COLOR KINETICS®

iCOLOR™ FRESCO

INSTALLATION GUIDE

c UL us LISTED
SUITABLE FOR WET LOCATIONS

CE

iColor Fresco 1′ (item # 101-000003-02)
iColor Fresco 2′ (item # 101-000003-01)
iColor Fresco 4′ (item # 101-000003-00)

PUB-000023-00 Rev 01

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

GETTING STARTED

This guide contains important information on installing your new iColor™ Fresco fixture. For your protection, please read it carefully before you embark on your colorful adventure. There are very few rules, but those that exist are there for your safety.

iColor Fresco is a Class 1 LED product. It is designed for indoor or outdoor use, and is suitable for wet and damp locations.

INCLUDED IN THIS BOX:

- 1 iColor Fresco fixture
- 1 Installation Guide

ADDITIONAL ITEMS YOU'LL NEED:

- iColor Fresco DMX Addressing Kit (Color Kinetics item # 100-000016-00)
- Terminator Set; includes two L joints (Color Kinetics item # 101-000005-00)
- Daisy Chain Connector; includes one T joint for multiple-fixture installations (Color Kinetics item # 101-000005-01)
- iMOPS-150-00 power supply (Color Kinetics item #109-000004-00)
- Electrical junction boxes (Use waterproof boxes for outdoor installations.)
- 1/2" NPT threaded pipe or conduit
- Silicone pipe sealant

Fig. 1: iColor Fresco fixture

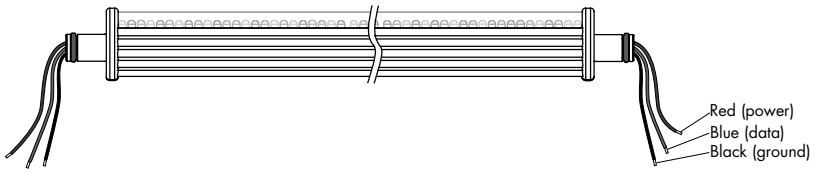


Fig. 2: Single-fixture installation

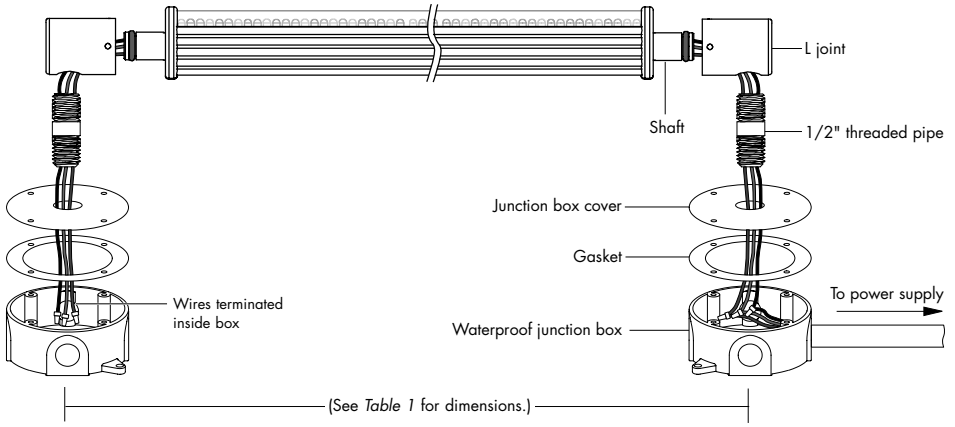


Table 1: Junction box dimensions

iCOLOR FRESCO NOMINAL SIZE	CENTER-TO-CENTER OF JUNCTION BOXES	
1 ft	14 3/4 in ± 1/4	(375 mm ± 6.3)
2 ft	26 1/2 in ± 1/4	(673 mm ± 6.3)
4 ft	50 in ± 1/4	(1270 mm ± 6.3)

ADDRESSING iCOLOR FRESCO

IMPORTANT: It is highly recommended that you set all DMX addresses *before* installing iColor Fresco.

Each iColor Fresco fixture contains one, two, or four segments, depending on the size of the fixture. You can assign one DMX address to an entire fixture, or you can assign a unique address to each segment within the fixture.

The iColor Fresco DMX Addressing Kit lets you set DMX addresses on iColor Fresco fixtures. Refer to the *iColor Fresco DMX Addressing Kit User Guide* for details.

INSTALLING iCOLOR FRESCO

IMPORTANT: It is highly recommended that you set all DMX addresses *before* installing iColor Fresco.

These fixtures should be installed by a qualified electrician in accordance with NEC and relevant local codes.

iColor Fresco fixtures are designed to be powered and controlled by the iMOPS power supply, available from Color Kinetics.

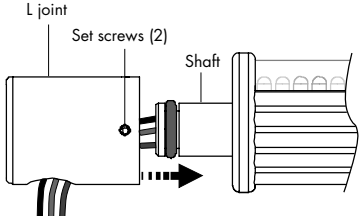
iColor Fresco fixtures have three color-coded wires at each end. The color-coding is:

Red = Power (+24 V DC)
Black = Ground
Blue = Data

SINGLE-FIXTURE INSTALLATION

1. Install junction boxes. (See *Table 1* for center-to-center dimensions.) For outdoor installations, use waterproof junction boxes and seal all conduit outlet holes with silicone pipe sealant.
2. At each end of the fixture, thread the wires through an L joint. Slide the L joint onto the shaft and tighten the set screws. (See *Fig. 3*.)

Fig. 3



3. At each L joint, thread the wires through the threaded pipe. (See Fig. 2.) Apply silicone pipe sealant to the threads, and attach the pipe to the L joint.
4. At each threaded pipe, thread the wires through a junction box cover. (See Fig. 2.) Apply silicone pipe sealant to the threads, and attach the cover to the pipe.
5. At the junction box nearest to the power supply, connect the three color-coded wires to the three power supply wires. Connect Power to Power, Ground to Ground, and Data to Data. (See Fig. 2.)

NOTE: For detailed instructions on connecting the power supply to the junction box, refer to the power supply documentation.

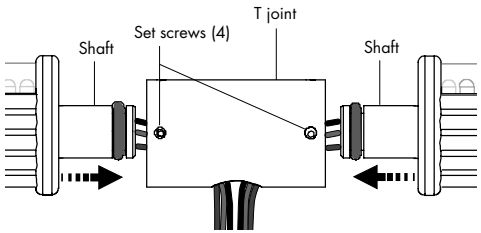
6. At the junction box farthest from the power supply, terminate the wires inside the box. (See Fig. 2.)
7. Attach the covers to the junction boxes. Make sure the waterproof gasket is in place.

MULTIPLE-FIXTURE INSTALLATION

Multiple fixture installations require a T joint between each fixture. T joints are available from Color Kinetics.

1. Install junction boxes. (See *Table 1* for center-to-center dimensions.) For outdoor installations, use waterproof junction boxes and seal all conduit outlet holes with silicone pipe sealant.
2. At every junction of two fixtures, thread the wires through a T joint. Slide the T joint onto the shafts and tighten the set screws. (See *Fig. 4*.)

Fig. 4



3. At the free ends of the first and last fixtures, thread the wires through an L joint. Slide the L joint onto the shaft and tighten the set screws. (See *Fig. 3*.)
4. At each joint, thread the wires through the conduit. Apply silicone pipe sealant to the threads, and attach the conduit to the joint. (See *Fig. 5*.)
5. At each section of conduit, thread the wires through a junction box cover. Apply silicone pipe sealant to the threads, and attach the cover to the conduit. (See *Fig. 5*.)
6. At the junction box nearest to the power supply, connect the three color-coded wires to the three power supply wires. Connect Power to Power, Ground to Ground, and Data to Data. (See *Fig. 5*.)

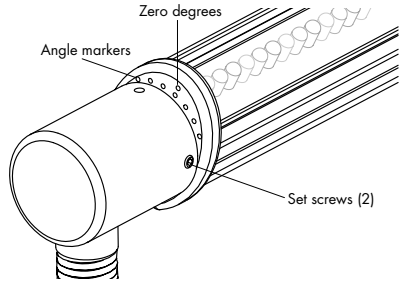
NOTE: For detailed instructions on connecting the power supply to the junction box, refer to the power supply documentation.

7. At the intermediate junction boxes, connect Power to Power, Ground to Ground, and Data to Data. (See *Fig. 5*.)
8. At the junction box farthest from the power supply, terminate the wires inside the box. (See *Fig. 5*.)
9. Attach the covers to the junction boxes. Make sure the waterproof gaskets are in place.

AIMING iCOLOR FRESCO

1. Loosen the set screws to aim the fixture at the desired angle.
2. Align the angle markers with the mark on each joint. The angle markers are spaced at 15° intervals. (See *Fig. 6*.)
3. Tighten the set screws. (Do not over-tighten.)

Fig. 6



iCOLOR FRESCO SPECIFICATIONS

(Refer to the iColor Fresco data sheet for a complete list of specifications.)

Color Range	• 16.7 million (24bit) additive RGB colors • Continuously variable intensity output range
Source	• Variable intensity colored LEDs
Data Interface	• DMX512 (RS485) compatible • Serial or USB compatible with Smart Jack Adapter
Control	• DMX512, or PC
Housing	• Anodized aluminum
Connectors	• Unterminated power and data cables
Listings	• UL listed, CE certified

SAFETY PRECAUTIONS

Warning

Do not open, alter or tamper with the product case. This will void the manufacturer's warranty. Follow all instructions in user guide, and observe all warnings carefully. To avoid electrical shock, never open the iColor Fresco housing. Do not attempt to service the electronic components yourself. Non-expert handling may damage the product and cause injury to the user.

The Don'ts

- Do not use iColor Fresco if the power cable has been damaged.
- Do not allow anything to rest on the fixture.
- Do not keep cables in high traffic areas.
- Do not paint, dye, repackage or alter the physical housing.
- Do not store units in dirty, dusty areas.

The Dos

- Operate only in places where sufficient airflow to cool the unit is present.
- Keep the unit interior dry. Precipitation, humidity and liquids contain minerals that corrode electronic circuits.
- Handle iColor Fresco as you would any delicate product. Be careful not to drop the units.
- Have fun with iColor Fresco and let Chromacore® open your imagination.

If any problems occur during usage, disconnect the product immediately and call or email:

Color Kinetics Technical Support Group:
1-888-FULL RGB or 617-423-9999 or
support@colorkinetics.com

Source Life

Color Kinetics illumination products utilize high brightness LEDs as the illumination source. LED manufacturers predict LED life of up to 100,000 hours MTBF (mean time between failure), the standard used by conventional lamp manufacturers to measure source life. However, like all basic light sources, LEDs also experience lumen depreciation over time. So while LEDs can emit light for an extremely long period of time, MTBF is not the only consideration in determining useful life. 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 [ambient temperature: -4oF to 104oF (-20oC to 40oC), humidity: 0-95% non-condensing humidity, adequate ventilation and air volume] and when operated using typical color-changing effects. Long-term operation outside of these ranges or conditions, or at the upper limits of these ranges or conditions, may subject the product to further degradation of the LED source life, or in extreme cases, failure of internal components. Source life information is based on LED manufacturers' data, as well as other third party testing.

U.S. AND FOREIGN PATENTS AND PATENTS PENDING

Color Kinetics Incorporated grants the purchaser of its lighting products and controllers a personal and non-transferable license to use Chromacore®, its patented technology for networkable control of LED-based color changing lighting fixtures for illumination, display and design. This license is granted only by Color Kinetics Incorporated, and may not be transferred except by the grantor. The design, duplication, manufacture, or sale of other products using networkable control of LED-based color changing lighting may be prohibited and is not licensed hereunder. Other patents pending.

Fig. 5: Multiple-fixture installation