

iColor Cove QL 12" iColor Cove QL 6"

USER GUIDE



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iColor Cove QL
ITEM# 101-000051-00 (12" fixture)
ITEM# 101-000051-01 (6" fixture)

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GETTING STARTED

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

Included In This Box

- (1) iColor Cove QL fixture (either 12" or 6")
- Mounting bracket
- User Guide

Additional Items Needed

- iColor Cove EC Leader Cable ITEM # 108-000015-00
- sPDS-60ca 24V Power Supply, ITEM #109-000021-02 (for DMX and Ethernet applications)
- PDS-60ca 24V Power Supply, ITEM # 109-000016-00 (for Pre-programmed applications)
- Flat head screws suitable for mounting surface
- Tools (screw gun, pliers, and wire cutters)

Optional Items

- 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 QL 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 iColor Cove QL and the power/data supply.

WARNING: iColor Cove QL and the 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 QL or the power/data supply until you read and understand the installation instructions.

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

CAUTION: iColor Cove QL 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 iColor Cove QL only with the intended Color Kinetics 24VDC Chromasic, Class 2 power/data supplies.

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 QL 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 QL 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/data supply in relationship to iColor Cove QL fixtures.** The iColor Cove EC leader cable between the power/data supply and the first iColor Cove QL fixture is 30 feet (9 m).

• **Location of iColor Cove QL 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 QL fixtures.** Refer to the sPDS-60ca 24V User Guide or PDS-60ca 24V Installation Guide.

• **Aiming the fixtures.** Fixtures can be rotated in the mounting brackets to adjust the direction of the light.

NOTE: If the fixtures are rotated more than 45°, the mounting brackets will begin to obstruct the light output.

STEPS TO A SUCCESSFUL INSTALLATION

1. Install the power/data supply.
2. Install the iColor Cove QL fixtures.
3. Address the lights.

Installing the Power/Data Supply(s)

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

- The iColor Cove QL 12" fixture draws 3 watts, so one sPDS-60ca 24V can support up to 20 iColor Cove QL 12" fixtures.
- The iColor Cove QL 6" fixture draws 1.7 watts, so one sPDS-60ca 24V can support up to 36 iColor Cove QL 6" fixtures.
- Multiple power/data supplies are needed for installations with more than 20 12" fixtures or 36 6" fixtures.

NOTE: If you want to combine 6" and 12" iColor Cove QL 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.

Installing the iColor Cove QL Fixtures

To install the iColor Cove QL fixtures:

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

Planning Space Between Fixtures

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

- iColor Cove QL 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 two 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.

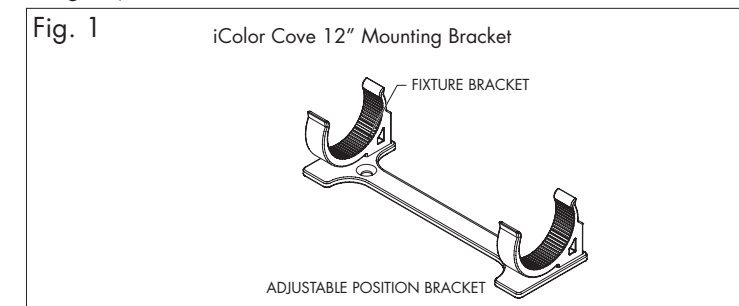
If you have a combination of 6" and 12" fixtures and 1' and 5' jumpers, use the Configuration Calculator located on www.colorkinetics.com/support to calculate the maximum number of fixtures per power/data supply.

Installing the Mounting Brackets

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

To install the mounting bracket for 12" fixtures:

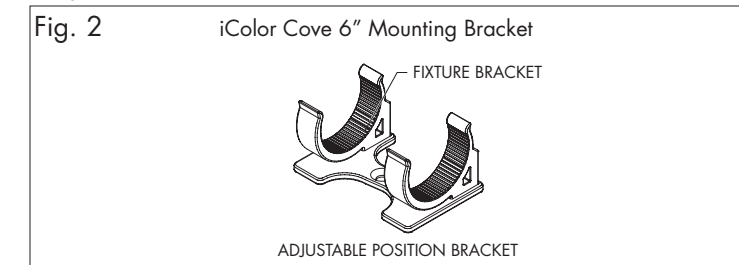
- Install the mounting brackets approximately 12 to 13 inches apart using #6 flat head screws suitable for the mounting surface. (See Fig. 1.)



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:

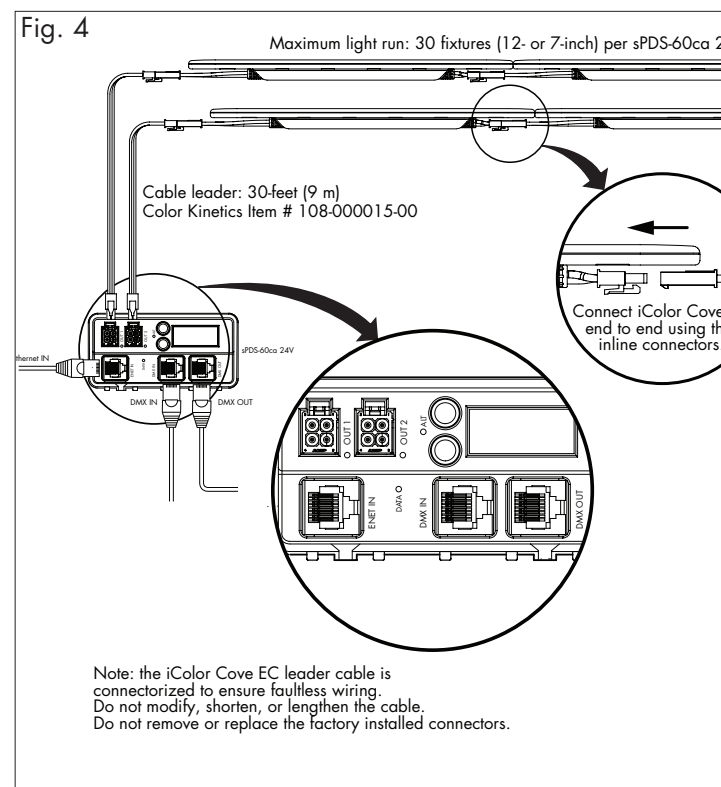
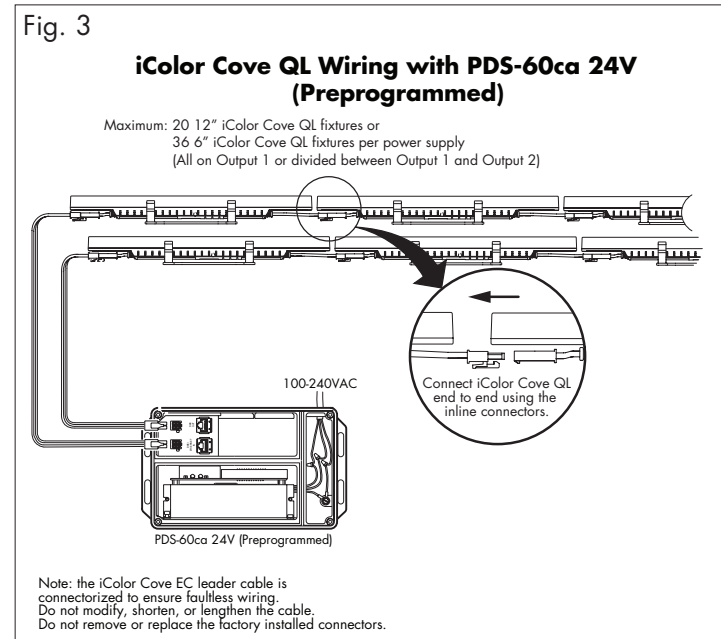
- Install the mounting brackets approximately 6 to 7 inches apart using a #6 flat head screw suitable for the mounting surface. (See Fig. 2.)



Installing the Fixtures and Connecting Cables

- Connect the first fixture in the series to the iColor Cove EC 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 iColor Cove QL fixtures until all lights are connected and mounted.
- Connect jumper cables between fixtures as needed.
- 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 Installation Guide.

Fig. 3 shows the connection using the PDS-60ca 24V (Preprogrammed) and Fig. 4 shows the connection using the sPDS-60ca 24V (DMX/Ethernet).



Addressing iColor Cove QL

The method used to address iColor Cove QL 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 QL. To address iColor Cove QL 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 QL can also be used with the Preprogrammed PDS-60ca 24V power/data supply.

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

For information on using iColor Cove QL with the PDS-60ca 24V, refer to the PDS-60ca 24V Installation Guide.

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.

iCOLOR COVE QL SPECIFICATIONS

COLOR RANGE	64 billion (36-bit) additive RGB color, continuously variable intensity
SOURCE	High brightness LEDs
BEAM ANGLE	100° x 40°
HOUSING	Rigid, vented plastic housing For the 12" fixture: 12" L x 1.5" W x 1.4" H (30 cm) x (3.8 cm) x (3.6 cm) (with base) For the 6" fixture: 6" L x 1.5" W x 1.4" H (15 cm) x (3.8 cm) x (3.6 cm) (with base)
CONNECTORS	Integral 3-pin male/female connectors
LISTINGS	UL/cUL, CE
DATA INTERFACE	Color Kinetics Chromasic data interface system
CONTROL	Color Kinetics line of controllers including Light System Manager, Video System Manager, or other DMX512 (RS485) sources
POWER REQUIREMENT	24VDC
POWER CONSUMPTION	For the 12" fixture: 3W Max. at full power For the 6" fixture: 1.7W Max. at full power
POWER SUPPLY	sPDS-60ca 24V, ITEM# 109-000021-02, for DMX/Ethernet applications PDS-60ca 24V (ITEM# 109-000016-00, for Pre-programmed applications)
LEADER CABLE	30-ft (9 m) iColor Cove EC Leader Cable, Item# 108-000015-00 (30-ft)
JUMPER CABLES	1-ft (0.3 m) iColor Cove EC Jumper Cable Item# 108-000020-00 (1-ft) 5-ft (1.5 m) iColor Cove EC Jumper Cable 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 50% of original light output. When the fixture is running at room temperature using a color wash effect, the range of lifetime is in the range of 30,000-50,000 hours. This is LED manufacturers' test data. 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)