

ColorBlast Powercore

The world's leading exterior LED wash fixture with intelligent color light



ColorBlast Powercore The world's leading exterior LED wash fixture with intelligent color light

ColorBlast Powercore high-performance LED fixtures combine rich, saturated, wall-washing color and colorchanging effects with simplified installation. ColorBlast Powercore offers a range of beam angles for wall washing, grazing, floodlighting, and spotlighting, along with the efficiency and cost-effectiveness of Powercore technology in a rugged die-cast aluminum housing.

- Superior light output Produces saturated, fullcolor light output of up to 1471 lumens with light projection of up to 204 feet. Fixtures are available in four beam angles: 23° and 36° for soft edges, 86° with no optic for uniformly washing façades, and a 10° beam for extended light projection.
- Integrates patented Powercore technology Powercore rapidly, efficiently, and accurately controls power output to fixtures directly from line voltage. The Philips Color Kinetics Data Enabler Pro merges line voltage with control data and delivers them to fixtures over a single standard cable, dramatically simplifying installation and lowering total system cost.
- Versatile light positioning Locking canopy base offers friction-free rotation of up to 350°, and 110° fixture tilting lets you quickly aim the fixture without special tools.
- Easy installation By providing line voltage directly to fixtures, Powercore eliminates the need for external power supplies and special wiring. Fixtures can be mounted to a junction box on a wall, ceiling, or floor.

- Universal power input range ColorBlast Powercore accepts power input of 100 – 240 VAC, allowing the installation of many fixtures in a continuous run.
- Industry-leading controls ColorBlast Powercore works seamlessly with the complete Philips Color Kinetics line of controllers, including ColorDial Pro, iPlayer 3, and Light System Manager, as well as third-party controllers.
- Efficient and cost-effective Replacing metal halide fixtures with ColorBlast Powercore fixtures can dramatically reduce electricity and maintenance costs while delivering superior consistency and uniformity of light and color.



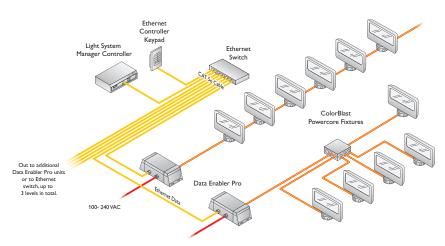
Outdoor Rated

Fully sealed for maximum fixture life and IP66 rated for outdoor applications, ColorBlast Powercore meets or exceeds specifications for use in wet locations. Rugged, diecast aluminum housing is available in white or black powder-coated finish.

Versatile Installation Options

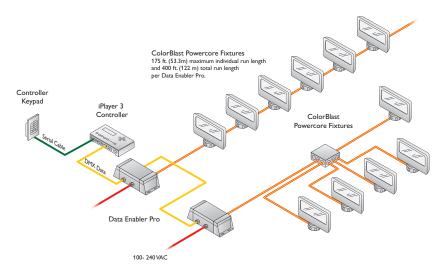
ColorBlast Powercore offers saturated, color-changing LED light, both indoors and outdoors. With its low-profile design, IP66-rated housing, multiple beam angles, and ease of installation and maintenance, ColorBlast Powercore is ideal for applications ranging from backlighting and display and signage lighting to floodlighting, façade- and wall-grazing, architectural detail highlighting, and artistic displays.

Philips offers a range of controllers to support installations from the simplest to the most complex. A simple application might use two ColorBlast Powercore fixtures with a ColorDial Pro controller to dramatically illuminate store window displays with pre-programmed color washes or fades. A larger installation might use Philips Color Kinetics iPlayer 3 controller and its ColorPlay 3 light show authoring software to



Large-scale Ethernet installation with Light System Manager

Large-scale installations may include multiple runs of ColorBlast Powercore fixtures controlled by Light System Manager. Each Data Enabler Pro supports a single run of fixtures, and connects to an available port on the Ethernet Switch.



Small-scale DMX installation with iPlayer 3

Small-scale installations may feature one or more runs of ColorBlast Powercore fixtures controlled by iPlayer 3. Data Enabler Pro devices can be connected in series to one or both DMX output ports on the iPlayer 3. run transformative and imaginative custom light shows on dozens of ColorBlast Powercore fixtures installed in multiple interior or exterior locations.

Philips Color Kinetics Light System Manager, an Ethernet-based integrated controller and light show authoring system, cost-effectively enables large-scale, complex, and intricately designed installations. The LAX Gateway at Los Angeles International Airport (shown on the cover) uses Light System Manager and approximately 1,800 ColorBlast Powercore fixtures to generate colorchanging light within 26 glass pylons ranging in height from 25 to 110 feet.

Regardless of the size and complexity of your installation, the planning time you spend up front can help streamline the installation and configuration of your fixtures. Keep these points in mind as you plan your installation:

- Create a lighting design plan that identifies and locates all fixtures, Data Enabler Pro devices, and controllers. Use this Product Guide and the online Configuration Calculator to determine whether to install fixtures in series or in parallel, how many fixtures you can install in a single run, and the maximum distances between Data Enabler Pro devices, fixtures, and controllers.
- To aid in addressing fixtures for color-changing light shows, record the serial number of each fixture as you assign it to your lighting design plan, and create a layout map that records the address or position of each fixture within a sequence of fixtures.
- Determine whether to address fixtures and configure your lighting system offline or interactively. With offline configuration, you stage and configure your system off-site, prior to installation. Offline configuration can be convenient when fixtures are to be installed in multiple locations or locations with difficult access. Interactive configuration is typically performed by an experienced technician, after fixtures have been installed. The interactive method can save time, since you connect and test your fixtures only once.

Photometrics

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.philipscolorkinetics.com/support/ies.

ColorBlast Powercore 10° clear lens

LED	Lumens	Efficacy
RGB	1418	27.7

Polar Candela Distribution

Illuminance at Distance

Cd: 0		90°		0.0	22.5	45 0	67.5	90.0		Center Beam fc	Beam Width
7000				41659		41659	41659		4 ft	2604 ft	0.6 ft 0.6 ft
		80°	15	350	364	383	371	358	4 ft 8 ft	651 fc	1.2 ft 1.2 ft
14000		70°	25 35	164 91	160 95	158 99	160 97	156 99	12 ft	289 fc	1.8 ft 1.8 ft
21000	HXXXX	60°	45 55	42 15	46 15	48 17	48 17	46 15	12 ft	163 fc	2.4 ft 2.4 ft
28000	HTXX		65 75	11 4	10 4	11 4	10 4	15 4	20 ft	104 fc	3.0 ft 3.0 ft
35000	HTX	50°	85 90	0	0	0	0	0	20 ft	72 fc	3.6 ft 3.6 ft
42000				-	-	-	-	-	2110		
VA: 0	° 10° 20° 30° 40°									204 ft (62.2 m)	Vert. Spread: 8.6° Horiz. Spread: 8.7°
1	🗖 - 0° H 📕 - 90° H								1 tc	maximum distance	Horiz. Spread. 6.7

Zonal Lumen Coefficients Of Utilization - Zonal Cavity Method ZONE LUMENS %FIXT 0- 30 0- 40 0- 60 0- 90 90-180 1289 1352 90.9 95.3 1404 99 0 1404 1418 0 1418 100.0 100.0 0-180

	RC		80)			70)			50			30			10		0	
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	
	0	1191	191	191	19	1161	161	161	16	1111	111	111	1061	061	06	102	021	02	100	
	1	1161				1131				1081			1041			101			98	
	2	1131	101	071	05	1111	081	061	04	1051	031	101	1021	01	99	99	98	97	96	
	3	1101	061	031	01	1081	051	021	00	1021	00	98	100	98	97	98	97	95	94	
	4	1071	031	00	97	1061	02	99	97	100	98	96	98	96	95	97	95	94	93	
	5	1051	01	97	95	1041	00	97	94	98	96	94	97	95	93	96	94	92	91	
	6	103	98	95	93	102	98	95	93	97	94	92	95	93	91	94	92	91	90	
	7	102	97	93	91	101	96	93	91	95	92	91	94	92	90	93	91	90	89	
	8	100	95	92	90	99	95	92	90	94	91	89	93	91	89	92	90	89	88	
	9	99	94	91	89	98	93	90	89	93	90	88	92	90	88	91	89	88	87	
	10	97	93	90	88	97	92	89	88	92	89	87	91	89	87	91	88	87	86	
~ ~ ~ ~	Callia								. 10/-						DOD				antin.	

RCC %: Ceiling reflectance percentage, RW %: Wall reflectance percentage, RCR: Room cavity ratio

ColorBlast Powercore 23° frosted lens

LED	Lumens	Efficacy
RGB	1222	23.9

Polar Candela Distribution

📕 - 90° H

LUMENS

950 1062

1179 1222

0 1222

%FIXT

77.8 87.0

96.5 100.0

0.0

RC

Cd: 0

883

1767

2650

3533

4417

5300

ZONE

0- 30 0- 40 0- 60 0- 90

90-180 0-180

VA: 0°

10° 20° 30° 40°

- 0° H

Zonal Lumen

Illuminance at Distance Center Beam fc 0.0 5229 4382 1395 415 179 91 50 27 10 1 0 22.5 5229 4385 1394 413 178 91 50 27 11 1 0 45.0 5229 4380 1387 407 176 90 50 28 12 2 0 67.5 5229 4372 1376 402 173 89 50 29 13 2 0 90.0 5229 4375 1374 399 172 89 50 28 13 2 0 0 5 25 35 45 55 65 75 85 90 327 ft 80° 4 ft 82 fc 8 ft 70° 36 fc 12 ft 20 fc 60 16 ft 13 fc 20 ft 50 9 fc 24 ft 72.2 ft (22 m)

8.6 ft 8.6 ft Vert. Spread: 20.4° Horiz, Spread: 20.3° 1 fc maximum distance

Beam Width

1.4 ft 1.4 ft

2.9 ft 2.9 ft

4.3 ft 4.3 ft

5.8 ft 5.7 ft

7.2 ft 7.2 ft

Effective Floor Cavity Reflectance: 20%

Coefficients Of Utilization - Zonal Cavity Method

										1	Effec	tive F	loor	Cav	ity Ref	lect	ance	e: 20%	
RC		8	D			7	C			50			30			10		0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	
0	119	119	119	119	1161	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	114	111	109'	107	1111	109	107	105	105	103	102	101	100	99	98	97	96	94	
2	109	104	100	97	1061	02	99	96	99	96	94	96	94	92	93	92	90	88	
3	104	98	93	90	102	97	92	89	94	91	88	92	89	86	89	87	85	83	
4	100	93	88	84	98	92	87	83	90	86	82	88	84	81	86	83	81	79	
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75	
6	92	84	79	75	91	83	78	75	82	78	74	81	77	74	79	76	73	72	
7	89	80	75	72	87	80	75	71	79	74	71	78	74	71	76	73	70	69	
8	85	77	72	69	84	77	72	68	76	71	68	75	71	68	74	70	68	66	
9	83	74	69	66	82	74	69	66	73	69	66	72	68	65	71	68	65	64	
10	80	72	67	64	79	71	67	64	71	66	63	70	66	63	69	66	63	62	
CC %: Ceil	ina ref	lecta	ance	per	centad	e. F	W 9	6: W	all refl	ecta	nce	percen	tage	e. RC	R: Ro	om	cavit	v ratio	

For lux multiply fc by 10.7

ColorBlast Powercore 36° frosted lens

LED	Lumens	Efficacy
RGB	1217	23.8

Polar Candela Distribution

Zonal Lumen

ZONE 0- 30 0- 40 0- 60 0- 90 90-180 0-180

Cd: 0

133

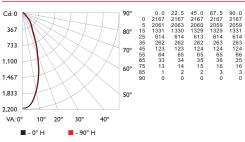
267

400

533

667

800



Illuminance at Distance

	Center Beam fc		Beam Width					
4 ft	135 ft	<u> </u>	2.6 ft	2.6 ft				
8 ft	34 fc		5.2 ft	5.2 ft				
12 ft	15 fc		7.8 ft	7.8 ft				
16 ft	8 fc		10.4 ft	10.4 ft				
20 ft	5 fc		13.0 ft	13.0 ft				
24 ft	4 fc		15.6 ft	15.6 ft				
46.5 ft (14.2 m) 1 fc maximum distance Vert. Spread: 35.9° Horiz. Spread: 36.0°								

Coefficients Of Utilization - Zonal Cavity Method

LUMENS	%FIXT				E	ffective Floor Ca	wity Reflectance: 20%	%
838	68.9	RC	80	70	50	30	10 0	
1006	82.7	RW	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10 0	
1163	95.6							
1217	100.0	0	119119119119	116116116116	111111111	106106106	102102102 100	0
0	0.0	1	113110107105	110108105103	104102100	100 98 97	97 95 94 92	2
1217	100.0	2	107102 97 94	105100 96 93	97 93 91	94 91 89	91 89 87 8	5
1211	100.0	3	101 95 89 85	99 93 88 84	90 86 83	88 85 82	86 83 80 79	9
		4	96 88 82 78	94 87 82 78	85 80 77	83 79 76	81 78 75 73	3
		5	91 83 77 72	90 82 76 72	80 75 71	78 74 71	77 73 70 68	8
		6	87 78 72 67	85 77 71 67	75 70 67	74 69 66	73 69 66 64	4
		7	83 73 67 63	81 73 67 63	71 66 62	70 66 62	69 65 62 60	0
		8	79 69 63 59	78 69 63 59	68 63 59	67 62 59	66 62 58 5	7
		9	76 66 60 56	74 65 60 56	64 59 56	64 59 56	63 58 55 54	4
		10	72 63 57 53	71 62 57 53	62 56 53	61 56 53	60 56 53 5	1

ColorBlast Powercore 86° no optic

LED	Lumens	Efficacy
RGB	1471	29.0

Polar Candela Distribution 45.0 794 787 737 668 584 420 116 75 18 6 0 67.5 794 785 735 667 582 395 157 99 23 4 0 22.5 794 789 736 669 585 327 120 72 14 6 0 0.0 794 787 733 668 584 301 119 54 11 6 0 5 15 25 35 45 55 65 75 85 90 80° 70° 60° 50° VA · 0° 10° 20° 30° 40 - 0° H - 90° H

Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	590	40.1
0- 40	950	64.6
0- 60	1366	92.9
0- 90	1471	100.0
90-180	0	0.0
0-180	1471	100.0

90.0 794 784 732 666 583 389 156 94 29 7 4 ft 8 ft 12 ft 16 ft 20 ft 24 ft

Illuminance at Distance Center Beam fc Beam Width 50 ft 7.1 ft 7.9 ft 13 fc 14.2 ft 15.8 ft 21.3 ft 23.7 ft 6 fc 28.3 ft 31.6 ft 3 f 2 fc 35.4 ft 39.5 ft 42.5 ft 47.4 ft 1 fc 28.2 ft (8.6 m)

1 fc maximum distance

Vert. Spread: 83.1° Horiz. Spread: 89.3°

Coefficients Of Utilization - Zonal Cavity Method

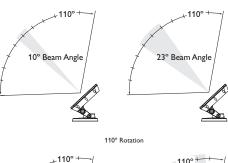
			E	ffective Floor Ca	wity Reflectance	: 20%
RC	80	70	50	30	10	0
RW	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
0	119119119119	116116116116	111111111	106106106	102102102	100
1	111108104102	109106103100	101 99 97	98 96 94	94 93 91	89
2	104 97 92 87	101 95 90 86	92 88 84	89 85 82	86 83 81	79
3	96 88 81 76	94 86 80 75	83 78 74	81 76 73	78 75 71	69
4	89 79 72 66	87 78 71 66	76 70 65	74 68 64	71 67 64	62
5	83 72 64 59	81 71 64 59	69 63 58	67 62 57	66 61 57	55
6	77 66 58 53	76 65 58 52	63 57 52	62 56 52	60 55 51	49
7	72 60 53 47	71 60 52 47	58 52 47	57 51 47	56 50 46	45
8	68 56 48 43	66 55 48 43	54 47 43	53 47 42	51 46 42	40
9	63 51 44 39	62 51 44 39	50 43 39	49 43 39	48 42 38	37
10	60 48 41 36	59 47 40 36	46 40 36	45 40 35	45 39 35	34

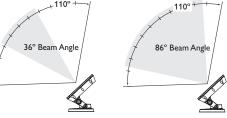
For lux multiply fc by 10.7

Specifications

Due to continuous improvements and innovations, specifications may change without notice.

ltem	Specification	Details						
	Beam Angle	10° / 23° / 36° / 86°						
	Lumens*	1418 (10° clear lens) 1222 (23° frosted lens) 1217 (36° frosted lens) 1471 (86° no optic)						
Output	LED Channels	Red / Green / Blue						
	Mixing Distance	6 in (152 mm) to uniform light						
	Lumen Maintenance†	50,000+ hours L50 @ 50° C (full output)						
	Input Voltage	100 – 240 VAC, auto-switching, 50 / 60 Hz via Data Enabler Pro						
Electrical	Power Consumption	50 W maximum at full output, steady state						
	Power Factor	.98 @ 120 VAC						
	Interface	Data Enabler Pro (DMX / Ethernet)						
Control	Control System	Philips full range of controllers, including Light System Manager, iPlayer 3, and ColorDial Pro, or third-party controllers						
	Dimensions (Height x Width x Depth)	7.1 x 12.5 x 4.9 in (172 x 317 x 125 mm)						
	Weight	6.4 lb (2.9 kg)						
	Effective Projected Area (EPA)	0.05211 m ²						
	Housing	Die-cast aluminium, powder-coated finish						
	Lens	Clear tempered glass (10° and 86° beam angles) Frosted tempered glass (23° and 36° beam angles)						
Physical	Fixture Connections	6 ft (1.8 m) unified power / data cable						
	Temperature Ranges	-40° – 122° F (-40° – 50° C) Operating -4° – 122° F (-20° – 50° C) Startup -40° – 176° F (-40° – 80° C) Storage						
	Humidity	0 – 95%, non-condensing						
	Fixture Run Lengths	To calculate fixture run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.philipscolorkinetics.com/support/ install_tool/						
Certification	Certification	UL / cUL, FCC Class A, CE, PSE						
and Safety	Environment	Dry / Damp / Wet Location, IP66						





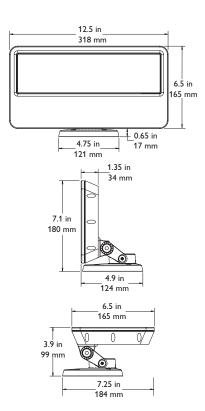
Lumen measurement complies with IES LM-79-08. *

†



 $L_{50} = 50\%$ lumen maintenance (when light output drops below 50% of initial output). Ambient luminaire temperatures specified. Lumen maintenance calculations are based on lifetime prediction graphs supplied by LED source manufacturers. Calculations for white-light LED fixtures are based on measurements that comply with IES LM-80-08 testing procedures. Refer to www.philipscolorkinetics.com/support/appnotes/ for more information.

CHROMACORE"	OPTIBIN	POWERCORE
CKTECHNOLOGY	CKTECHNOLOGY	CKTECHNOLOGY



Included in the box

ColorBlast Powercore fixture

(2) 8-32 screws for indoor installation

(4) 10-24 stainless steel screws for outdoor installation1/8 in hex key wrench for fixture positioning

and locking

Junction box gasket

Installation Instructions

Fixtures and Data Enabler Pro

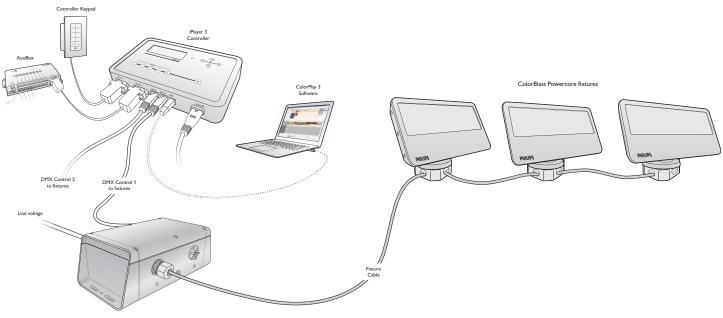
ColorBlast Powercore fixtures are part of a complete system which includes:

- One or more Data Enabler Pro devices
- Any Philips controller, including Light System Manager, iPlayer 3, and ColorDial Pro, or a third-party controller
- 4-conductor copper wire to connect ColorBlast Powercore fixtures in series or in parallel. Standard 12 AWG (2.05 mm) stranded wire is recommended.

ltem	Туре	Housing Color	Item Number	Philips 12NC
	10° (clear lens)	White	123-000021-00	910503702321
		Black	123-000021-01	910503702350
	23° (frosted lens)	White	123-000021-02	910503702334
ColorBlast Powercore		Black	123-000021-03	910503702351
UL / cUL / CE / PSE	36° (frosted lens)	White	123-000021-04	910503702352
		Black	123-000021-05	910503702353
	9(° (no potio)	White	123-000021-06	910503702354
	86° (no optic)	Black	123-000021-07	910503702355
	10° clear lens	White	123-000021-08	910503702434
		Black	123-000021-09	910503702435
	23° frosted lens	White	123-000021-10	910503702436
ColorBlast Powercore CQC		Black	123-000021-11	910503702437
	36° frosted lens	White	123-000021-12	910503702827
		Black	123-000021-13	910503702828
	86° no optic	White	123-000021-14	910503702829
		Black	123-000021-15	910503702830
Data Enabler Pro	3/4 in / 1/2 in NPT (U.S. trade size conduit)		106-000004-00	910503701210
	PG21 / PG13 (metric size conduit)		106-000004-01	910503701211
Use Item Number when ordering in North America.				

Typical ColorBlast Powercore system installation

For detailed wiring diagrams visit www.philipscolorkinetics.com/support/wiring/ls_prod.html



Data Enabler Pro

Accessories

Designed specifically for the family of Blast fixtures, accessories provide additional options for controlling and dispersing light. Accessory holders snap to the front of the fixture and are required for mounting accessories. Accessory holders prevent accessories from falling out if the fixture is tipped or hung upside down.

Item	Housing Color	Item Number	Philips 12NC	
Accessory Holders	White	120-000070-00	910503702864	\square
	Black	120-000070-01	910503702863	
Top Hats	White	120-000005-03	910503702847	
	Black	120-000005-04	910503702848	
HalfTop Hats	White	120-000009-03	910503702843	
	Black	120-000009-04	910503702844	
Egg Crate Louvers	White	120-000015-03	910503702851	
	Black	120-000015-04	910503702852	
Barndoors	White	120-000019-03	910503702855	
	Black	120-000019-04	910503702856	
Horizontal Glass Spread Lens*	36° (ribs out) / 50° (ribs in)	120-000025-00	910503703897	
Horizontal / Vertical Glass Spread Lens*	40°	120-000025-01	910503703898	

 $^{\ast}\,$ Intended for use with Blast fixtures with 10° clear lens

Use Item Number when ordering in North America.

Refer to the ColorBlast Powercore Installation Instructions for specific warning and caution statements.

To streamline the configuration of complex installations, record the serial number (DMX) or IP address (Ethernet) and location of each Data Enabler Pro.

Installation

ColorBlast Powercore offers rich, saturated wall-washing color and color-changing effects with Powercore technology. Powercore, which integrates LED power and data management within the fixture, eases installation by eliminating the need for external power supplies.

Owner / User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate ColorBlast Powercore fixtures in such a manner as to comply with all applicable codes, state and local laws, ordinances, and regulations. Consult with the appropriate electrical inspector to ensure compliance.

Installing in Damp or Wet Locations

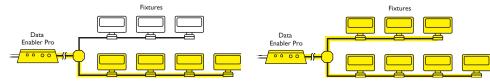
When installing in damp or wet locations, it is good practice to seal all fixtures and junction boxes with electronics-grade RTV silicone sealant to ensure that moisture cannot enter or accumulate in wiring compartments, cables, or other electrical parts. You must use suitable outdoor-rated junction boxes when installing in damp or wet locations. Additionally, you must use gaskets, clamps, and other parts required for installation to comply with all applicable local and national codes

Create a Lighting Design Plan and Layout Grid

1. Determine the appropriate location of each Data Enabler Pro in relation to the light fixtures, and of the light fixtures in relation to each other.

ColorBlast Powercore fixtures can be installed in series or in parallel (wired to a common junction box). The maximum number of fixtures each Data Enabler Pro can support depends on specific configuration details such as fixture spacing, circuit size, line voltage, and method of connection (in series or in parallel). For more information, and for help calculating the number of fixtures your specific installation can support, download the Configuration Calculator from www. colorkinetics.com/support/install_tool/, or consult Application Engineering Services at support@colorkinetics.com.

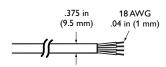
In addition to maximum fixture run lengths determined by the electrical configuration, each Data Enabler Pro imposes maximum run lengths based on data integrity. To ensure data integrity, maximum individual run length should not exceed 175 feet (53.3 m), and the total cable length per Data Enabler Pro should not exceed 400 feet (122 m).



Data Integrity — maximum individual length 175 ft (53.3 m)

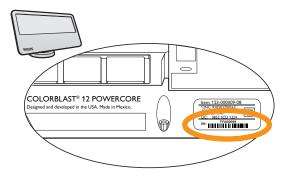
2. On an architectural diagram or other diagram that shows the physical layout of the installation, identify the locations of all switches, controllers, Data Enabler Pro devices, fixtures, and cables.

Leader Cable connector dimensions



Data Integrity — total length 400 ft (122 m)

3. Each ColorBlast Powercore fixture comes pre-programmed with a unique serial number. As you unpack the fixtures, record the serial numbers in a layout grid (typically a spreadsheet or list) for easy reference and light addressing.



- 4. Assign each fixture to a position in the lighting design plan.
- 5. To streamline installation and aid in light show programming, you can affix a weatherproof label identifying the order or placement in the installation to an inconspicuous location on each light fixture's housing.

Start the Installation

- Install all Data Enabler Pro devices, including any interfaces with controllers. Data Enabler Pro devices and external controllers send power and control signals to the fixtures over the single fixture cable. Additional cabling is required to connect fixtures together in series.
- 2. Verify that all additional supporting equipment (switches, controllers) is in place.
- 3. Ensure that all additional parts and tools are available, including:
 - The included 8-32 screws for indoor installations, or the 10-24 stainless steel screws for outdoor installations
 - The included 1/8 hex key wrench
 - · The included junction box gasket
 - In the US, one 4 in (102 mm) round US electrical junction box per fixture, rated for your application, with 3.5 in (89 mm) center-to-center screw holes for attaching the fixture's base. (Refer to the junction box manufacturer's literature for additional items required for mounting or sealing.)
 - A sufficient length of 12 AWG (2.05 mm), 4-conductor stranded copper wire
 - · Conduit as required
 - Electronics-grade room temperature vulcanizing (RTV) silicone sealant

So For complete instructions on how to wire the Data Enabler Pro, refer to the Data Enabler Pro Product Guide or Installation Instructions.

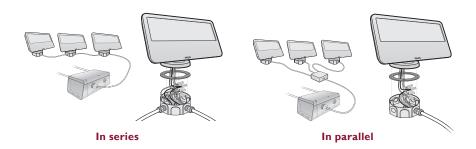


Included in the box ColorBlast Powercore fixture (2) 8-32 screws for indoor installation (4) 10-24 stainless steel screws for outdoor installation 1/8 in hex key wrench for fixture positioning and locking Junction box gasket Installation Instructions

> So When installing ColorBlast Powercore fixtures, the input earth ground, canopy earth ground, and fixture cable earth ground must all be connected together.

Install the Fixtures

ColorBlast Powercore fixtures can be installed in series or in parallel (wired to a common junction box). Each fixture requires a dedicated junction box for mounting. Ensure that all junction boxes are suitable for the environment and sealed, if necessary, and that all wiring between junction boxes complies with local codes.



Make sure the power is OFF before mounting and connecting ColorBlast Powercore fixtures.

- 1. Mount junction boxes in accordance with the lighting design plan. Each fixture is designed for mounting in a 4 in (102 mm) round US electrical junction box, rated for your application, with 3.5 in (89 mm) center-to-center screw holes for attaching the fixture's base.
- 2. If installing fixtures in a series, pull 4-conductor copper wire between each junction box in the series.

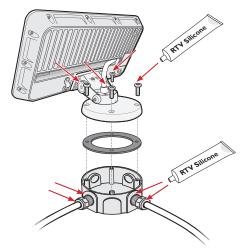
If installing fixtures in parallel, pull 4-conductor copper wire from a common junction box to each fixture's junction box.

The maximum cable run from a Data Enabler Pro to any individual ColorBlast Powercore fixture is 175 feet (53 m). When installing in parallel, the total cable length cannot exceed 400 feet (122 m).

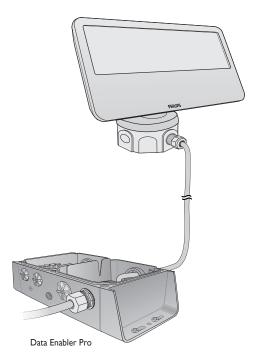
- 3. Trim the cable from the fixture to fit in the junction box, leaving enough cable to make wiring connections.
- Insert the fixture cable through the provided junction box gasket before making wire connections. When attaching the fixture to the junction box, ensure that the gasket is compressed evenly.
- 5. Use wire nuts to connect line, neutral, ground, and data. If installing in series, connect the leader cable from each fixture to the fixture's junction box. If installing in parallel, connect the leader cable from each fixture to the lead wire from the Data Enabler Pro in the common junction box.
- 6. Tuck wire connections into the junction box, and use the provided screws to attach the fixture to the junction box.
- 7. If installing in a damp or wet location, seal all junction boxes with electronicsgrade RTV silicone sealant. Use gaskets, clamps, and other parts and fittings required to comply with local outdoor wiring codes.

In locations where US junction boxes are not available, you can mount fixtures directly to a wall or other mounting surface. For help with your specific installation, consult your local support organization, or contact Application Engineering Services at support@colorkinetics.com.

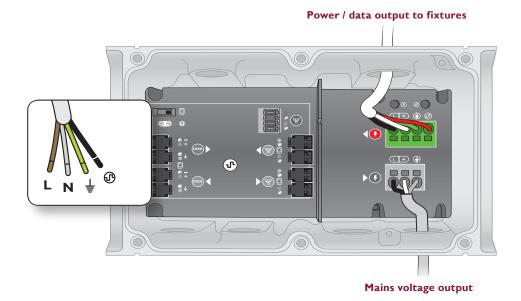
Wiring between junction boxes must comply with local codes.



8. Run the wiring from the first junction box in the series to the Data Enabler Pro, or, if installing in parallel, run the wiring from the common junction box to the Data Enabler Pro. Secure connections within the Data Enabler Pro housing.



9. Secure the Data Enabler Pro cover. If installing in a wet or damp location, seal the Data Enabler Pro with electronics-grade RTV silicone sealant.



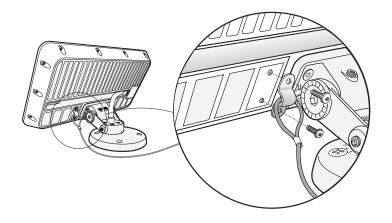
 Refer to the Data Enabler Pro Product Guide for comprehensive installation and configuration instructions. You can view or download the guide from www.philipscolorkinetics.com/ls/ pds/dataenablerpro

Attach Safety Cable (Optional)

Safety cable minimum requirements

Material	316 Stainless Steel
Size	5/64 to 3/16 in (2 to 5 mm) nominal diameter. Minimum break load must be greater than 400 lb (181 kg)
Construction	7 x 7 (49 wires) preformed stranded

Each ColorBlast Powercore fixture is designed for use with a safety cable to tether it to a secure anchor point. When dictated by local or state code or advised by a structural engineer, attach a safety cable to the bracket on the back of the fixture. Remove the two screws that attach the cable bracket, loop the safety cable over the cable bracket, and reattach to the fixture. Attach the safety cable to the mounting surface using a method that follows the code or engineer's requirements.



Address and Configure the Fixtures

Make sure the power is ON before addressing and configuring fixtures.

You address and configure ColorBlast Powercore fixtures using QuickPlay Pro addressing and configuration software, which you can download for free from www.philipscolorkinetics.com/support/addressing/

- In Ethernet installations, you can address and configure your fixtures using QuickPlay Pro with a computer connected to your lighting installation's network. QuickPlay Pro can automatically discover all of your fixtures, controllers, and Data Enabler Pro devices for quick configuration.
- In DMX installations, you can address and configure your fixtures using QuickPlay Pro with iPlayer 3 or SmartJack Pro. You can manually enter fixture serial numbers, or you can import a spreadsheet listing each fixture's serial number and starting DMX address.

Addressing ColorBlast Powercore Fixtures

ColorBlast Powercore fixtures operate in 8-bit mode by default. You can configure ColorBlast Powercore to operate in 16-bit mode, which increases fixture resolution for smoother dimming.

In 8-bit mode, fixtures use one DMX address per LED channel (red, green, and blue). In 16-bit mode, fixtures use two DMX addresses per LED channel. The first DMX address corresponds to the "coarse" data for that channel, and the second corresponds to the "fine" data. By using double the number of DMX addresses, 16-bit mode increases fixture resolution from 256 dimming steps to 65,536 (256 x 256) dimming steps.

DMX Channel Assignments						
0 Dis Made		l	2		3	
8-Bit Mode	Red		Green		Blue	
16-Bit Mode	1	2	3	4	5	6
	Red Coarse	Red Fine	Green Coarse	Green Fine	Blue Coarse	Blue Fine

So You will need the layout grid that you created when you recorded the serial numbers of the light fixtures in your installation. ColorBlast Powercore fixtures come factory-addressed with a starting DMX address of 1. For lighting designs where fixtures work in unison, all fixtures can be assigned the same starting DMX address. Changes to the default starting DMX address is not necessary, but if lights were previously readdressed for use in other installations, you must reset them. For light show designs that show different colors on different fixtures, you must assign unique DMX addresses to your fixtures and sort them in a useful order.

Setting Fixture Dimming Curve

Dimming curves describe how slowly or quickly a fixture dims at different levels of input. For finer control, ColorBlast Powercore offers three different dimming curves for use in different situations and applications:

Normal

The non-linear (gamma) dimming curve used in most Philips Color Kinetics LED lighting fixtures. ColorBlast Powercore fixtures use the normal dimming curve by default.

• Linear

A dimming curve with a linear relationship between power input and DMX output.

Tungsten

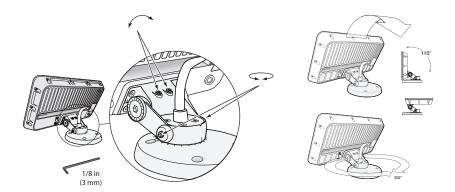
A non-linear dimming curve that emulates the dimming curve of incandescent lamps on a DMX dimmer. This curve offers the most control at low intensities.

Setting LED Transition Speed

Normally, LEDs react to DMX or other control data instantaneously. In some cases, you may want to slow down the reaction speed to achieve smoother transitions when the intensity of different LED channels changes. ColorBlast Powercore offers five levels of decreasing LED transition speed, from Fast (instant snap changes) to Delay-4 (slowest transition speed).

Aim and Lock the Fixtures

Using the provided 1/8 in hex key wrench, loosen the rotation and tilting set screws. Aim the fixtures by rotating the base and tilting the beam as desired. Tighten the two pairs of set screws to lock the fixture in place.



So not look directly into the fixture when aiming and locking.

For exterior applications with direct exposure to water, ColorBlast Powercore fixtures should not be aimed directly upwards, as water may pool on the lens and affect beam quality. Instead, the fixture should be angled to allow for proper water drainage.



Philips Color Kinetics 3 Burlington Woods Drive Burlington, Massachusetts 01803 USA Tel 888.385.5742 Tel 617.423.9999 Fax 617.423.9998 www.philipscolorkinetics.com

Copyright © 2011 – 2012 Philips Solid-State Lighting Solutions, Inc. All rights reserved. Chromacore, Chromasic, CK, the CK logo, Color Kinetics, the Color Kinetics logo, ColorBlast, ColorBlaze, ColorBurst, ColorGraze, ColorPlay, ColorReach, iW Reach, eW Reach, eW Fuse, DIMand, Essential/White, eW, iColor, iColor Cove, Intelli/White, iW, iPlayer, Optibin, and Powercore are either registered trademarks or trademarks of Philips Solid-State Lighting Solutions, Inc. in the United States and / or other countries. All other brand or product names are trademarks or registered trademarks of their respective owners. Due to continuous improvements and innovations, specifications may change without notice. Cover Photo: Courtesy of Los Angeles World Airports