iColor Cove EC

INSTALLATION INSTRUCTIONS

Item # 101-000022-00 (12 inch)
Item # 101-000022-01 (7 inch)

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GETTING STARTED

Philips 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 document 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.
- Installation Instructions.

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 Pre-programmed 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 document 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 Philips 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 Philips 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.** Philips Color Kinetics recommends that the fixtures are positioned at least 2 in (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)

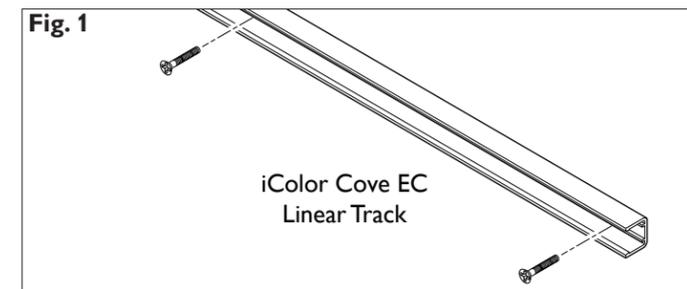Determine a location out of direct view for the power supply(s).

- One PDS-60ca 24V or one sPDS-60ca 24V can support up to 30 iColor Cove EC fixtures (7 in or 12 in). 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 in and 12 in 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 Philips 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.
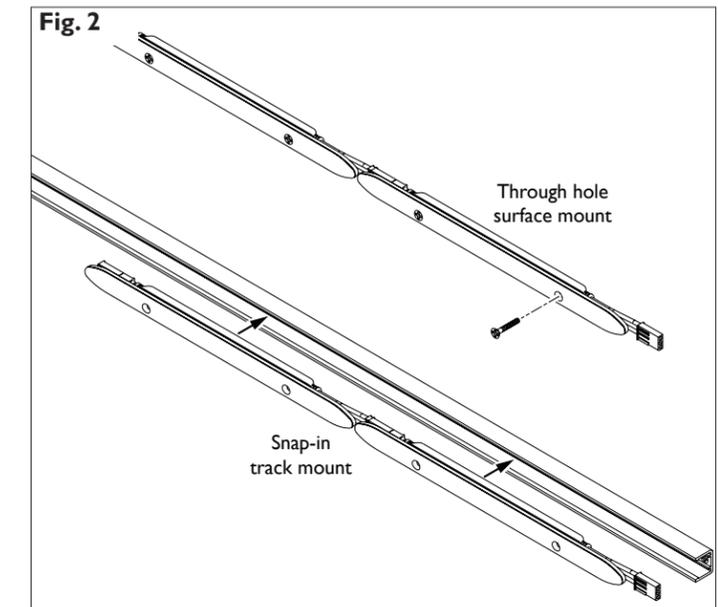
Marking the Path and Installing Tracks

1. Using a pencil or chalk line, mark a center line 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.)

Fig. 1

iColor Cove EC
Linear Track

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.)

Fig. 2

Through hole surface mount

Snap-in track mount

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: Pre-programmed 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.

PHILIPS

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 Pre-programmed PDS-60ca 24V

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

iColor Cove EC fixtures are automatically addressed by the Pre-programmed 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 e-mail: Philips Color Kinetics Technical Support Group at 1-888-FULL RGB or 617-423-9999 or 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

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

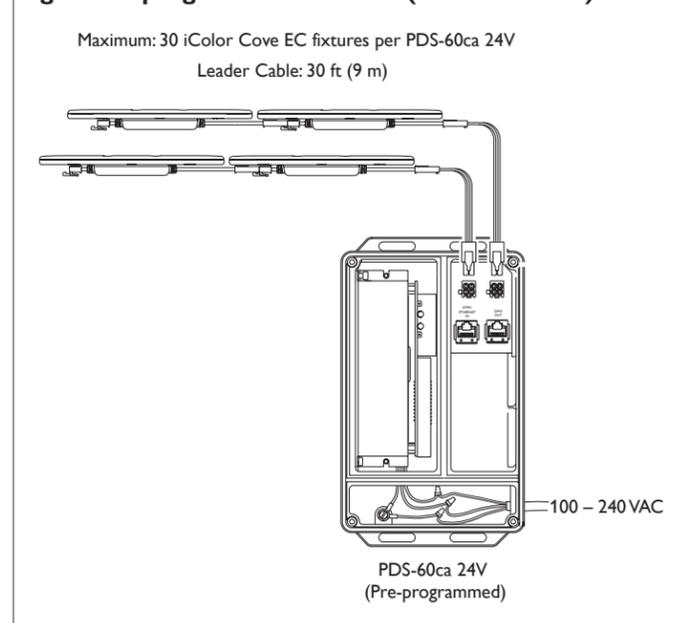### Fig. 3: Pre-programmed Control (PDS-60ca 24V)

Maximum: 30 iColor Cove EC fixtures per PDS-60ca 24V

Leader Cable: 30 ft (9 m)

100 – 240 VAC

PDS-60ca 24V
(Pre-programmed)

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

Maximum: 30 iColor Cove EC fixtures per sPDS-60ca 24V
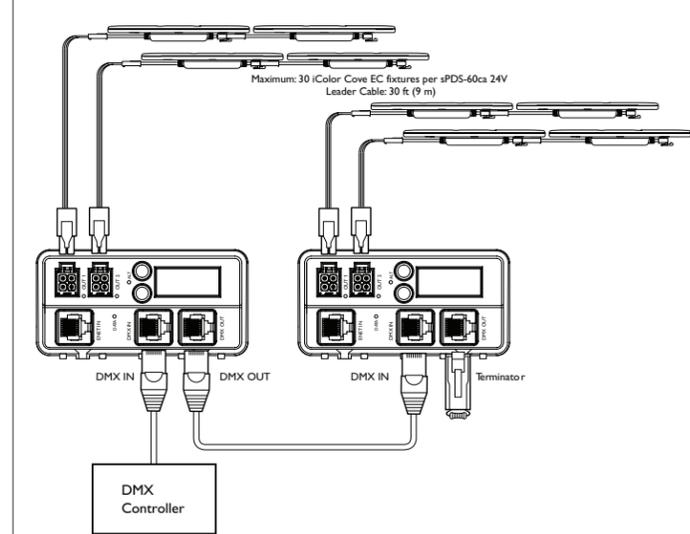Leader Cable: 30 ft (9 m)

DMX IN   DMX OUT   DMX IN   Terminator

DMX
Controller

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

Maximum: 30 iColor Cove EC fixtures per sPDS-60ca 24V
Leader Cable: 30 ft (9 m)

100 – 240 VAC   100 – 240 VAC

sPDS-60ca 24V   sPDS-60ca 24V

Ethernet IN   Ethernet Switch   Ethernet IN (CAT5 E / RJ45)

Light System Engine   PC*

* PC used for show authoring and show control.