iW PROFILE
USER GUIDE

An INTELLIWHITE™ Product

Color Kinetics Incorporated
10 Milk Street, Suite 1100
Boston, MA 02108 USA
Tel 888 Full RGB
Tel 617 423 9999
Fax 617 423 9998
info@colorkinetics.com
www.colorkinetics.com

CHROMACORE® BY COLOR KINETICS

OPTIBIN® BY COLOR KINETICS

DRY

DAMP

ITEM# 501-000005-00 (Medium)
501-000005-01 (Narrow)
501-000008-02 (Wide)

PUB-000127-00 Rev. 02

Specifications subject to change without notice.

c UL us LISTED 78GF

INTRODUCTION

Welcome to a more colorful world brought to you by Chromacore®, Color Kinetics' patented core technology that generates and controls millions of colors and a variety of lighting effects using a microprocessor to control LEDs. This guide contains important information about installing and operating your new iW™ Profile safely.

Included In This Box

- iW Profile fixture
- 8" 0°/60° mounting track
- User Guide

Additional Items Needed

- Color Kinetics iW PDS-150 (Item# 509-000001-00) or iW PDS-60 (Item # 509-000002-00)
- iW Profile leader cable (Item# 108-000023-00)
- Controller - Color Kinetics iW Scene Controller (508-000001-00/02)
- #6 flat-head mounting hardware and screw driver

Optional Items

- 5-1/2 foot 45° Mounting track (Item# 501-000006-00)
- 5-1/2 foot 0°/60° Mounting track (Item# 501-000006-01)
- 1' or 4' iW Profile jumper cables (Item# 108-000024-00/01)

Scope of This User Guide

The goal of this user guide is to explain in easily understandable language the necessary steps to install iW Profile and assure peak performance. Its intended use is for reference only, by persons who are fully qualified. This document should never be considered a substitute for any provisions 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 that, if not avoided, could result in death or serious injury.

"**CAUTION**" Potentially hazardous situation that, if not avoided, may result in minor or moderate injury or property damage.

DANGER: Ensure that main power supply is off before installing or wiring iW Profile. Failure to adhere to these instructions will result in death or serious injury.

DANGER: iW Profile must be installed by a qualified electrician in accordance with NEC and relevant local codes. Failure to comply will result in death, serious injury, or property damage.

WARNING: Do not install or use iW Profile until you read and understand the installation instructions and safety labels. Failure to do so could result in serious injury or property damage.

WARNING: Do not use iW Profile if the power cables are damaged. Doing so can result in death, serious injury, and property damage.

CAUTION: Use appropriate materials and mounting methods to support the fixture adequately. Failure to do so can result in property damage and void the warranty

CAUTION: iW Profile has no user serviceable parts. Do not attempt to open the fixture. Doing so will result in property damage and void the warranty.

CAUTION: Do not exceed the specified voltage and current input. Doing so will result in property damage and void the warranty.

CAUTION: Do not exceed the maximum number of specified fixtures in a light run. Doing so will result in current overload.

CAUTION: Do not use sharp tools near or on the fixture lens. Doing so will result in property damage and void the warranty.

CAUTION: Do not hot swap. Ensure that power to the fixture is off before connecting or disconnecting fixtures. Hot swapping will result in property damage and void the warranty.

CAUTION: iW Profile is a Class 1 LED product with LED radiation. Do not stare into beam or view directly with optical instruments.

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 iW Profile 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 nature of an iW Profile installation requires planning to ensure a timely, successful installation with minimal complications and down time.

Planning Suggestions

When planning an iW Profile installation, Color Kinetics suggests doing the following:

- Consult an Electrical Inspector to approve all wiring plans.
- Refer to local and state codes for installation compliance.
- Create a Layout Plan drawing, per Lighting Designer or Architect.
- Use Color Kinetics Application Engineering Services.

Installation Considerations

When creating your installation plan, consider the following:

- Zones. iW Profile fixtures are dimmable, color temperature adjustable fixtures that are controlled by zones. Using iW Scene Controller, you can set the brightness level and color temperature from cool to warm, for all lights within a specified zone.

  You create zones by designating each iW PDS as a specific alphanumeric zone, 1-9 or A-F. All fixtures attached to that power/data supply reside within the designated zone. For example, in an installation with two iW PDS power/data supplies where the first power/data supply is set to Zone 1 and the second is set to Zone 2, the lights attached to the first power/data supply are in Zone 1 and the lights attached to the second power/data supply are in Zone 2.

  For installations where all lights are controlled in unison, set each iW PDS in the installation to the same zone designator. For installations where groups of lights are controlled individually, set unique zone designators for each power/data supply.
- Location of iW PDS in relationship to iW Profile fixtures. Each iW Profile has a 50-foot leader cable; therefore, the iW PDS must be located within 50 feet of the fixture. The leader cable can be shortened, but not lengthened.
- Location of the fixture and method of attaching. Mounting hardware is dictated by the mounting surface. Ensure that the hardware used is appropriate for the mounting surface.
- Install and wire iW PDS before installing iW Profile fixtures. Refer to the iW PDS-150 or iW PDS-60 Installation Guides.

STEPS TO A SUCCESSFUL INSTALLATION

1. Set the zone(s) for the iW PDS power/data supply according to the instructions provided in the iW PDS-150 or iW PDS-60 Installation Guides.
2. Install the iW PDS power/data supply.
3. Install the iW Profile fixtures.
4. Connect power and data from the iW PDS to the fixtures.
5. Install iW Scene Controller.

Installing the iW PDS

Determine the location for iW PDS. Each iW Profile fixture uses 15 watts. One iW PDS-150 can support up to ten iW Profile fixtures and one iW PDS-60 can support up to four iW Profile fixtures. Multiple iW PDS-150 power/data supplies are needed for installations with more than ten iW Profile fixtures or which require multiple zones. Multiple iW PDS-60 power/data supplies are needed for installations with more than four iW Profile fixtures or which require multiple zones.

WARNING: Ensure that the power supply is off before wiring or connecting fixtures to iW PDS. Failure to do so can result in serious injuries or death.

CAUTION: Never lengthen the iW Profile leader cable. Doing so will result in property damage and void warranty.

Things to remember:

- Install the iW PDS according to state and local codes.
- Consult an Electrical Inspector to approve all wiring plans.

Refer to the iW PDS-150 or iW PDS-60 Installation Guides for complete installation, wiring, and zone setting instructions. After running power and data to iW PDS and setting the zone, you are ready to attach the iW Profile fixtures.

Installing the iW Profile Fixtures

iW Profile fixtures are installed in series. The in-line connectors provide an end-to-end fixture installation for the best visual effects. Jumper cables are available to add space between the fixtures when needed.

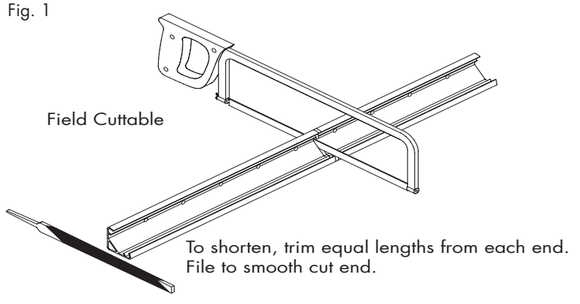
Installing Tracks

iW Profile mounts to surfaces using the provided 8" track or one of the optional 5-1/2' mounting tracks. The optional mounting tracks are ideal for long linear runs, or in direct view installations where the gaps between 8" tracks will be visible, and provide perpendicular (0°), 60°, and 45° mounting.

An 8", 0°/60° track is provided with the fixture. An optional 5 1/2', 0°/60° track is also available. These tracks allow you to position the fixture perpendicular to the mounting surface, or angled at 60° to surface.

NOTE: The track is field cuttable. When trimming the track, trim evenly from each end of the track. For example, to remove 6" from the track length, cut 3" from each end. This ensures that the fixture mounting clips are always securely planted in the track. See Fig. 1.

Fig. 1



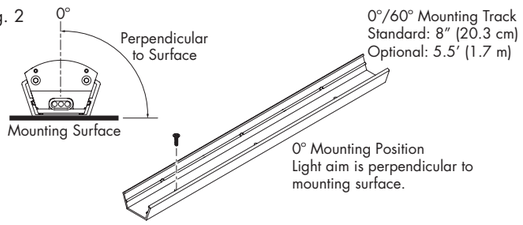
CAUTION: When installing the track, use hardware suitable for the mounting surface.

RECOMMENDED: Consult a structural engineer to confirm size, type, and amount of hardware used will support the full weight of the track and fixture securely to specified mounting surface.

Installing the Fixture Perpendicular to Surface

Use the 0°/60° track to install fixtures perpendicular to the mounting surface. Position the base of the track against surface and attach using #6 flat-head mounting screws suitable for the mounting surface. Press firmly to snap the fixture into the track. See Fig. 2.

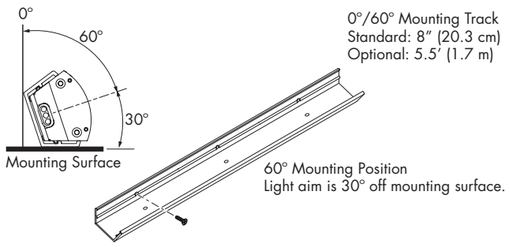
Fig. 2



Installing the Fixture 60° to Surface

Use the 0°/60° track to install fixtures angled 60° to the mounting surface. Position the mounting hole side of the track against the surface and attach using #6 flat-head mounting screws suitable for the mounting surface. Press firmly to snap the fixture into the track. See Fig. 3.

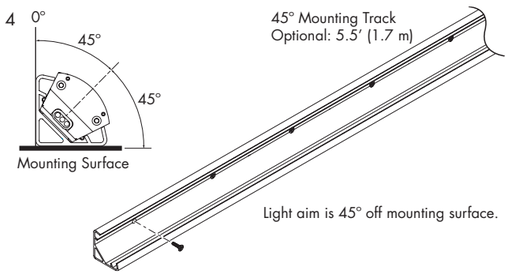
Fig. 3



Installing the Fixture 45° to Surface

Use the 45° track to install fixtures angled 45° to the mounting surface. Position the mounting hole side of the track against the surface and attach using #6 flat-head mounting screws suitable for the mounting surface. Press firmly to snap the fixture into the track. See Fig. 4.

Fig. 4



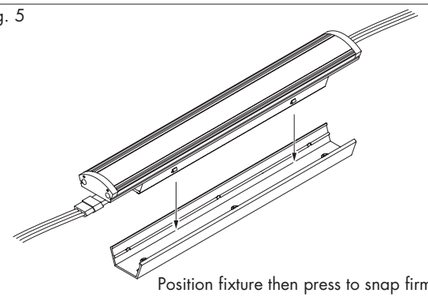
Installing the Fixtures

WARNING: Power must be off before installing iW Profile. Failure to do so can result in serious injuries or death.

1. Connect the first fixture in a run to the leader cable, then press to snap into the track. Connect the next fixture in the series and snap it into the track. See Fig. 5. Consult the iW PDS-150 or iW PDS-60 Installation Guides for the maximum number of fixtures that can be run in a single series.

   The flexible connector cables allow for up to 180° turning radius.

Fig. 5



2. Continue mounting the fixtures, making in-line power/data connections as you go, until all lights in the series are mounted.
3. Insert the terminator into the last fixture of each light series.
4. Repeat Steps 1 through 3 for each iW PDS output.

Making Electrical Connections

iW Profile is compatible with Color Kinetics iW PDS series.

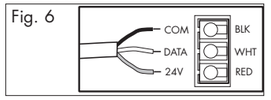
Connecting Power

iW Profile requires 24VDC. After installing the light fixtures, connect the iW Profile leader cables to iW PDS using the provided terminal connectors. See Fig. 6.

The iW Profile leader cable contains three color-coded wires:

- Black = Common
- White = Data
- Red = +24 VDC

Fig. 6



CAUTION: Do not overload iW PDS. Doing so will result in product failure and void the warranty.

CAUTION: You must use the cable provided with the unit. Use of other cables may result in light failure.

Installing The Controller

All lights connected to an iW PDS reside in the zone designated on the iW PDS. iW Scene Controller allows you to control all lights within specified zones. With iW Scene Controller you can adjust the color temperature of the lights from warm to cool and set the brightness level for all lights within a zone.

After installing iW PDS and attaching lights, install iW Scene Controller. Simply plug one end of the 4-pin, 50-foot cable into the plug located on the back of iW Scene Controller, and the other end into the controller plug within iW PDS. iW Scene Controller fits into a standard single-gang wall box and must be located within 50 feet of iW PDS.

Refer to the iW PDS-150, iW-PDS-60, and iW Scene Controller Installation Guides for complete installation, wiring, and operation instructions.

ROUTINE MAINTENANCE

Cleaning: Using a soft cloth, clean surface with mild soap and water. Do not use abrasives or glass cleaners. Doing so may scratch or cloud the lens and housing.

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 agencies[1] 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.

Temperature Monitoring

For protection from extreme temperatures, iW Profile has been designed with a temperature monitoring feature. If operating temperatures rise to an unsafe level, a compensation circuit is triggered and the iW Profile operation is interrupted causing the lights to turn dim warm. After 30 minutes the lights will return to normal operation. The lights can also be reset by cycling the power.

To prevent additional power shut-downs, determine the cause of the overheating and correct the problem.

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

iW PROFILE SPECIFICATIONS

COLOR TEMP RANGE	3000K to 6500K
SOURCE	High intensity LEDs
BEAM ANGLE	20° x 120°, 52° x 120°, or 82° x 82°
HOUSING	Die cast aluminum with enamel finish
LENS	Clear tempered UV resistant lens
CONNECTORS	Unified power and data cable
LISTINGS	UL/cUL, CE
PROTECTION RATING	IP60
DATA INTERFACE	Color Kinetics iW PDS
CONTROL	Color Kinetics line of iW controllers including iW Scene Controller
POWER REQUIREMENT	24VDC
POWER CONSUMPTION	15W Max. at full power
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 1/2 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)