetics controller or DMX512 compatible controller
Address Unit	Serialized Addressing Software (SAS) or Zapi (ITEM# 103-000005-00/01)
Mounting Base (optional)	ITEM# 116-000005-00 White ITEM# 116-000005-01 Black

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FUNCTIONAL FLOW DIAGRAM

ColorBurst 6 with PDS-60 24V (DMX Control)



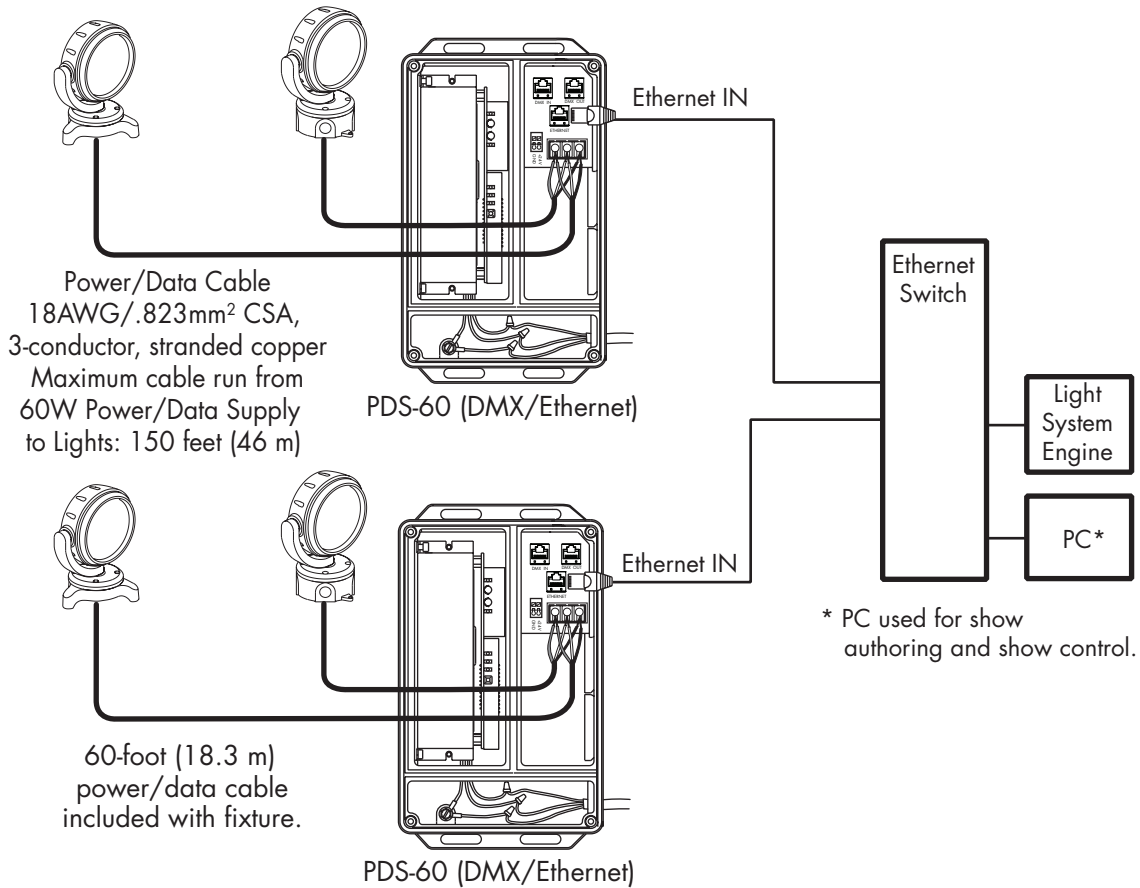
For complete installation instructions and safety precautions, refer to the ColorBurst 6 User Guide and wiring diagrams located at www.colorkinetics.com/support.

Additional Items	Applications
Power/Data Supply	PDS-60 24V (ITEM# 109-000017-00/03)
Controller	Any Color Kinetics controller or DMX512 compatible controller
Address Unit	Serialized Addressing Software (SAS) or Zapi (ITEM# 103-000005-00/01)
Mounting Base (optional)	ITEM# 116-000005-00 White ITEM# 116-000005-01 Black

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FUNCTIONAL FLOW DIAGRAM

ColorBurst 6 with PDS-60 24V (Ethernet Control)



For complete installation instructions and safety precautions, refer to the ColorBurst 6 User Guide and wiring diagrams located at www.colorkinetics.com/support.

Additional Items	Applications
Power/Data Supply	PDS-60 24V (ITEM# 109-000017-00/03)
Controller	Any Color Kinetics controller or DMX512 compatible controller
Address Unit	Serialized Addressing Software (SAS) or Zapi (ITEM# 103-000005-00/01)
Mounting Base (optional)	ITEM# 116-000005-00 White ITEM# 116-000005-01 Black