

eW Cove Powercore Installer's Guide

An Essential White Product



An eW™ Cove Powercore fixture is an EssentialWhite™ product that provides high-intensity indoor alcove lighting. In addition to its high quality of light, the fixture uses Powercore® technology to ensure a simple installation and DIMand™ technology to provide smooth dimming with standard commercial dimmers.

- Powercore® technology embeds power transformers in the fixtures and eliminates the need for an external power supply.
- DIMand™ technology supports smooth dimming with commercial ELV dimmers.

This *Installer's Guide* contains important information on planning and installing your new eW Cove Powercore fixture to ensure peak performance. Read it carefully and save it for future reference. This document should never be considered a substitute for any provision of a regulation or state and/or local code.

OPTIBIN®
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PHILIPS

Scope Of This Guide

The eW Cove Powercore product line includes, and this installer's guide covers, these products:

Permanently-Mounted eW Cove Powercore Item Numbers

Size	Color Temp.	Voltage	Item Number
6" (15.2 cm)	2800 K	120 VAC	523-000005-00
	4200 K	120 VAC	523-000005-03
12" (30.5 cm)	2800 K	120 VAC	523-000004-00
	4200 K	120 VAC	523-000004-03

Portable eW Cove Powercore Item Numbers

Size	Color Temp.	Voltage	Item Number
6" (15.2 cm)	2800 K	120 VAC	999-000285-00
	4200 K	120 VAC	999-000285-01
12" (30.5 cm)	2800 K	120 VAC	999-000284-00
	4200 K	120 VAC	999-000284-01

Accessories for eW Cove Powercore Fixtures

Use one leader cable to connect line power to each series of fixtures. Jumper cables are optional. Mounting tracks are optional for permanent installations and required for portable installations.

Item Description	Item Number
10-foot (3 m) leader cable with flying leads for permanent installations. Includes series terminator.	108-000032-00
8-foot (2.4 m) leader cable with plug for portable installations. Includes series terminator.	999-000287-00
1-foot (30.5 cm) jumper cable. Provides spacing between series segments.	108-000033-00
5-foot (1.5 m) jumper cable. Provides spacing between series segments.	108-000033-01
Box of 25 4-foot (1.2 m) mounting tracks. Ensures straight runs of fixtures. Required for snap-in mounting of fixtures for portable installations; optional for permanent installations.	523-000006-00

Identification and Warning of Hazards

In accordance with ANSI Z535.6-2007, this "signal word" text system identifies the severity of hazards associated with the product:

WARNING	POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.
CAUTION	POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY OR PROPERTY DAMAGE.

Specifications

Specifications are subject to change without notice.

	6-Inch Fixture	12-Inch Fixture
Length	6 inches (15.2 cm)	12 inches (30.5 cm)
Width	1.25 inches (3.2 cm) (tube diameter)	
Height	1.37 inches (3.5 cm)	
Weight	3 oz. (85 g)	5 oz. (142 g)
Source	High-efficacy (>40 LPW), high-brightness LEDs that enable eW Cove Powercore installations to meet California Title 24 requirements.	
LEDs Per Fixture	3	5
Color Temperature	2800 K (+375/-300) or 4200 K (+400/-500)	
Total Output (lumens)	2800 K: 67	2800 K: 135 4200 K: 177
Efficacy (Lm/W)	2800 K: 30.7	2800 K: 30.7 4200 K: 39.3
Beam Angle	110° x 110°	
Mixing Distance	Mixing distance to uniform light is two inches (5 cm).	
Housing	Charcoal gray, UL-recognized, injection-molded plastic.	
Inter-fixture Connectors	IEC 15 A (max) with C13 plug	
Maximum Run Length	150 fixtures	100 fixtures
Leader Cable	2-pole, 2-wire, grounded, 15 A (sold separately)	
Listings	UL/CUL (120 VAC), CE	
Control	Line switches or ELV (electronic low voltage) commercially-available trailing edge or phase control dimmers.	
Line Voltage	100, 120, or 230 VAC	
Power Consumption	4 W max. at startup 2.2 W max. steady state	6 W max. at startup 4.5 W max. steady state
Current @ 120 V	30 mA	50 mA
Temperature Range	-4°F to 122°F (-20°C to 50°C) operating temperature	
Humidity Range	0 to 95% non-condensing	
LED Source Life	40,000 hours, based on LED manufacturers' test data	

eW Cove Powercore Installer's Guide

1. Read This First

Before you begin the installation, read all of this *Installer's Guide*.

WARNING FIXTURES MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE US NATIONAL ELECTRICAL CODE AND RELEVANT LOCAL CODES AND REGULATIONS.

WARNING DO NOT ATTEMPT TO INSTALL OR USE A FIXTURE UNTIL YOU READ AND UNDERSTAND THE INSTALLATION INSTRUCTIONS AND SAFETY LABELS.

Owner / User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner and user to install, maintain, and operate the eW Cove Powercore in such a manner as to comply with all federal, state, and local laws, ordinances, regulations, and the American National Standard Institute Safety Code.

WARNING FIXTURES MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH ALL APPLICABLE NATIONAL AND LOCAL ELECTRICAL CODES AND REGULATIONS.

2. Get Started—Inspect Fixtures

Carefully inspect the cartons and boxes containing the eW Cove Powercore fixtures and the fixtures themselves for any damage that may have occurred in transit.

WARNING DO NOT USE A FIXTURE IF THE LENS, HOUSING, OR POWER CABLES ARE DAMAGED.

WARNING FIXTURES HAVE LINE VOLTAGE RISK OF SHOCK AND NO USER SERVICEABLE PARTS. DO NOT ATTEMPT TO OPEN THEM.

3. Plan the Installation

If approved architectural drawings are not available:

- Create a layout plan drawing that includes all fixtures, leader cables, and jumper cables.
- Refer to local and state codes to ensure installation compliance and consult with the appropriate electrical inspector to approve all wiring plans.
- Consult Color Kinetics Application Engineering Services as needed at support@colorkinetics.com.

eW Cove Powercore fixtures may be installed permanently or as portable units. There are three differences in the types of installation:

	Permanent	Portable
Mounting	Screwed to substrate. Tracks may be used for alignment.	Snapped into permanently mounted tracks.

	Permanent	Portable
Power	Leader cable that is hard-wired into a junction box connection.	Leader cable with a standard 3-prong 120 VAC plug.
Control	Dimmers may be used.	Dimmers not supported.

Use these guidelines when you plan the installation:

- Circuits supporting permanent installations of eW Cove Powercore fixtures may be switched or controlled by commercial ELV (electronic low voltage) trailing edge or phase control dimmers.
- Joined together, two fixtures' flexible connector cables have enough play to allow for about 1" spacing between fixtures and 180° turns.
- One and five-foot jumper cables can add space between fixtures when needed.
- Permanently installed eW Cove Powercore fixtures may be track or surface mounted. Tracks ensure straight alignment, so surface mounting is best for non-linear designs.
- Up to 100 12-inch or 150 6-inch eW Cove Powercore fixtures may be daisy-chained together in a serial run.

CAUTION DO NOT EXCEED THE SPECIFIED VOLTAGE AND CURRENT INPUT.

CAUTION DO NOT EXCEED THE MAXIMUM NUMBER OF SPECIFIED FIXTURES IN A LIGHT RUN.

4. Assemble Additional Items

To wire and mount an eW Cove Powercore fixture, you may need additional parts and tools.

Wiring

One eW Cove Powercore Leader Cable with terminator is required for each series of connected fixtures.

- The cable used for permanent installations has flying leads (Item #108-000032-00) and is 10 feet (3 m) long.
- The cable used for portable installations has a two-prong plug (Item #999-000287-00) and is 8 feet (2.4 m) long.

The terminator plugs into the female connector of the last fixture in the series.

If fixtures in a series need to be separated by more than an inch (25 mm), use jumper cables to connect the fixtures. Two lengths are available: 1 foot (30.48 cm) (Item 108-000033-00) and 5 foot (1.524 m) (Item 108-000033-01).

Track Mounting

A series of permanently mounted eW Cove Powercore fixtures may be mounted in optional 4-foot long track segments to ensure a straight run.

If the fixture series is portable, tracks *must* be used to secure the fixtures.

In either situation, make sure that the tracks are available.

Tools and Supplies

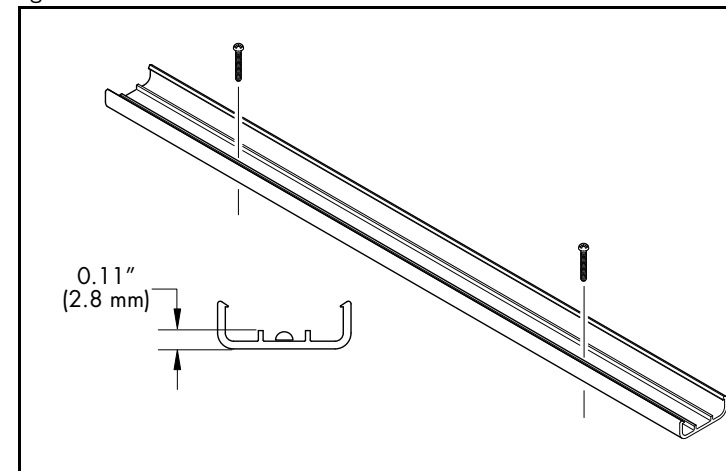
You will need these tools and supplies:

- General tools to secure fixtures and mounting tracks (drill, screwdriver, level, measuring tools, etc.).
- #6 mounting screws or other suitable connectors (bolts, nuts and washers, for instance, if required).
- Electrical tools and supplies (wire cutters, insulation strippers, wire nuts) to connect the leader cable to a circuit inside a junction box and to the series of fixtures.

5. Install Tracks

If tracks are used, install them now. Tracks can be easily cut to fit with a hacksaw or nippers. Make sure the tracks are firmly attached to the substrate with screws in all mounting holes. The screw heads may not rise above the interior rails.

Figure 1: Track Installation Detail

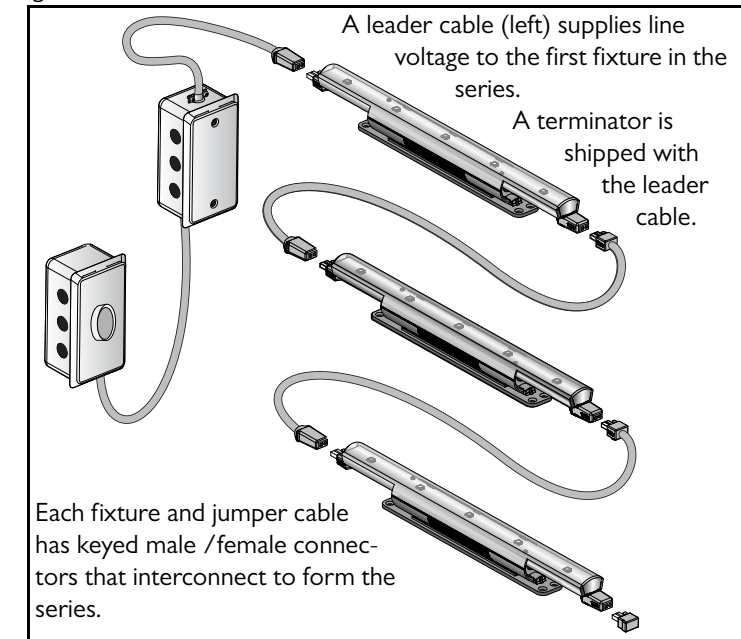


6. Mount The Fixtures

eW Cove Powercore fixtures are installed in series. The fixture's in-line connectors provide an end-to-end fixture butt for the best visual effects.

1. Position the first fixture in the series. If a track is used, snap the fixture into the track and slide it into position. The leader cable will connect to this fixture's male connector, so make sure that the fixture is oriented so the next fixture can plug into this fixture's female connector.
2. **(Permanent Installations Only)** Secure permanently-mounted fixtures. Most materials will require pilot holes for the screws. Mark the location of the holes using the fixture base as a guide. Drill the pilot holes, through the track, if used, and mount the fixture with four #6 screws.
3. Position the next fixture in the series. Match its male connector to the female connector of the previous fixture. Snap it into the track, if used. Attach the fixture to the surface as in Step 2 if the fixtures are being permanently mounted.

Figure 2: Permanent Leader Cable and Terminator Attachment.



4. Continue mounting the fixtures, making power connections as you go, until all lights in the series are mounted.
5. Insert the terminator (packaged with the leader cable) into the last fixture of the series.
6. Connect the leader cable to line power. **(Permanent Installations Only)** Make any required connections to line power (Ensure that the junction box end of the leader cable uses the supplied strain relief.) and switches or dimmers in the junction box. **(Portable Installations Only)** Plug the leader cable into a suitable outlet.
7. Connect the leader cable to the first fixture in the series.

WARNING ENSURE THAT MAIN POWER SUPPLY IS OFF BEFORE INSTALLING OR WIRING A FIXTURE.

8. Energize the circuit to test the installation.

CAUTION DO NOT HOT SWAP FIXTURES. ENSURE THAT POWER TO THE SERIES IS OFF BEFORE CONNECTING OR DISCONNECTING INDIVIDUAL FIXTURES.

7. Aim The Fixtures

To aim the fixture, just rotate it to the desired position; there are detents every 10 degrees to hold it in position.

CAUTION DO NOT USE SHARP TOOLS NEAR OR ON THE FIXTURE LENS.

CAUTION EW COVE POWERCORE FIXTURES ARE A CLASS 2 LED PRODUCT. DO NOT STARE INTO A BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

This product is protected by one or more of the following U.S. patents and their foreign counterparts: 6,016,038, 6,150,774, 6,292,901, 6,340,868, 6,636,003, 6,777,891, 6,969,954, 6,975,079, 7,038,399, 7,161,313, 7,186,003, 7,202,613, 7,221,104, and 7,233,115. Other patents pending. Copyright © 2007 Philips Solid-State Lighting Solutions. All rights reserved. Chromacore, Chromatic, CK, the CK logo, Color Kinetics, the Color Kinetics logo, Color Kinetics The Leader in Intelligent Light, ColorBlast, ColorBlaze, ColorBurst, ColorCast, ColorPlay, ColorScape, DIMand, Direct Light, EssentialWhite, eW, iColor, iColor Cove, IntelliWhite, iW, iPlayer, Light Without Limits, Optibin, Powercore, QuickPlay, Sauce, the Sauce logo, and Smartguice are either registered trademarks or trademarks of Philips Solid-State Lighting Solutions in the United States and/or other countries. All other brand or product names are trademarks or registered trademarks of their respective owners.