



eColor Blast Powercore gen4

Customizable exterior LED wash fixture with solid color light

PHILIPS



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eColor Blast Powercore gen4 high-performance LED luminaires provide a high-intensity wash of color light with simplified installation. eColor Blast Powercore gen4 offers a range of accessories that allow for customizable beam angles for floodlighting, spotlighting, wall washing, and grazing, along with the efficiency and cost-effectiveness of Powercore technology in a rugged die-cast aluminum housing.

- Expands customization with a wide range of new Philips accessory options. In addition to the native 6° lens, five different diffuser lenses can customize the fixture to produce 20°, 40°, 60°, 80°, and 10° x 40° (asymmetric) beam angles. Three housing color choices (black, gray, and white)—plus the option to add or combine a louver and rock guard with either a full glare shield or a half glare shield—create new aesthetic possibilities for designers and architects.
- Meets ASTM B117 standard for > 1,500 hours of corrosion resistance and ANSI C136.31-2010 standard with a 3G vibration rating.
- Improves durability with new flat lens that prevents water from pooling into the fixture, keeping the LEDs protected and secure over the course of a luminaire's lifetime.
- Integrates patented Powercore technology that controls power output to luminaires directly from line voltage—rapidly, efficiently, and accurately.
- The Philips Color Kinetics Data Enabler Pro merges line voltage with control data and delivers them to luminaires over a single standard cable, dramatically simplifying installation and lowering total system cost.
- Universal power input range of 100 – 277 VAC.
- Precision Dimming—Smooth dimming down to 1% with optional Data Enabler Pro and digital control interface.
- Works seamlessly with the Philips Color Kinetics full range of controllers, including Light System Manager, Video System Manager, Video System Manager Pro, iPlayer 3, Antumbra Color Keypad, and ColorDial Pro—as well as third-party controllers.



Outdoor Rated

Fully sealed for maximum fixture life and IP66 rated for outdoor applications, eColor Blast Powercore gen4 meets or exceeds specifications for use in wet locations. Rugged, die-cast aluminum housing is available in white, gray, or black powder-coated finish.

Court Building Glows with Strength and Power

The Constitutional Court of the Republic of Turkey Court Building has been an architectural masterpiece since its construction. The award-winning design of the courthouse evokes strength and power. It stands on the outskirts of the city as a symbol of justice and transparency of government.



Photo Credits: Istanbul Agency

The Constitutional Court Building was part of the Ankara City Beautification Project, which consisted of over 20 Philips LED lighting installations throughout the city. For the Court Building's beautification, the city wanted the feelings of fortitude that the architecture suggested to be seen throughout the night as it is highly visible from a main highway.

The lighting designer's goal was to emphasize the intricate structure of the building with light. A mixture of amber and white LED lights accented the different layers and materials on the façade. The warm colors also make the courthouse inviting. The Ankara Metropolitan Municipality,

which commissioned the beautification project, selected Philips Color Kinetics fixtures because of the variety of colors offered to achieve the desired look.

Four types of fixtures were needed to add depth and accentuate the complex architecture. Caglar Yilmaz, the lighting designer, used eColor Graze Powercore (now specified using eColor Graze QLX Powercore) in amber and eColor Blast Powercore in amber to illuminate the outer façade and layers of the structure. She used iV Reach Powercore LED floodlights to illuminate the surfaces that had text and logos. She chose eWGraze Powercore to illuminate the main entrance.

"The project has been greatly appreciated by the municipality and has become an example for future lighting projects in the city," said Yilmaz. .

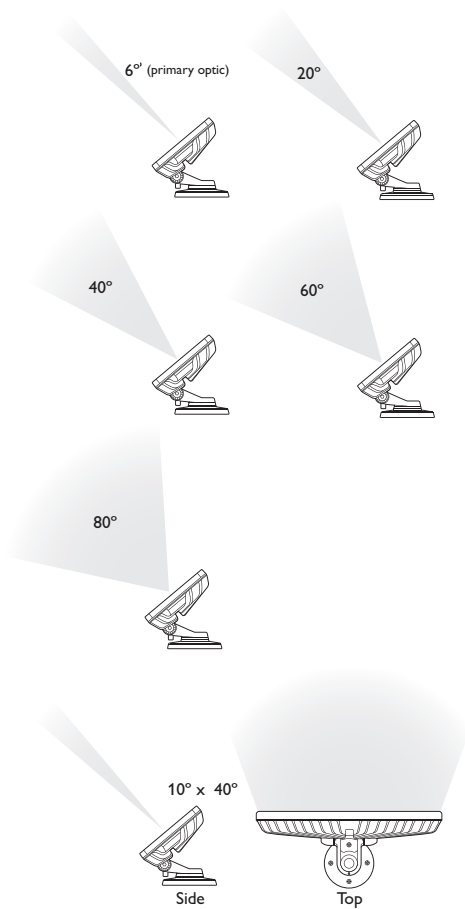


Photo Credits

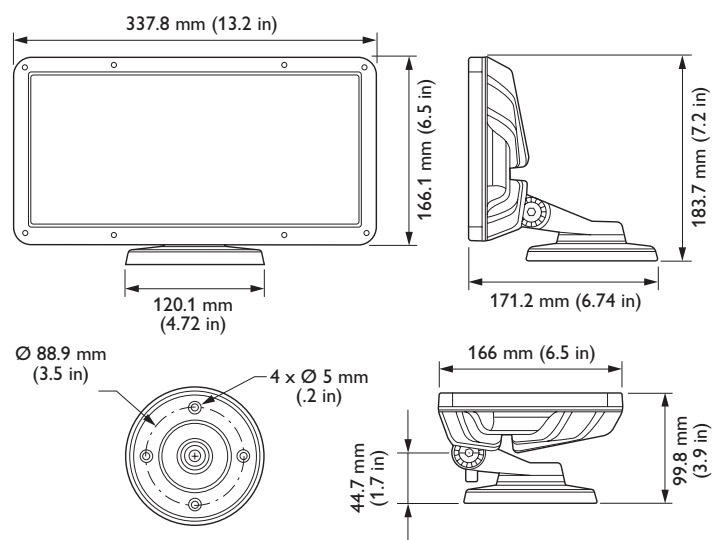
eColor Blast Powercore Specifications

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

Item	Specification	Details
Output	Beam Angle	10° primary optic (no diffuser) Optional diffusers: 20°/40°/60°/80°/10° x 40° (asymmetric)
	Effective Projected Area (EPA)	0.068 m²
Electrical	Input Voltage	100 – 277 VAC, auto-switching, 50/60 Hz via Data Enabler Pro
	Power Consumption	50 W maximum at full output, steady state
	Power Factor	0.9 @ 120 VAC, 0.85 @ 277 VAC
Control		On/Off or Precision Dimming by 4 conductor cable & DE Pro
Physical	Dimensions (Height x Width x Depth)	185 x 338 x 171 mm (7.3 x 13.3 x 6.75 in)
	Weight	3.9 kg (8.2 lb)
	Housing	Die-cast aluminium, powder-coated finish
	Lens	Clear tempered glass
	Fixture Connections	1.8 m (6 ft) combined power data whip
	Temperature Ranges	-40° – 50° C (-40° – 122° F) Operating -20° – 50° C (-4° – 122° F) Startup -40° – 80° C (-40° – 176° F) Storage
	Fixture Run Lengths	To calculate fixture run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/
Certification and Safety	Humidity	0 – 95%, non-condensing
	Certification	UL/cUL, FCC Class B, CE, PSE, CQC, RCM, EAC, UA
	Environment	Dry / Damp / Wet Location, IP66
	Corrosion Resistance	ASTM B117 > 1,500 hours
	Vibration Resistance	ANSI C136.31-2010 3G
	Mechanical Impact	IK10



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✳ For help estimating the light output and distribution of eColor lighting fixtures, please contact Philips Color Kinetics Applications Engineering Services at support@colorkinetics.com.

Included in the box

eColor Blast Powercore gen4 fixture
(2) 8-32 screws for indoor installation
(4) 10-24 stainless steel screws for outdoor installation
5 mm hex wrench
2.5 mm hex wrench
Installation Instructions

Fixtures and Data Enabler Pro

Item	Type	Housing Color	Item Number	Philips 12NC
eColor Blast Powercore gen4	Red	White	223-000093-00	912400130355
		Black	223-000093-01	912400130356
		Gray	223-000093-16	912400133537
	Green	White	223-000093-04	912400130359
		Black	223-000093-05	912400130360
		Gray	223-000093-18	912400133539
	Blue	White	223-000093-08	912400130363
		Black	223-000093-09	912400130364
		Gray	223-000093-20	912400133541
	Amber	White	223-000093-12	912400130367
		Black	223-000093-13	912400130368
		Gray	223-000093-22	912400133543

Use Item Number when ordering in North America.

Data Enabler

Item	Style	Item Number	Philips 12NC
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.

Accessories

Designed specifically for the family of Blast fixtures, accessories install directly to the fixture to provide additional options for controlling and dispersing light.

* For complete instructions on how to install the accessories, refer to the Accessory Installation Instructions at: www.colorkinetics.com/l/essentialcolor/eColor-Blast-Powercore-gen4/

Item	Item Number	Philips 12NC	Color	
Diffuser Trim Ring	120-000185-00	912400130336	White	
	120-000185-01	912400130337	Black	
	120-000185-15	912400133530	Gray	
Louver	120-000185-04	912400130340	White	
	120-000185-05	912400130341	Black	
	120-000185-17	912400133532	Gray	
Rock Guard	120-000185-06	912400130342	White	
	120-000185-07	912400130343	Black	
	120-000185-18	912400133533	Gray	
Half Glare Shield	120-000185-13	912400130349	White	
	120-000185-14	912400130350	Black	
	120-000185-19	912400133534	Gray	
Full Glare Shield	120-000185-02	912400130338	White	
	120-000185-03	912400130339	Black	
	120-000185-16	912400133531	Gray	

Use Item Number when ordering in North America.

Wiring Compartment

Item	Housing Color	Item Number	Philips 12NC
Wiring Compartment UL/cUL	Black	106-000011-30	910503704147
	White	106-000011-31	910503704148
	Gray	106-000011-32	910503704149
Wiring Compartment CE	Black	106-000011-40	910503703275
	White	106-000011-41	910503703276
	Gray	106-000011-42	910503703277

Use Item Number when ordering in North America.

Installation

eColor Blast Powercore gen4 is an LED wash light providing high-intensity color light while consuming less energy than comparable non-LED fixtures. Powercore, which delivers line voltage directly to the fixture, eases installation by eliminating the need for external power supplies or special wiring.

Owner/User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate eColor Blast Powercore gen4 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 any 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.

Planning a Precision Dimming Installation

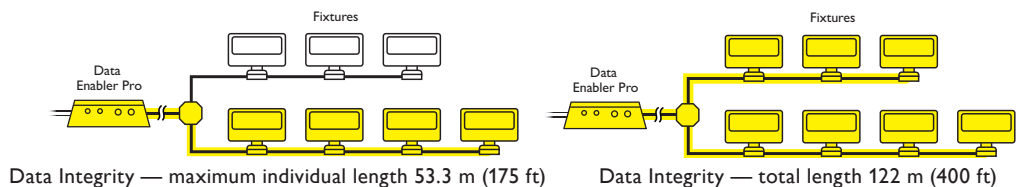
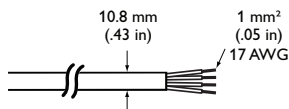
eColor Blast Powercore gen4 can be dimmed using a Data Enabler Pro setup. If you plan on precision dimming eColor Blast Powercore gen4, you will need to plan out your installation.

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.

eColor Blast Powercore gen4 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 53.3 m (175 ft), and the total cable length per Data Enabler Pro should not exceed 122 m (400 ft).

Leader Cable Dimensions

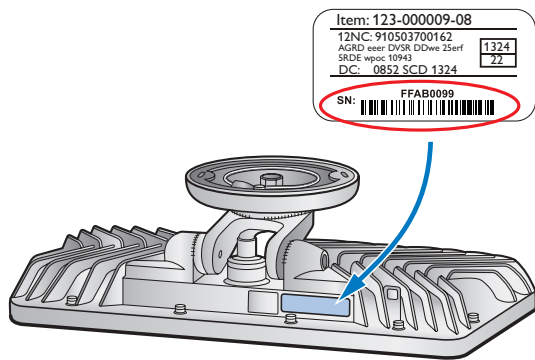


2. On an architectural diagram or other diagram that shows the physical layout of the installation, identify the locations of all switches, controllers, Data Enabler Pro devices, fixtures, and cables.

✳ Refer to the eColor Blast Powercore Installation Instructions at www.colorkinetics.com/essentialcolor/eColor-Blast-Powercore-gen4/ for specific warning and caution statements.

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

- Each eColor Blast Powercore gen4 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.



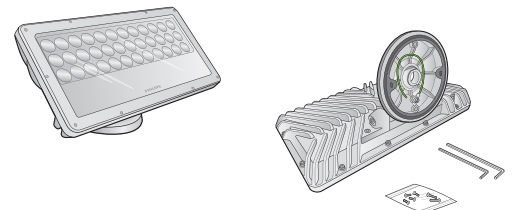
- Assign each fixture to a position in the lighting design plan.
- To streamline installation and aid in light show programming, you can affix a weatherproof label identifying the order or placement in the installation to an inconspicuous location on each light fixture's housing.

Assemble Additional Parts and Tools

Make sure all additional parts and tools are available, including:

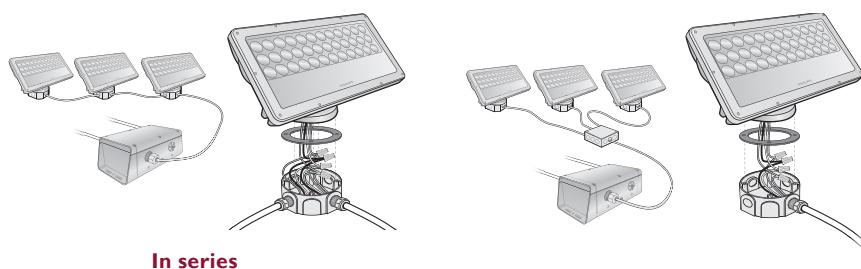
- The provided 8-32 screws for indoor installations, or the 10-24 stainless steel screws for outdoor installations
- The provided 5 mm and 2.5 mm hex key wrenches
- In the US, one 102 mm (4 in) round US electrical junction box per fixture, rated for your application, with 89 mm (3.5 in) center-to-center 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 4 mm² (12 AWG), 4-conductor stranded copper wire
- Conduit as required
- Electronics-grade room temperature vulcanizing (RTV) silicone sealant as required

eColor Blast Powercore gen4 fixture
(2) 8-32 stainless stell screws for indoor installation
(4) 10-24 stainless steel screws for outdoor installation
5 mm hex wrench
2.5 mm hex wrench
Installation Instructions



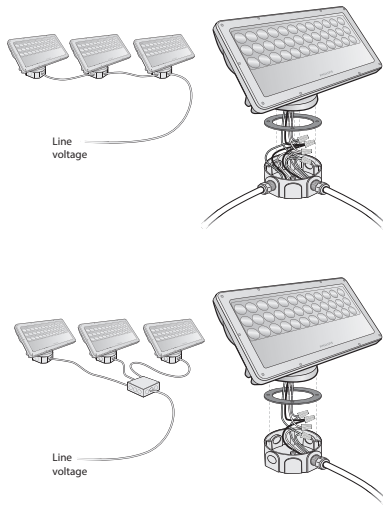
Install the Fixtures

eColor Blast Powercore gen4 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 that all wiring between junction boxes complies with local 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.

✱ When installing eColor Blast Powercore gen4 fixtures, the input earth ground, canopy earth ground, and fixture cable earth ground must all be connected together.



⚠ Wiring between junction boxes must comply with local codes.

Standard ON/OFF Control Installation

Make sure the power is OFF before mounting and connecting eColor Blast Powercore gen4 fixtures.

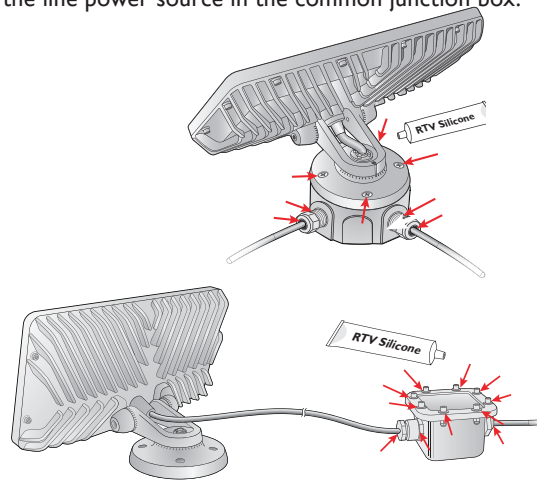
1. Mount junction boxes in accordance with the lighting design plan. Each fixture is designed for mounting in a 102 mm (4 in) round US electrical junction box, rated for your application, with 89 mm (3.5 in) center-to-center screw holes for attaching the fixture's base.

Fixtures are supplied with a grounding wire attached to the fixture's base (canopy). The canopy ground wire can be attached to a grounding point in the junction box, or connected with the ground in the fixture cable.

2. Use wire connectors to connect line, neutral, ground.

If installing in series, connect the leader cable from each fixture to the fixture's junction box.

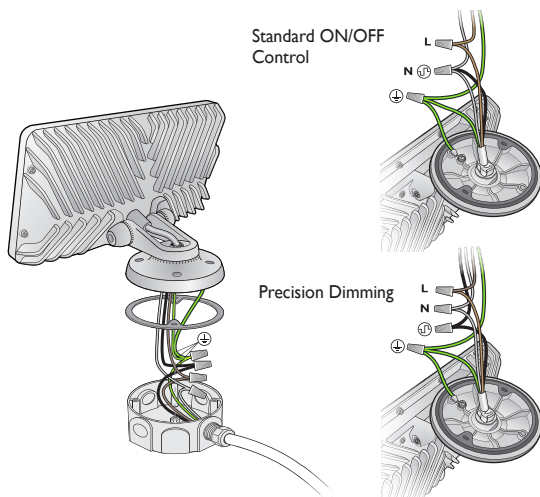
If installing in parallel, connect the wires from each fixture to the lead wire from the line power source in the common junction box.



3. If installing in a damp or wet 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.

Precision Dimming Installation

For Precision Dimming using a Data Enabler Pro, the maximum cable run from a Data Enabler Pro to any individual eColor Blast Powercore gen4 fixture is 53 m (175 ft). When installing in parallel, the total cable length cannot exceed 122 m (400 ft).



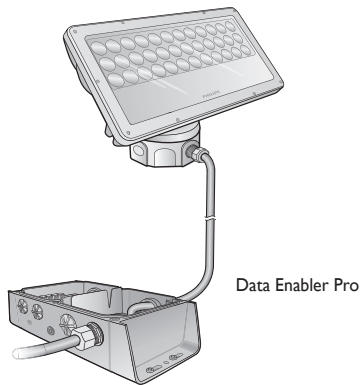
1. Install all Data Enabler Pro devices, including any interfaces with controllers. Data Enabler Pro devices and external controllers send power and control signals to the fixtures over the single fixture cable. Additional cabling is required to connect fixtures together in series.
2. Verify that all additional supporting equipment (switches, controllers) is in place.
3. Trim the cable from the fixture to fit in the junction box, leaving enough cable to make wiring connections.
4. Insert the fixture cable and the canopy ground wire through the attached gasket ring before making wire connections. When attaching the fixture to the junction box, ensure that the gasket is compressed evenly.

5. Use wire connectors to connect line, neutral, ground, and data.

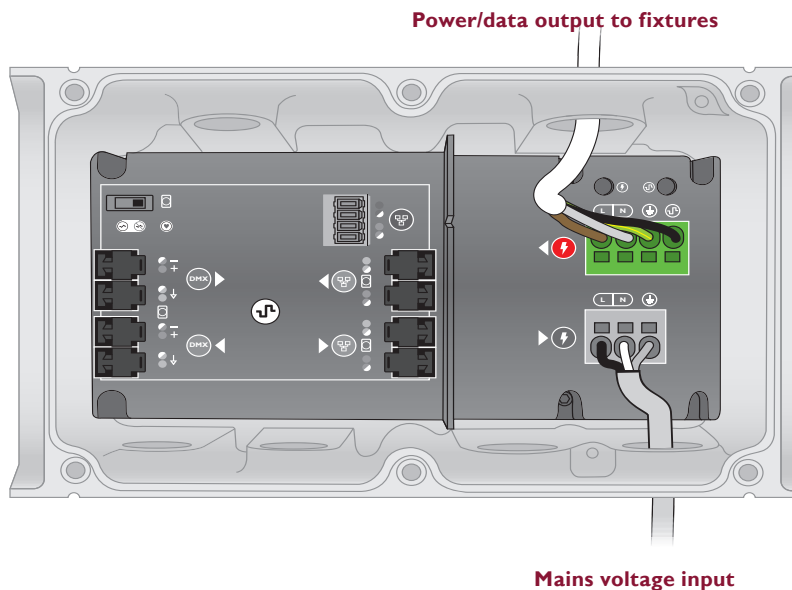
If installing fixtures in a series, pull 4-conductor copper wire between each junction box in the series.

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

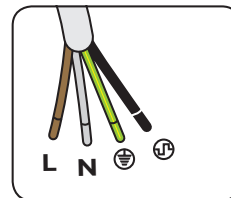
6. Attach the canopy ground wire to a grounding point in the junction box, or combine it with the fixture cable ground with a wire nut.
7. Tuck wire connections into the junction box, and use the provided screws to attach the fixture to the junction box.
8. Run the wiring from the first junction box 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.colorkinetics.com/lis/pds/dataenablerpro

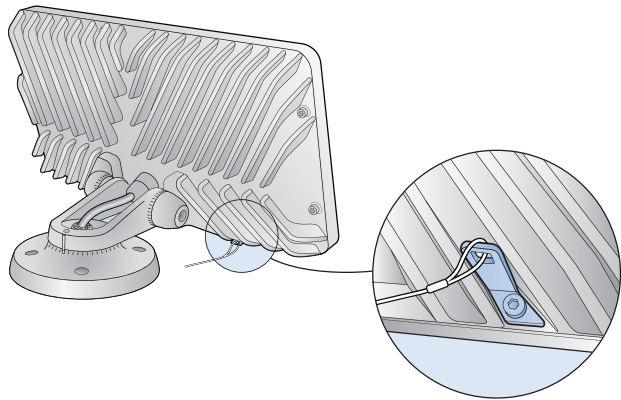


Safety cable minimum requirements

Material	304 or 316 Stainless Steel
Size	4 mm (5/32 in) nominal diameter. Minimum break load must be greater than 1,089 kg (2,400 lb).
Construction	7 x 7 (49 wires) preformed stranded

Attach Safety Cable (Optional)

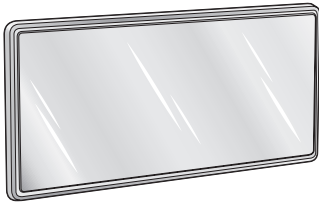
Each eColor Blast Powercore gen4 fixture is designed for use with a safety cable to tether it to a secure anchor point. When dictated by local or state code or advised by a structural engineer, attach a safety cable to the bracket on the back of the fixture. Attach the safety cable to the mounting surface using a method that follows the code or engineer’s requirements.



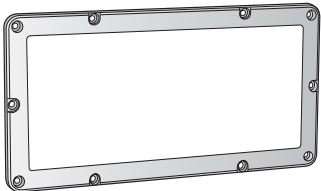
Attach Accessories (Optional)

Accessories can be installed to change the beam angle or add extra protection to the fixture in outdoor environments.

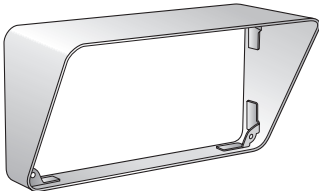
✳ For complete instructions on how to install the accessories, refer to the *Accessory Installation Instructions* at www.colorkinetics.com/ls/essentialcolor/eColor-Blast-Powercore-gen4/



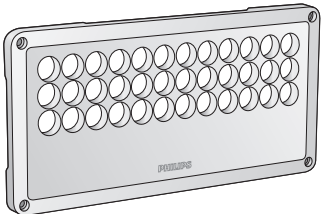
Spread Lens



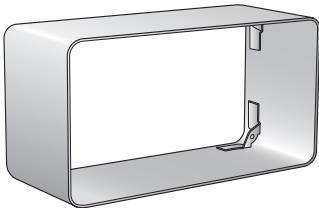
Trim Ring



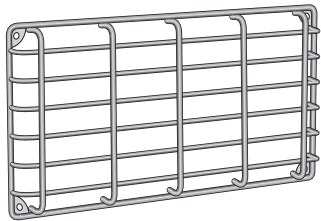
Glare Shield - Half



Louver



Glare Shield - Full



Rock Guard

Address and Configure the Fixtures (for Precision Dimming Only)

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

You address and configure eColor Blast Powercore gen4 fixtures using QuickPlay Pro addressing and configuration software, which you can download for free 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.

- 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 eColor Blast Powercore gen4 Fixtures

eColor Blast Powercore gen4 fixtures operate in 8-bit mode by default. You can configure eColor Blast Powercore gen4 to operate in 16-bit mode, which increases fixture resolution for smoother dimming.

eColor Blast Powercore gen4 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 are not necessary, but if lights were previously readdressed for use in other installations, you must reset them. For light show designs where different fixtures have different intensities, 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, eColor Blast Powercore gen4 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. eColor Blast Powercore gen4 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. eColor Blast Powercore gen4 offers five levels of decreasing LED transition speed, from Fast (instant snap changes) to Delay-4 (slowest transition speed).

Aim and Lock the Fixtures

Make sure the power is ON before aiming and locking the fixtures.

⚠ Do not look directly into the fixture when aiming and locking.

To aim the fixtures, rotate the base and tilt the beam as desired. Using the appropriate hex wrench, lock the fixture in place by tightening three set screws—two set screws lock tilt, and a single screw locks rotation.

