



COLORBLAZE 48

POWERED BY CHROMACORE



Color Kinetics® ColorBlaze™ 48 is a Chromacore®-powered product, in the bColor Series, designed for washing large areas with far-reaching, rich, saturated colors, and color changing effects. ColorBlaze 48's on-board power supply and addressing capabilities eliminate the need for special equipment, simplifying specification and installation, and the auto-switching power supply is suited for both domestic and international use. The streamlined, four-foot housing provides a simple yet powerful solution for large-area scenery and wash lighting for venues such as theaters, TV studios, concerts, events, casinos, and exhibits. ColorBlaze 48 is the perfect foot light for TV productions and Broadway shows.

Designed in a stylish and rugged extruded aluminum housing, each fixture features attached mounting brackets, each with three, 1/2-inch (1.3 cm) mounting holes for use with Cheeseborough clamps or pipe clamps. Locking knobs located on the mounting brackets allow for 360° rotation, locking, and adjustment without the use of special tools. The housing is equipped to affix spread lenses, louvers, and other attachments and is available in a black or white painted finish. A single 3-wire, 4-foot (1.2 m) cable provides power directly from a 100VAC to 240VAC power source via a 2-pole, 3-wire, grounded, 20A plug (not included).

Each ColorBlaze 48 has 8 individual circuit board assemblies with 18 high-intensity LEDs per board making it sequentially controllable in 6-inch increments by a Color Kinetics controller or a third-party controller. Data can be daisy-chained from fixture to fixture with an RJ45 data cable or an XLR-5 data cable.

For protection from extreme temperatures, 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 (24bit) additive RGB colors; continuously variable intensity output range
SOURCE	High intensity power light emitting diodes (LEDs)
BEAM ANGLE	22°
HOUSING	Extruded Aluminum with black or white finish
POWER CONNECTOR	2-pole, 3-wire, grounded, 20A (not included)
DATA CONNECTORS	RJ45 or XLR-5
LISTINGS	C-UL US listed, CE certified

COMMUNICATION SPECIFICATIONS

DATA INTERFACE	DMX 512
CONTROL	Color Kinetics full line of controllers or other DMX512 (RS485) controllers

ELECTRICAL SPECIFICATIONS

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

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE RANGE	-4°F to 122°F (-20°C to 50°C) based on testing of specific product
--------------------------	--

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: -4°F to 104°F (-20°C to 40°C), 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.

COLOR CONSISTENCY

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.



ITEM# 116-000008-00 (Black)
116-000008-01 (White)

U.S. PATENTS 6,016,038, 6,150,774 AND 6,340,868
EUROPEAN PATENT 1,016,062
OTHER PATENTS PENDING

©2003 Color Kinetics Incorporated. All rights reserved.
Chromacore, Color Kinetics, the Color Kinetics logo, ColorBlast, ColorBurst, ColorPlay, ColorScape, iColor, iColor Cove, iPlayer, QuickPlay, and Smartjuice are registered trademarks, and Chromatic, ColorBlaze, and Optibin are trademarks of Color Kinetics Incorporated.

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

BR0116 Rev 00

Specifications subject to change without notice.

COLORBLAZE 48

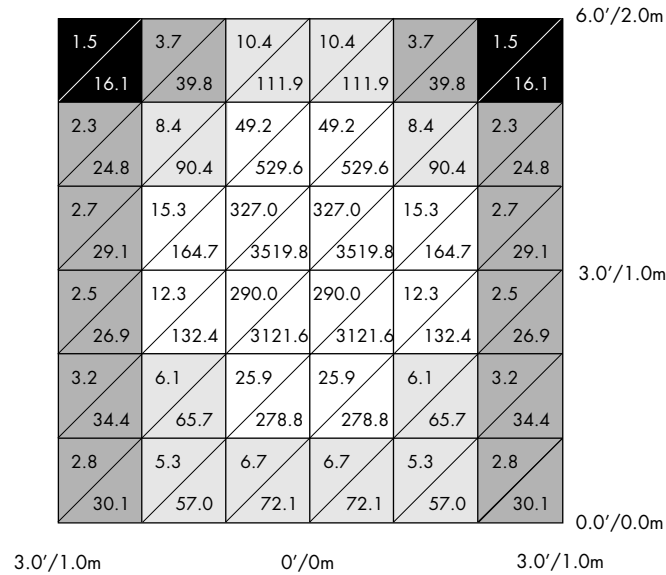
PHOTOMETRIC PERFORMANCE

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:	22° (at 50% of peak illuminance)
Distribution:	Symmetric direct illumination
CCT:	Adjustable 1,000–10,000K
CRI:	Not measurable (CIE 13.3-1995)

ILLUMINANCE DISTRIBUTION



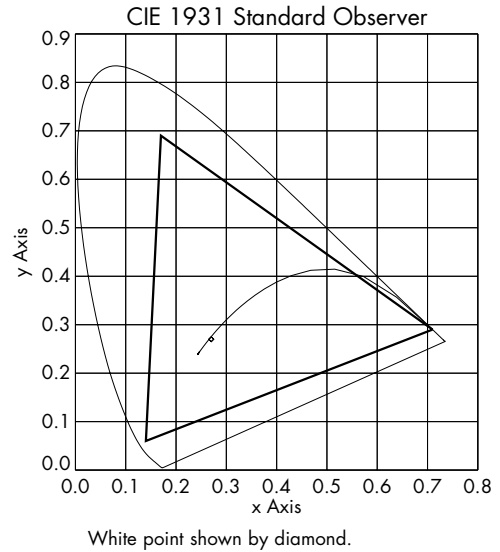
Units:	Footcandles/Lux
Measured on:	White
Distance from surface:	3'/1m (from bottom of grid with light at a 45° angle)
Multipliers:	0.31 Red, 0.51 Green, 0.26 Blue

ILLUMINANCE

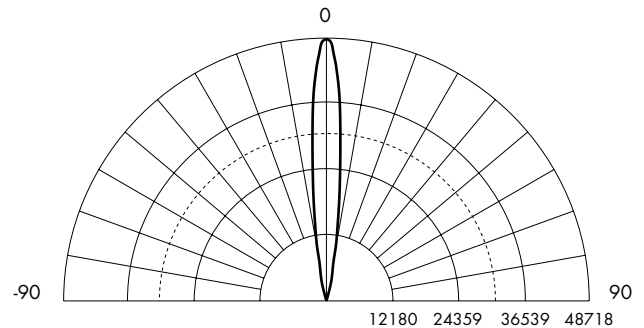
COLOR	3' 1m	6' 2m	9' 3m	15' 3m
WHITE	5180.3 55761.1	1295.1 13940.3	575.6 6195.7	207.2 2230.4
RED	1605.9 17285.9	401.5 4321.5	178.4 1920.7	64.2 691.4
GREEN	2642.0 28438.2	660.5 7109.5	293.6 3159.8	105.7 1137.5
BLUE	1346.9 14497.9	336.7 3624.5	149.7 1610.9	53.9 579.9

Measured in Footcandles/Lux on axis.

GAMUT



CANDLE POWER DISTRIBUTION



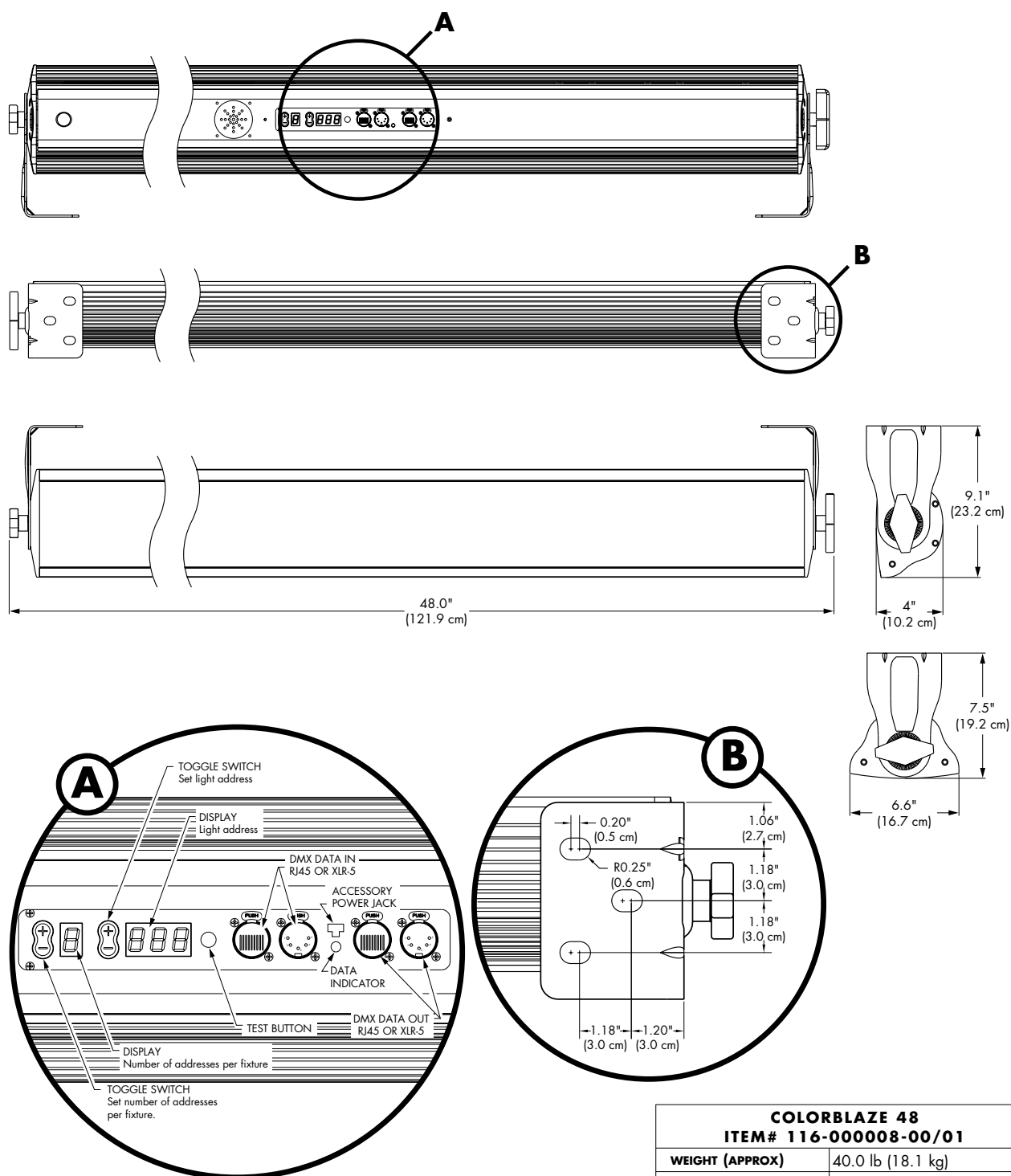
Measured on:	White
Beam center:	48,718 cd
Thin dashed line:	Indicates 50% of peak
Multipliers:	0.31 Red, 0.51 Green, 0.26 Blue

LIGHT OUTPUT

COLOR	TOTAL OUTPUT (LUMENS)	POWER (WATTS)	EFFICACY (lm/w)
WHITE	2390	240.0	10.0
RED	740.9	84.0	8.8
GREEN	1218.9	84.0	14.5
BLUE	621.4	84.0	7.4

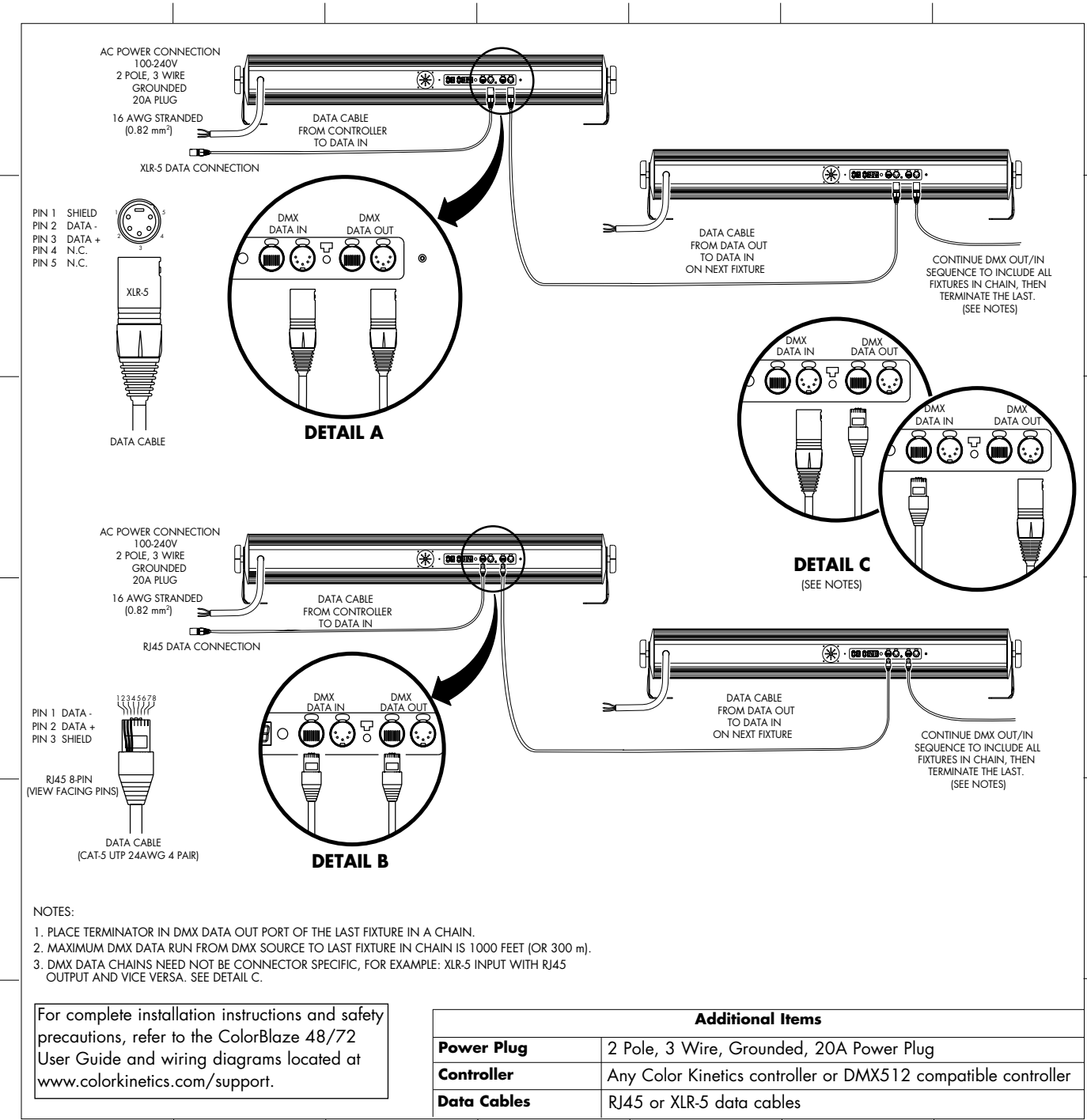
COLORBLAZE 48

PHYSICAL DIMENSIONS



COLORBLAZE 48

FUNCTIONAL FLOW DIAGRAM



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.