

iCOLOR COVE EC

USER GUIDE



COLOR KINETICS INCORPORATED
10 MILK STREET, SUITE 1100
BOSTON, MA 02108
TEL 888 FULL RGB
TEL 617 423 9999
FAX 617 423 9998
INFO@COLORKINETICS.COM
WWW.COLORKINETICS.COM

iColor Cove EC
ITEM# 101-000022-00 (12-inch)
101-000022-01 (7-inch)

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GETTING STARTED

Color Kinetics® iColor Cove® is a low-profile LED cove light featuring Chromasic® technology. iColor Cove EC delivers subtle color-changing light and lighting effects to alcoves, task areas, accent areas, and other confined spaces. This guide contains important information about installing and operating your new iColor Cove EC fixture safely and accurately.

Included In This Box

- (1) iColor Cove EC fixture.
- (2) Mounting screws.
- User Guide.

Additional Items Needed

- iColor Cove EC Leader Cable ITEM # 108-000015-00.
- Linear Track Hardware: Flat head screws suitable for mounting surface.
- sPDS-60ca 24V DMX/Ethernet, ITEM # 109-000021-02 (for DMX and Ethernet applications).
- PDS-60ca 24V Power Supply, ITEM # 109-000016-00 (for Preprogrammed applications).
- Tools (screw gun, pliers, wire cutters, tin snips).

Optional Items

- iColor Cove EC Linear Mounting Track ITEM # 101-000038-00.
- iColor Cove EC 1-foot Jumper Cable ITEM # 108-000020-00.
- iColor Cove EC 5-foot Jumper Cable ITEM # 108-000020-01.

Scope of this Guide

The goal of this user guide is to explain the steps necessary to install iColor Cove EC 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.

DANGER: Ensure that main power supply is off before installing or wiring iColor Cove EC and PDS-60ca 24V power/data supply.

WARNING: iColor Cove EC and PDS-60ca 24V power/data 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 iColor Cove EC or PDS-60ca 24V until you read and understand the installation instructions.

WARNING: Do not use iColor Cove EC 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: iColor Cove EC has no serviceable parts. Do not attempt to open the fixture.

CAUTION: iColor Cove EC is an indoor/dry rated fixture. Do not install outdoors or in a 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.

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

Planning Suggestions

- Consult an Electrical Inspector to approve 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/data supply in relationship to iColor Cove EC fixtures.** The iColor Cove EC leader cable between the power/data supply and the first iColor Cove EC fixture is 30 feet (9 m).
- **Location of iColor Cove EC 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/data supply before installing the iColor Cove EC fixtures.** Refer to the sPDS-60ca 24V User Guide or PDS-60ca 24V Installation Guide.

STEPS TO A SUCCESSFUL INSTALLATION

1. Install the power/data supply.
2. Mark the path and install tracks.
3. Install the iColor Cove EC fixtures.
4. Address the lights.

Installing the Power/Data Supply(s)

Determine a location out of direct view for the power supply(s).

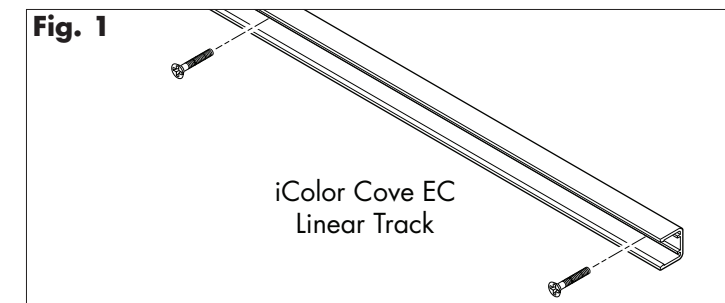
- One PDS-60ca 24V or one sPDS-60ca 24V can support up to 30 iColor Cove EC fixtures (7" or 12"). Multiple power/data supplies are needed for installations with more than 30 fixtures.
- The power/data supply can be located up to 30 feet (9 m) from the first fixture in the series.

NOTE: If you want to combine 7" and 12" iColor Cove EC fixtures on a single power/data supply, use the Configuration Calculator located on www.colorkinetics.com/support to calculate the maximum number of fixtures per power/data supply or consult Color Kinetics Application Engineering Services at support@colorkinetics.com.

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

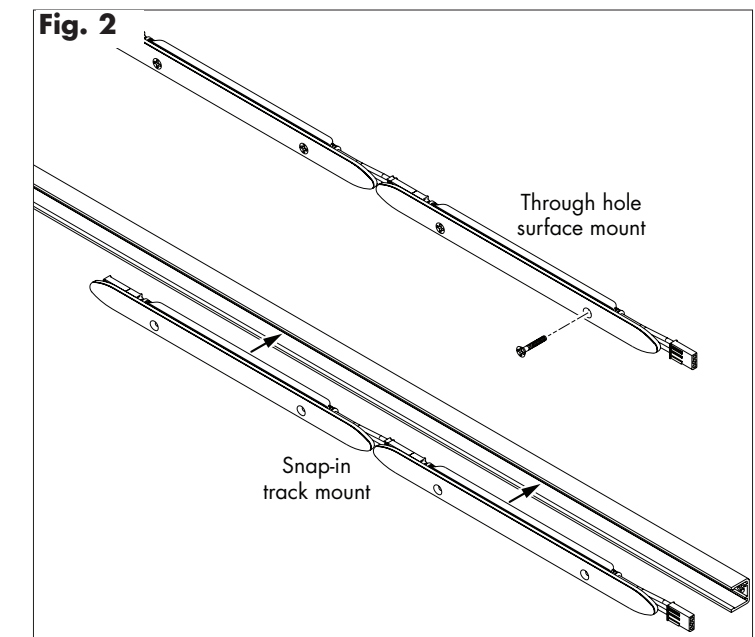
Marking the Path and Installing Tracks

1. Using a pencil or chalk line, mark a centerline path for the lights to follow. For linear installations, the iColor Cove EC Track is ideal for maintaining linear alignment and cable management. The track can be field cut with large wire cutters or tin snips to meet your installation needs. Install iColor Cove EC on horizontal or vertical surfaces to accommodate your lighting environment.
2. Cut track to desired length. Using flat head screws suitable for the mounting surface, drive screws through the plastic track into the attaching surface. Recommended maximum spacing between screws is 16 inches (41 cm). (See Fig. 1.)



Installing the iColor Cove EC Fixtures

- When using the track, simply push the lights into the mounts. (See Fig. 2.)
- When not using the optional track mount, iColor Cove EC can be installed using the provided screws. Using the screw holes located on the iColor Cove EC, fasten the fixture to the installation surface. (See Fig. 2.)



Caution: When using through holes to install iColor Cove EC, do not over tighten screws. Over tightening will result in product damage and void the warranty.

Installing the Fixtures and Connecting Cables

1. Connect the first fixture in the series to the iColor Cove EC leader cable and snap it into the track.
2. Connect the next fixture in the series to the first and snap it into the track.
3. Continue connecting and installing the iColor Cove EC fixtures until all the fixtures are connected and mounted.
4. Plug the leader cable into the fixture and connect it to the power/data supply. For detailed instructions, refer to the sPDS-60ca 24V User Guide or the PDS-60ca 24V User Guide.
5. Data is connected to the iColor Cove EC via the PDS-60ca 24V or sPDS-60ca 24V power/data supply. Data connections vary depending on the type data used with the appropriate PDS-60ca 24V or sPDS-60ca 24V. Refer the figures below.
 - Fig. 3: Preprogrammed control (using PDS-60ca 24V)
 - Fig. 4: DMX control (using sPDS-60ca 24V)
 - Fig. 5: Ethernet control (using sPDS-60ca 24V)

For complete instructions and wiring diagrams for your power/data supply, refer to the PDS-60ca User Guide and wiring diagrams located at www.colorkinetics.com/support.

Addressing iColor Cove EC

The method used to address iColor Cove EC depends on the type of power/data supply being used.

Using sPDS-60ca 24V (for DMX or Ethernet Applications)

When using DMX or Ethernet, use the sPDS-60ca 24V power/data supply with iColor Cove EC. To address iColor Cove EC from sPDS-60ca 24V, first set the base address, and then set up sequential addressing, reverse addressing and group addressing, as needed.

For detailed information on addressing, see the sPDS-60ca 24V User Guide.

Using Preprogrammed PDS-60ca 24V

iColor Cove EC can also be used with the Preprogrammed PDS-60ca 24V power/data supply.

iColor Cove EC fixtures are automatically addressed by the Preprogrammed PDS-60ca 24V.

For detailed information on using the iColor Cove EC with the PDS-60ca 24V, refer to the PDS-60ca 24V User Guide.

If any problems occur during usage, unplug the product immediately and call or email: Color Kinetics Technical Support Group at 1-888-FULL RGB or 617-423-9999 or <http://support@colorkinetics.com>.

WARNING: Do not open, alter or tamper with the product case. This will void the manufacturer's warranty. To avoid electrical shock, never open the iColor Cove EC case. Do not attempt to service the electronic components yourself. Non-expert handling may damage the product and cause injury to the user.

iCOLOR COVE EC SPECIFICATIONS

| | |
|---------------------------|---|
| COLOR RANGE | 64 billion (32-bit) additive RGB colors; continuously variable intensity output range |
| BEAM ANGLE | 120° by 120° |
| SOURCE | 15 LEDs (12-inch), 9 LEDs (7-inch) Red, Green, and Blue |
| HOUSING | Rigid plastic housing |
| CONNECTORS | 3-pin in-line |
| LISTINGS | UL/cUL, CE certified (pending) |
| DATA INTERFACE | Color Kinetics Chromasic data interface system |
| CONTROL | Ethernet, DMX512 or stand-alone |
| POWER REQUIREMENTS | 24VDC |
| POWER CONSUMPTION | 2W Max. at full intensity (full RGB) |
| POWER SUPPLY | PDS-60ca 24V (ITEM# 109-000016-00) and sPDS-60ca 24V (ITEM# 109-000021-02) |
| 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 50% of original light output. When the fixture is running at room temperature using a color wash effect, the lifetime is in the range of 30,000-50,000 hours. This is based on LED manufacturers' test data. For more detailed information on source life, please see www.colorkinetics.com/lifetime.

Fig. 3: Preprogrammed Control (PDS-60ca 24V)

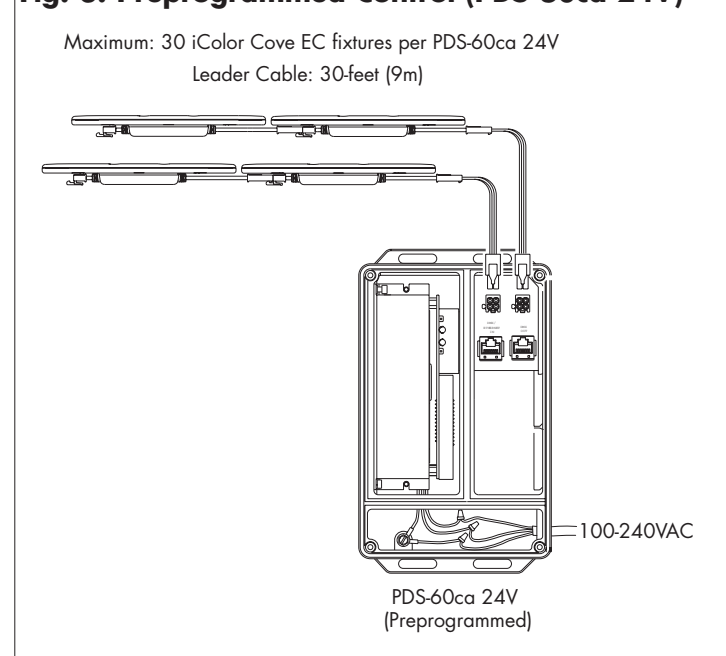


Fig. 4: DMX Control (sPDS-60ca 24V)

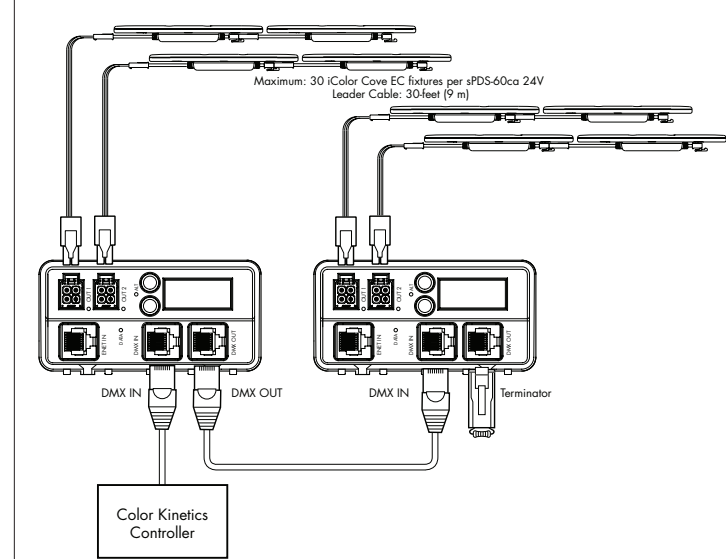
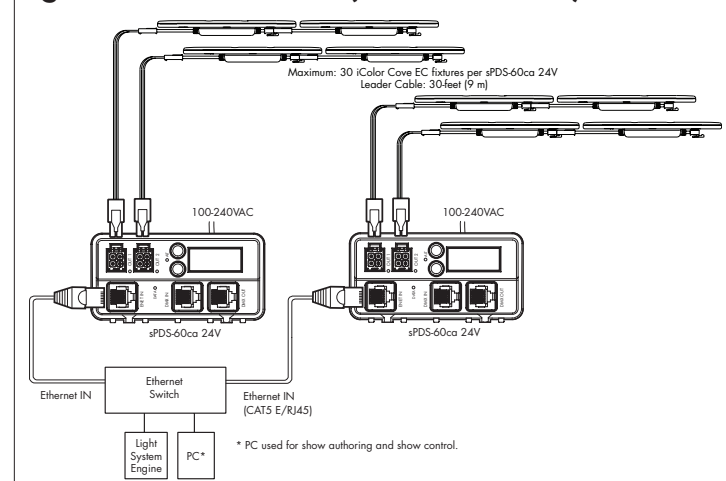


Fig. 5: Ethernet Control (sPDS-60ca 24V)



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.