



ColorGraz Powercore

Linear, color-changing LED surface light for wall washing and grazing

PHILIPS

ColorGraze Powercore

Linear, color-changing LED surface light for wall washing and grazing

ColorGraze™ Powercore linear LED lights are optimized for surface grazing, wall-wash lighting, and efficient signage illumination. Superior light quality offers uniform beam saturation as close as 6 in (152 mm). A compact, low-profile design combined with flexible mounting options allows for discreet placement within a wide range of architectural features. Intelligent, controllable fixtures are available in standard full-color configurations. Build-to-order configurations with additional beam angles and custom channels of white or color LEDs are also available to support special applications.

- Tailor light output to specific applications — Available in three standard lengths, with standard 10° x 60° and 30° x 60° beam angles. Individually addressable 1 ft (305 mm) segments accommodate fine control of color-changing effects and pre-programmed light shows.
- High-performance illumination and beam quality — ColorGraze Powercore delivers up to 271 lumens of color-changing light per foot. Superior beam quality offers striation-free saturation as close as 6 in (152 mm) from fixture placement with no visible light scalloping between fixtures.
- Integrates patented Powercore® technology — Powercore technology rapidly, efficiently, and accurately controls power output to ColorGraze Powercore fixtures directly from line voltage. The Philips Data Enabler Pro merges line voltage and control data and delivers them to the fixture over a single standard cable, dramatically simplifying installation and lowering total system cost.
- Versatile installation options — Constant torque locking hinges offer simple and consistent position control from various angles. The low-profile aluminum housing accommodates placement within most architectural niches.
- Superior color consistency and accuracy — Optibin®, an advanced binning algorithm, exceeds industry standards for chromaticity to ensure superior color consistency and uniformity of LED sources.
- Industry-leading controls — ColorGraze Powercore works seamlessly with the complete line of Philips controllers, including Light System Manager™, iPlayer® 3, and ColorDial™ Pro, as well as third-party controllers.
- Custom configurations for special applications — Standard configurations use three channels of LEDs (Red, Green, and Blue) to produce a full range of RGB colors. You can create custom configurations to support special applications by exchanging the LEDs in any channel. Available LEDs include eight color temperatures ranging from a warm 2700 K to a cool 6500 K, Royal Blue, Blue, Green, Amber, and Red. Additional beam angles (including 9° x 9°, 10° x 30°, and 90° x 60°) are also available. See the ColorGraze Powercore Ordering Information specification sheet for complete details.



Easy to install

With flexible mounting options, multiple fixture length and beam angle options, integrated Powercore technology, and a discreet low-profile housing rated for use in outdoor locations, ColorGraze Powercore offers high performance and simple installation.

Create Visually Engaging Surroundings

Atlantic Ocean Residence
Exterior at Sunset



Benefit from a Specifier-Class LED Lighting System

ColorGraze Powercore fixtures let you focus on the visual impact of your lighting design, rather than setup. Tailor light output to specific applications — enhance an area with smooth, wall-washing light, or highlight textures such as brick and stucco via surface grazing. For added affect, use a combination of wall-washing and grazing techniques to develop a visually transitional space, for example drawing interest from the interior of a structure to the exterior.

Design with Intelligent Control

With a digital playback controller such as iPlayer 3 or Light System Manager, you can schedule fixed color displays or color-changing light sequences according to the day of the week, date, a recurring time, or a daily astronomical event, such as sunrise or sunset.

Ease of Installation and Maintenance

ColorGraze Powercore fixtures allow installation in difficult-to-access locations — crane-accessible features on a building exterior, for example — without the maintenance concerns associated with traditional lighting sources.

Versatile Installation Options

ColorGraze Powercore offers vibrant color and color-changing light ideal for surface grazing, wall washing, and signage lighting applications.

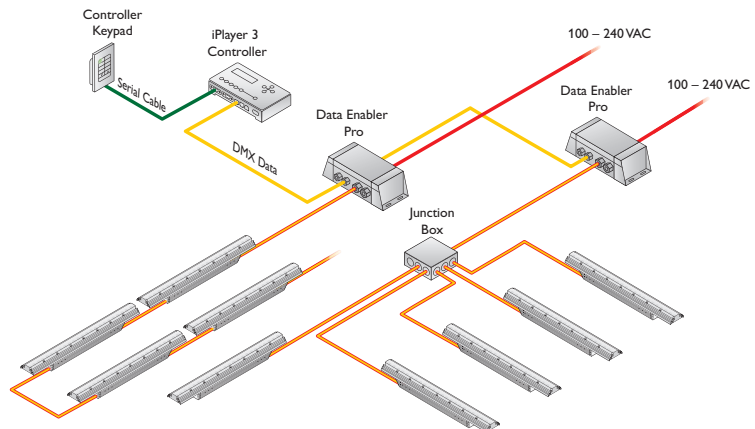
Philips offers a range of controllers to support installations from the simplest to the most complex. A simple installation might use twenty ColorGraze Powercore fixtures, an iPlayer 3 controller, and one Data Enabler Pro to illuminate a retail display with color-changing effects. A larger installation might use the Ethernet-based Philips Light System Manager controller and multiple Data Enabler Pro devices to display light shows via hundreds of ColorGraze Powercore fixtures installed within a mix of interior and exterior architectural niches.

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.
- For high-contrast surface grazing — for example to highlight unique textures or features — place 10° x 60° fixtures within 4 in (102 mm) of a wall or other surface, with the light beam parallel with the wall or surface. For smooth, wall-washing light that reflects a glare-free ambient glow into the surrounding area, use 30° x 60° fixtures and place them at a greater distance from the wall or surface, with the light beam parallel with or at a small angle towards the wall or surface.
- 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.

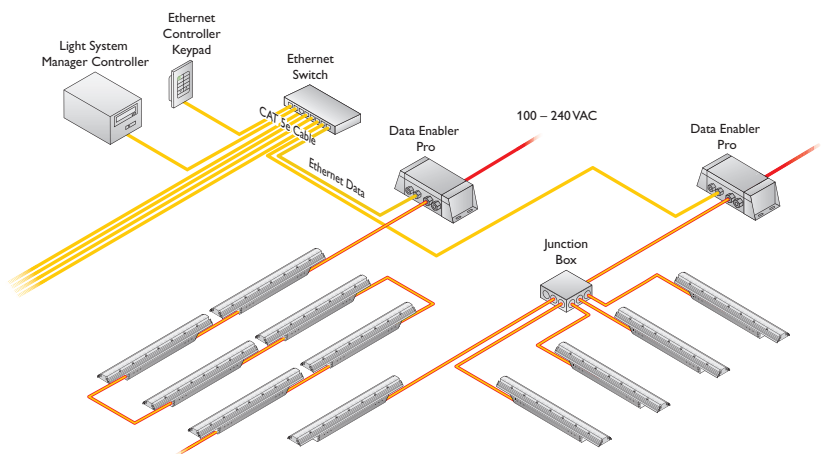
DMX installation with iPlayer 3

DMX-based installations typically feature multiple series of ColorGraze Powercore fixtures controlled by iPlayer 3. Data Enabler Pro devices are connected in series, then connected to either of the two output ports on the iPlayer 3. ColorGraze Powercore fixtures may be installed end-to-end, or spaced apart, according to the lighting design.



Ethernet installation with Light System Manager

Large-scale, Ethernet-based installations can include dozens or hundreds of series of ColorGraze Powercore fixtures connected to Light System Manager via Data Enabler Pro devices and other Ethernet hardware.



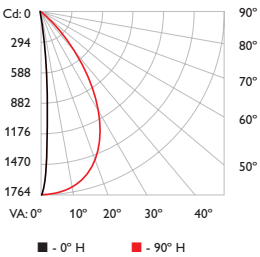
Photometrics

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

ColorGraz® Powercore 2 ft (610 mm), 10° x 60° beam angle

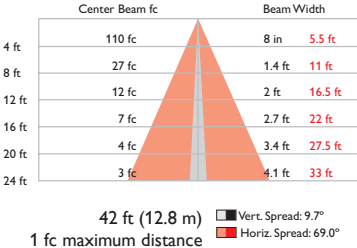
LED	Lumens	Efficacy
RGB	543	15.5

Polar Candela Distribution



Candela Table					
	0	22.5	44	67.5	90
0	1759	1759	1759	1759	1759
5	834	899	1116	1503	1748
15	115	128	197	645	1636
25	51	59	85	205	1345
35	30	34	50	95	853
45	14	17	31	60	337
55	5	7	17	37	89
65	2	3	8	18	32
75	1	1	2	7	11
85	1	1	1	1	1
90	0	0	0	0	0

Illuminance at Distance



Zonal Lumen

Zone	Lumens	% Lamp	% Luminaire
0-30	348.4	64.2%	64.2%
0-40	444.9	81.9%	81.9%
0-60	525.6	96.8%	96.8%
60-90	17.3	3.2%	3.2%
0-90	542.9	100%	100%
90-180	0	0%	0%
0-180	542.9	100%	100%
Total Efficiency: 100%			

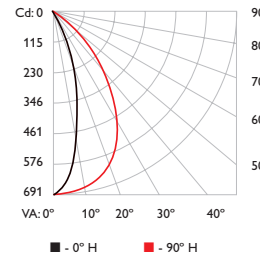
Coefficients Of Utilization - Zonal Cavity Method

		Effective Floor Cavity Reflectance: 20%															
RCC %:		80				70				50				30			
RW %:		70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30
RCR:		0	1.13	1.10	1.07	1.05	1.11	1.08	1.06	1.04	1.02	1.00	1.00	99	97	95	94
		2	1.07	1.02	.98	.94	1.05	1.00	.96	.86	.97	.94	.91	.89	.91	.89	.87
		3	1.01	.95	.89	.85	.99	.93	.88	.80	.90	.86	.83	.88	.85	.82	.86
		4	.96	.88	.82	.78	.94	.87	.82	.74	.85	.80	.76	.83	.79	.76	.81
		5	.91	.82	.76	.72	.89	.81	.76	.69	.80	.75	.71	.78	.74	.70	.76
		6	.87	.77	.71	.67	.85	.77	.71	.65	.75	.70	.66	.74	.69	.66	.72
		7	.82	.73	.67	.62	.81	.72	.66	.61	.71	.66	.62	.70	.65	.62	.69
		8	.79	.69	.63	.59	.77	.68	.63	.58	.67	.62	.58	.66	.61	.58	.65
		9	.75	.65	.59	.55	.74	.65	.59	.55	.64	.59	.55	.63	.58	.55	.62
		10	.72	.62	.56	.52	.71	.62	.56	.52	.61	.56	.52	.60	.55	.52	.59
			RCC %: Ceiling reflectance percentage, RW %: Wall reflectance percentage, RCR: Room cavity ratio														

ColorGraz® Powercore 2 ft (610 mm), 30° x 60° beam angle

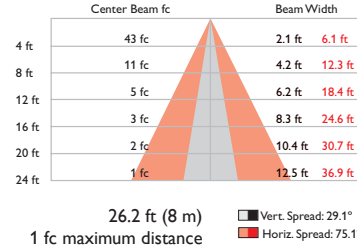
LED	Lumens	Efficacy
RGB	506	14.5

Polar Candela Distribution



Candela Table					
	0	22.5	44	67.5	90
0	689	689	689	689	689
5	633	633	658	673	686
15	327	355	452	579	649
25	106	125	210	405	556
35	44	49	80	210	396
45	26	28	39	88	212
55	15	16	23	39	85
65	8	8	12	20	31
75	3	3	4	7	10
85	1	1	1	1	1
90	1	1	1	0	0

Illuminance at Distance



Zonal Lumen

Zone	Lumens	% Lamp	% Luminaire
0-30	312.4	61.7%	61.8%
0-40	400.7	79.2%	79.2%
0-60	483.7	95.6%	95.6%
60-90	22.0	4.4%	4.4%
0-90	505.7	99.9%	100%
90-180	0	0%	0%
0-180	505.7	99.9%	100%
Total Efficiency: 99.9%			

Coefficients Of Utilization - Zonal Cavity Method

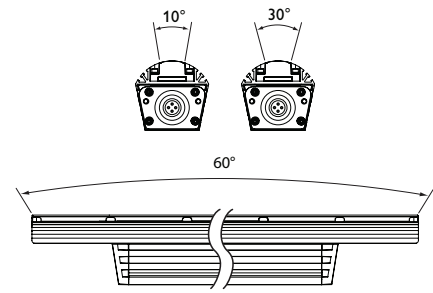
		Effective Floor Cavity Reflectance: 20%															
RCC %:		80				70				50				30			
RW %:		70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30
RCR:		0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02
		1	1.13	1.09	1.07	1.04	1.10	1.07	1.05	.92	1.03	1.01	.99	.99	.98	.96	.95
		2	1.06	1.01	.96	.92	1.04	.99	.95	.85	.96	.92	.89	.93	.90	.87	.85
		3	1.00	.93	.87	.83	.98	.91	.86	.78	.89	.84	.81	.86	.83	.80	.81
		4	.94	.86	.80	.75	.93	.85	.79	.72	.83	.78	.74	.81	.76	.73	.79
		5	.89	.80	.74	.69	.87	.79	.73	.66	.77	.72	.68	.75	.71	.67	.74
		6	.84	.75	.68	.64	.83	.74	.68	.62	.72	.67	.63	.71	.66	.62	.69
		7	.80	.70	.63	.59	.79	.69	.63	.58	.68	.62	.58	.67	.62	.58	.66
		8	.76	.66	.59	.55	.75	.65	.59	.54	.64	.59	.55	.63	.58	.54	.62
		9	.72	.62	.56	.52	.71	.62	.56	.51	.61	.55	.51	.60	.55	.51	.59
		10	.69	.59	.53	.48	.68	.58	.52	.48	.57	.52	.48	.57	.52	.48	.56
			RCC %: Ceiling reflectance percentage, RW %: Wall reflectance percentage, RCR: Room cavity ratio														

For lux multiply fc by 10.7

Specifications

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

Item	Specification	2 ft (610 mm)	3 ft (914 mm)	4 ft (1219 mm)
Output	Beam Angle	10° × 60° / 30° × 60°		
	Lumens*	543 (10° × 60°) 506 (30° × 60°)	815 (10° × 60°) 759 (30° × 60°)	1086 (10° × 60°) 1012 (30° × 60°)
	LED Channels	Red / Green / Blue		
	Mixing Distance	6 in (152 mm) to uniform beam saturation		
Electrical	Input Voltage	100 – 240 VAC, auto-switching, 50 / 60 Hz		
	Power Consumption	35 W maximum at full output, steady state	52.5 W maximum at full output, steady state	70 W maximum at full output, steady state
Control	Interface	Data Enabler Pro (DMX / Ethernet)		
	Control System	Philips full range of controllers, including Light System Manager, iPlayer 3, and ColorDial Pro, or third-party controllers		
Physical	Dimensions (Height x Width x Depth)	2.7 × 24 × 2.8 in (69 × 610 × 71 mm)	2.7 × 36 × 2.8 in (69 × 914 × 71 mm)	2.7 × 48 × 2.8 in (69 × 1219 × 71 mm)
	Weight	4.9 lb (2.2 kg)	8.1 lb (3.6 kg)	10.8 lb (4.9 kg)
	Housing	Extruded anodized aluminum		
	Lens	Clear polycarbonate		
	Fixture Connectors	Integral male / female waterproof connectors		
	Mounting	Multi-positional, constant torque, locking hinges		
	Temperature	-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		
	Maximum Fixture Run Lengths†	37 @ 100 VAC 43 @ 120 VAC 56 @ 220 VAC 56 @ 240 VAC	Configuration: 2 ft (610 mm) fixtures installed end-to-end, 20 A circuit, standard 50 ft (15.2 m) Leader Cable	
	Certification and Safety	Certification	UL / cUL, FCC Class A, CE, PSE, CCC	
Environment		Dry / Damp / Wet Location, IP66		



* To calculate the number of fixtures your specific installation can support, download the Configuration Calculator from www.colorkinetics.com/support/install_tool

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



† These figures, provided as a guideline, are accurate for this configuration only. Changing the configuration can affect the fixture run lengths.

CHROMACORE™ | OPTIBIN™ | POWERCORE™
CK TECHNOLOGY CK TECHNOLOGY CK TECHNOLOGY

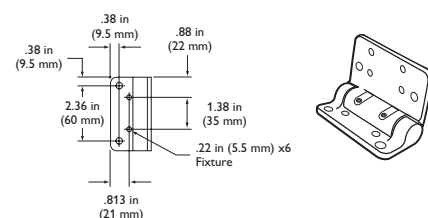
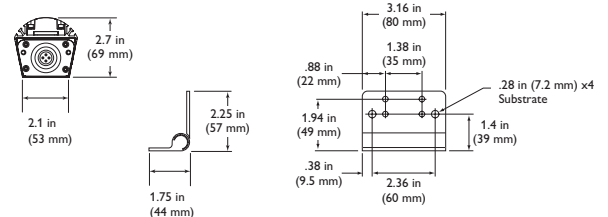
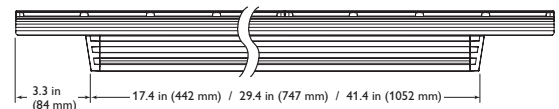
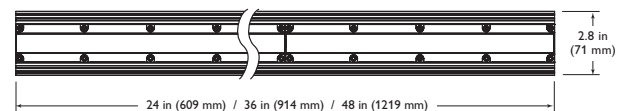
Lumen Maintenance

Lumen maintenance values are based on measurements that comply with IES LM-80-08 testing procedures. Refer to www.colorkinetics.com/support/appnotes/lm-80-08.pdf for more information.

Ambient Temperatures	L70*	L50†
1 RGB Channel Full On		
@ 25° C	100,000+ hours	100,000+ hours
@ 50° C	80,000 hours	100,000 hours
2 RGB Channels Full On		
@ 25° C	90,000 hours	100,000+ hours
@ 50° C	60,000 hours	90,000 hours
3 RGB Channels Full On		
@ 25° C	80,000 hours	100,000 hours
@ 50° C	50,000 hours	90,000 hours

* L70 = 70% maintenance of lumen output (when light output drops below 70% of initial output).

† L50 = 50% maintenance of lumen output (when light output drops below 50% of initial output).



Fixtures and Accessories

ColorGraz® 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
- Leader Cables to connect the first fixture in each series to a Data Enabler Pro
- Optional Jumper Cables to add space between fixtures in a series, if necessary
- 4-conductor copper wire to connect each Data Enabler Pro to a common junction box, if installing fixtures in parallel. Standard 12 AWG (2.05 mm) stranded wire is recommended.

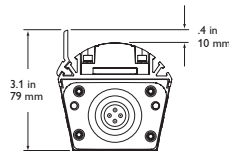
Build-to-Order Configurations

In addition to the standard configurations listed here, build-to-order configurations are also available with non-standard options. See the ColorGraz® Powercore Ordering Information sheet at www.colorkinetics.com/ls/rgb/graze/ for complete details.

Component	Available Non-Standard Options
Color Temperature	2700K, 3000 K, 3500 K, 4000 K, 5000 K, 5500 K, 6000 K, 6500 K
Color	Royal Blue, Blue, Green, Amber, Red
Beam Angle	9° x 9°, 15° x 30°, 60° x 30°, 90° x 60°

ColorGraz® Powercore fixtures

Depending on the installation's design, you may need Jumper Cables to add space between fixtures



Item	Type	Size	Item Number	Philips 12NC
ColorGraz® Powercore	10° x 60° beam angle	2 ft (610 mm)	123-000030-00	910503700308
		3 ft (914 mm)	123-000030-01	910503700309
		4 ft (1219 mm)	123-000030-02	910503700310
	30° x 60° beam angle	2 ft (610 mm)	123-000030-03	910503700311
		3 ft (914 mm)	123-000030-04	910503700312
		4 ft (1219 mm)	123-000030-05	910503700313
Leader Cable with Terminator	UL / cUL	50 ft (15.2 m)	108-000042-00	910503700322
	CE / PSE	50 ft (15.2 m)	108-000042-01	910503700323
Jumper Cable	UL / cUL	End-to-End	108-000039-00	910503700314
		1 ft (305 mm)	108-000039-01	910503700315
		5 ft (1.5 m)	108-000039-02	910503700316
	CE / PSE	End-to-End	108-000040-00	910503700317
		1 ft (305 mm)	108-000040-01	910503700318
		5 ft (1.5 m)	108-000040-02	910503700319
Glare Shield		1 ft (305 mm)	120-000081-00	910503700745
		2 ft (610 mm)	120-000081-01	910503700746
		3 ft (914 mm)	120-000081-02	910503700747
		4 ft (1.2 m)	120-000081-03	910503700748
Additional Terminators		Quantity 10	120-000074-00	910503700580
Additional Hinge		Quantity 1	120-000098-00	910503700772
Data Enabler Pro	3/4 in / 1/2 in NPT (US trade size conduit)		106-000004-00	910503701210
	PG21 / PG13 (metric size conduit)		106-000004-01	910503701211

Use Item Number when ordering in North America

Installation

ColorGraze Powercore offers vibrant grazing and wall-washing light. Powercore technology, 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 ColorGraze 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

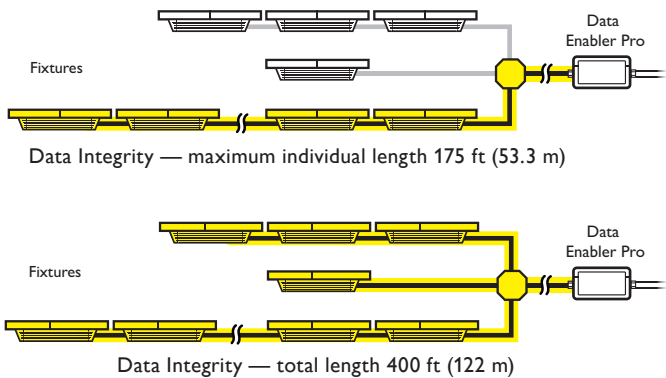
When installing in wet or damp locations, seal all Data Enabler Pro devices and junction boxes with electronics-grade RTV silicone sealant so that water or moisture cannot enter or accumulate in wiring compartments, cables, or other electrical parts. Use suitable outdoor-rated junction boxes when installing in damp or wet locations. Additionally, use gaskets, clamps, and other parts required for installation to comply with all applicable local and national codes.

Prepare for the Installation

1. Refer to the lighting design plan, architectural diagram, or other diagram that shows the physical layout of the installation to identify the locations of each all switches, controllers. Data Enabler Pro devices, fixtures, and cables.

ColorGraze 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 length, fixture spacing (Jumper Cables), circuit size, line voltage, and Leader Cable length. As an example, the table to the right lists the maximum number of fixtures in a single run at various voltages, assuming 2 ft (610 mm) fixtures installed end-to-end on a 20 A circuit, using a standard 50 ft (15.2 m) Leader Cable. Keep in mind that these figures, provided as a guideline, are accurate for the specified configuration only. Changing the configuration can affect the fixture run lengths.

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 lengths should not exceed 175 ft (53.3 m), and the total cable length per Data Enabler Pro should not exceed 400 ft (122 m).



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

✳ Clean the lens with water and mild detergent using a soft cleaning cloth, and wipe dry. Because they will scratch, soften, pit, haze, yellow, mar, or crack the lens, do not use paper towels, abrasive cleaning products, window cleaners, or cleaning solutions containing chemicals such as ammonia, sodium hydroxide, and isopropyl alcohol.

Fixture run lengths

37 @ 110 VAC
43 @ 120 VAC
56 @ 220 VAC
56 @ 240 VAC

assuming 2 ft (610 mm) fixtures installed end-to-end on a 20 A circuit, using a standard 50 ft (15.2 m) Leader Cable

✳ 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.

✱ Refer to the *Data Enabler Pro Installation Instructions* or *Product Guide* for guidelines on configuring and positioning the *Data Enabler Pro* in relation to the controller.

Start the Installation

1. 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 a single fixture cable. Additional cabling is required to connect fixtures together in parallel or 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 mounting hinges and hardware
 - 2 mm, 2.5 mm, and 4 mm hex key wrenches
 - 1/4 in (5 mm) socket cap fasteners, anchors, or screws for surface mounting
 - Conduit, as needed
 - A sufficient length of 4-conductor copper wire. Standard 12 AWG (2.05 mm) stranded wire is recommended.
 - Junction boxes, as needed, rated for your application. (Refer to the manufacturer's literature for additional items required for mounting or sealing.)
 - Electronics-grade room temperature vulcanizing (RTV) silicone sealant, as needed

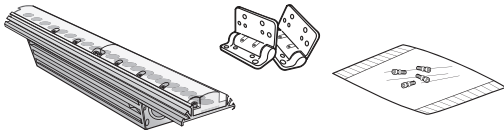
Included in the box

ColorGraz® Powercore fixture

(2) Mounting hinges

(4) M5, 15 mm stainless steel hex bolts for hinge installation

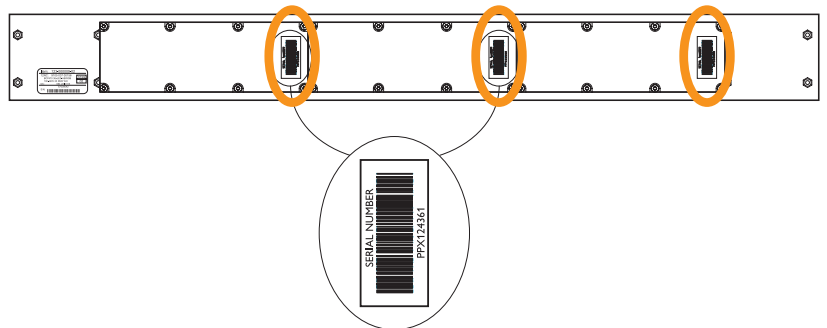
Installation Instructions



Unpack and Position Fixtures

1. Carefully inspect the box containing ColorGraz Powercore and the contents for any damage that may have occurred in transit.
2. ColorGraz Powercore fixtures are addressable in 1 ft (305 mm) segments. This feature allows playback controllers to send unique light output data to each segment of each fixture within your installation.

Each fixture segment, or LED node, come pre-programmed with a unique serial number. Each fixture has two, three, or four serial numbers, depending on its length. As you unpack the fixtures, record the serial numbers in a layout grid (typically a spreadsheet or list) for easy reference and light addressing.



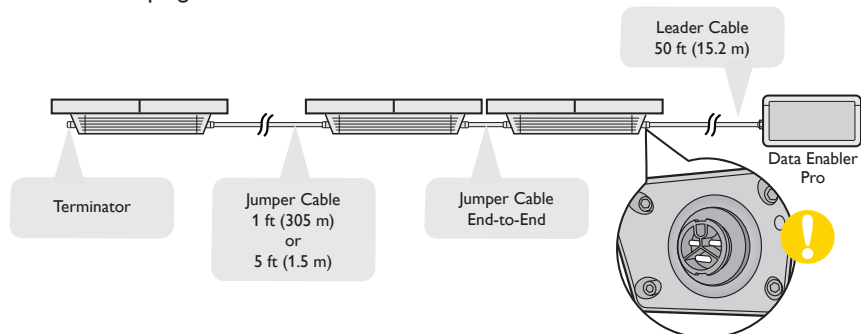
3. Assign each fixture to a position in the lighting design plan.
4. To streamline installation and aid in light address programming, you can affix a weatherproof label identifying the order or placement in the installation to an inconspicuous location on each fixture's housing.

Mount and Connect Fixtures

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

1. Using the included 4 mm hex hardware, attach two hinges to each fixture. There are three possible methods for attaching hinges to the fixtures, each method offering differing degrees of swing radius and space-efficiency. Select the method most suitable for your application.

Note that ColorGraze Powercore fixtures are directional: There is a male connector plug on one end of the fixture and a female connector plug on the other end. When installing a linear series of fixtures, ensure that all fixtures are oriented in the same direction. Note that the Leader Cable connects to the male connector plug on the first fixture in each series.



2. Using 1/4 in (5 mm) socket cap screws, bolts, or anchors, mount the fixture hinge assemblies directly to a wall or other suitable mounting surface.
3. Rotate the fixture hinge assemblies into the desired positions. For consistent position control, use the indicators on the side of each hinge knuckle for reference. Use a 2 mm hex key wrench to loosen the set screws, as needed.
4. To accommodate installation from various angles, each hinge has four set screws designed to lock the hinge position. All four, or only two, of the set screws may be used, depending on the mounting method and swing radius you select for the hinge. For example, if the hinge leaves are to be fully closed, the interior set screws may not be accessible.

Do not lock the hinges positions at this time; the hinges have a built-in constant torque feature that allows temporary positioning. For optimal light output performance, aim and lock the hinges following installation.

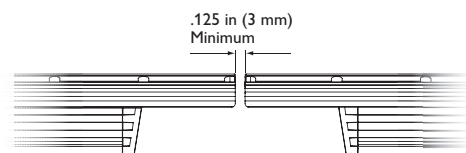
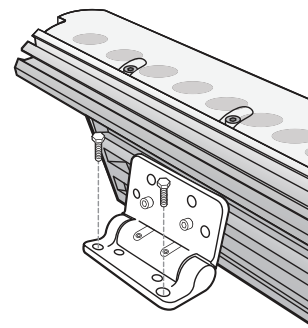
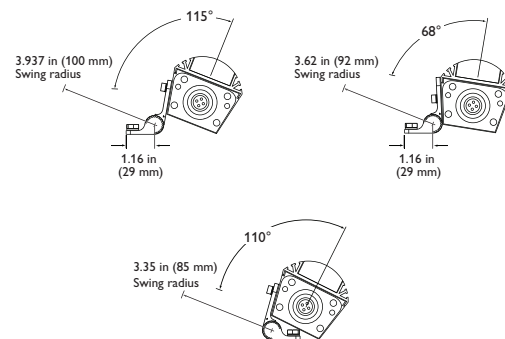
5. Connect the leader cables from the Data Enabler Pro devices to the fixtures.

If installing fixtures in a single linear series, connect the provided ColorGraze Powercore leader cable from the Data Enabler Pro to the first fixture in the series. Twist the connector ends to lock the leader cable into place.

If installing fixtures in parallel, pull copper wire from the Data Enabler Pro to the common junction box. We recommend the use of 12 AWG (2.05 mm), stranded 4-conductor copper wire.

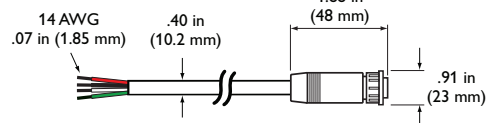
Connect the provided ColorGraze Powercore leader cables from the common junction box to the first fixture in each series.

Within the junction box, use wire nuts to connect line, neutral, ground, and data wires. Tuck wire connections into the junction box, then enclose. If installing in a wet or damp location, seal all junction boxes with electronics-grade RTV silicone sealant. Use gaskets, clamps, and other parts and fittings required to comply with local outdoor wiring codes.

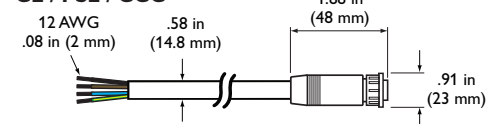


Leader Cable Connector Dimensions

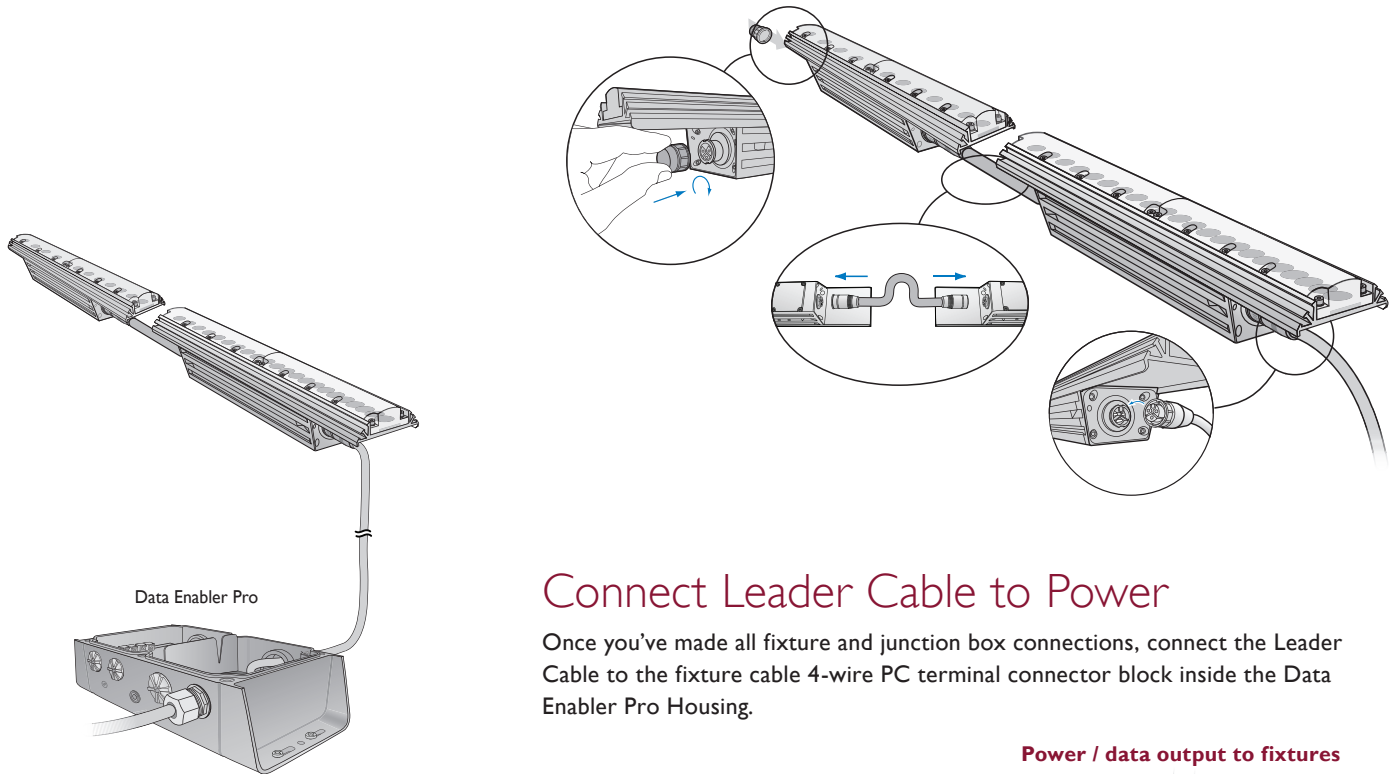
UL / cUL



CE / PSE / CCC



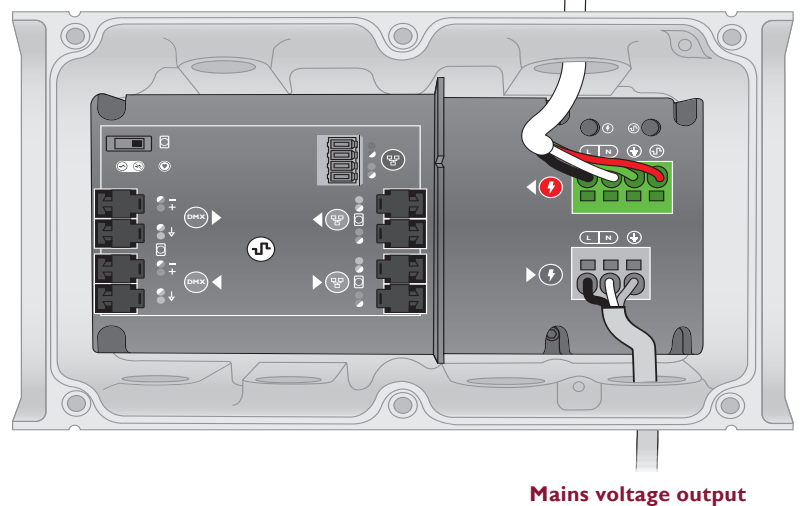
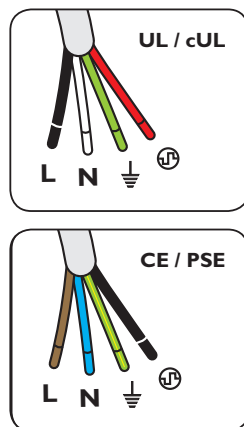
6. Connect all Jumper Cables between fixtures. Twist the connector ends to lock.
7. Attach the terminator to the last fixture in each series. Terminators are provided with the ColorGraze Powercore Leader Cables.



Connect Leader Cable to Power

Once you've made all fixture and junction box connections, connect the Leader Cable to the fixture cable 4-wire PC terminal connector block inside the Data Enabler Pro Housing.

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



Address the Fixtures

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

To allow a fine level of control, ColorGraze Powercore fixtures are addressable in 1 ft (305 mm) segments, or nodes. ColorGraze Powercore fixtures have two, three, or four nodes, depending on fixture length, each identified by a unique serial number.

Each ColorGraze Powercore node uses three sequential DMX channels or addresses, one for red, one for green, and one for blue. ColorGraze Powercore nodes come factory-addressed to DMX channels 1 (red), 2 (green), and 3 (blue).

For lighting designs where fixture nodes work in unison, all nodes can be assigned the same DMX addresses. Changes to the default addresses are not necessary, but if nodes were previously readdressed for use in other installations, you must reset them. For light show designs that show different colors on different nodes, you must assign unique DMX addresses to your nodes and sort them in a useful order.

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

For details on addressing and configuring fixtures, controllers, and power / data supplies with QuickPlay Pro, refer to the *Addressing and Configuration Guide*, which you can view or download at www.colorkinetics.com/support/addressing.

✳ You can download QuickPlay Pro from www.colorkinetics.com/support/addressing.

✳ You will need the layout grid that you created when you recorded the serial numbers of the light fixtures in your installation.

Aim and Lock the Fixtures

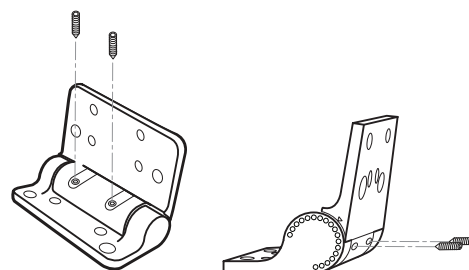
Rotate the fixtures to achieve the optimal angle for light output. For consistent position control, use the indicators on the side of each hinge knuckle as reference.

For fine horizontal adjustment, you can change the position of the hinge mounting block located on the side of each fixture. Loosen the set screw with a 2.5 mm hex key, slide the mounting block to the desired position, then tighten the set screw.

Once satisfied with fixture angles and positioning, use a 2 mm hex key wrench to tighten the hinge position set screws and lock each hinge.

✳ Do not look directly into a fixture when aiming and locking.

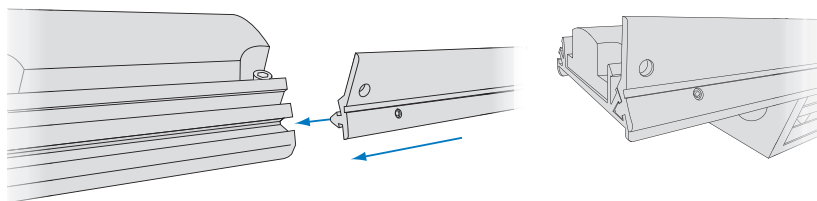
✳ The hinge position set screws have factory applied thread lock. Confirm the fixture angle and positioning before locking each hinge.



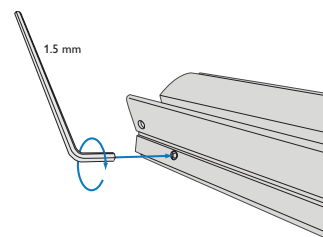
Attach Glare Shields (Optional)

Glare Shields, in 1 ft (305 mm), 2 ft (610 mm), 3 ft (914 mm), and 4 ft (1.2 m) lengths, can be inserted in the grooves in the ColorGraze Powercore housing. Glare Shields block unwanted spill light, and can shield the light sources from being directly visible in certain mounting situations.

1. Insert the Glare Shield's triangular tab in the outer groove on the side of the ColorGraze Powercore housing.



2. Using a hex wrench, tighten the locking screws to hold the Glare Shield in place.
3. (Optional) Attach a tether to the knockout in the Glare Shield, and affix the tether to a secure anchor point.



Philips Color Kinetics
3 Burlington Woods Drive
Burlington, Massachusetts 01803 USA
Tel 888.385.5472
Tel 617.423.9999
Fax 617.423.9998
www.philipscolorkinetics.com

Copyright © 2008 – 2010 Philips Solid-State Lighting Solutions, Inc. All rights reserved. Chromacore, Chromasic, CK, the CK logo, Color Kinetics, the Color Kinetics logo, ColorBlast, ColorBlaze, ColorBurst, eW Fuse, ColorGraze, ColorPlay, ColorReach, iW Reach, eW Reach, DIMand, EssentialWhite, eW, iColor, iColor Cove, IntelliWhite, 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: Atlantic ocean residence, by John Brandon Miller DAS-000010-00 R06 12-10