

iW BLAST 12

INSTALLATION GUIDE



An INTELLIWHITE™ Product

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501-000007-05 (Aluminum, Clear Lens)

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.



INTRODUCTION

Welcome to a more colorful world brought to you by Color Kinetics and Chromacore®, our patented core technologies that generate and control 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™ Blast 12 safely.

INCLUDED IN THIS BOX

- iW Blast 12
- (2) 8-32 screws for indoor installations
- (4) 10-24 stainless steel screws for outdoor installations
- Allen wrench
- Warranty and Registration cards
- Installation Guide

ADDITIONAL ITEMS NEEDED

- 4" Electrical junction box (rated for your application) with 3.5" center to center distance for mounting locations.
- Color Kinetics iW PDS-150 (Item# 509-000001-00) or iW PDS-60 (Item# 509-000002-00)
- Controller - Color Kinetics IntelliWhite Series
- Adjustable wrench
- Torque wrench
- Safety cable for applications requiring tethering to a structure.
- Phillips head screw driver

SCOPE OF THIS USER GUIDE

The goal of this user guide is to explain in an easily understandable language the necessary steps to install iW Blast 12 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 Blast 12. Failure to adhere to these instructions will result in death or serious injury.

DANGER: iW Blast 12 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 Blast 12 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 Blast 12 if the power cables are damaged. Doing so can result in death, serious injury, and property damage.

WARNING: As dictated by a Structural Engineer and/or local code, install safety cables to iW Blast 12 fixtures. Failure to do so can result in injuries or property damage.

WARNING: When using safety cables, ensure that they comply to the specifications given in this user guide. Failure to comply can result in injuries or 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 Blast 12 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 Blast 12 is a Class 2 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 Blast 12 in such a manner as to comply with all state and local laws, ordinances, regulations, and the American National Standards Institute Safety Code.

PLAN THE INSTALLATION

The nature of an iW Blast 12 installation requires planning to ensure a timely, successful installation with minimal complications and down time.

PLANNING SUGGESTIONS

When planning an iW Blast 12 installation, Color Kinetics suggests doing the following:

- Consult a 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.
- Employ Color Kinetics Application Engineering Services.

INSTALLATION CONSIDERATIONS

When creating your installation plan, consider the following:

- Zones. iW Blast 12 fixtures are dimmable, color temperature adjustable fixtures that are controlled by zones. Using the 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 internally designating each iW power/data supply 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 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 power/data supply 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 power/data supply in relationship to iW Blast 12 fixtures. Each iW Blast 12 has a 60-foot leader cable; therefore, the iW power/data supply must be located within 60 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 the iW power/data supply before installing iW Blast 12 fixtures. Refer to the iW power/data supply or iW PDS-60 Installation Guides.

STEPS TO A SUCCESSFUL INSTALLATION

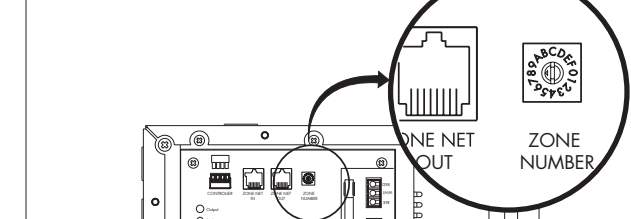
1. Set the zone(s) for the iW power/data supply.
2. Install the iW power/data supply.
3. Install fixtures.
4. Install iW Controller.
5. Connect power and data from the iW power/data supply to the fixtures.

SET THE iW POWER/DATA SUPPLY ZONE

To minimize installation time and effort, set the zone for each iW Data Enabler prior to installing. Zones can be set or changed after installing the iW Data Enabler; however, any settings or changes made after power is engaged requires a power cycle to recognize the change.

Using a small, flat-head screw driver, set the zone for the iW Data Enabler by rotating the zone switch, located next to the LED indicators, to a specific designator—1 to 9 or A to F. The designator zero (0) is reserved for future features. See Fig. 1.

Fig. 1



INSTALL THE iW POWER/DATA SUPPLY

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

CAUTION: Never lengthen the iW Blast 12 cable. Doing so will result in property damage and void warranty.

Determine a location for the iW power/data supply. One iW power/data supply can support up to three iW Blast 12 fixtures, one per fuse group. Multiple iW power/data supplies are needed for installations with more than three iW Blast 12 fixtures or which require multiple zones.

Things to remember:

- Install the iW power/data supply according to state and local codes.
- Consult a 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 the iW power/data supply and setting the zone, you are ready to attach the iW Blast 12 fixtures.

ColorBlast 12 Powercore fixtures are junction box mounted. Ensure that the junction box used in your installation is suitable for the environment.

ColorBlast 12 Powercore can be installed in a daisy-chained series or each fixture can be home-run to a common junction box.

INSTALL iW BLAST 12

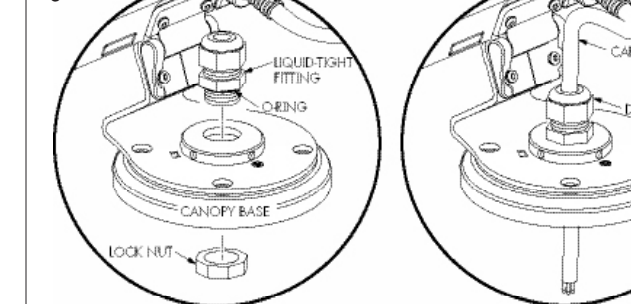
iW Blast 12 can be installed indoors or outdoors, with or without a junction box. When using an electrical junction box, ensure that it is rated for your application and has 3-1/2" center-on-center fixture mounting holes.

THROUGH-BASE CABLE ASSEMBLY

For all installations where the cable must go through the canopy base, follow the directions below to prevent cable damage and to create a water-tight seal for outdoor installations.

1. Screw the liquid-tight fitting into the canopy base. The O-ring must be seated against the canopy opening to ensure a water-tight seal.
2. Insert the fixture cable through the dome nut. Loosen dome nut if necessary. Pull the cable through the fitting. Leave enough cable above the fitting to ensure full fixture head rotation.
3. Tighten dome nut to seal the cable. After 24-hours, tighten the dome nut again to ensure proper sealing force and water-tight seal. See Fig. 2.

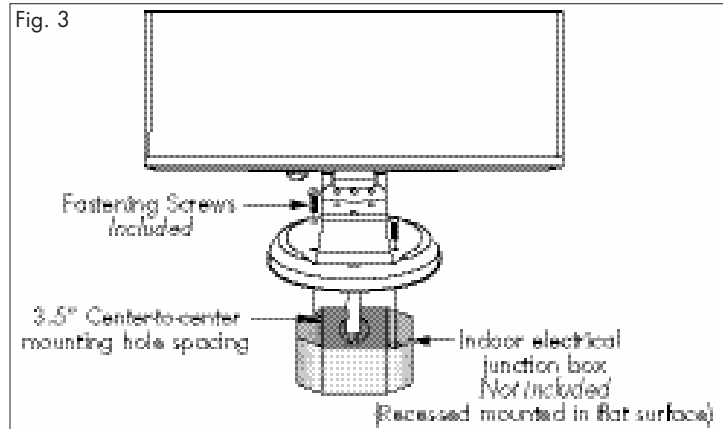
Fig. 2



INDOOR: WALL OR CEILING MOUNT

WARNING: Power must be off before installing the iW Blast 12.

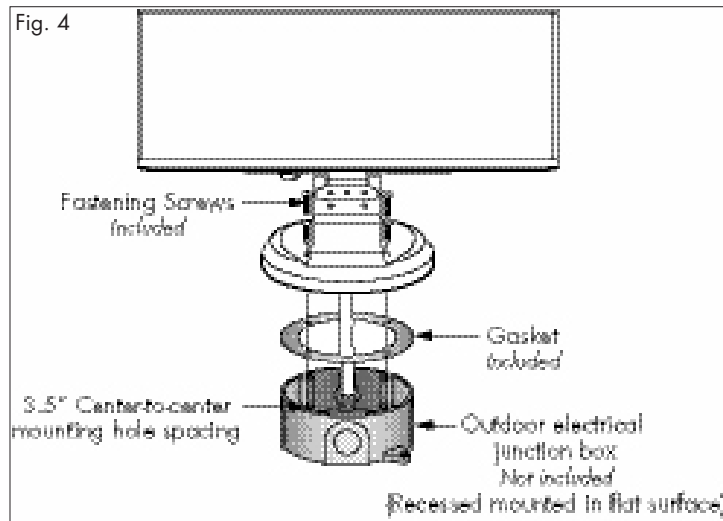
1. Pull fixture leader cable through junction box ensuring that the junction box is located within 60 feet of the iW power/data supply power/data supply.
2. Using the provided screws, attach the mounting bracket of the iW Blast 12 to the junction box See Fig. 3.



OUTDOOR: WALL OR CEILING MOUNT

For outdoor installations, iW Blast 12 must be used with an outdoor rated junction box and the gasket must be used to ensure a watertight seal

1. Thread leader cable through provided gasket. Pull fixture leader cable through junction box ensuring that the junction box is located within 60 feet of the iW power/data supply power/data supply.
2. Using the provided screws, attach the mounting bracket of the iW Blast 12 to the outdoor rated junction box See Fig. 4.



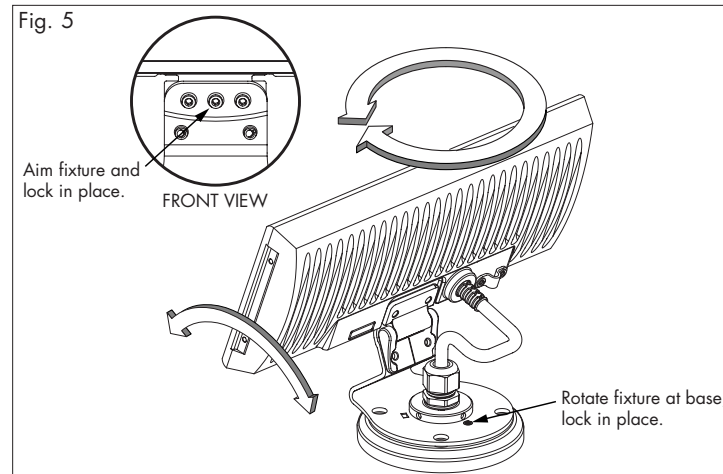
FLOOR MOUNT

When used indoors, iW Blast 12 can be mounted without a junction box. Ensure that the fixture sits flush to the surface and use mounting hardware suitable for the mounting surface.

POSITION FIXTURE

Rotate the light fixture to the desired position. Using the provided Allen wrench, tighten the set screws located on the base to lock in place. Tilt the fixture to the desired angle and tighten the set screws located on the front of housing to lock. See Fig. 5 for location of set screws.

NOTE: For permanent installations, use thread locker to prevent loosening.



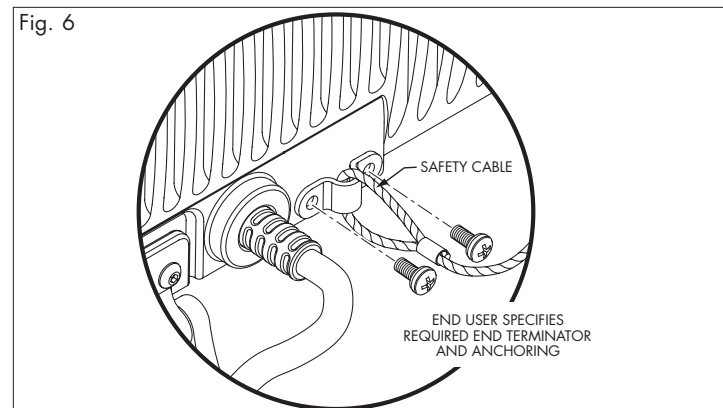
ATTACH SAFETY CABLE

Each fixture is designed for use with a safety cable. When dictated by local or state code, or by a Structural Engineer, attach a safety cable from the fixture to the mounting surface.

1. Located on the back of the ColorBlast 12 Powercore fixture is a safety cable bracket. See Fig. 4.
2. Remove the two screws that attach the cable bracket to the fixture. Loop the safety cable over the cable bracket and reattach to the fixture.
3. Attach the safety cable to the mounting surface.
For the proper mounting method of the safety cable to the installation surface, refer to a Structural Engineer or applicable standards for your specific application.

The safety cables used in the installation should meet the following minimal requirements:

- MATERIAL:** 316 Stainless Steel
SIZE: 5/64-inch (0.78-inch nominal diameter) or larger, minimum break load must be greater than 400 pounds. Maximum diameter is 3/16-inch.
CONSTRUCTION: 7 x 7 (49 wires) preformed stranded
END TERMINATIONS: Determined by installer and/or owner
MOUNTING METHOD: Determined by installer or owner



ELECTRICAL CONNECTIONS

The iW Blast 12 is compatible with Color Kinetics iW power/data supply.

CAUTION: Do not overload iW power/data supply. 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.

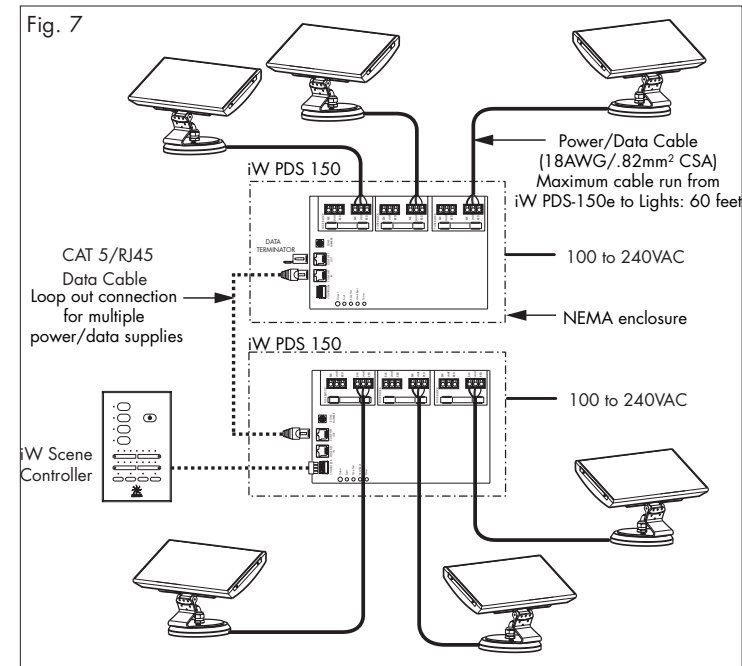
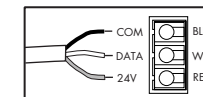
CONNECTING POWER

iW Blast 12 requires 24VDC. After installing the light fixtures, connect the power/data cable to the iW power/data supply. The iW PDS-150 supports three iW Blast 12 fixtures. Wire one fixture per terminal group. See Fig. 7. Each iW PDS-60 supports one iW Blast 12 fixture.

NOTE: Each light must receive power directly from a power supply. You cannot daisy chain power from one iW Blast 12 to another.

The iW Blast 12 cable contains three color-coded wires:

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



ROUTINE MAINTENANCE

Cleaning: Using a soft cloth, clean surface with mild soap and water or window cleaner.

Lubricating: As needed, apply light household oil to the hinges.

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.

TEMPERATURE MONITORING

For protection from extreme temperatures, the iW Blast 12 has been designed with a temperature monitoring feature. If operating temperatures rise to an unsafe level, a compensation circuit is triggered and the iW Blast 12 operation is interrupted causing the lights to turn dull 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 BLAST 12 SPECIFICATIONS

COLOR TEMP RANGE	3000K to 6500K
SOURCE	High intensity LEDs
DATA INTERFACE	Color Kinetics IntelliWhite Controller
FINISH	Black, white, or aluminum powder coated die cast aluminum housing
CONNECTORS	Unified power and data cable
LISTINGS	UL, CE, and IP66
POWER REQUIREMENT	50W, 24VDC

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)