

COLORBLAZE 48



The ColorBlaze® 48 fixture washes large areas with far-reaching, rich, saturated colors and color-changing lighting effects. The streamlined, four-foot black metal housing provides a simple yet powerful solution for large-area scenery and wash lighting for theaters, TV and video studios, concerts, events, casinos, and exhibits. On-board power supplies and addressing capabilities eliminate the need for dedicated support equipment and simplifies specification and installation. The auto-switching power supplies work around the world.

Designed in a rugged extruded aluminum housing, each fixture features attached mounting brackets with two, 1/2-inch (13 mm) mounting holes for use with Cheeseborough clamps or pipe clamps. Locking knobs located on the mounting brackets allow for 180° rotational adjustment and locking without the use of special tools. Optional mounting brackets are available for T-handle mount applications. The housing is equipped to support spread lenses, louvers, and other attachments. A single 3-wire, 18AWG 6-foot (1.8 m) UL/cUL rated cord with IEC and flying leads is supplied. (Consult distribution for cord sets listed for PSE or CE).

Each ColorBlaze 48 fixture has eight individual circuit board assemblies, each with 18 high-intensity LEDs. This makes it sequentially controllable in 6-inch increments by a Color Kinetics DMX controller or a third-party DMX512 controller. Each circuit board is pre-addressed for Light# 1-8/DMX# 1-24. Data can be daisy-chained from fixture to fixture with an RJ-45 data cable or an XLR-5 data cable.

For protection from overheating, ColorBlaze 48 has been designed with a temperature monitoring feature. If operating temperatures rise to an unsafe level, a compensation circuit is triggered and ColorBlaze 48 operation is interrupted causing the lights to turn dull red. After 30 minutes the lights will auto-cycle and return to full intensity.

COLORBLAZE 48 SPECIFICATIONS

COLOR RANGE	16.7 million (24 bit) additive RGB colors; continuously variable intensity output range
SOURCE	High intensity power light emitting diodes (LEDs)
BEAM ANGLE	10°
HOUSING	Extruded aluminum with black finish
POWER CONNECTOR	IEC 15A (max) with C13 plug, UL/cUL rated 2-pole, 3-wire, grounded, 15A, flying leads
DATA CONNECTORS	RJ-45 or XLR-5
LISTINGS	UL/cUL, CE, PSE

COMMUNICATION SPECIFICATIONS

DATA INTERFACE	DMX512
CONTROL	Color Kinetics' line of DMX controllers or other DMX512 (RS-485) controllers

ELECTRICAL SPECIFICATIONS

POWER REQUIREMENT	100-240VAC
POWER CONSUMPTION	280W, 2.5A nominal at full intensity (full RGB)

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE RANGE	-40°F to 122°F (-40°C to 50°C) operating temperature 14°F to 122°F (-10°C to 50°C) starting temperature
--------------------------	--

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 80,000-100,000 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.

OPTIBIN®

There are inherent variations in the fabrication processes of all semiconductor materials. For LEDs, this variance results in differences in the color and intensity of light output as well as electrical characteristics. Due to these differences, LED manufacturers sort production into "bins," but insuring the availability of a single bin is very difficult. To minimize this issue and achieve optimal color consistency in its products, Color Kinetics has developed and uses a proprietary technology called Optibin. Optibin is an advanced production binning optimization process that minimizes the effects of LED variance for the best possible output uniformity in the final product. Color Kinetics Optibin technology gives the most consistent control of color and intensity from product to product.

CHROMACORE®
BY COLOR KINETICS

OPTIBIN®
BY COLOR KINETICS



ITEM#116-000016-00

This product is protected by one or more of the following U.S. patents and their foreign counterparts: 6,016,038, 6,150,774, 6,292,901, 6,340,868, 6,777,891, 6,788,011, 6,806,659, 6,969,954, 6,975,079, 7,186,003, and 7,221,104. Other patents pending.

Copyright © 2003-2007 Color Kinetics Incorporated. All rights reserved.

Chromacore, Chromasic, CK, the CK logo, Color Kinetics, the Color Kinetics logo, Color Kinetics The Leader in Intelligent Light, ColorBlast, ColorBlaze, ColorBurst, ColorCast, ColorPlay, ColorScape, DIMand, Direct Light, EssentialWhite, eW, iColor, iColor Cove, IntelliWhite, iW, iPlayer, Light Without Limits, Optibin, Powercore, QuickPlay, Sauce, the Sauce logo, and Smartfence are either registered trademarks or trademarks of Color Kinetics Incorporated in the United States and/or other countries.

All other brand or product names are trademarks or registered trademarks of their respective owners.

BR0116 Rev 07

Specifications subject to change without notice. Refer to www.colorkinetics.com for the most recent data sheet versions.

COLORBLAZE 48

PHOTOMETRIC PERFORMANCE

Photometric data is based on test results from an independent testing lab.

SOURCE SPECIFICATIONS

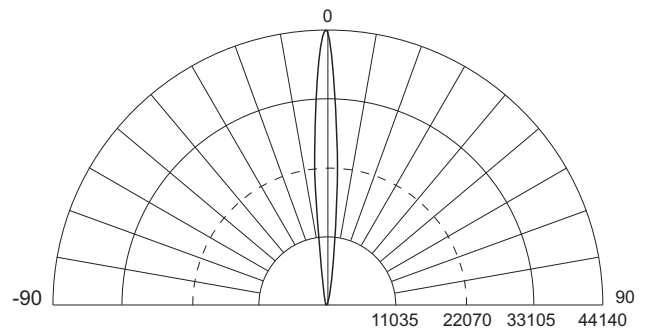
Optics:	Clear polycarbonate
Source:	144 LEDs (48 Red, 48 Green, 48 Blue)
Beam Angle:	10° (at 50% of peak illuminance)
Distribution:	Symmetric direct illumination
CCT:	Adjustable 1,000 – 10,000K
CRI:	Not measurable (CIE 13.3-1995)

ILLUMINANCE DISTRIBUTION

7.9 85.0	10.7 115.2	11.9 128.1	11.4 122.7	9.6 103.3	6.9 74.3	6.0'/2.0m
15.3 164.7	25.3 272.3	29.3 315.4	27.6 297.1	19.1 205.6	10.0 107.6	
52.8 568.3	99.1 1066.7	107.0 1151.7	109.0 1173.3	68.0 732.0	18.0 193.8	3.0'/1.0m
59.0 635.1	144.0 1550.0	183.0 1969.8	183.0 1969.8	140.0 1507.0	54.6 587.7	
23.4 251.9	82.5 888.0	127.0 1367.0	125.0 1345.5	112.0 1205.6	57.3 616.8	
10.1 108.7	25.5 274.5	38.9 418.7	40.5 435.9	35.4 381.0	19.6 211.0	0.0'/0.0m
3.0'/1.0m		0'/0m		3.0'/1.0m		

Units: Footcandles (top)/Lux (bottom)
10.8 lux = 1 fc
Measured on: All, reflectance model 80/50/20%
Distance from surface: Bottom of grid, 3' (1.0 m) from surface, light at a 45° angle off horizontal

CANDLE POWER DISTRIBUTION



Measured on: White
Beam center: 44140 cd
Thin dashed line: Indicates 50% of peak
Multipliers: 0.33 Red, 0.50 Green, 0.18 Blue

ILLUMINANCE

COLOR	3' 1m	6' 2m	9' 3m	15' 5m
WHITE	2162.0 23271.8	675.0 7265.7	253.0 2723.3	127.0 1367.0
RED	721.2 7763.5	225.2 2423.8	84.4 908.5	42.4 456.0
GREEN	1070.2 11519.5	334.1 3596.5	125.2 1348.0	62.9 676.7
BLUE	393.5 4235.5	122.9 1322.4	46.0 495.6	23.1 248.8

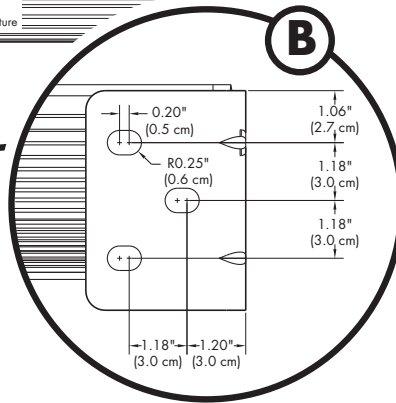
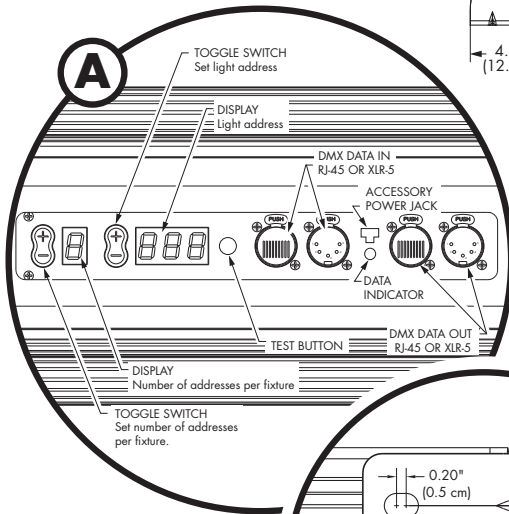
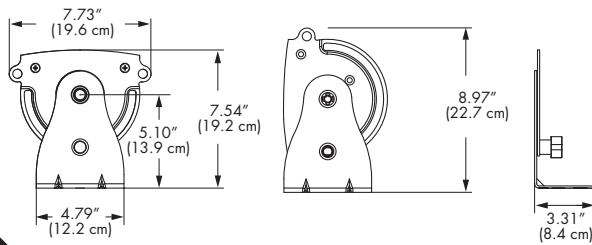
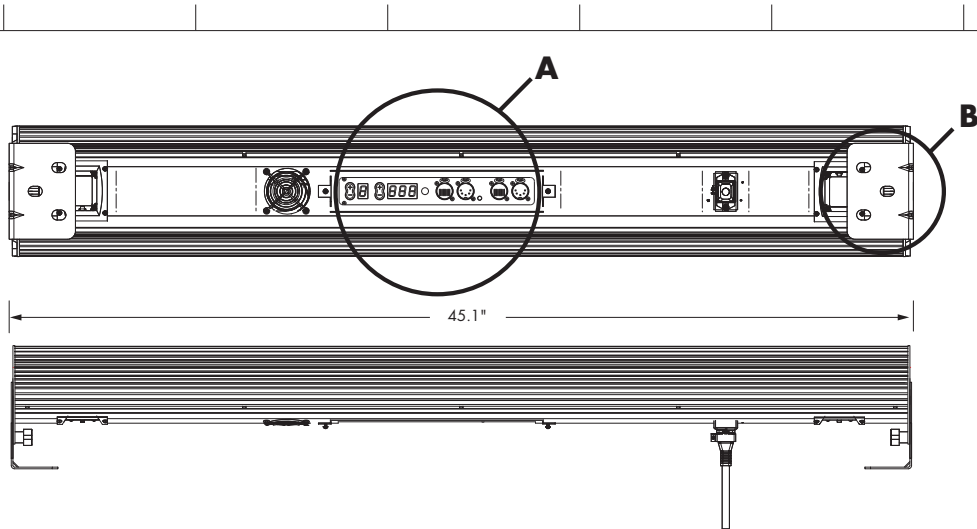
Measured in Footcandles (top)/Lux (bottom) on axis.
Measured on: All, reflectance 0.

LIGHT OUTPUT

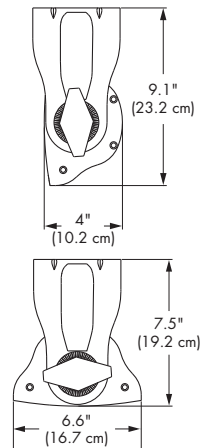
COLOR	TOTAL OUTPUT (lumens)	POWER (Watts)	EFFICACY (Lm/W)
WHITE	2282	240.0	9.5
RED	761.3	84.0	9.1
GREEN	1129.6	84.0	13.4
BLUE	415.3	84.0	4.9

COLORBLAZE 48

PHYSICAL DIMENSIONS



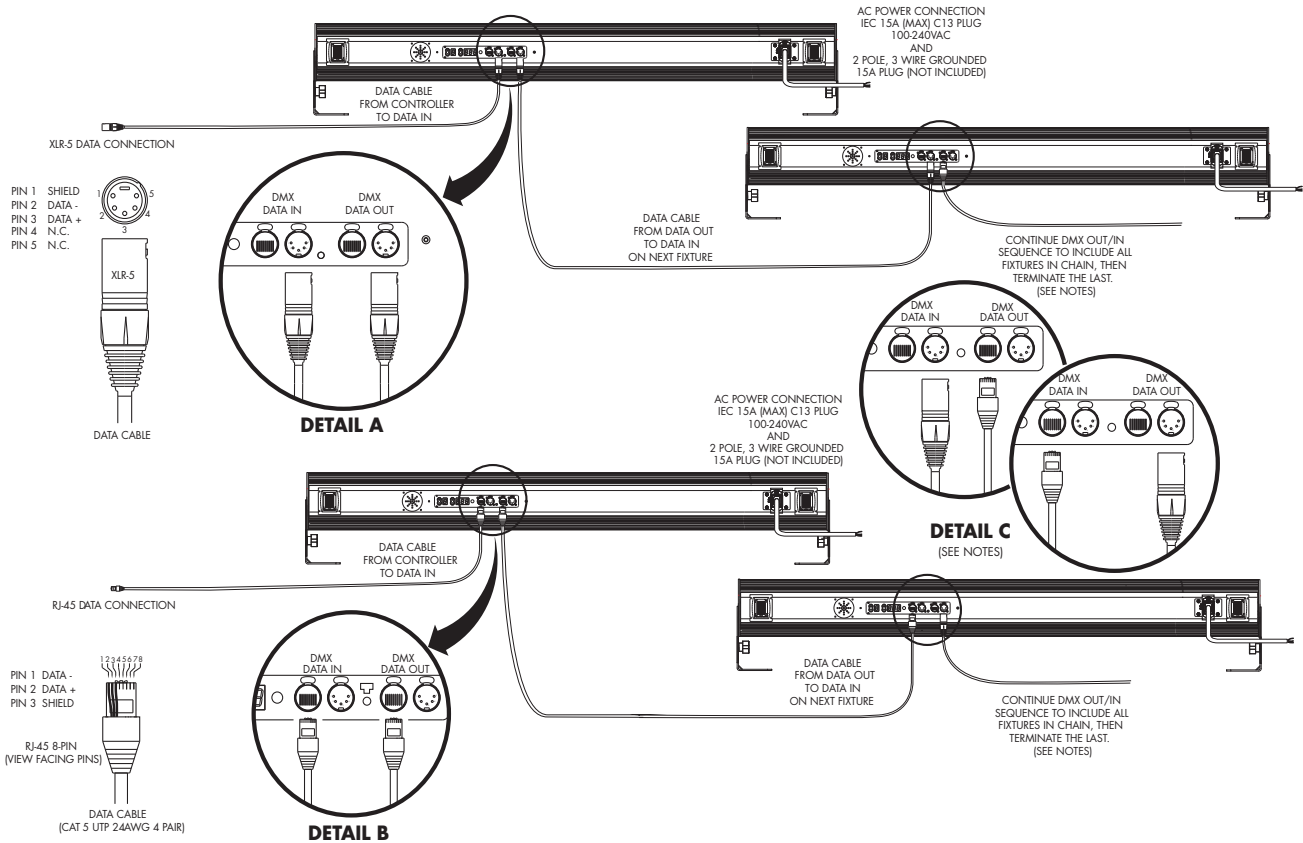
OPTIONAL MOUNTING BRACKET FOR T-HANDLE MOUNTING



COLORBLAZE 48 ITEM# 116-000016-00	
WEIGHT (APPROX)	40.0 lb (18.1 kg)
POWER CABLE	IEC 15A (max) with C13 plug
POWER REQUIREMENT	100-240VAC (280W)

COLORBLAZE 48

FUNCTIONAL FLOW DIAGRAM



NOTES:

1. PLACE TERMINATOR IN DMX DATA OUT PORT OF THE LAST FIXTURE IN A CHAIN.
2. MAXIMUM DMX DATA RUN FROM DMX SOURCE TO LAST FIXTURE IN CHAIN IS 1 000 FEET (OR 300 m).
3. DMX DATA CHAINS NEED NOT BE CONNECTOR SPECIFIC, FOR EXAMPLE: XLR-5 INPUT WITH RJ-45 OUTPUT AND VICE VERSA. SEE DETAIL C.
4. THE ACCESSORY POWER JACK IS FOR USE WITH COLOR KINETICS PRODUCTS ONLY.

For complete installation instructions and safety precautions, refer to the ColorBlaze 48/72 User Guide and wiring diagrams located at www.colorkinetics.com/support.

Additional Items	
Power Plug	2 Pole, 3 Wire, Grounded, 15A Power Plug
Controller	Color Kinetics DMX controller or DMX512 compatible controller
Data Cables	RJ-45 or XLR-5 data cables