

eW COVE 12" eW COVE 6"

USER GUIDE

An ESSENTIALWHITE™ Product



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CHROMASIC®
BY COLOR KINETICS

OPTIBIN®
BY COLOR KINETICS



eW Cove 12"
ITEM# 500-000004-00 (2700K)
500-000004-01 (3000K)
500-000004-02 (4200K)

eW Cove 6"
ITEM# 500-000005-00 (2700K)
500-000005-01 (3000K)
500-000005-02 (4200K)

This product is protected by one or more of the following patents: U.S. Patent Nos. 6,016,038, 6,150,774 and other patents listed at <http://colorkinetics.com/patents/>. Other patents pending.

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PUB-000155-00 Rev 02

Specifications subject to change without notice. Refer to www.colorkinetics.com for the most recent user guide versions.

GETTING STARTED

eW™ Cove is a low profile, linear fixture featuring Chromasic® technology for small cove and display lighting applications. eW Cove can be used in a wide variety of installations in retail, exhibit, hospitality, and architectural settings. This guide contains important information about installing and operating your new eW Cove fixtures safely and accurately.

Included In This Box

- For 12" eW Cove - 12 fixtures
For 6" eW Cove - 1 fixture
- Mounting bracket(s)
- User Guide

Additional Items Needed

- 30-foot (9 m) eW Cove Leader Cable (ITEM# 107-000007-00) or Dimming Adapter Kit (includes 0-10V Dimming Adapter and Dimming Leader Cable) (ITEM# 107-000007-01)
- PS-96 24V (ITEM# 109-000025-00) or any other 24VDC Class 2 UL 1310 Listed power supply
- Flat head screws suitable for mounting surface
- Tools (screw gun, pliers, and wire cutters)

Optional Items

- 1-foot (0.3 m) Jumper Cable for iColor Cove EC, iColor Cove QL and eW Cove (ITEM# 108-000020-00)
- 5-foot (1.5 m) Jumper Cable for iColor Cove EC, iColor Cove QL, and eW Cove (ITEM# 108-000020-01)

Scope of this Guide

The goal of this user guide is to explain the steps necessary to install eW Cove and assure peak performance. Its intended use is for reference only, by a fully qualified electrician or technician. This document should never be considered a substitute for any provision of a regulation or state and/or local code.

Identification and Warnings of Safety Hazards

In accordance with ANSI Z535.4-2002 the following system of identifying the severity of the hazards associated with the products is used:

“**DANGER**” Imminently hazardous situation which, if not avoided, will result in death or serious injury.

“**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. Also used to alert against unsafe practices.

IGNORING A HAZARD WILL VOID ANY WARRANTY.

WARNING: Risk of electric shock. Ensure that main power supply is off before installing or wiring eW Cove and the power supply.

WARNING: eW Cove and the power supply must be installed by a qualified electrician or technician in accordance with NEC and relevant local codes.

WARNING: Do not attempt to install or use eW Cove or the power supply until you read and understand the installation instructions.

WARNING: Do not use eW Cove if any cables are damaged.

WARNING: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CAUTION: eW Cove has no serviceable parts. Do not attempt to open the fixture.

CAUTION: eW Cove is an indoor/dry rated fixture. Do not install outdoors or in wet locations.

CAUTION: Do not use sharp tools near or on the fixture lens or cable.

CAUTION: Do not hot swap. Ensure that power supply is off before connecting or disconnecting fixtures.

CAUTION: Use eW Cove with a Color Kinetics recommended 24VDC Class 2 UL 1310 Listed power supply (ITEM# 109-000025-00 or equivalent).

NOTE: The instructions and precautions set forth in this user guide are not necessarily all-inclusive, all conceivable, or relevant to all applications as Color Kinetics cannot anticipate all conceivable or unique situations.

Owner/User Responsibilities

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

PLANNING THE INSTALLATION

The eW Cove installation requires planning to ensure timely, successful installation with minimal complications and down time.

Planning Suggestions

- Consult an Electrical Inspector to review all wiring plans.
- Refer to local and state codes for installation compliance.
- Create a Layout Plan drawing, per a Lighting Designer's or Architect's recommendation.
- Consult Color Kinetics Application Engineering Services as needed at support@colorkinetics.com.

Installation Considerations

When creating your installation plan, consider the following:

- **Location of the power supply in relationship to eW Cove fixtures.** The leader cable between the power supply and the first eW Cove fixture is 30 feet (9 m).
- **Location of eW Cove fixtures.** Color Kinetics recommends that the fixtures are positioned at least 2" (5 cm) away from the illuminated surface to allow for proper light mixing.
- **Selection of mounting hardware.** The mounting screws to be used are dictated by the mounting surface. Ensure that the hardware selected is appropriate for the mounting surface.
- **Install and wire the power supply before installing the eW Cove fixtures.** Refer to the product documentation for the Color Kinetics recommended power supply for more information.
- **Aiming the fixtures.** Fixtures can be rotated in the mounting brackets to adjust the direction of the light.
NOTE: The mounting brackets may begin obstructing light output when the fixture is rotated.
- **Dimming option.** A Dimming option allows you to connect a user-supplied 0-10V dimmer or dimming controller to the configuration. For this option, you need the Dimming Adapter Kit (0-10V Dimming Adapter and Dimming Leader Cable). For more information on the dimming option, see *Using the Dimming Option* later in this guide or the *Dimming Adapter Kit User Guide*.

STEPS TO A SUCCESSFUL INSTALLATION

1. Install the power supply.
2. Install the eW Cove fixtures.

Installing the Power Supply(s)

Consider the following when determining the number of power supplies needed:

- The eW Cove 12" fixture draws 2.5 watts. Depending on the power supply and jumpers used, up to 36 fixtures can be used per run.
- The eW Cove 6" fixture draws 1.3 watts. Depending on the power supply and jumpers used, up to 65 fixtures can be used per run.
- Multiple power supplies and leader cables are needed for installations with more than 36 12" fixtures or 65 6" fixtures.

NOTE: If you want to combine 6" and 12" eW Cove fixtures on a single power supply, use the Configuration Calculator located at www.colorkinetics.com/support to calculate the maximum number of fixtures per run or consult Color Kinetics Application Engineering Services at support@colorkinetics.com.

Power supplies should be located in an accessible, well-ventilated location. The power supply can be located up to 30 feet (9 m) from the first fixture in the run.

Installing the Power Supply

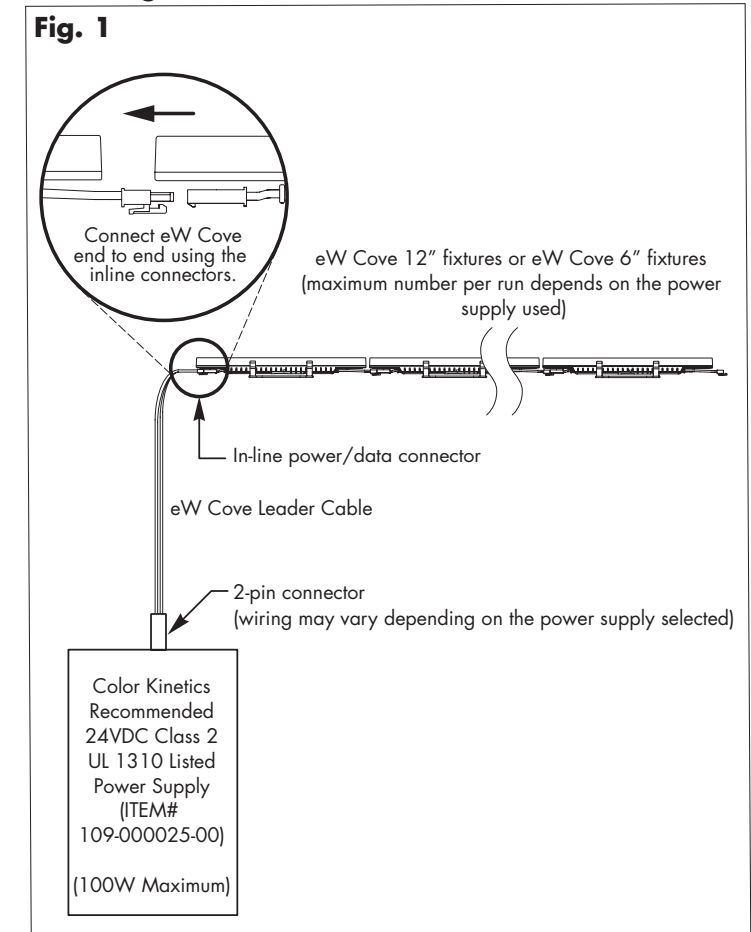
The eW Cove Leader Cable comes with a DC Power Cable. This DC Power Cable is only used to connect the eW Cove Leader Cable to an alternate power supply.

To connect the eW Cove fixtures to the Color Kinetics recommended power supply (ITEM# 109-000025-00):

- The eW Cove DC Power cable is not needed. Connect the eW Cove Leader Cable to the 2-pin connector on the power supply. The other end of the eW Cove Leader Cable will be connected to the first fixture in the run. See Fig. 1.

Wiring may vary depending on the power supply selected. If you use an alternate power supply (other than ITEM# 109-000025-00), you will likely need to connect the eW Cove DC Power Cable to the eW Cove Leader Cable.

Installing the eW Cove Fixtures



To install the eW Cove fixtures:

- Plan the space between fixtures.
- Install the mounting brackets.
- Install the fixtures and connect cables.

Planning Space Between Fixtures

eW Cove fixtures produce the best light effects when mounted end-to-end. However, if you need to insert space between the fixtures, 1-foot and 5-foot jumper cables can be used between the fixtures.

- eW Cove can have up to one inch spacing between fixtures in an end-to-end installation.

If you need:

- 12 inches or less space between fixtures: Use the 1' jumper cable. You can place one 1' jumper cable between every fixture in a run. Do not place more than one 1' jumper cable between two fixtures. If you need more than 1' of space between fixtures, use the 5' jumper cable instead of the 1' jumper cable.
- More than 12 inches between fixtures: Use the 5' jumper cable. You can use up to four 5' jumper cables in a single run. Two 5' jumper cables can be strung together between fixtures for up to 10' of space between fixtures.

If you have a combination of 6" and 12" fixtures, or you are using jumper cables, use the Configuration Calculator located at www.colorkinetics.com/support to calculate the maximum number of fixtures per run.

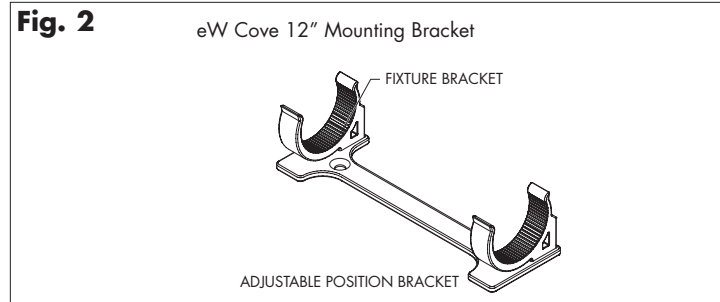
Installing the Mounting Brackets

eW Cove can be mounted on horizontal or vertical surfaces to accommodate your lighting environment.

To install the mounting bracket for 12" fixtures:

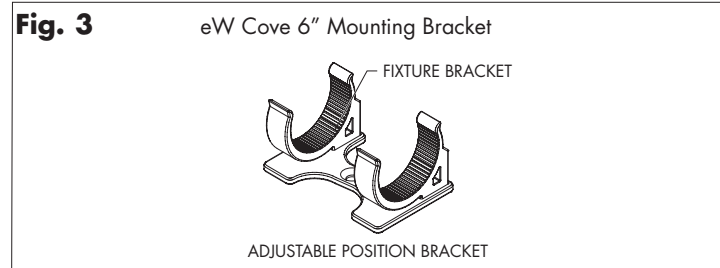
- Install the mounting brackets approximately 12 to 13 inches apart using #6 flat head screws suitable for the mounting surface. See Fig. 2.

TIP: If installation location or conditions prevent you from center mounting the 12" fixture to the bracket, you can slide the bracket to accommodate the light and the surrounding surface.



To install the mounting bracket for 6" fixtures:

- Install the mounting brackets approximately 6 to 7 inches apart using a #6 flat head screw suitable for the mounting surface. See Fig. 3.



Installing the Fixtures and Connecting Cables

- Connect the first fixture in the series to the eW Cove leader cable and snap into the mounting bracket.
- Connect the next fixture in the series to the first and snap into the mounting bracket.
- Continue connecting and installing the eW Cove fixtures until all lights are connected and mounted.
- Connect jumper cables between fixtures as needed.
- Plug the power supply into a wall outlet. For detailed instructions, refer to the installation instructions for the power supply.

Using the Dimming Option

Color Kinetics also provides a Dimming Adapter Kit, which allows you to connect the eW Cove fixtures to a user-supplied 0-10V dimmer or dimming controller. The Dimming Adapter Kit includes a 0-10V Dimming Adapter and a 30-foot (9 m) Dimming Leader Cable.

Figure 4 shows how the dimming option is configured. The following provides general information about the dimming option. For complete details on connecting the dimming option, refer to the *Dimming Adapter Kit User Guide*.

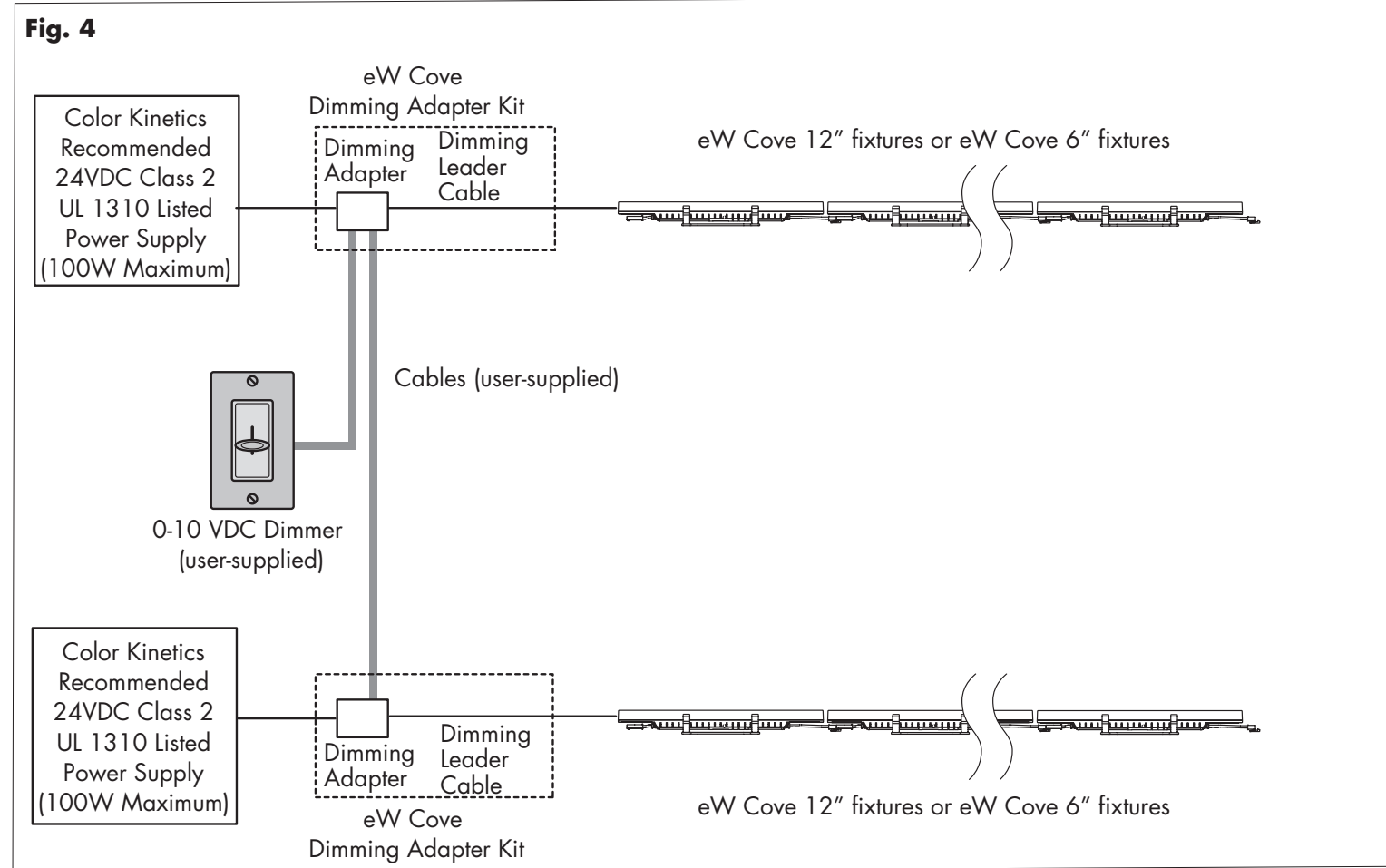
- The Dimming Adapter is connected to the power supply using either the 2-pin connector or the power input screw terminals on the power supply.
- The Dimming Adapter is connected to the Dimming Leader Cable (included in the Dimming Adapter Kit). The Dimming Leader Cable is connected to the first fixture in the run.
- The user-supplied 0-10V Dimmer is connected to the Dimming Adapter via a user-supplied cable.
- If your configuration includes more than one power supply for eW Cove fixtures, each power supply requires a Dimming Adapter. The first Dimming Adapter is connected to the next Dimming Adapter via a user-supplied cable. Only one Dimmer is required for the configuration.
- The Dimming Adapter can be installed into a multi-gang junction box or it can be mounted to a suitable flat surface.

IMPORTANT INFORMATION

Strobe Warning

There is some anecdotal evidence that strobe lighting may induce epileptic symptoms in certain susceptible individuals, although no associated product warnings have been issued by United States government according to the Food and Drug Administration.

If strobe lights are used, some international regulatory agencies¹ recommend keeping flicker rates at or below four flashes per second (as less of the flicker-sensitive population will then be at risk of an attack). This flicker rate applies only to the overall output of any group of lights in direct view. However, when more than one strobe light is used, the flashes should be synchronized. End users should also consider issuing a warning, alerting audience or viewers to the presence of strobe lighting.



eW COVE SPECIFICATIONS

COLOR TEMPERATURES	2700K, 3000K, 4200K
SOURCE	High brightness LEDs
BEAM ANGLE	120° x 120°
HOUSING	Rigid, vented plastic housing 12" (30.5 cm) L x 1.5" (6.8 cm) W x 1.4" (3.5 cm) H (with base) 6" (15.2 cm) L x 1.5" (6.8 cm) W x 1.4" (3.5 cm) H (with base)
CONNECTORS	Integral 3-pin male/female connectors
LISTINGS	UL/cUL, CE
DATA INTERFACE	Color Kinetics Chromasic data interface system
POWER REQUIREMENT	24VDC
POWER CONSUMPTION	For the 12" fixture: 2.5W at full power For the 6" fixture: 1.3W at full power
POWER SUPPLY	PS-96 24V (ITEM# 109-00025-00) or any other 24VDC Class 2 UL 1310 Listed power supply
LEADER CABLE	30-foot (9 m) eW Cove Leader Cable (ITEM# 107-000007-00) or Dimming Adapter Kit (includes 0-10V Dimming Adapter and Dimming Leader Cable) (ITEM# 107-000007-01)
JUMPER CABLES	1-foot (0.3 m) Jumper Cable for iColor Cove EC, iColor Cove QL, and eW Cove (Item# 108-000020-00) 5-foot (1.5 m) Jumper Cable for iColor Cove EC, iColor Cove QL, and eW Cove (ITEM# 108-000020-01)
TEMPERATURE RANGE	-4°F to 122°F (-20°C to 50°C) based on testing of specific product

LED Source Life

In traditional lamp sources, lifetime is defined as the point at which 50% of the lamps fail. This is also termed Mean Time Between Failure [MTBF]. LEDs are semiconductor devices and have a much longer MTBF than conventional sources. However, MTBF is not the only consideration in determining useful life. Color Kinetics uses the concept of useful light output for rating source lifetimes. Like traditional sources, LED output degrades over time (lumen depreciation) and this is the metric for SSL lifetime.

LED lumen depreciation is affected by numerous environmental conditions such as ambient temperature, humidity and ventilation. Lumen depreciation is also affected by means of control, thermal management, current levels, and a host of other electrical design considerations. Color Kinetics systems are expertly engineered to optimize LED life when used under normal operating conditions. Lumen depreciation information is based on LED manufacturers' source life data as well as other third party testing. Low temperatures and controlled effects have a beneficial effect on lumen depreciation. Overall system lifetime could vary substantially based on usage and the environment in which the system is installed.

Temperature and effects will affect lifetime. Color Kinetics rates product lifetime using lumen depreciation to 70% of original light output. When the fixture is running on warm or cool, at room temperature, the LED lifetime is in the range 50,000 – 70,000 hours. This is LED manufacturers' test data. High output is defined as any LED device that is ½ watt or above. For more detailed information on source life, please see www.colorkinetics.com/lifetime.

Warranty

This product is sold pursuant to CK's Standard Terms and Conditions (the "T&Cs") which may be found at <http://colorkinetics.com/howtobuy/buy/terms> and which contain important provisions, including, among others, Limited Warranty, exclusions and limitations on CK's liability for damages, and restrictions on the remedies that are available to you.

¹ Guide to Health, Safety and Welfare at Pop Concerts and Similar Events, HMSO Publications (UK).