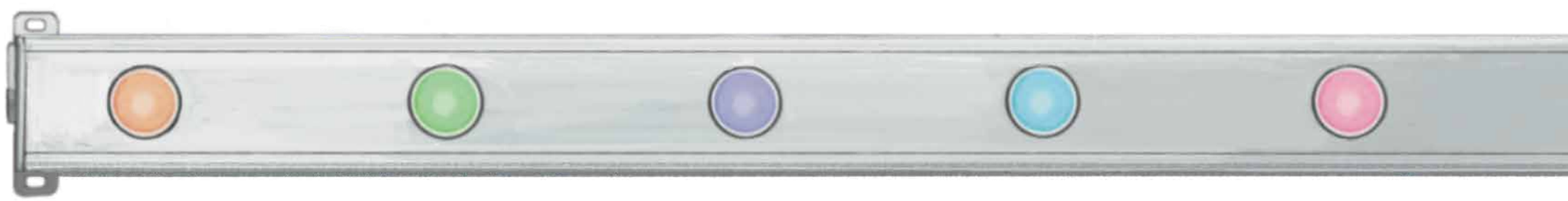
TOKISTAR

PRODUCT GUIDE
KROMASTAR SERIES

KROMASTAR GLOBE

KROMASTAR FLAT

KROMASTAR WASH



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

2024.3 Ver. 1

GALLERY

#01

#02

#03

#01 CAFE

KROMASTAR GLOBE

KSG02-500-VI-RGBW

▶▶ Page 3-4

#02 átoa

KROMASTAR FLAT

Custom (KSF01-300-RGB)
*Successor product : KSF02-300-RGBW
Lighting design:lino
Photographer : Fumito Suzuki

▶▶ Page 5-6

#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 5-6

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 1.25mm²×3 L = 2m

Independently Addressable RGBW LEDs

KSG02-□□□-□□-RGBW

LED Spacing	LED Type
300 : 300mm	VI : VI Lamp
500 : 500mm	UB : UB Lamp

Clear Globe (VI Lamp)

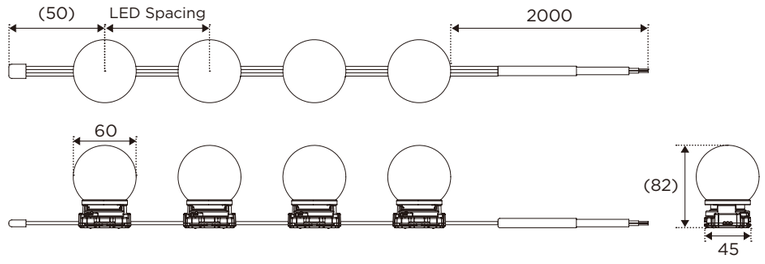
Frosted Globe (UB Lamp)

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	

Specifications

(mm)



LED Colors, lm

VI Lamp
Red : 4.6lm/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

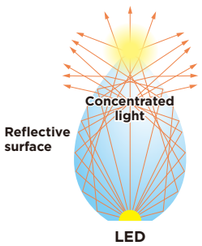
KSG-EP	Lead wire extension

Max. 10m (sold in increments 1m)

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.



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.

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 7-8 for the Power Supply, Data Mixer and Wiring Diagram of Kromastar Globe.

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

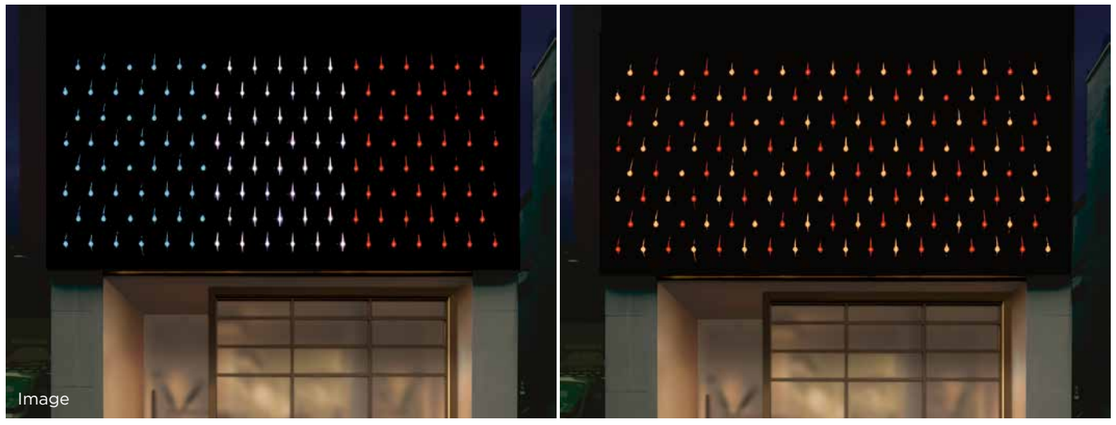
System Features

Point 01

A New Standard for Full-Color Eye-Catching Lighting

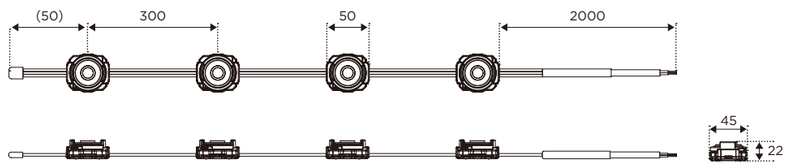
Adding White LEDs to conventional RGB LEDs allows a more expansive range of expression. RGBW LEDs easily create a spring cherry blossom color or stylish shades of white. Orders can be provided in increments of 1 LED. It is possible to manufacture up to 100 LEDs (30m at 300MM spacing) for labor savings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

(mm)



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

*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

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.

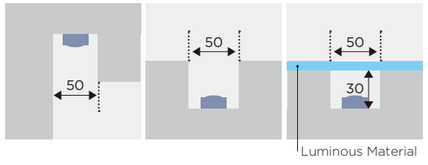
Surface Mounting with Disks

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.

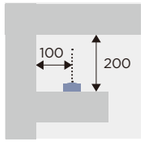
Minimum Space Requirements



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)



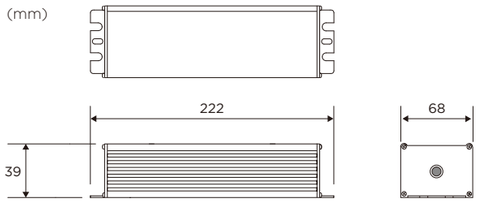
Refer to page 7-8 for the Power Supply, Data Mixer and Wiring Diagram of Kromastar Flat.

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

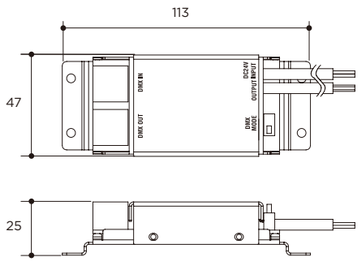
Tokistar's LDR24-96 has a single 96 watt output.



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
Safety Standards
UL 879, UL 8750, UL 1310 Class 2, TUV EN60950-1, EN61347-1, EN61347-2-3 ind. CAN/CSA C22.2, No. 223-M91, CE, IP67 Rated
LED Module Capacity
KSG/KSF fixtures up to 100LEDs can be connected for one LDR24-96.

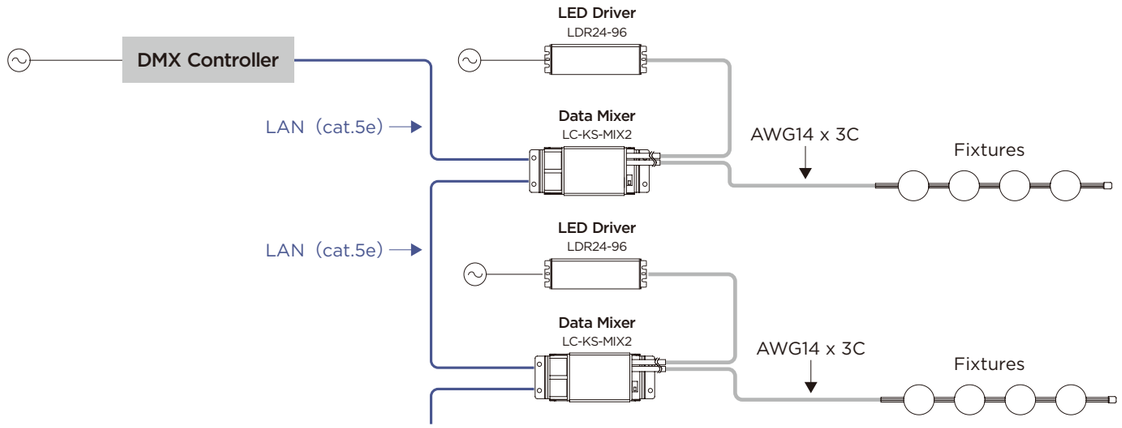
Data Mixer for Kromastar Globe and Kromastar Flat

LC-KS-MIX2 Required



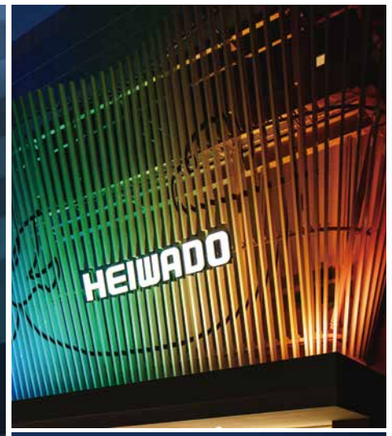
Rated input voltage : 24VDC
Rated output voltage : 24VDC 5A
Input signal : DMX
Weight : 120g
*For indoor use only

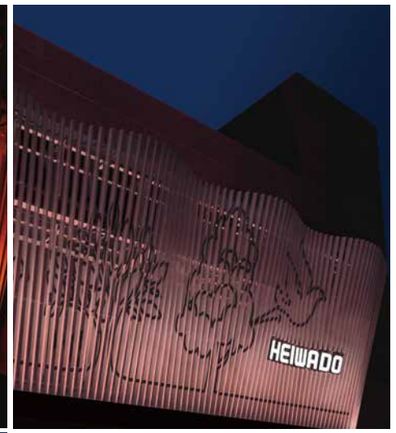
The wiring diagram is just an example.
Wiring diagram varies depending on electrical specifications, content of performance, site conditions, etc.

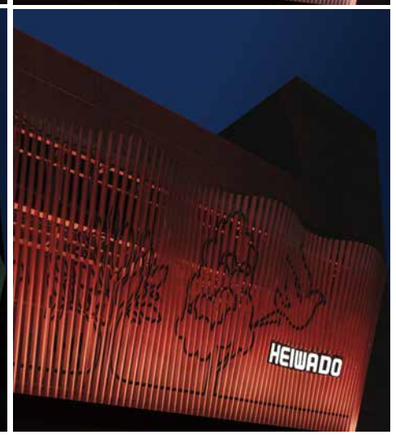


*NOT includes: DMX Controller, DMX Splitter, LAN Cables (cat.5e), Software, On site setting, etc.

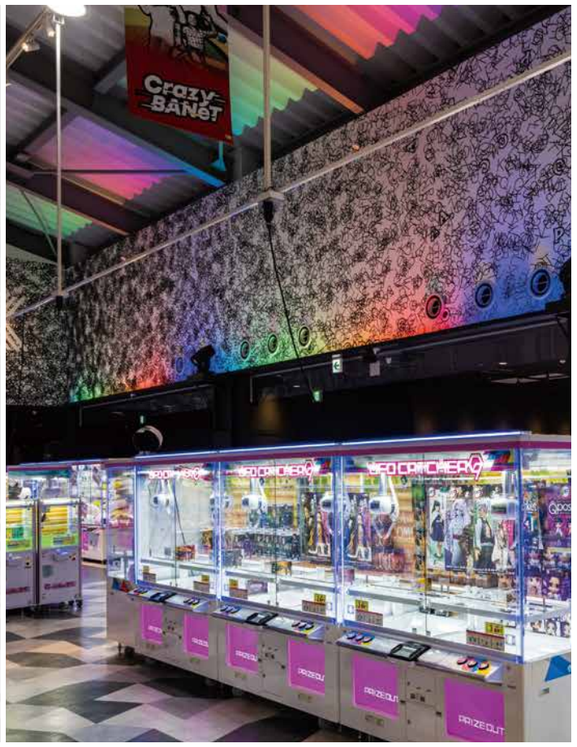
#01



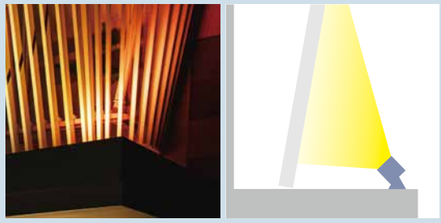




#02



#01 HEIWADO ISHIYAMA

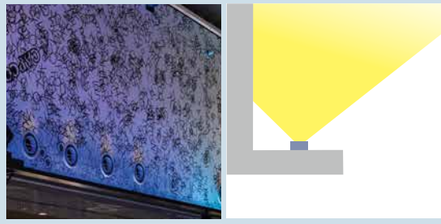


KROMASTAR WASH

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

▶▶ Page 11-12

#02 MIRAINO AEON MALL HAKUSAN



KROMASTAR WASH

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

▶▶ Page 11-12

KROMASTAR WASH

OUTDOOR | IP66 | 24VDC / DMX

Voltage = 24VDC
Weight = L300 : 700g
L600 : 1400g
L900 : 2100g
Main Materials = Aluminum, Stainless Steel & PC
Cable = Outer Diameter : Φ6.1mm(5-core)
Power sider : AWG18x2
Dimming Signal Side : AWG20x3
Connector Diameter : Φ20mm

Independently Addressable RGBW LEDs

KSW01-L□□□-RGBW-20D

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

Beam Angle
20D : 20°

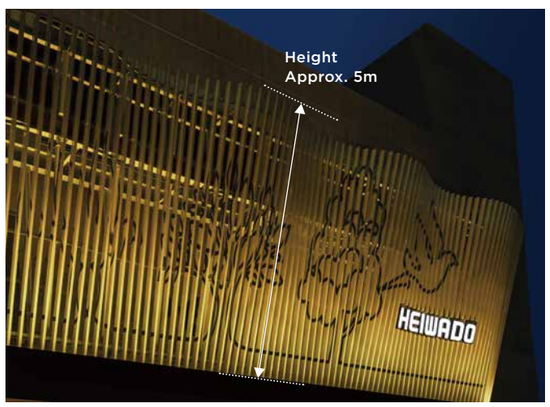
Addresses are given at the factory upon order.

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



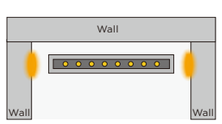
Kromastar Wash incorporates high-powered 4-1n 1 RGBW LEDs behind a single lens for producing consistent mixed colors from each light source. The 20 degree lens can illuminate not only flat surfaces but also surfaces with complex structures evenly without breaking the light.

Point 02 Independently addressable 4-in-1 RGBW LEDs create your own special atmosphere

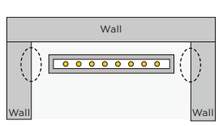
Each Red, Green, Blue and White LED die is independently addressable.
Its feature enables it to create white LED color for everyday use, and colored lighting for special occasions.

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.

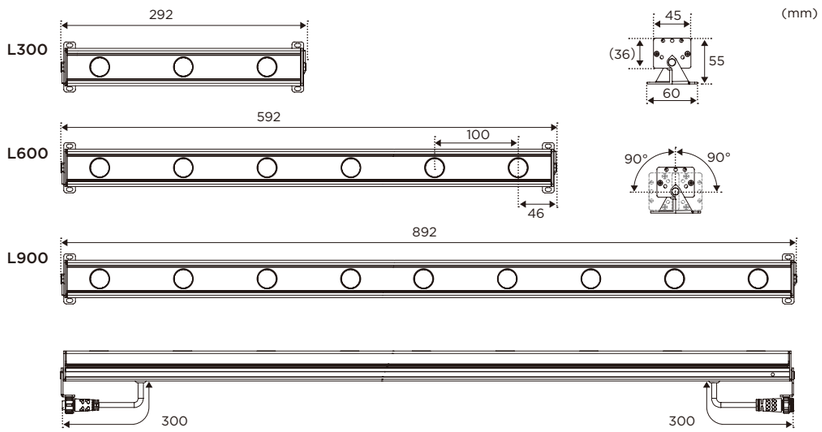


Typical full color wall grazer



Kromastar Wash

Specifications

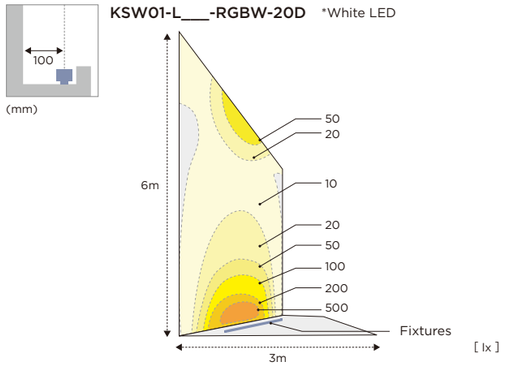


LED Colors, lm

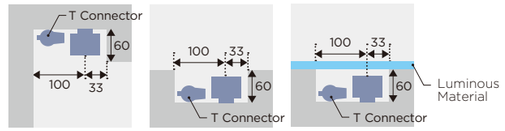
Red : 110lm/LED
Green : 125lm/LED
Blue : 30lm/LED
White (4000K)
:140lm/LED

*This is the maximum value for each color.

Light Distribution



Minimum Space Requirements



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.

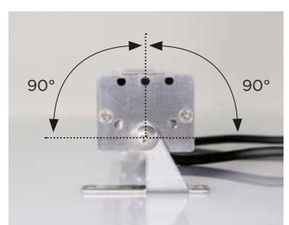
Installation

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.



Refer to page 13-14 for the Power Supply, Date Converter and Wiring Diagram of Kromastar Wash.

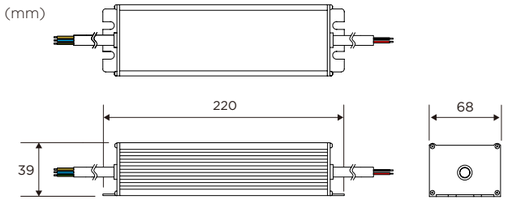
Power Supply & Date Converter

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

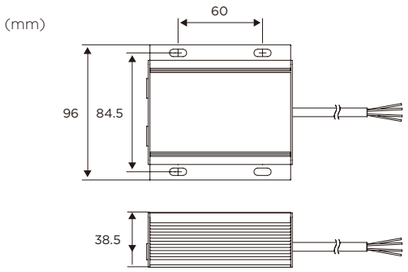
Tokistar's LDR24-96W has a single 96 watt output.



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
Safety Standards
ETL Listed to UL 2108 when used with Tokistar Lighting Products
UL8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13 IP67, J61347-1, J61347-2-13 approved; design refer to UL60950-1,TUV EN60950-1
LED Module Capacity
KSW fixtures up to 2.4m can be connected for one LDR24-96W.

Data Converter for Kromastar Wash

LC-KSW-DC Required

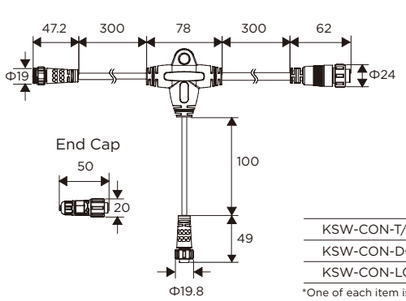


Rated input voltage : 24VDC
Input signal : DMX
Weight : 180g
*For indoor use only

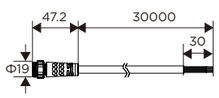
Kromastar Wash Cables

T Connector · Cable Required

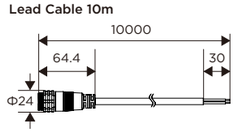
T Connector with End Cap



Data Cable 30m



Lead Cable 10m



KSW-CON-T/EC	T Connector with End Cap
KSW-CON-DC-30m	Data Cable 30m
KSW-CON-LC-10m	Lead Cable 10m

*One of each item is required for a LED driver.

Options

KSW-EXT-DC-15m	Data Extension Cable 15m

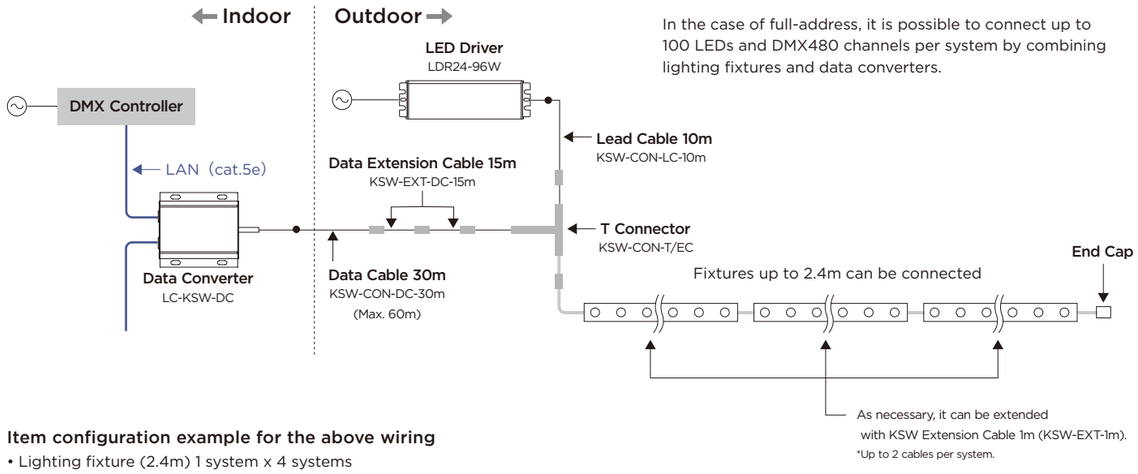
*This is an extension cable exclusively for KSW-CON-DC-30m. It can be extended up to 60m in combination with KSW-CON-DC-30m.

KSW-EXT-1m	KSW Extension Cable 1m

*This is an extension cable to connect between T connector and the fixture, or between fixtures. Up to 2 can be used per system.

Wiring Diagram

The wiring diagram is just an example.
Wiring diagram varies depending on electrical specifications, content of performance, site conditions, etc.



In the case of full-address, it is possible to connect up to 100 LEDs and DMX480 channels per system by combining lighting fixtures and data converters.

Item configuration example for the above wiring
- Lighting fixture (2.4m) 1 system x 4 systems
- From T connector to data converter: Max.60m

Kromastar Wash L900	KSW01-L900-RGBW-20D	8pcs
Kromastar Wash L300	KSW01-L300-RGBW-20D	4pcs
LED Driver	LDR24-96W	4pcs
Data Converter	LC-KSW-DC	4pcs
T Connector with End Cap	KSW-CON-T/EC	4pcs
Data Cable 30m	KSW-CON-DC-30m	4pcs
Data Extension Cable 15m	KSW-EXT-DC-15m	8pcs
Lead Cable	KSW-CON-LC-10m	4pcs
KSW Extension Cable	KSW-EXT-1m	-

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

⚠ PRECAUTIONS

- Maximum cable length from DMX controller to Data Converter end is 50m.
- Maximum cable length from Data Converter to T connector is 60m.
- Controllers and Data Converters are not waterproof. Please install them indoors.
- Please select cables with a capacity that matches the construction conditions. Depending on the site environment, select cables that are water/weather resistant and comply with the local standards.

⚠ 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.