

# iW PROFILE g2

USER GUIDE

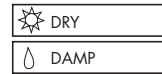


An INTELLIWHITE™ Product

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ITEM# 501-000010-00 (Medium)  
501-000010-01 (Narrow)  
501-000010-02 (Forward Throw Asymmetric)

This product is protected by one or more of the following patents: U.S. Patent Nos. 6,016,038, 6,150,774 and other patents listed at <http://colorkinetics.com/patents/>. Other patents pending.

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Specifications subject to change without notice.

## GETTING STARTED

iW™ Profile g2 is a sleek, low profile, linear white light fixture suitable for many applications, such as museum, display, exhibit, retail, hospitality, and architectural. This guide contains important information about installing and operating your new iW Profile g2 safely and accurately.

### Included In This Box

- iW Profile g2 fixture
- 8" (20.3 cm) 0°/60° mounting track
- 8" (20.3 cm) 45° mounting track (for Asymmetric fixtures only)
- 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 (M3.5) flat-head mounting hardware and screw driver

### Optional Items

- 5-1/2 foot (1.7 m) 45° Mounting track (Item# 501-000006-00)
- 5-1/2 foot (1.7 m) 0°/60° Mounting track (Item# 501-000006-01)
- 1' (0.3 m), 4' (1.2 m), and 8' (2.4 m) iW Profile jumper cables (Item# 108-000024-00/01/02)

### Scope of This User Guide

The goal of this user guide is to explain the steps necessary to install iW Profile g2 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 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 the main power supply is off before installing or wiring iW Profile g2.

**WARNING:** iW Profile g2 must be installed by a qualified electrician in accordance with NEC and relevant state/local codes.

**WARNING:** Do not install or use iW Profile g2 until you read and understand the installation instructions and safety labels.

**WARNING:** Do not use iW Profile g2 if the power cables are damaged.

**CAUTION:** Use appropriate materials and mounting methods to support the fixture adequately.

**CAUTION:** iW Profile g2 has no user serviceable parts. Do not attempt to open the fixture.

**CAUTION:** Do not exceed the specified voltage and current input.

**CAUTION:** Do not exceed the maximum number of specified fixtures in a light run.

**CAUTION:** Do not use sharp tools near or on the fixture lens.

**CAUTION:** Do not hot swap. Ensure that power to the fixture is off before connecting or disconnecting fixtures.

**CAUTION:** iW Profile g2 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, 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 g2 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

iW Profile g2 installation requires planning to ensure a timely, successful installation with minimal complications and down time.

### Planning Suggestions

When planning an iW Profile g2 installation, Color Kinetics suggests doing the following:

- 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](mailto:support@colorkinetics.com).

## Installation Considerations

When creating your installation plan, consider the following:

- **Zones.** iW Profile g2 fixtures are dimmable, color-temperature adjustable fixtures that are controlled in zones. Using iW Scene Controller, you can set the brightness level and color temperature from cool to warm, for all fixtures within a specified zone.

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 PDSs where the first power/data supply is set to Zone 1 and the second is set to Zone 2, the fixtures attached to the first power/data supply are in Zone 1 and the fixtures attached to the second power/data supply are in Zone 2.

For installations where all fixtures are controlled in unison, set each iW PDS in the installation to the same zone designator. For installations where groups of fixtures are controlled individually, set unique zone designators for each power/data supply.

- **Location of iW PDS in relationship to iW Profile g2 fixtures.** The iW Profile leader cable between iW PDS and the first iW Profile g2 fixture is 50 feet (15 m). Thus, iW PDS must be located within 50 (15 m) feet of the first 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 g2 fixtures.** Refer to the iW PDS-150 or iW PDS-60 Installation Guides.

## STEPS TO A SUCCESSFUL INSTALLATION

1. Set the zone(s) for iW PDS according to the instructions provided in iW PDS-150 or iW PDS-60 Installation Guides.
2. Install iW PDS.
3. Install the iW Profile g2 fixtures.
4. Connect the power/data leader cable from iW PDS to the fixtures.
5. Install iW Scene Controller.

### Installing the iW PDS

Determine the location for iW PDS. Each iW Profile g2 fixture draws a maximum of 15 watts. One iW PDS-150 can support up to ten iW Profile g2 fixtures and one iW PDS-60 can support up to four iW Profile g2 fixtures. Multiple iW PDS-150 power/data supplies are needed for installations with more than ten iW Profile g2 fixtures or which require multiple zones. Multiple iW PDS-60 power/data supplies are needed for installations with more than four iW Profile g2 fixtures or which require multiple zones.

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 g2 fixtures.

**WARNING:** Ensure that the power supply is off before wiring or connecting fixtures to iW PDS. Failure to do so could result in death or serious injury and will void the warranty.

**CAUTION:** Never lengthen the iW Profile leader cable. Doing so may result in minor or moderate injury or property damage and will void the warranty.

## Installing iW Profile g2 Fixtures

iW Profile g2 fixtures are installed in series. The in-line connectors support end-to-end fixture installation for the best visual effects. Jumper cables are available to add space between the fixtures when needed.

### Installing Tracks

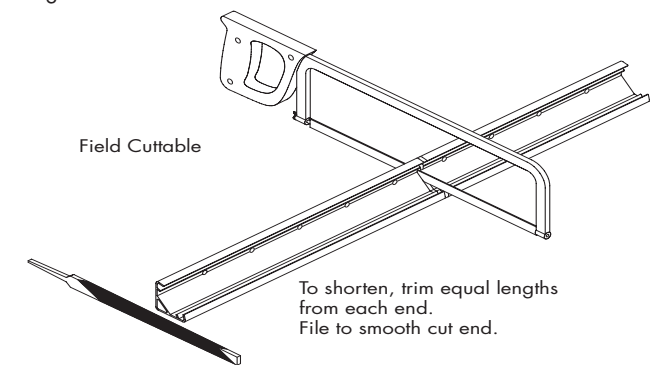
iW Profile g2 mounts to surfaces using the provided 8" (20.3 cm) track or one of the optional 5-1/2' (1.7 m) mounting tracks. The optional mounting tracks are ideal for long linear runs, or for direct view installations where the gaps between 8" (20.3 cm) tracks will be visible. The tracks provide 0°, 60°, and 45° mounting.

An 8" (20.3 cm), 0°/60° track is provided with the fixture. Additionally, an 8" (20.3 cm), 45° track is provided with the Asymmetric fixture.

An optional 5 1/2' (1.7 m), 0°/60° or 45° track is also available. These tracks allow you to position the fixture perpendicular to the mounting surface, or angled at 60° or 45° to the surface.

**NOTE:** The track is field cuttable. When trimming the track, trim evenly from each end of the track. For example, to remove 6" (15 cm) from the track length, cut 3" (7 cm) from each end. This ensures that the fixture mounting clips are always securely planted in the track. See Fig. 1.

Fig. 1



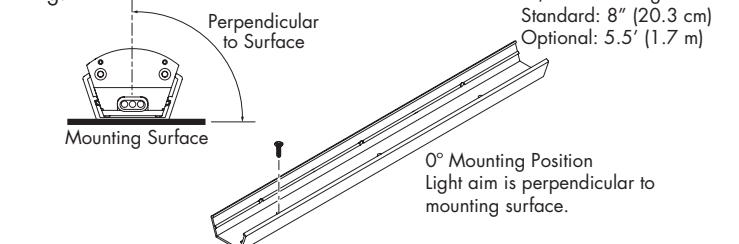
**CAUTION:** When installing the track, use hardware suitable for the mounting surface. Failure to do so may result in minor or moderate injury or property damage and will void the warranty.

**RECOMMENDED:** Consult a structural engineer and state/local codes to confirm size, type, and amount of hardware that will support the full weight of the track and fixture securely to specified mounting surface.

### Installing the Fixture Perpendicular to Surface

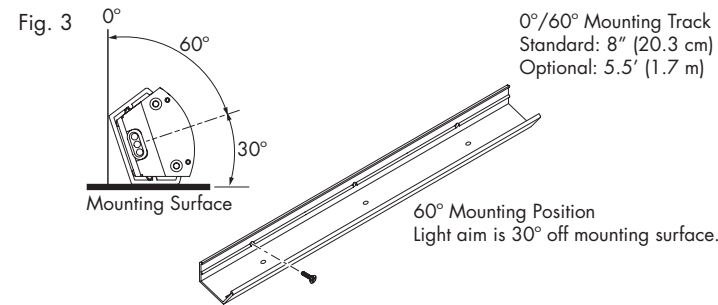
Use the 0°/60° track to install fixtures perpendicular to the mounting surface. Position the base of the track against surface and attach using #6 flat-head mounting screws suitable for the mounting surface. Press firmly to snap the fixture into the track. See Fig. 2.

Fig. 2



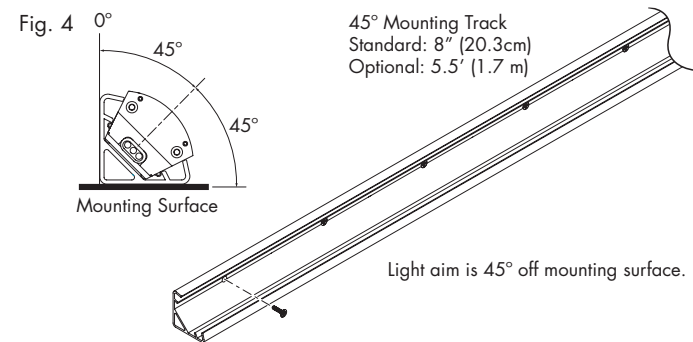
### Installing the Fixture 60° to Surface

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 (M3.5) flat-head mounting screws suitable for the mounting surface. Press firmly to snap the fixture into the track. See 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.



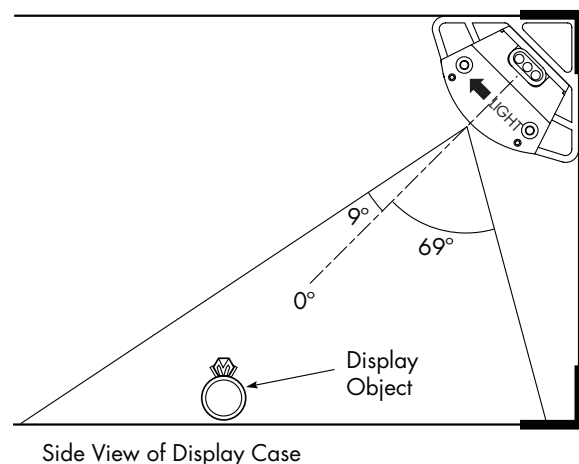
### Aiming Fixtures

For the Narrow and the Medium fixtures, the position of the track determines how fixtures are aimed.

For the Asymmetric fixtures, refer to the label on the female connector end of the end caps of each fixture to determine where the majority of the light will be directed. Position the fixture in the track accordingly. The light direction arrow should point in the direction where the majority of the light will be projected.

For example, if you want to aim most of the light into a display case, position the fixture in the track so the arrow on the end cap of the fixture points into the case. See Fig. 5.

Fig. 5

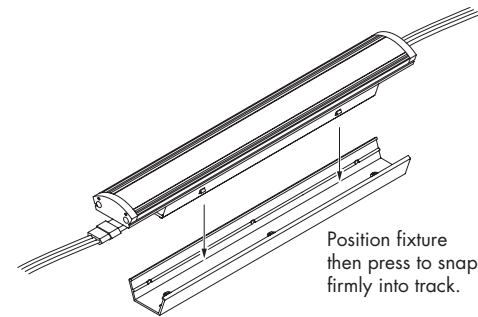


### Installing the Fixtures

**WARNING:** Power must be off before installing iW Profile g2. Failure to do so could result in death or serious injury and will void the warranty.

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. 6. 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. 6



2. Continue mounting the fixtures, making in-line power/data connections as you go, until all fixtures in the series are mounted.
3. Repeat Steps 1 and 2 for each iW PDS output.

### Making Electrical Connections

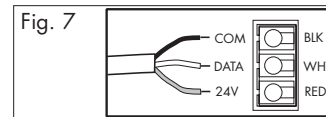
iW Profile g2 is compatible with Color Kinetics iW PDS series.

#### Connecting Power

iW Profile g2 requires 24VDC. After installing the light fixtures, connect the iW Profile g2 leader cables to iW PDS using the provided terminal connectors. See Fig. 7.

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

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



**CAUTION:** Do not overload iW PDS. Doing so may result in minor or moderate injury or property damage and will void the warranty.

**CAUTION:** You must use the cable provided with the unit. Failure to do so may result in minor or moderate injury or property damage and will void the warranty.

### Installing the Scene Controller

All lights connected to an iW PDS reside in the zone designated on iW PDS. iW Scene Controller allows you to 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 (15 m) cable into the connector located on the back of iW Scene Controller, and the other end into the controller connector within iW PDS. iW Scene Controller fits into a standard single-gang wall box. iW Scene Controller must be located within 50 feet (15 meters) 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 the surface of iW Profile g2 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 the United States government according to the Food and Drug Administration. If strobe lights are used, some international regulatory agencies<sup>1</sup> 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 g2 has been designed with a temperature monitoring feature. If operating temperatures rise to an unsafe level, a compensation circuit is triggered and iW Profile g2 operation is interrupted, causing the lights to turn dim warm (3000K). 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 g2 SPECIFICATIONS

<b>COLOR TEMP RANGE</b>	3000K to 6500K
<b>SOURCE</b>	High intensity LEDs
<b>BEAM ANGLE</b>	Narrow, Medium, Asymmetric Forward Throw
<b>HOUSING</b>	Aluminum with enamel finish
<b>LENS</b>	Clear tempered UV resistant lens
<b>CONNECTORS</b>	Unified power and data cable
<b>LISTINGS</b>	UL/cUL, CE
<b>PROTECTION RATING</b>	IP60
<b>DATA INTERFACE</b>	Color Kinetics iW PDS-150 or iW PDS-60
<b>CONTROL</b>	Color Kinetics line of controllers including iW Scene Controller, or LSM* 24VDC
<b>POWER REQUIREMENT</b>	15W Max. at full power
<b>POWER CONSUMPTION</b>	15W Max. at full power
<b>TEMPERATURE RANGE</b>	-4°F to 122°F (-20°C to 50°C) based on testing of specific product

\*For large or complex installations, consider controlling iW Profile g2 with Light System Manager (LSM). Refer to the LSM data sheets or contact support@colorkinetics.com for further information.

### 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](http://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.

<sup>1</sup> Guide to Health, Safety and Welfare at Pop Concerts and Similar Events, HMSO Publications [UK]