

TOKISTAR

PRODUCT GUIDE

KROMASTAR SERIES

KROMASTAR SPOT

KROMASTAR WASH

KROMASTAR GLOBE

KROMASTAR FLAT



2F JS Progre, 4-1-23, Heiwajima, Ota-ku, Tokyo 143-0006, Japan

TEL : +81-3-5763-6121 FAX : +81-3-5763-6130

www.toki.co.jp/tokistar/en/

⚠ PRECAUTIONS

1. Read all instructions completely before beginning installation.
2. Turn off electricity before beginning installation.
3. All wiring is to be performed by a qualified electrician.
4. Installation must comply with the National Electrical Code, or all applicable codes.
5. Turn main supply to LED Driver on only after all connections have been made and tested.
6. Use only LED Drivers provided by Tokistar with the system.

KROMASTAR SPOT





OUTDOOR

IP66

24VDC

DMX

Voltage = 24VDC
Wattage = 4W
Weight = 200g
Main Materials = Aluminum & PC
Cable = Connector Diameter : Φ20mm, L : 0.5m

Independently Addressable RGBW LEDs

KSP01-RGBW-30D-B

Beam Angle

Module Color

30D : 30°

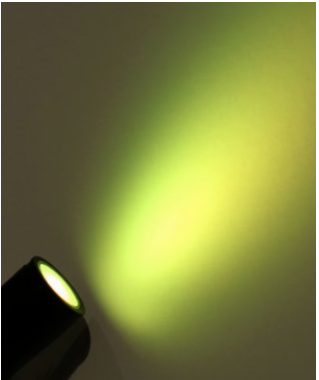
B : Black

System Features

Point 01

Beautiful and uniform color blending

Designed for seamless RGBW color mixing, it delivers beautifully balanced hues—even the challenging yellow tones. The addition of white (W) allows for subtle, delicate expressions. Its robust construction ensures reliable performance both indoors and outdoors, making it ideal for amusement parks, gardens, and architectural lighting.



Point 02

Compact RGBW spotlight for outdoor use

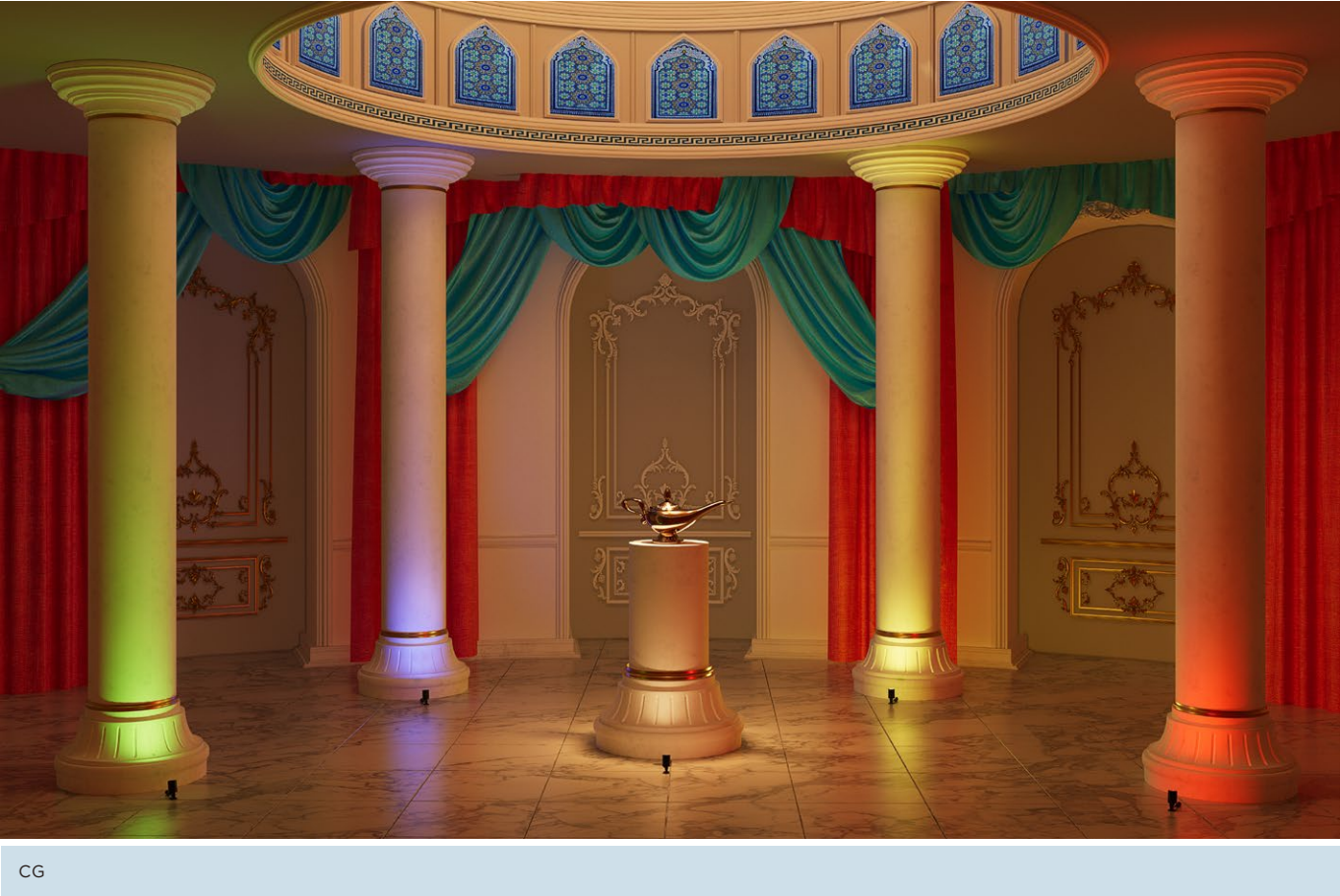
With a diameter of just 40mm and a total height of only 90mm including the adjustable bracket, this spotlight offers a compact form that blends seamlessly into any space without disrupting the design. Equipped with waterproof connectors, it reduces installation effort and ensures easy handling during maintenance.



Point 03

Dynamic lighting with Independently addressable RGBW LEDs

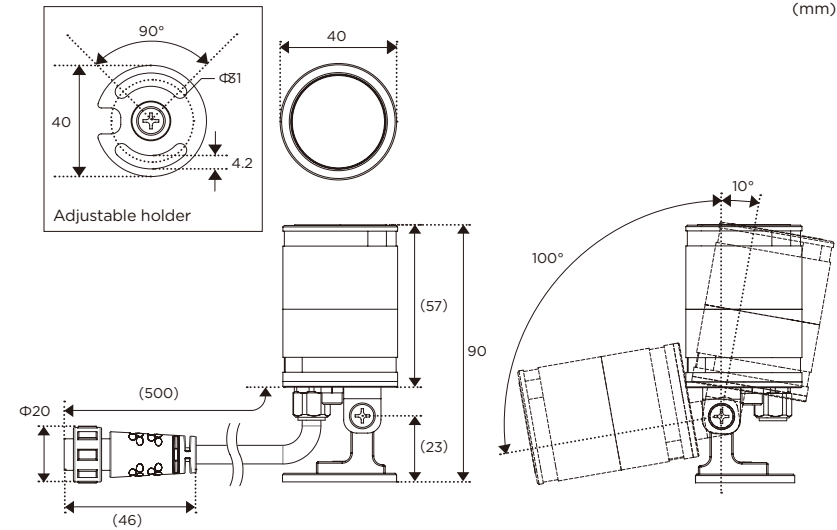
With individually addressable control, this fixture delivers smooth color transitions and dynamic chasing sequences.



CG

Specifications

Minimum Space Requirements




LED Colors, lm

*This is the maximum value for each color.

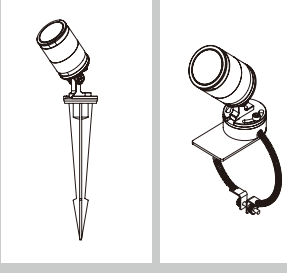
Red : 63lm
Green : 107lm
Blue : 23lm
White(4000K) : 127lm

Installation

Secure the fixture's adjustable holder to the mounting surface using screws. Please prepare Φ4 mm screws suitable for the surface.



Custom stake and tree band options are available upon request.



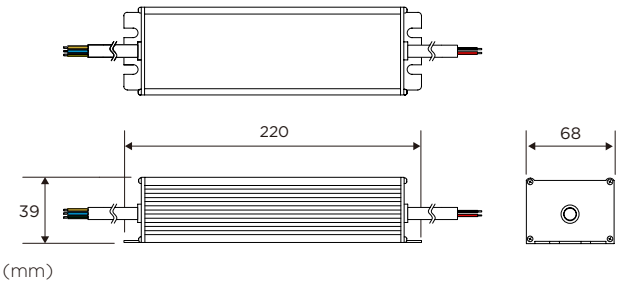
Power Supply & Date Converter

24VDC LED Driver

Kromastar Spot operates from Tokistar’s 24VDC LED driver. 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.

LDR24-96W

Tokistar’s LDR24-96W has a single 96 watt output.

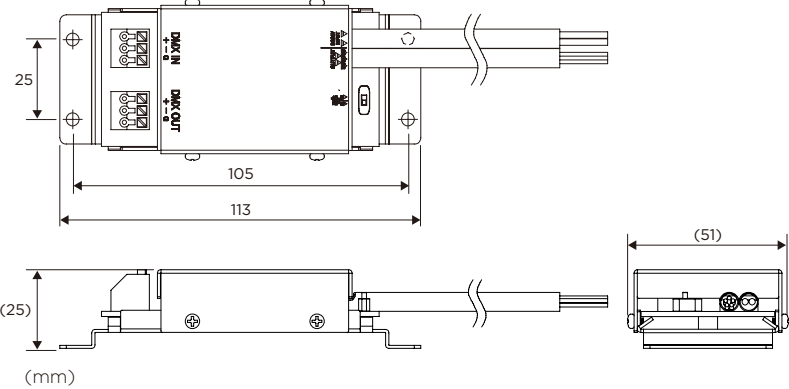


LDR24-96W Specifications
Input Range : 100-277VAC
Frequency Range : 50/60Hz
Output: 24VDC (+/- 3%)
Max. Output Current : 4.0A
Max. Output Power : 96W
Protection : Overload, Over voltage, Short Circuit, Over Temperature
Working Temperature: -30°C-+60°C
Mechanical Specifications
Dimensions : 68 x 220 x 39 mm
Weight : 1120g
Enclosure Rating : Suitable for use in Dry, Damp and Wet Locations/IP67 Rated
Mounting : Flange Mount
LED Module Capacity
KSP fixtures up to 24LEDs can be connected for one LDR24-96W.



Data Converter

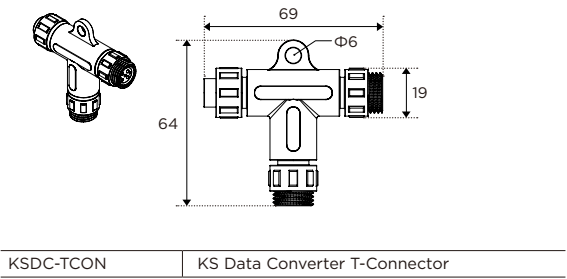
LC-KS-DC2 Required



Rated input voltage : 24VDC
Input signal : DMX
Weight : 140g
*For indoor use only

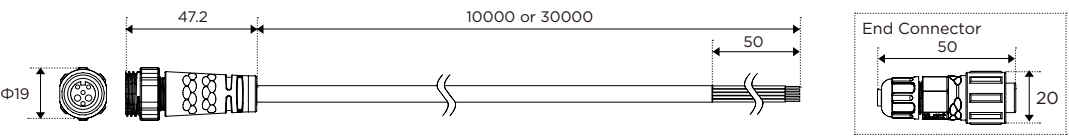
Kromastar Spot Cables

KS Data Converter T-Connector Required



KSDC-TCON	KS Data Converter T-Connector
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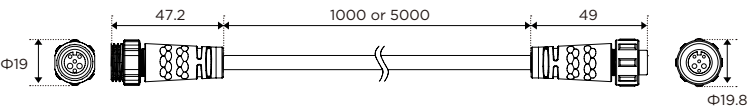
KS Data Converter Cable 10m / 30m (with End Connector) Required



KSDC-CON-10m/EC	KS Data Converter Cable 10m (with End Connector)
KSDC-CON-30m/EC	KS Data Converter Cable 30m (with End Connector)

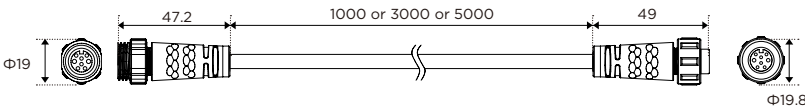
Options

KS Data Converter Extension Cable(6P), 1m / 5m



KSDC-EXT6P-1m	KS Data Converter Extension Cable (6P) 1m
KSDC-EXT6P-5m	KS Data Converter Extension Cable (6P) 5m

KS Data Converter Fixture Extension Cable (8P), 1m / 3m / 5m



KSDC-EXT8P-1m	KS Data Converter Fixture Extension Cable (8P) 1m
KSDC-EXT8P-3m	KS Data Converter Fixture Extension Cable (8P) 3m
KSDC-EXT8P-5m	KS Data Converter Fixture Extension Cable (8P) 5m

Wiring Diagram

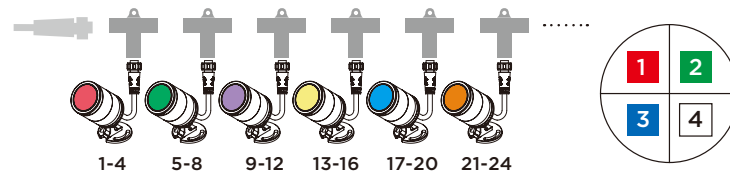
The wiring diagram is provided as a reference example only. Wiring may vary depending on electrical specifications, lighting effects, and site conditions.

NOTE

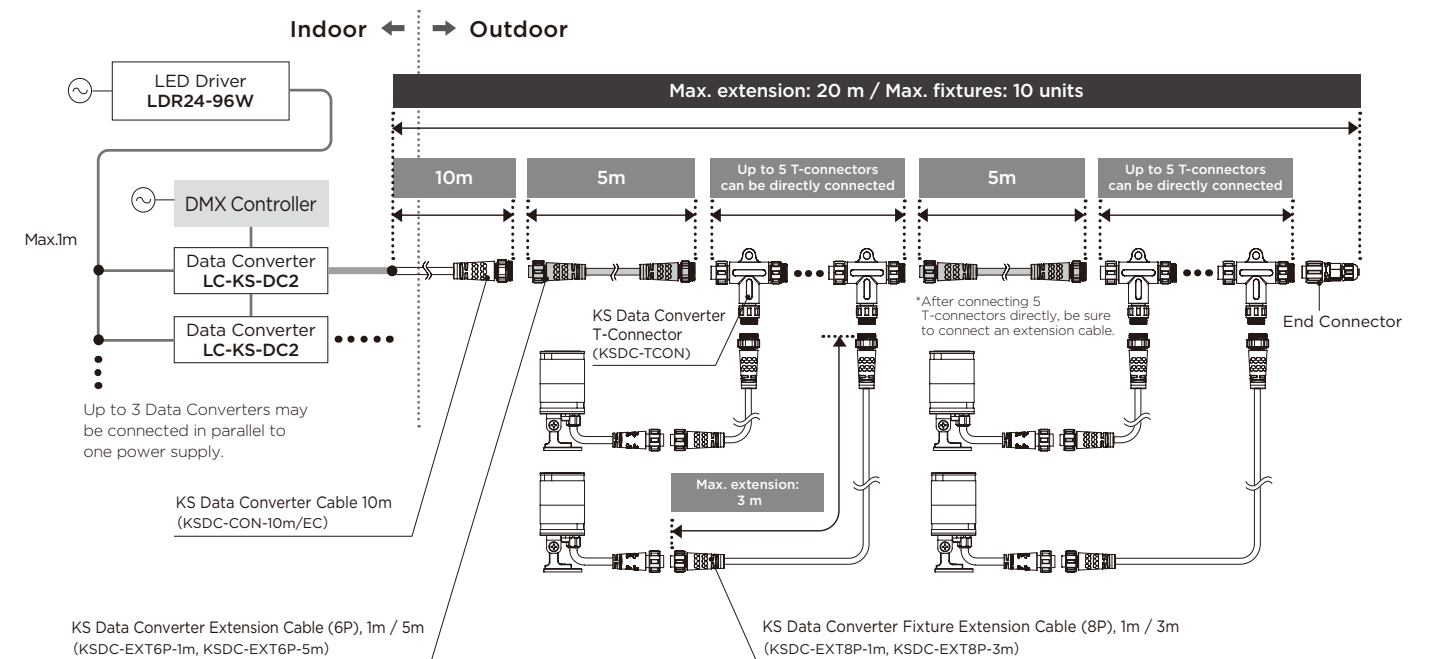
- The maximum cable length from the DMX controller to the last Data Converter is 200 meters.
- Up to 3 Data Converters can be connected in parallel to one power supply.
- Data converters must be wired within 1 meter from the power supply.
- Up to 5 T-connectors can be directly connected in series.
- Control devices such as controllers and Data Converters are not waterproof. Please install them indoors.

Assigning Addresses

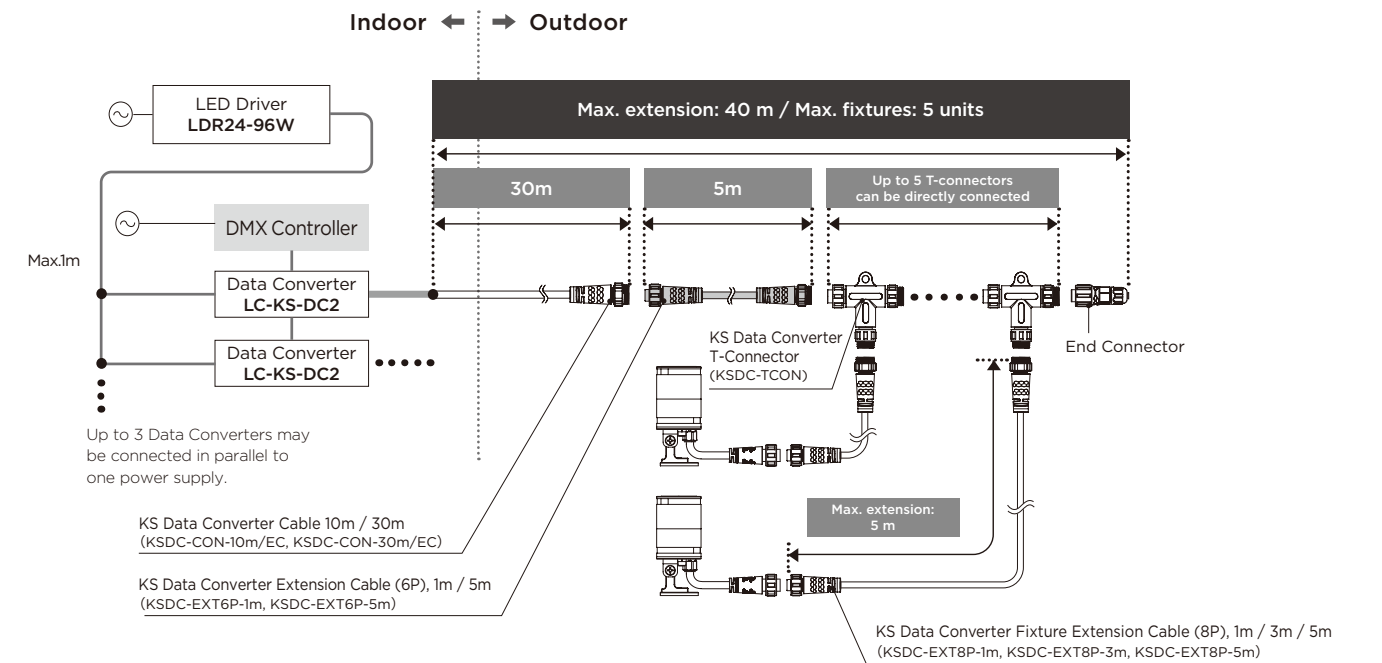
Each LED module contains Red, Green, Blue, and White LED dies. These are given unique DMX addresses at the factory and cannot be changed on site. Unless otherwise specified, we will assign the first module next to the lead wire to DMX addresses 1-4. Each succeeding module will be assigned the next 4 addresses as shown in the example the right with 6 modules.



When connecting 6 to 10 fixtures



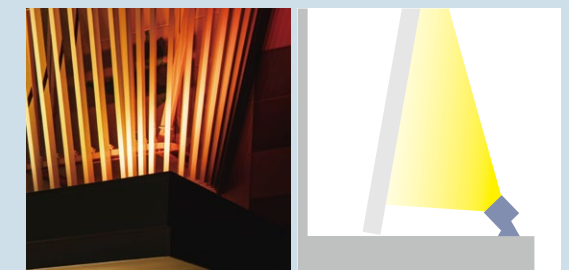
When connecting 5 or fewer fixtures



#01



#01 HEIWADO ISHIYAMA

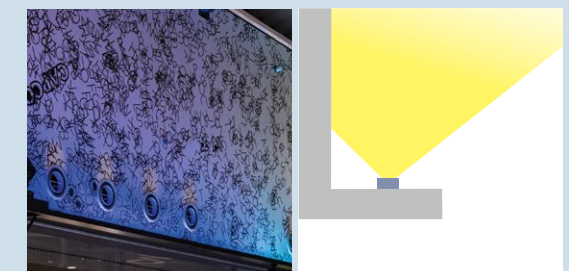


KROMASTAR WASH

Custom (KSW01-RGBW-20D equivalent)
Design : MIZUHARA ARCHITECTURE PLANNING OFFICE

▶▶ Page 9-10

#02 MIRAINO AEON MALL HAKUSAN



KROMASTAR WASH

KSW01-L900-RGBW-20D
Design : RIC DESIGN Inc.
Construction : MidWest corp.

▶▶ Page 9-10

#02



KROMASTAR WASH





OUTDOOR



IP66



24VDC
DMX

Voltage = 24VDC

Weight = L300 : 700g
L600 : 1400g
L900 : 2100g

Main Materials = Aluminum, Stainless Steel & PC

Cable = Connector Diameter : Φ20mm, L : 0.3m

Independently Addressable RGBW LEDs

KSW01-L- -RGBW-20D

Length

300 : 300mm
600 : 600mm
900 : 900mm

Beam Angle

20D : 20°

Addresses are given at the factory upon order.

Catalog#	Power	Length
KSW01-L300-RGBW-20D	12W	0.3m
KSW01-L600-RGBW-20D	24W	0.6m
KSW01-L900-RGBW-20D	36W	0.9m

Fixtures up to 2.4m can be connected for a single LDR24-96W.

System Features

Point
01

Consistent mixed color is ideal for lighting architectural facades



Kromastar Wash incorporates high-powered 4-In 1 RGBW LEDs behind a single lens for producing consistent mixed colors from each light source. The 20 degree lens can illuminate not only flat surfaces but also surfaces with complex structures evenly without breaking the light.

Point
02

Independently addressable 4-in-1 RGBW LEDs create your own special atmosphere

Each Red, Green, Blue and White LED die is independently addressable. Its feature enables it to create white LED color for everyday use, and colored lighting for special occasions.

Point
03

20 degree lens eliminates cutoff lines

20 degree lens eliminates any sharp cutoff where the fixture is lighting a reflective surface to the sides.



Typical full color wall grazer



Kromastar Wash

Specifications



LED Colors, lm

Red : 110lm/LED
Green : 125lm/LED
Blue : 30lm/LED
White (4000K) :140lm/LED

*This is the maximum value for each color.

Light Distribution



Minimum Space Requirements



Dimensions include up to 25° tilt.

For proper air flow, the dimensions indicated are required to prevent heat build up. Please keep these guidelines in mind when using various optional parts. Other considerations are lighting effect and maintenance.

Installation

Fix with screws

Screw the mounting brackets on both ends of the fixture. Please prepare commercially available Φ4mm screws suitable for the construction surface.



Brackets are adjustable

As standard, adjustable brackets are installed. They pivot 90 degrees.



Recommended Space Requirements

Method:
Cornice-style
mounting



Refer to page 11-14 for the Power Supply, Date Converter and Wiring Diagram of Kromastar Wash.

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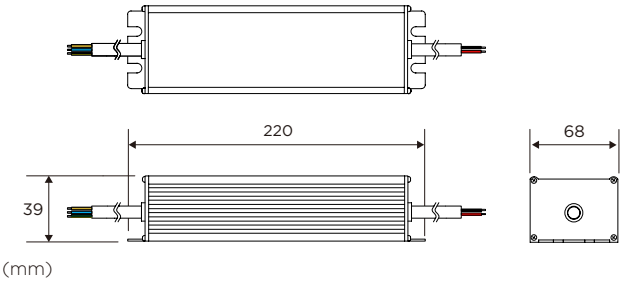
Power Supply & Date Converter

24VDC LED Driver

Kromastar Wash operates from Tokistar’s 24VDC LED driver. 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.

LDR24-96W

Tokistar’s LDR24-96W has a single 96 watt output.

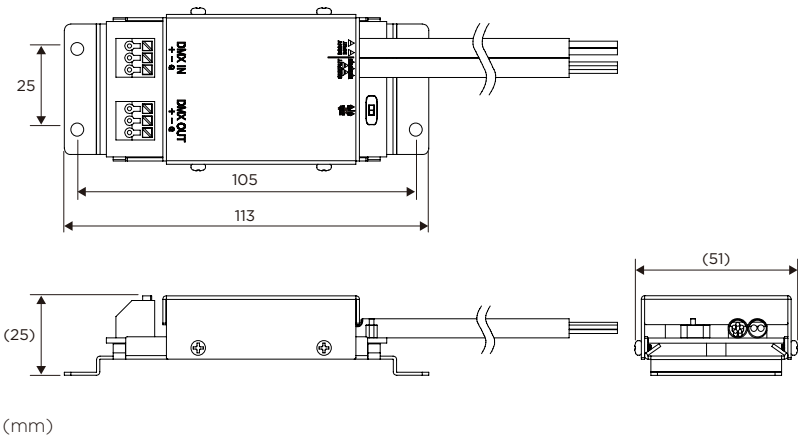


LDR24-96W Specifications
Input Range : 100-277VAC
Frequency Range : 50/60Hz
Output: 24VDC (+/- 3%)
Max. Output Current : 4.0A
Max. Output Power : 96W
Protection : Overload, Over voltage, Short Circuit, Over Temperature
Working Temperature: -30°C-+60°C
Mechanical Specifications
Dimensions : 68 x 220 x 39mm
Weight : 1120g
Enclosure Rating : Suitable for use in Dry, Damp and Wet Locations/IP67 Rated
Mounting : Flange Mount
LED Module Capacity
KSW fixtures up to 2.4m can be connected for one LDR24-96W.



Data Converter

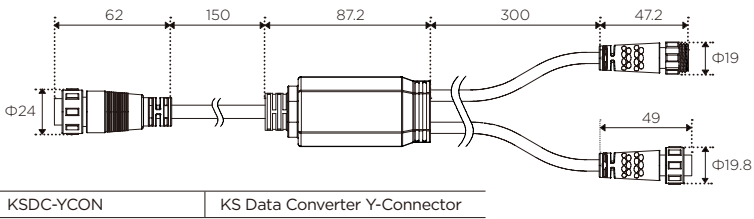
LC-KS-DC2 Required



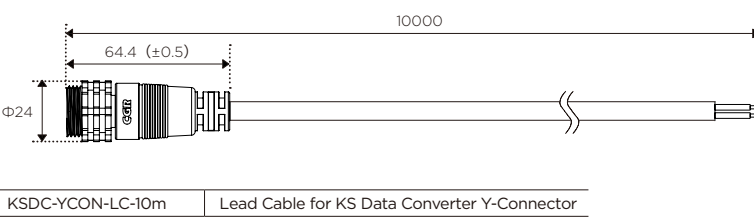
Rated input voltage : 24VDC
Input signal : DMX
Weight : 140g
*For indoor use only

Kromastar Wash Cables

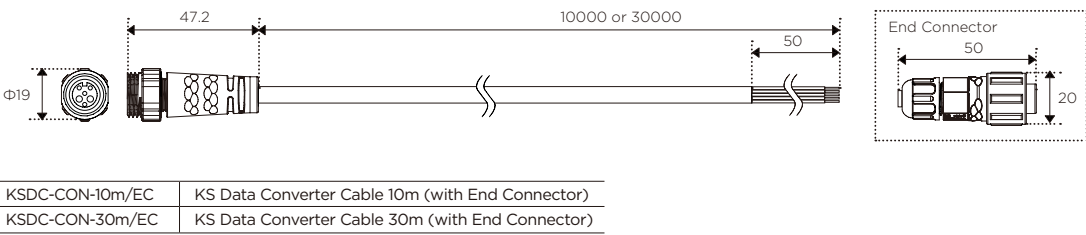
KS Data Converter Y-Connector Required



Lead Cable for KS Data Converter Y-Connector Required

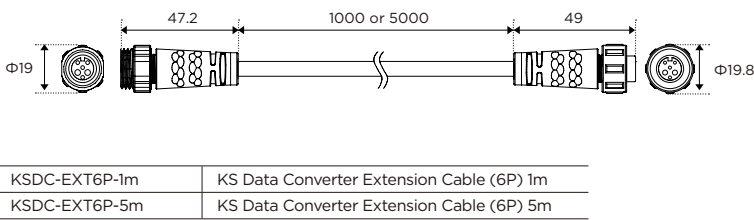


KS Data Converter Cable 10m / 30m (with End Connector) Required



Options

KS Data Converter Extension Cable (6P), 1m / 5m



Wiring Diagram

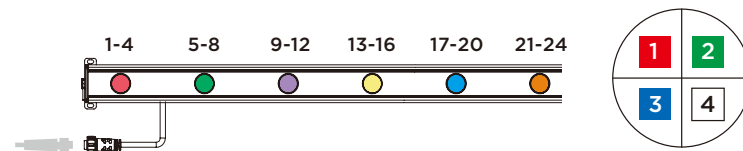
The wiring diagram is provided as a reference example only. Wiring may vary depending on electrical specifications, lighting effects, and site conditions.

NOTE

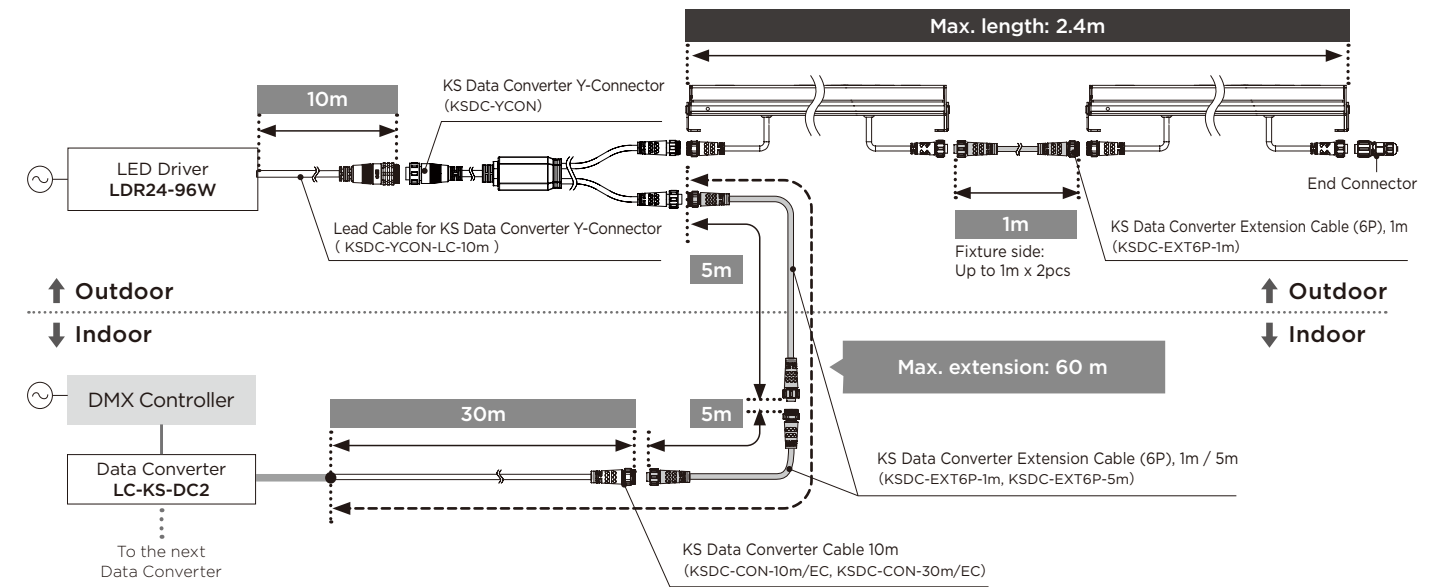
- The maximum cable length from the DMX controller to the end Data Converter is 200 meters.
- Use one power supply per data converter.
- Control devices such as controllers and Data Converters are not waterproof and should be installed indoors.

Assigning Addresses

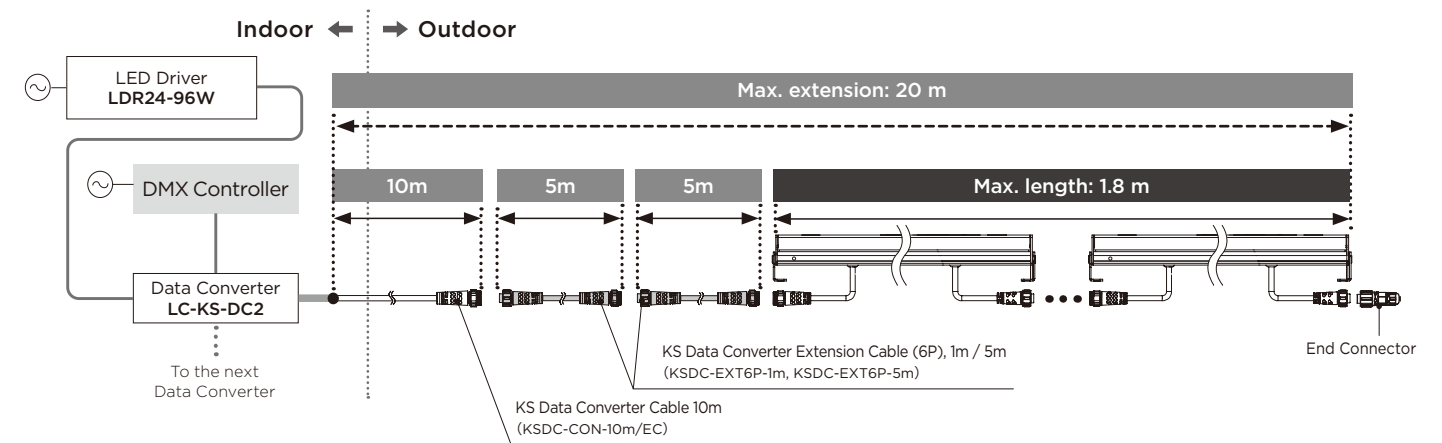
Each LED module contains Red, Green, Blue, and White LED dies. These are given unique DMX addresses at the factory and cannot be changed on site. Unless otherwise specified, we will assign the first module next to the lead wire to DMX addresses 1-4. Each succeeding module will be assigned the next 4 addresses as shown in the example the right with 6 modules.

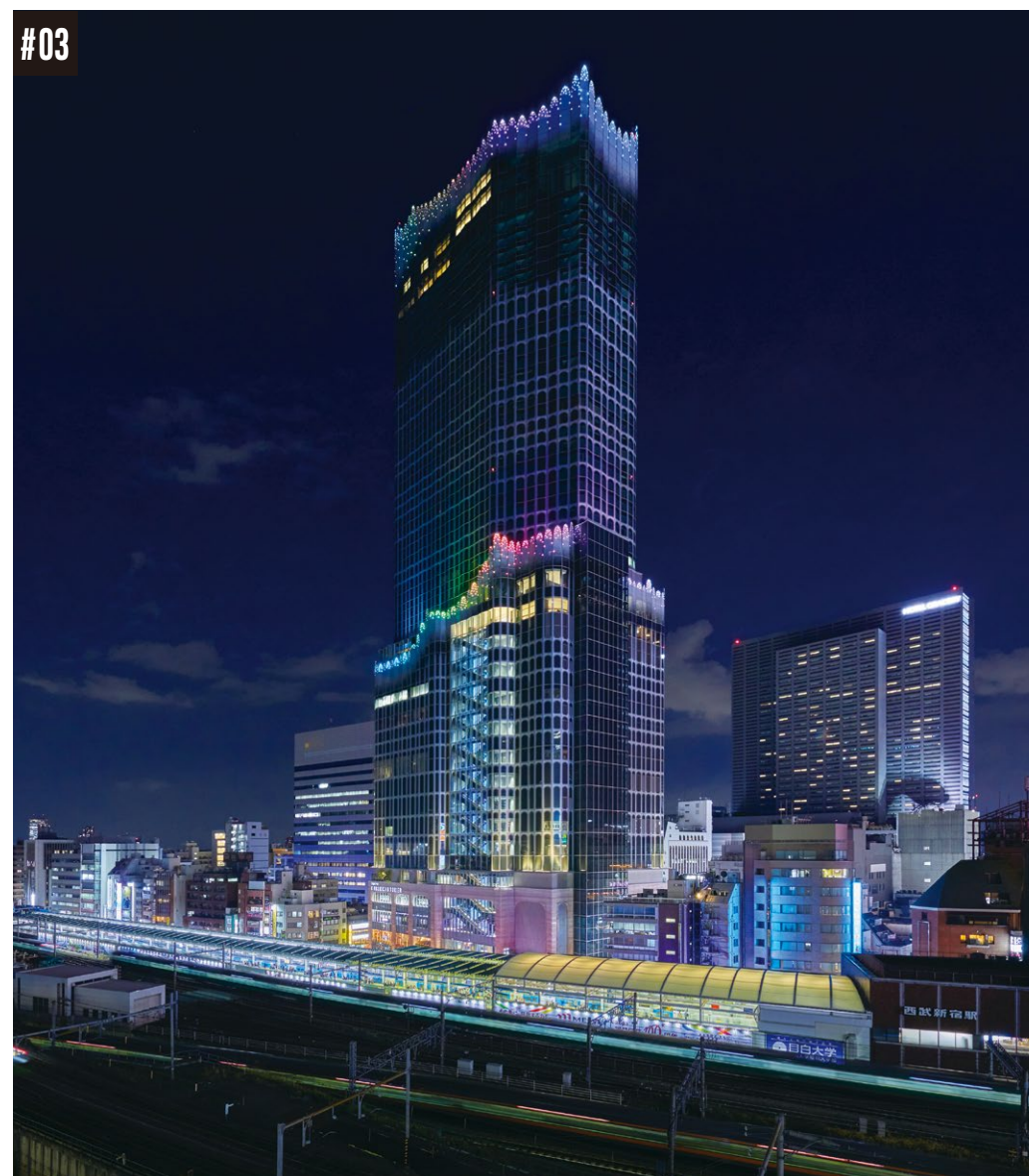


When installing the power supply outdoors

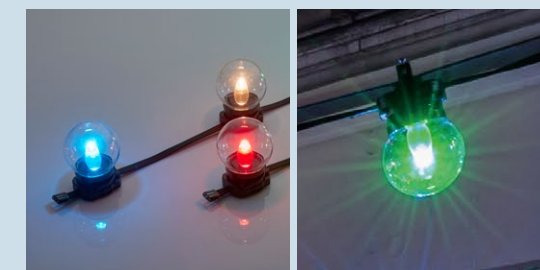


When installing the power supply indoors





#01 CAFE

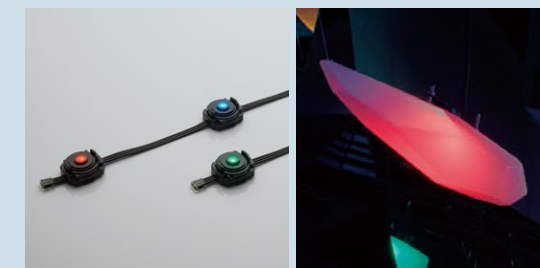


KROMASTAR GLOBE

KSG02-500-VI-RGBW

▶▶ Page 17-18

#02 átoa



KROMASTAR FLAT

Custom (KSF01-300-RGB)

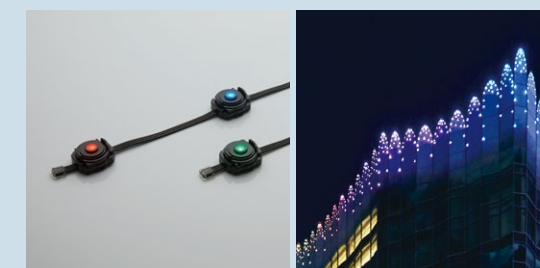
*Successor product : KSF02-300-RGBW

Lighting design:lino

Photographer : Fumito Suzuki

▶▶ Page 19-20

#03 TOKYU KABUKICHO TOWER



KROMASTAR FLAT

Custom

Exterior design : Yuko Nagayama & Associates

Architectural design : Tokyu Architects & Engineers INC.

Lighting design : Illumination Of City Environment

Photographer : Fumito Suzuki

▶▶ Page 19-20

KROMASTAR GLOBE





OUTDOOR



IP66



24VDC
DMX

Voltage = 24VDC

Wattage = 0.96W/LED

Weight = 80g/LED

Main Materials = Aluminum, PBT & PC

Cable = Outer Diameter : Φ7.8mm 1.25mm×3 L : 2m

Independently Addressable RGBW LEDs

KSG02-□□□-□□-RGBW

LED Spacing

300 : 300mm

500 : 500mm

LED Type

VI : VI Lamp

UB : UB Lamp



Clear Globe
(VI Lamp)



Frosted Globe
(UB Lamp)

Addresses are given at the factory upon order.

Catalog#	Power	LED Q'ty /run
KSG02-300-VI-RGBW	3.20W/m	4-100 LEDs
KSG02-500-VI-RGBW	1.92W/m	
KSG02-300-UB-RGBW	3.20W/m	
KSG02-500-UB-RGBW	1.92W/m	

System Features

Point 01

Newly added Virtual Incandescent lamps and white LEDs enhance your experience

The virtual incandescent (VI) lamp was well-received in our Exhibitor Series. It does a remarkable job of emulating incandescent filaments from all perspectives. Red, Green, Blue and newly added White LEDs enable Kromastar to create vibrant expression in various colors. It is possible to use the white LED for everyday use and then change the atmosphere with vivid colored lighting on special occasions.

VI Lamp + Clear Globe



UB Lamp + Frosted Globe



Point 02

4-in-1 RGBW LEDs create your own special atmosphere

Kromastar produces consistent mixed color. In addition, it can create a white incandescent-like atmosphere with different color temperatures. Since each lamp is independently addressable, various expressions can be created as you like.





Reflective surface

Concentrated light

LED

Specifications



(mm)

LED Colors, lm

VI Lamp

Red : 4.5lm/LED

Green : 10.4lm/LED

Blue : 3.3lm/LED

White(2700K) : 13.8lm/LED (Ra=88)

UB Lamp

Red : 6.1lm/LED

Green : 13.8lm/LED

Blue : 4.4lm/LED

White(2700K) : 18.4lm/LED (Ra=88)

*This is the maximum value for each color.

Accessories

Mounting Parts Required

Festoon Mounting

KSG-MDW/5	Wire-rope adaptors (5pcs/set)
-----------	-------------------------------

*Wire rope and all the associated mounting hardware is not provided with the system.

Surface Mounting

KSG-MD/5	Mounting disks (5pcs/set)
KSG-STP/10	Cable saddles (10pcs/set)

Panel Mounting

KSG-PM/5	Panel mount adaptors (5pcs/set)
----------	---------------------------------

Other Option

KSG-EP	Lead wire extension
--------	---------------------

Max. 10m (sold in increments 1m)

Installation

Surface Mounting with Disks



Mounting disks	KSG-MD/5
----------------	----------

*5pcs/set

*One mounting disk is required for each socket. Please check the required number of LEDs before placing an order.

Kromastar Globe can be surface mounted to structures using mounting disks. Fix a mounting disk to the structure with Φ4mm pan head screws, and snap the socket into the mounting disk.

Festoon Mounting with Wire-rope Adaptors



Wire-rope adaptors	KSG-MDW/5
--------------------	-----------

*5pcs/set

*Wire rope and all the associated mounting hardware is not provided with the system.

*A wire-rope adaptor is required for each socket. Please check the required number of LEDs before placing an order.

For festoon applications to a catenary cable, our wire-rope adaptors securely hold each socket in place to a wire rope. Wire rope should be stainless steel, tensile strength of 3.69 kN or more with outer diameter of 3 to 5mm.

Panel Mounting with Panel Mount Adaptors



Panel mount adaptors	KSG-PM/5
----------------------	----------

*5pcs/set

For installations to flat panels or extrusions up to 1.0 to 5.0mm, we offer panel mount adaptors. The socket assembly is inserted from below and the panel mount adaptor is pressed in place from above. Make a Φ54mm hole to install the socket. Recommended spacing between mounting holes is 250mm for KSG02-300, and 450mm for KSG02-500 fixtures in consideration of the wiring.

Refer to page 21-22 for the Power Supply, Data Mixer and Wiring Diagram of Kromastar Globe.

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18

KROMASTAR FLAT





OUTDOOR



IP66



24VDC
DMX

Voltage = 24VDC
Wattage = 0.96W/LED
Weight = 60g/LED
Main Materials = PBT, PVC, Aluminum, & PC
Cable = Outer Diameter : Φ7.8mm 1.25mm²×3 L : 2m

Independently Addressable RGBW LEDs

KSF02-300-RGBW

LED Spacing

300 : 300mm

Addresses are given at the factory upon order.

Catalog#	Power	LED Q'ty /run
KSF02-300-RGBW	3.20W/m	4-100 LEDs

System Features

Point
01

A New Standard for Full-Color Eye-Catching Lighting

Adding White LEDs to conventional RGB LEDs allows a more expansive range of expression. RGBW LEDs easily create a spring cherry blossom color or stylish shades of white. Orders can be provided in increments of 1 LED. It is possible to manufacture up to 100 LEDs (30m at 300mm spacing) for labor savings in large facilities.

Kromastar Flat 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.



Specifications



LED Colors, lm

Red : 7.6lm/LED
Green : 17.3lm/LED
Blue : 5.5lm/LED
White : 23.0lm/LED (Ra=88)

*This is the maximum value for each color.

Accessories

Mounting Parts Required

Linear Mounting	
KSG-MC	Mounting track
<small>*Wire rope and all the associated mounting hardware is not provided with the system.</small>	
Surface Mounting	
KSG-MD/5	Mounting disks (5pcs/set)
KSG-STP/10	Cable saddles (10pcs/set)

Panel Mounting

KSG-PM/5	Panel mount adaptors (5pcs/set)
----------	---------------------------------

Other Option

KSG-EP	Lead wire extension
--------	---------------------

Max. 10m (sold in increments 1m)

Linear Mounting



Mounting track	KSG-MC
----------------	--------

*Material : Aluminum
*Length : 0.3 to 2.4m

Easy to use with mounting tracks for linear applications. Fix with Φ4mm pan head screws.

Panel Mounting



Panel mount adaptor	KSG-PM/5
---------------------	----------

*5pcs/set

The socket assembly is inserted from below and the panel mount adaptor is pressed in place from above. Provide a Φ54mm hole to install the socket. Recommended spacing between the holes is 250mm in consideration of wiring.

Surface Mounting with Disks



Mounting disks	KSG-MD/5
----------------	----------

*5pcs/set
*One mounting disk is required for each socket.
Please check the required number of LEDs before placing an order.

Kromastar Flat can be surface mounted to structures using mounting disks. Fix a mounting disk to the structure with Φ4mm pan head screws, and snap the socket into the mounting disk.

Minimum Space Requirements



(mm)

Luminous Material

For proper air flow, the dimensions indicated are required to prevent heat build up. Please keep these guidelines in mind when using various optional parts. Other considerations are lighting effect and maintenance.

Recommended Space Requirements

For indirect applications (Cove lighting)



(mm)

Refer to page 21-22 for the Power Supply, Data Mixer and Wiring Diagram of Kromastar Flat.

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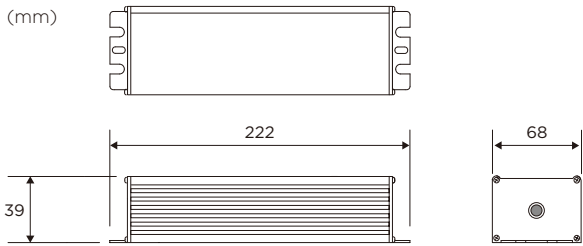
Power Supply & Data Mixer

24VDC LED Driver

Kromastar Globe and Kromastar Flat operate from Tokistar's 24VDC LED driver. 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

Tokistar's LDR24-96 has a single 96 watt output.



LDR24-96 Specifications

Input Range : 100-277VAC
Frequency Range : 50/60Hz
Output: 24VDC (+/- 3%)
Max. Output Current : 4.0A
Max. Output Power : 96W
Protection : Overload, Over voltage,
Short Circuit, Over Temperature
Working Temperature: -30°C~+50°C

Mechanical Specifications

Dimensions : 68 x 222 x 39mm
Weight : 998g
Enclosure Rating : Suitable for use in Dry,
Damp and Wet Locations/IP67 Rated
Mounting : Flange Mount

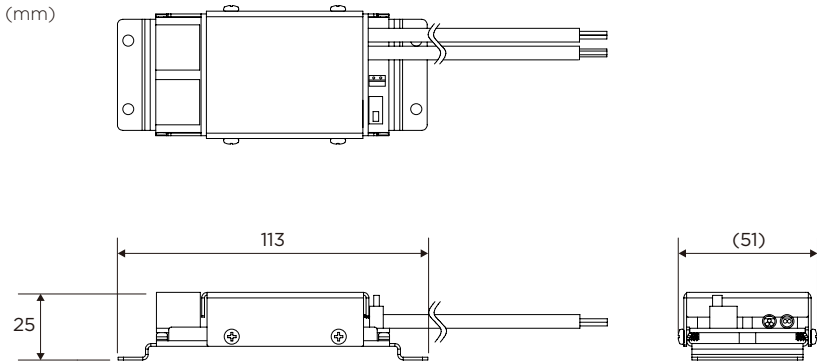
LED Module Capacity

KSG/KSF fixtures up to 100LEDs can be connected for one LDR24-96.



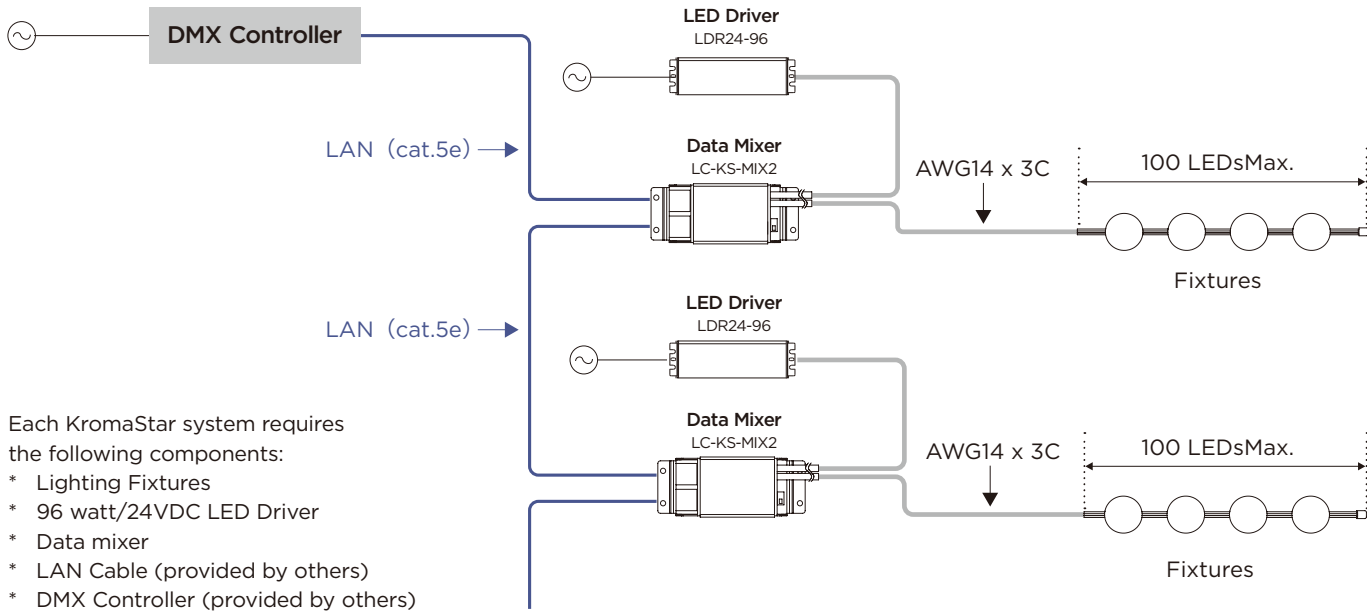
Data Mixer for Kromastar Globe and Kromastar Flat

LC-KS-MIX2 Required



Rated input voltage : 24VDC
Rated output voltage : 24VDC 5A
Input signal : DMX
Weight : 120g
*For indoor use only

Wiring Diagram



Each KromaStar system requires the following components:

- * Lighting Fixtures
- * 96 watt/24VDC LED Driver
- * Data mixer
- * LAN Cable (provided by others)
- * DMX Controller (provided by others)

*NOT includes: DMX Controller, DMX Splitter, LAN Cables (cat.5e), Software, On site setting, etc.

*The wiring diagram is just an example.

Wiring diagram varies depending on electrical specifications, content of performance, site conditions, etc.

NOTE

- One data mixer (LC-KS-MIX2) is required for each independent KromaStar fixture. Do not connect two or more KromaStar fixtures to an LC-KS-MIX2.
- The LED driver and data mixer should be placed in close proximity to each other.
- Multiple data mixers may be connected to an LDR24-96 LED driver if the total capacity does not exceed 96 watts.
- The Data mixer can be located up to 20m from a fixture if AWG14 wire is used.
- Up to 13 LC-KS-MIX2 data mixers may be linked if the total length of LAN Cable does not exceed 100m.

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 module 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 the right with 6 modules.

