

TOKISTAR KromaStar Series



TOKISTAR LIGHTING

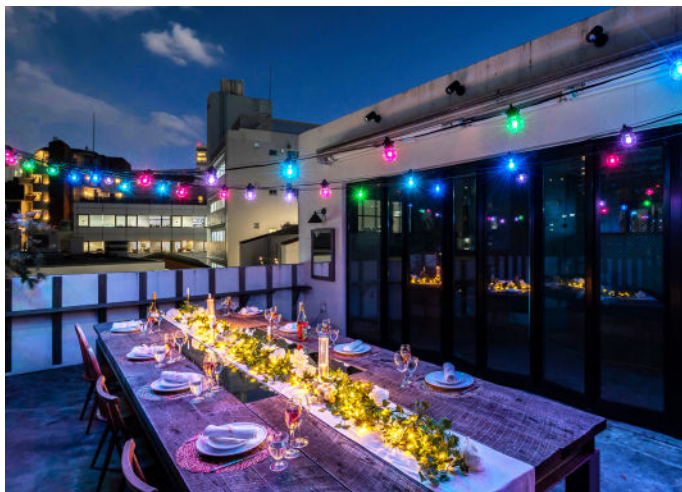


KromaStar™

KromaStar is Tokistar's newest lighting innovation featuring 4-in-1 RGBW LEDs for consistent mixed color. Each LED consumes 0.96 watts at full brightness. There are three distinct versions:

- KromaStar Flex is the foundation of all versions and does not include a globe.
- Clear globes create vivid points of light and frosted globes provide a softer uniform appearance.
- Our Virtual Incandescent version creates distinct points of colored light from all viewing perspectives.

All systems are approved for wet location and operate from 24VDC Class 2 LED drivers.



KromaStar Flex

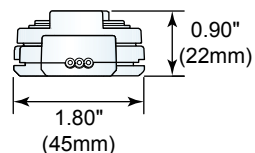
KromaStar Flex may be used as a direct or indirect light source. When panel mounted it provides vibrant color-changing points of light. As an indirect source it creates vivid blended color. Standard socket spacings include 4, 12, 18 and 24". Custom spacings are available upon request.

KSF - 300 - RGBW

Fixture Style		Socket Spacing		LED	
Code	Style	Code	Inches	Code	Watts/Volts
KSF	Flex	100	4"	RGBW	0.96W/24VDC
		300	12"		
		450	18"		
		600	24"		



ATAMI RESIDENCE
Design: Sumitomo Forestry Co., Ltd.
Lighting Design: LIGHT GRAFFITI Tomohiro Mukaihira



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Cover:
KromaStar Globes create an eye-catching display

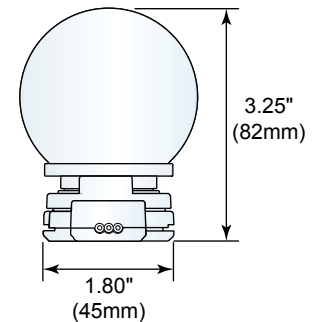
SEVEN PARK AMAMI
Owner: Fuyo General Lease Co., Ltd.
Seven & I Create Link Co., Ltd.
Design: GRAPHICS AND DESIGN INC.
TAKENAKA CORPORATION
NOMURA Co., Ltd.
Photo: SHUNGIKU

KromaStar Series is ETL Wet-Location Listed and marked in accordance with CE Standards.



Frosted and Clear Globes

Frosted globes diffuse light to provide a uniform soft appearance. Clear globes create distinct points of light. Standard socket spacings include 12, 18 and 24". Custom spacings are available upon request.

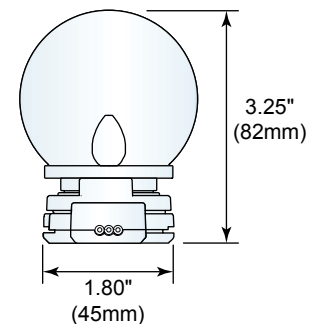
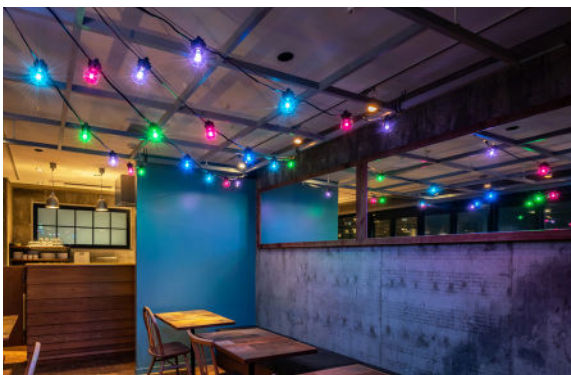


KSG - 450 - RGBW - G19F

Fixture Style		Socket Spacing		LED		Globe Style	
Code	Style	Code	Inches	Code	Watts/Volts	Code	Style
KSG	Globe	300	12"	RGBW	0.96W/24VDC	G19F	G19 Frosted
		450	18"			G19C	G19 Clear
		600	24"				

Virtual Incandescent™ with Clear Globes

Our Virtual Incandescent polycarbonate lens does a remarkable job of emulating traditional incandescent filaments from all perspectives. Standard socket spacings include 12, 18 and 24". Custom spacings are available upon request.



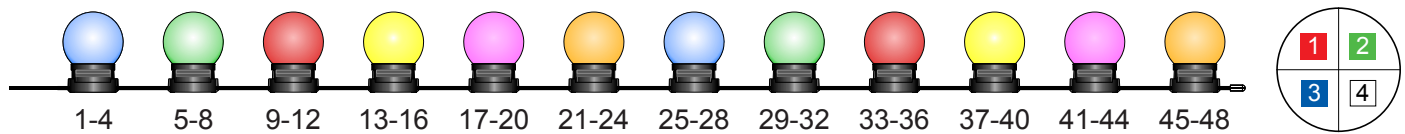
KSG - 450 - RGBW - VI - G19C

Fixture Style		Socket Spacing		LED		Globe Style	
Code	Style	Code	Inches	Code	Watts/Volts	Code	Style
KSG	Globe	300	12"	RGBW	0.96W/24VDC	VI-G19C	G19 Clear w/Virtual Incandescent Lens
		450	18"				
		600	24"				

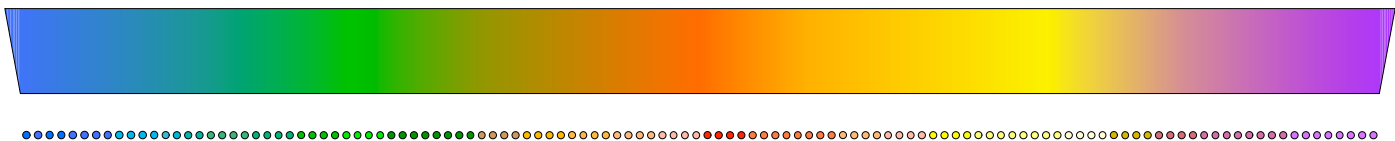


Assigning Addresses

Each LED module contains Red, Green, Blue, and White LED dies. These are given unique DMX addresses at the factory and cannot be changed on site. Unless otherwise specified, we will assign the first globe next to the lead wire to DMX addresses 1-4. Each succeeding module will be assigned the next 4 addresses as shown in the example below with 12 globes.



Since each fixture may have up to 100 LED modules, it may take up to 400 DMX addresses. In this case you can program the controller to create colorful animated effects from the beginning of a run to the end as indicated below.



Specifications



- Polycarbonate Globe (Clear or Frosted) with flammability rating UL 94V-2
- Light Sources 0.96 watt / 24VDC LEDs
- Flexible Conductors with 3 each #16 AWG stranded and plated wires
- Sockets with flammability rating UL 94V-0 are permanently fastened to cable
- Insulation is flexible PVC rated 105° C

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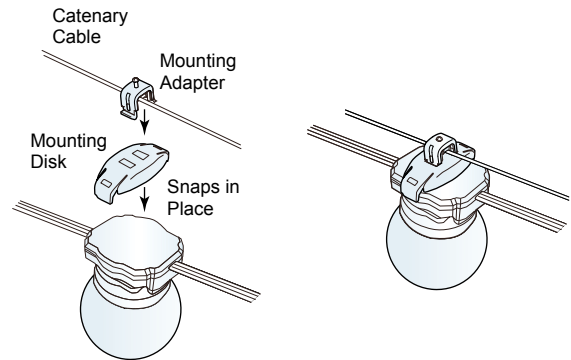


Mounting Options

Festoon Mounting

Part#: KSG-MDA

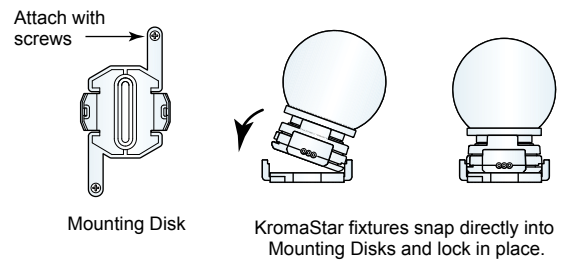
For festoon applications on catenary cable, our wire-rope adaptors securely hold each socket in place to a .125" or .188" diameter wire rope. Wire rope and associated mounting hardware are not provided with the system.



Surface Mounting with Disks

Part#: KSG-MD

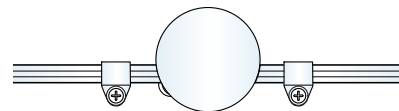
KromaStar Series can be surface mounted to structures using mounting disks. One disk is required for mounting each socket. The socket can be snapped into the disk and screwed in place to the structure.



Surface Mounting with Straps

Part#: KSG-MS

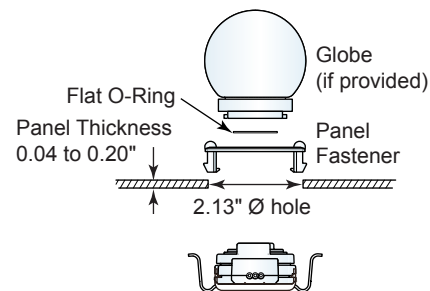
Mounting straps can also be used to secure fixtures. Two straps are required per socket.



Panel Fasteners

Part# KSG-PM

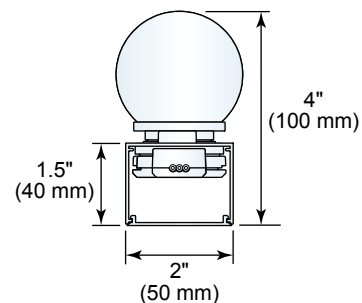
For installations to flat panels and other materials, we offer panel fasteners. The socket assembly is inserted from below and the panel fastener is pressed in place from above.



KSG Extrusion

Part# KSG-EXC

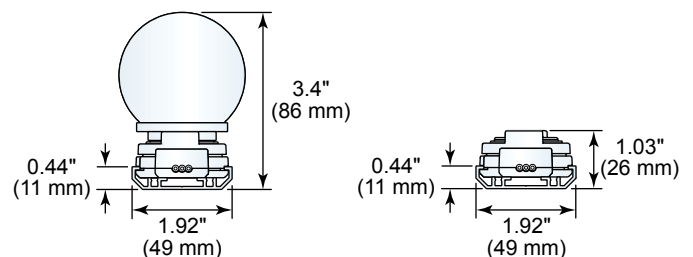
EXC extrusion is available in a 1.5" x 2" aluminum profile for use in all environments. Standard finish is black powder coat. Custom finishes are available.



Mounting Channel

Part# KSG-MC

For surface mounted installations our KromaStar black mounting channel ensures linear integrity. The channel may be used with either Globe or Flex fixtures.

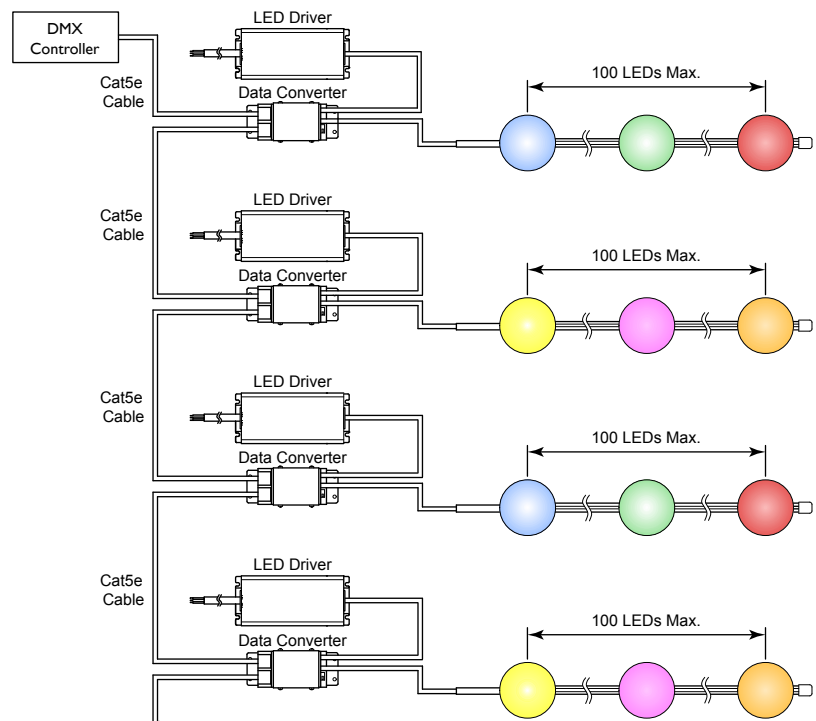




System Layout

Each KromaStar system requires the following components:

- Lighting Fixtures
- 96 watt/24VDC LED Driver
- PWM Data Converter
- Cat5e Cable (provided by others)
- DMX Controller (provided by others)
- One data converter (LC-KSG-MIX) is required for each independent KromaStar fixture. Do not connect two or more KromaStar fixtures to an LC-KSG-MIX.
- The LED driver and data converter should be placed in close proximity to each other.
- Multiple data converters may be connected to an LDR24-96 LED driver if the total capacity does not exceed 96 watts.
- The Data Converter can be located up to 65' (20M) from a fixture if #14 AWG wire is used.



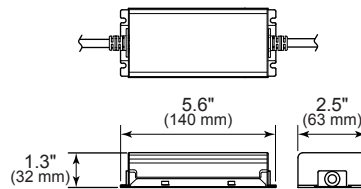
- Up to 13 LC-KSG-MIX data converters may be linked if the total length of Cat5e cable does not exceed 328 ft. (100M).

Driver/Enclosure

LED Driver

Part#: LDR24-96

KromaStar operates from 24VDC LED drivers. This Class 2 power supply has a single output limited to 96 watts/4 amps. The input is universal ranging from 100 to 277VAC 50/60 Hz.



LDR24-96 Specifications

Input Range: 100~277VAC
Frequency Range: 50/60 Hz
Output: 24VDC (+/- 2%)
Max. Output Current: 4.0A
Max. Output Power: 96W
Protection: Overload, Over Voltage, Short Circuit, Over Temperature
Working Temperature: -40°C~+50°C

Mechanical Specifications

Dimensions: 2.5" x 5.6" x 1.3"
Weight: .58Kg / 1.3 lbs
Enclosure Rating: Suitable for use in Dry, Damp and Wet Locations/IP67 Rated
Mounting: Flange Mount

Safety Standards

UL8750, UL879, CSA C22.2 No. 250.13-12; ENEC EN61347-1, EN61347-2-13 independent, EN62384; GB19510.1, GB19510.14; EAC TP TC 004; J61347-1(H29), J61347-2-13(H29), KC61347-1, KC61347-213, IS15885(Part2/Sec13); NOM-058-SCFI-2017; IP67 approved

LED Module Capacity

0,96 Watt LED Modules: 100 each

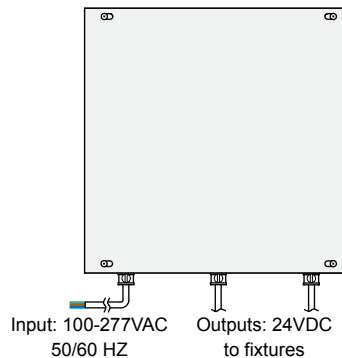
LED Driver Enclosure

Part#: LDR24-ENC-96

Part#: LDR24-ENC-192

Tokistar offers a UL Listed enclosure with 1 or 2 LDR24-96 LED drivers inside. The enclosure is rated NEMA 3R and suitable for damp or dry locations.

Dimensions: 12.25" x 12" x 4.5"

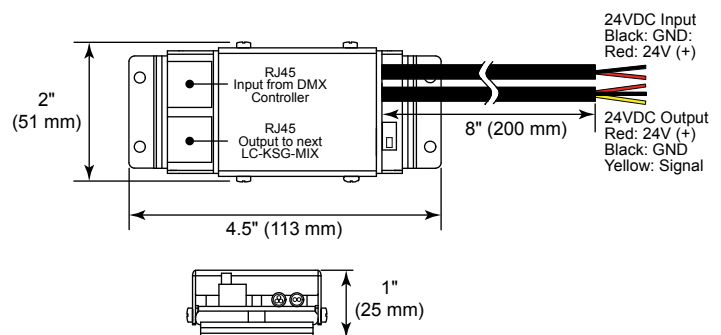


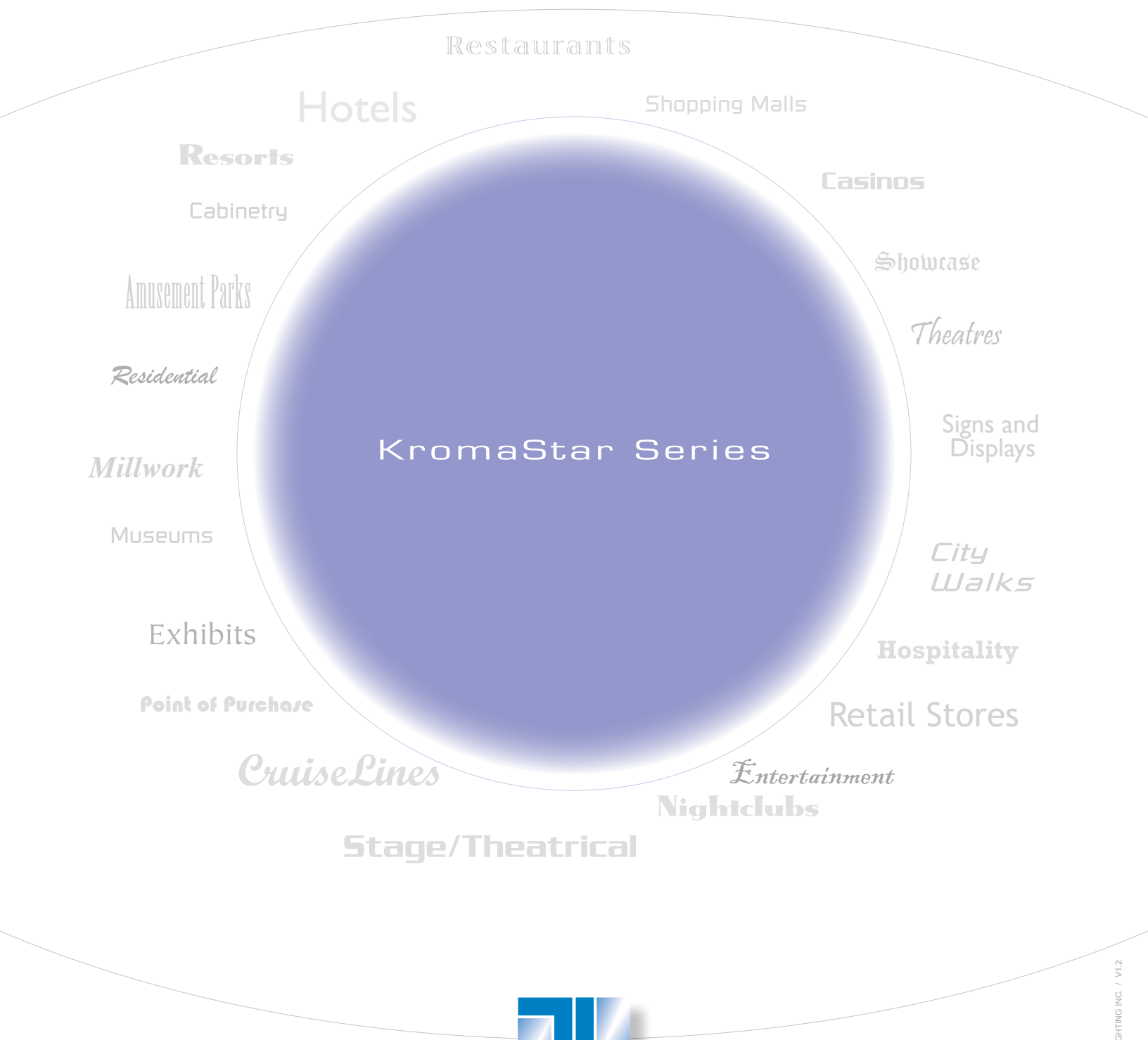
Data Converter

Part#: LC-KSG-MIX

A 24VDC input from a Tokistar LED driver feeds into the converter and is passed to the lighting fixtures. DMX data is supplied to the converter from a DMX controller and the signal is passed to the fixture. This data should be provided from an isolated line from the controller. It may be necessary to use a DMX splitter to provide the signal.

Do not connect more than one fixture to the converter. This device should be installed in a dry location.





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