Kurba Grazer 3D™ Dynamic Color | Field Bendable 24V System

optic arts by luminii

Features

Kurba Grazer 3D™ is a wall grazing, energy efficient and flexible LED strip suitable for wet locations capable of vertical/top bends down to 8″ radius and Horizontal/side bends up down 16″ radius . The silicone material offers excellent heat, weather, UV, and solvent resistance and has a special coating to repel dust and dirt accumulation.

Output Options
- 2-Wire Warm Dim gradually warms the color temperature as you dim down the brightness
- Tunable White allows individual control of CCT and output
- RGB options offer balanced output across the color gamut and a true white with RGBW

Average Life (L70)
50,000 hours

Approvals
24VDC Class 2 wet listed, IP67

Warranty
3 years

1.38"
0.98"
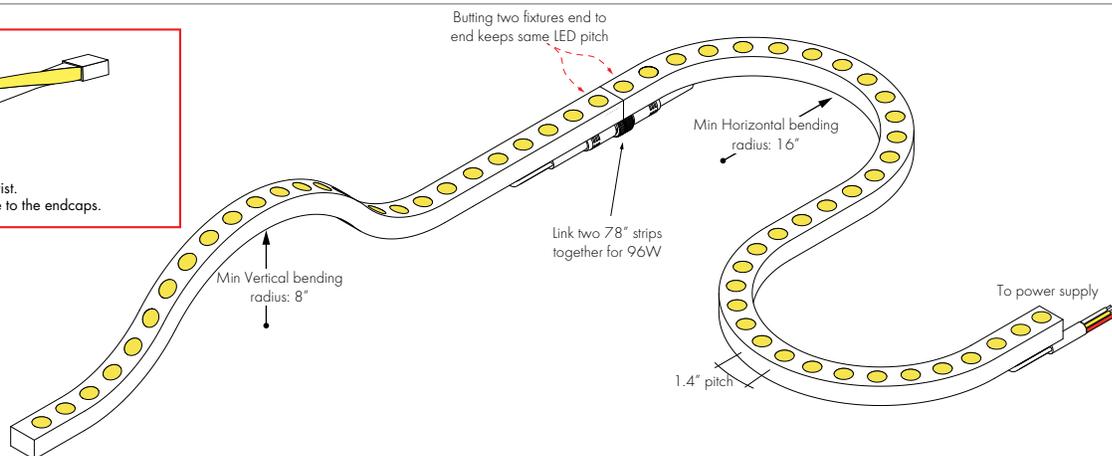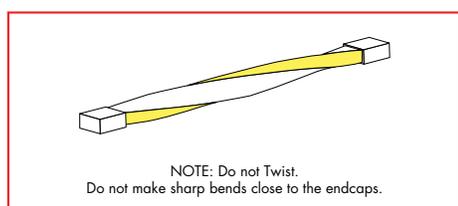
Finish Options
☐ White ■ Black

RoHS Declare.
c(UL)us LISTED CE DIM

Warm Dimming Tunable White IP67
RGB RGBW

Technical Information

Finish Option	White			Black		
Output	TW9SO	RGB9SO	RGBW9SO	TW9SO	RGB9SO	RGBW9SO
Light Output at (All On)	274 lm/ft	237 lm/ft	280 lm/ft	243 lm/ft	201 lm/ft	237 lm/ft
Average Power Consumption at 4'	7.32 W/ft	7.32 W/ft	7.32 W/ft	7.32 W/ft	7.32 W/ft	7.32 W/ft
Efficacy	37 lm/W	32 lm/W	38 lm/W	33 lm/W	27 lm/W	32 lm/W
Ordering Increment	9.84"	9.84"	9.84"	9.84"	9.84"	9.84"
Maximum Run Length (per strip/ In Series)	78″/156″	78″/156″	78″/156″	78″/156″	78″/156″	78″/156″
Operating Temperature Range	-40°F to 131°F	-40°F to 131°F	-40°F to 131°F	-40°F to 131°F	-40°F to 131°F	-40°F to 131°F
Control/Dimming Protocol	0–10V, DMX	DMX	DMX	0–10V, DMX	DMX	DMX

Constraints

NOTE: Do not Twist.
Do not make sharp bends close to the endcaps.

Butting two fixtures end to end keeps same LED pitch

Min Horizontal bending radius: 16″

Min Vertical bending radius: 8″

Link two 78″ strips together for 96W

1.4″ pitch

To power supply

Ordering Code

MODEL	RATING	BEND DIRECTION	LENGTH	OUTPUT[1]	CCT	LENS[2]	MOUNTING	FINISH	FEED POSITION LEFT	FEED POSITION RIGHT

KBG - Kurba Grazer 3D™

W - Wet

3D - 3D Bending

SEE PCC CHART ON PAGE 5

TW9SO - Tunable White, Standard Output
RGB9SO - RGB, Standard Output
RGBW9SO - RGBW, Standard Output

22K57K - 2200K-5700K
RGB - Red, Green, Blue
RGB30K - RGB 3000K

20X20 - Grazer (20°)
20X30 - Elliptical Beam (20°x30°)
20X50 - Elliptical Beam (20°x50°)
40X40 - Elliptical Beam (40°x40°)

NA - See Page 3 for orderable mounting accessories

WH - White
BK - Black

FEED POSITION LEFT
INJECTION MOLD[3]
IMB - Back Wire Feed[4]
NPF - No Power Feed[5]

QUICK CONNECT
IMFB - Back Female QC[6]
IMMB - Back Male QC[6]
NPF - No Power Feed[5]

FEED POSITION RIGHT
INJECTION MOLD[3]
IMB - Back Wire Feed[4]
NPF - No Power Feed[5]

QUICK CONNECT
IMFB - Back Female QC[6]
IMMB - Back Male QC[6]
NPF - No Power Feed[5]

Feeds come with 118″ wire leads

1 - Title 24 JA8 compliance achievable, contact factory for specific requests
2 - 40X40 lens option only available with RGB26SO & RGBW26SO outputs.
3 - Injection Mold Soldered Wire Feeds (IMB) come with 90° wire leads
4 - Order IMB (Injection Mold Soldered Lead Wires) when connecting KBG to power supply.
5 - NPF-NPF for Feed Position 1&2 is not a valid configuration option.
6 - Order IMFB (Female Q/C) and IMMB (Male Q/C) when joining multiple KBG fixtures together.
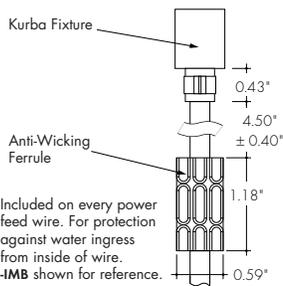
Product Dimensions

Front View

1.38"
0.98"
0.20"
0.35"

Side View

Up to 78" per strip

4.50" ± 0.40"

Injection Mold Soldered Lead Wires [118"]
(for connection to power supply)

1.50"

Injection Mold Quick Connect [118"]
(for linking KBG sections)

4.00"
1.42"

Top View

0.33"   0.60"   Ø 0.84"

1.38"

Up to 78" per strip

For best wall grazing, place fixture about 4" from wall.
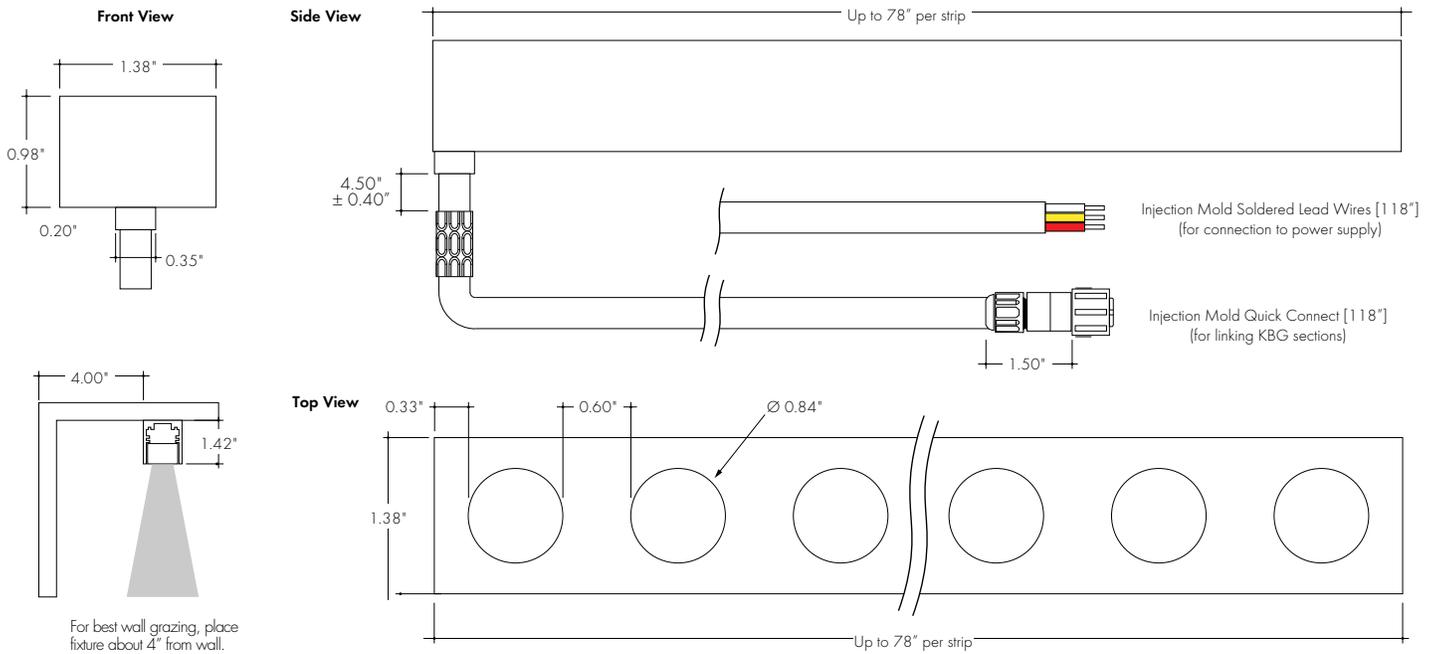
<u>Note:</u> Each 78" Kurba Grazer 3D™ section is 48W. Two 78" Kurba Grazer 3D™ strips may be joined together in series up to 156" for a continuous run.
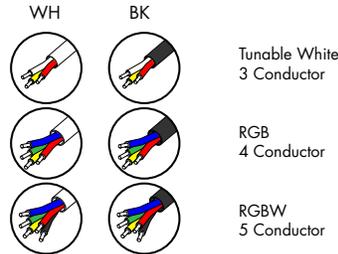
Linking and Extension Cable Options

ANTI-WICKING FERRULE
Included on every power feed wire

Kurba Fixture

0.43"
4.50" ± 0.40"

Anti-Wicking Ferrule

Included on every power feed wire. For protection against water ingress from inside of wire. **-IMB** shown for reference.

1.18"

0.59"

POWER FEED OPTIONS

WH   BK

Tunable White
3 Conductor

RGB
4 Conductor
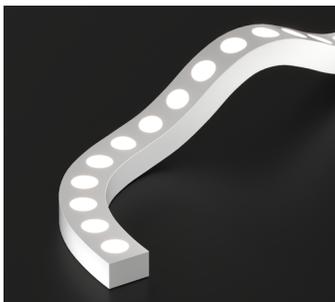
RGBW
5 Conductor

Finish Options

• A wide variety of finish options allowing complete customization of style and aesthetic.

Basic Option

White

Kurba's base finish is a crisp white which brings a timeless, clean aesthetic that brightens and enhances any space
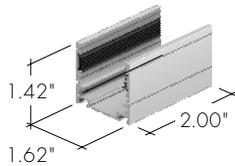
Premium Option

Black

Black is a dark, pitch-black with a soft flat finish. This finish brings a bold, modern look, adding a touch of cosmic elegance to any space.

## Mounting Accessories and Optional Connectors

MC-KBG-SAP-SM-2-SA
KBG Mounting Channel, Serrated Aluminum Profile,
Surface Mount, 2in x 1.4in tall. Silver Anodized

1.42"
2.00"
1.62"

Aluminum mounting channel providing grip. For use
with light strip mounted to the ceiling.
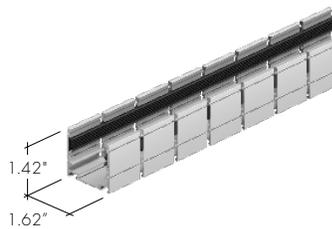
MC-KBG-SAP-SM-78-SA
KBG Mounting Channel, Serrated Aluminum Profile,
Surface Mount, 78in x 1.4in tall, Silver Anodized
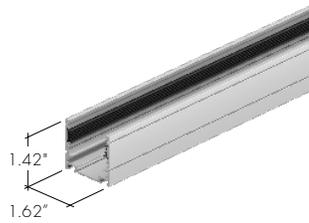
1.42"
1.62"

Aluminum mounting channel providing grip. For use
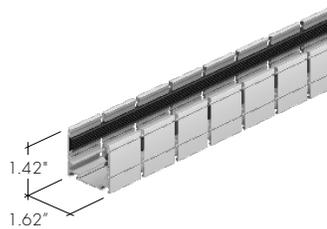with light strip mounted to the ceiling.

MC-KBG-BSAP-HB-SM-38-SA
KBG Mounting Channel, Bendable Serrated Aluminum
Profile, Horizontal Bending, Surface Mount, 38in, Silver
Anodized

1.42"
1.62"

1.20"   0.16"   0.19" x 0.39"

5.33"
0.60"

Aluminum mounting channel providing grip. For use
with light strip mounted to the ceiling.
NOTE: HB - Horizontal Bending Only

MC-KBG-BSAP-VB-SM-38-SA
KBG Mounting Channel, Bendable Serrated Aluminum
Profile, Vertical Bending, Surface Mount, 38in, Silver
Anodized

1.42"
1.62"

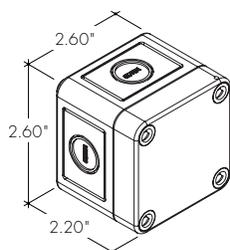1.20"   0.16"

5.33"
0.60"   0.19" x 0.39"

Aluminum mounting bracket providing grip. For use
with light strip mounted to the ceiling.
NOTE: VB - Vertical Bending Only
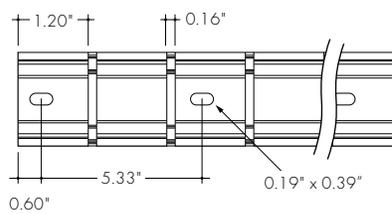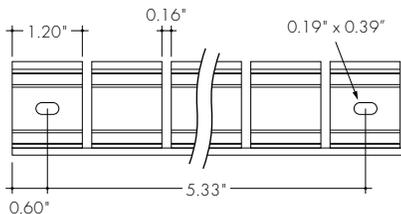
LVSP-WET
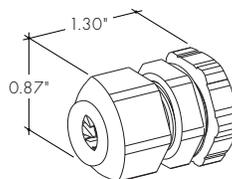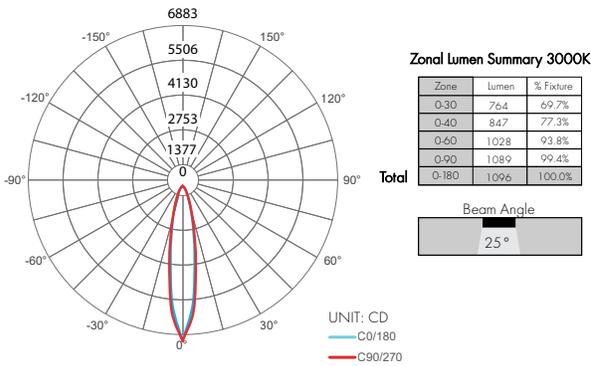Splice box: wet rated, low voltage, gray

2.60"
2.60"
2.20"

LVSP-WET-CM
Connector for splice box, low voltage for cable
management, gray

1.30"
0.87"

Photometry

KBG-W-3D-48-TW9SO-27K65K-20X20-NA-WH
Kurba Grazer 3D, 4ft, 2700K - 6500K, 20° Grazer Lens

6883
5506
4130
2753
1377
0

UNIT: CD
— C0/180
— C90/270

Zonal Lumen Summary 3000K

Zone	Lumen	% Fixture
0-30	764	69.7%
0-40	847	77.3%
0-60	1028	93.8%
0-90	1089	99.4%
0-180	1096	100.0%

Total

Beam Angle

25°

KBG-W-3D-48-TW9SO-27K65K-20X30-NA-WH
Kurba Grazer 3D, 4ft, 2700K - 6500K, 20°X30° Elliptical Lens

6978
5582
4187
2791
1396
0

UNIT: CD
— C0/180
— C90/270

Zonal Lumen Summary 3000K

Zone	Lumen	% Fixture
0-30	792	72.3%
0-40	875	79.8%
0-60	1038	94.7%
0-90	1089	99.4%
0-180	1096	100.0%

Total

Axial Beam Angle

21°

Transversal Beam Angle

29°
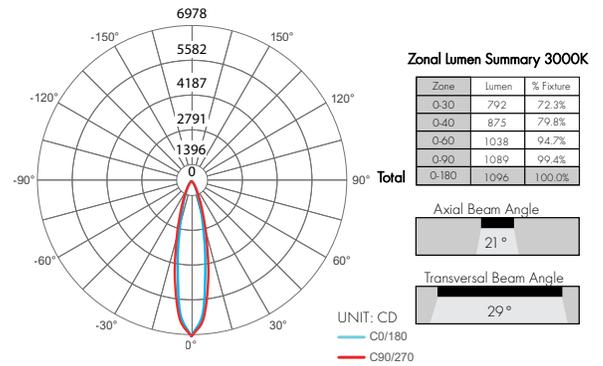
KBG-W-3D-48-TW9SO-27K65K-20X50-NA-WH
Kurba Grazer 3D, 4ft, 32700K - 6500K, 20°X50° Elliptical Lens

3261
2609
1957
1304
652
0

UNIT: CD
— C0/180
— C90/270

Zonal Lumen Summary 3000K

Zone	Lumen	% Fixture
0-30	646	58.9%
0-40	761	69.4%
0-60	1013	92.4%
0-90	1089	99.4%
0-180	1096	100.0%

Total

Axial Beam Angle

27°

Transversal Beam Angle

52°
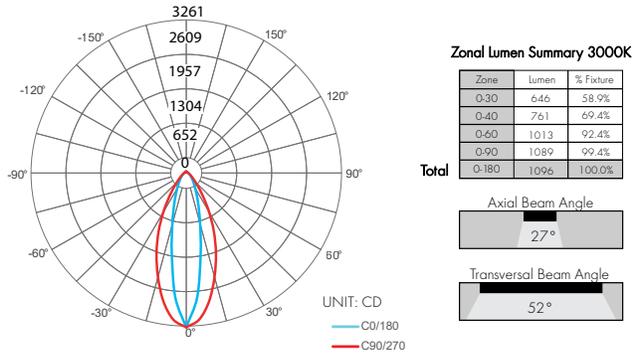
KBG-W-3D-48-RGBWW9SO-RGB30K-40X40-NA-WH
Kurba Grazer 3D, 4ft, RGB-3000K, 40°X40° Elliptical Lens

1862
1490
1117
745
372
0

UNIT: CD
— C0/180
— C90/270

Zonal Lumen Summary 3000K

Zone	Lumen	% Fixture
0-30	645	57.6%
0-40	763	68.1%
0-60	1030	92.0%
0-90	1114	99.5%
0-180	1120	100.0%

Total

Axial Beam Angle

38°

Transversal Beam Angle

43°

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TW9SO | Power Consumption Per Fixture Length

Based on operation with PDCU series of power supplies. Use Acutal Length for Order Code Entry
Tolerance for Actual Lengths less than 6 ft is +/- 0.2", Actual Lengths between 6 ft and 16 ft is +/- 0.3", and Actual Lengths greater than 16 ft is +/- 0.6"

Nominal Length (in)	W	Actual Length (in)
10	6.1	**10.0**
20	12.1	**19.8**
30	24.4	**29.7**
39	24.0	**39.4**
49	30.1	**49.4**
59	36.1	**59.2**
69	42.1	**69.1**
78	48.1	**78.9**

RGB9SO | Power Consumption Per Fixture Length

Based on operation with PDCU series of power supplies. Use Acutal Length for Order Code Entry
Tolerance for Actual Lengths less than 6 ft is +/- 0.2", Actual Lengths between 6 ft and 16 ft is +/- 0.3", and Actual Lengths greater than 16 ft is +/- 0.6"

Nominal Length (in)	W	Actual Length (in)
10	6.1	**10.0**
20	12.1	**19.8**
30	24.4	**29.7**
39	24.0	**39.4**
49	30.1	**49.4**
59	36.1	**59.2**
69	42.1	**69.1**
78	48.1	**78.9**

RGBW9SO | Power Consumption Per Fixture Length

Based on operation with PDCU series of power supplies. Use Acutal Length for Order Code Entry
Tolerance for Actual Lengths less than 6 ft is +/- 0.2", Actual Lengths between 6 ft and 16 ft is +/- 0.3", and Actual Lengths greater than 16 ft is +/- 0.6"

| Nominal Length (in)	W	Actual Length (in)
10	6.1	**10.0**
20	12.1	**19.8**
30	24.4	**29.7**
39	24.0	**39.4**
49	30.1	**49.4**
59	36.1	**59.2**
69	42.1	**69.1**
78	48.1	**78.9**

Power Supplies

See fixture and power supply instructions & spec sheet for wiring information. Dimming possible in select models - view Luminii website for list of compatible dimmers.

For use with Tunable White

DALI2 Dimming Power Supplies 0.1% 120VAC - 277VAC

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT	OUTPUT CONTROL
PS - Power Supply, 120-277VAC	**DALI-DT8** - DALI DT8 Tunable White (0.1%)	**D** - Dry	**96** - 96 Watts	**24** - 24 VDC	**PWM** - Pulse Width Modulation

MODELS	96W
Length	14.40"
Width	5.20"
Depth	2.60"

PS-DALI-DT8-D-96
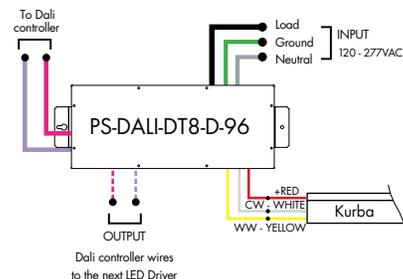
Athena DALI2-DT8 LED Driver

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT	FEATURE
PS - Power Supply, 120-277VAC	**DALI-DT8** - DALI DT8 Tunable White	**D** - Dry	**96** - 96 Watts	**24** - 24 VDC	**AWNR** - Athena

| MODELS	96W
Length	14.40"
Width	5.20"
Depth	2.60"

ATHENA
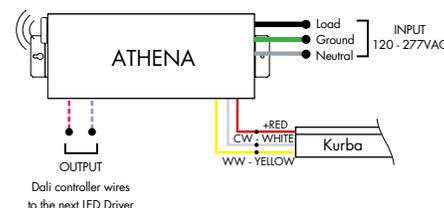
For use with Tunable White

VintageDim® 0 - 10V Dimming Power Supplies 0.1% 120VAC - 277VAC

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS - Power Supply, 120-277VAC	**010V-WD** - 0 -10V Dimming (0.1%), Standard Warm Dim Curve (with Tunable White LED) **010V-TW** - 0 -10V Dimming (0.1%), Two Channel Control, Brightness and CCT1-CCT2 Ratio **010V-2CH** - 0 -10V Dimming (0.1%), Two Channel Control, LED1 Brightness and LED2 Brightness **010V-WDX** - 0 -10V Dimming (0.1%), Customizable Warm Dim Curve (with Tunable White LED) **010V-2CHX** - 0 -10V Dimming (0.1%), Two Channel Control, Customizable Brightness and CCT1-CCT2 Ratio	**D** - Dry	**96** - 96 Watts **3X96** - 3x96 Watts[1]	**24** - 24 VDC

1 - 3x96 is only available with input control options 010V-WD and 010V-TW
2 - Athena only available on 96 watts option

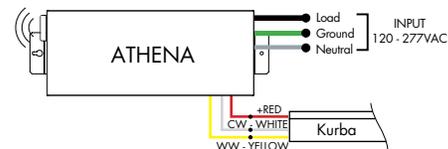| MODELS	96W	3X96
Length	14.40"	15.00"
Width	5.20"	6.62"
Depth	2.60"	4.56"
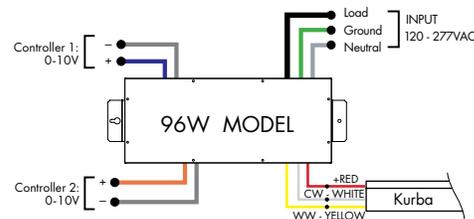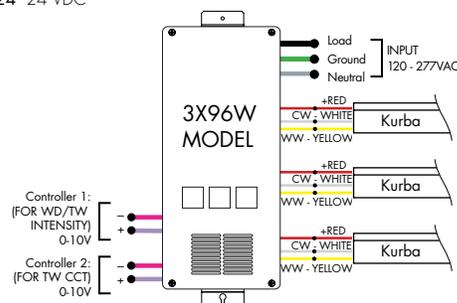
3X96W MODEL

96W MODEL

Power Supplies

See fixture and power supply instructions & spec sheet for wiring information. Dimming possible in select models - view Luminii website for list of compatible dimmers.

Athena 0-10V Warm Dim LED Driver

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT	FEATURE
PS-Power Supply, 120-277VAC	010V-WD-0-10V Dimming, Standard Warm Dim Curve (with Dynamic White LED)	D-Dry	96-96 W	24-24 VDC	AWNR-Athena

MODELS	96W
Length	14.40"
Width	5.20"
Depth	2.60"

Athena 0-10V Two Channel LED Driver

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT	FEATURE
PS-Power Supply, 120-277VAC	010V-2CH-0-10V Dimming Two Channel Control, LED1 Brightness and LED2 Brightness	D-Dry	96-96 W	24-24 VDC	AWNR-Athena
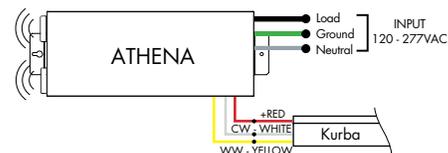
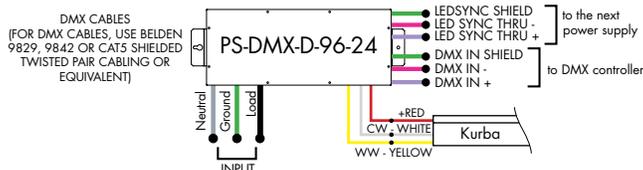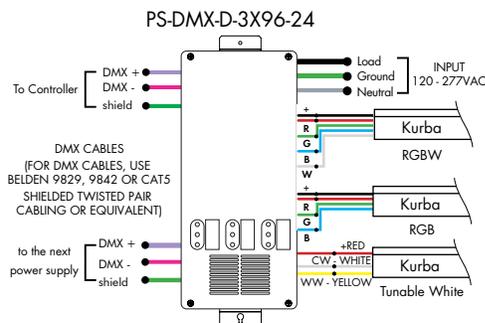| MODELS	96W
Length	14.40"
Width	5.20"
Depth	2.60"

For use with RGB/RGBW, Tunable White

Requires Controller

DMX Dimming Power Supplies 0.1% 120VAC - 277VAC

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS-Power Supply, 120-277VAC	DMX-DMX (0.1%)	D-Dry	96-96 Watts / 3X96-3X96 Watts	24-24 VDC

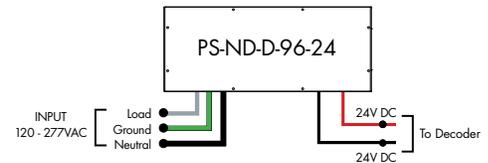| MODELS	96W	3X96
Length	14.40"	15.00"
Width	5.20"	6.62"
Depth	2.60"	4.56"

PS-DMX-D-3X96-24

PS-DMX-D-96-24

Power Supplies

See fixture and power supply instructions & spec sheet for wiring information. Dimming possible in select models - view Luminii website for list of compatible dimmers.

For use with RGB/RGBW/Pixel   Requires Controller and Decoder

Ordering Code Non-Dimming Power Supply 120VAC - 277VAC

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS - Power Supply, 120-277VAC	ND - Non Dimming	D - Dry	96 - 96 Watts	24 - 24 VDC

PS-ND-D-96-24

INPUT 120 - 277VAC — Load / Ground / Neutral

24V DC / 24V DC — To Decoder

MODELS	96W
Length	14.40"
Width	5.20"
Depth	2.60"

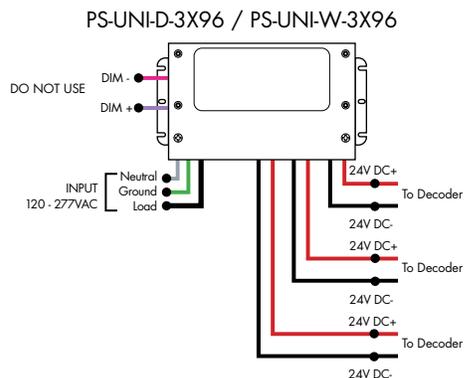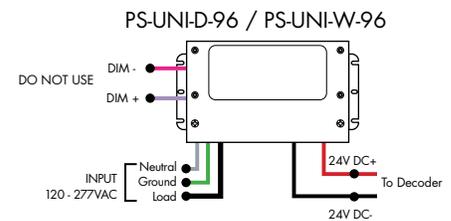### For use with RGB/RGBW/Pixel   Requires Controller and Decoder

Ordering Code Universal Dimming Power Supplies 1% 120VAC - 277VAC

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS - Power Supply, 120-277VAC	UNI - 0-10V Dimming, Phase Dimming	D - Dry W - Wet	30 - 30 Watts 60 - 60 Watts 96 - 96 Watts 3x96 - 3x96 Watts	24 - 24 VDC

Compatibility: View a complete list of compatible dimmers on product page (Link)

0-10V - 1% dimming
MLV/ELV/TRIAC - 1% dimming, consult dimming compatibility chart

PS-UNI-D-96 / PS-UNI-W-96

DO NOT USE — DIM - / DIM +

INPUT 120 - 277VAC — Neutral / Ground / Load

24V DC+ / 24V DC- — To Decoder

PS-UNI-D-3X96 / PS-UNI-W-3X96

DO NOT USE — DIM - / DIM +

INPUT 120 - 277VAC — Neutral / Ground / Load

24V DC+ / 24V DC- — To Decoder
24V DC+ / 24V DC- — To Decoder
24V DC+ / 24V DC- — To Decoder

MODELS	PS-UNI-W-30W	PS-UNI-W-60W	PS-UNI-W-96W	PS-UNI-W-3X96W
Length	6.50"	7.40"	8.66"	11.85"
Width	3.73"	3.73"	3.73"	4.32"
Depth	1.61"	1.61"	1.61"	1.81"

MODELS	PS-UNI-D-30W	PS-UNI-D-60W	PS-UNI-D-96W	PS-UNI-D-3X96W
Length	8.77"	8.77"	8.11"	9.94"
Width	4.27"	4.27"	5.60"	7.61"
Depth	1.83"	1.83"	1.83"	2.02"

optic arts
by luminii

Controllers and Decoders

For use with Tunable White Power Supplies

Tunable White wall-mount controller controls lighting fixtures, wireless control of TW lighting fixture. Fits in any standard US switch box. Includes all the outputs in the back of the controller.

Features

- Switch & dimming control function, control range > 20M.
- Smooth transition between light levels.
- Separately operate dimming and color temperature functions.
- Able to control 1 zone with endless receivers. Each receiver can maximally be controlled by 8 remotes.
- Power, temperature color and dimming functions operated by push button after receivers are connected.

Operating Voltage

3V DC battery

Color Parameters

- Brightness
- Saturation
- Fading

ORDERING CODE

MODEL

DTW-MC

DTW-MC - Tunable White controller

Tunable White DMX wall-mount controller is a fully touch sensitive controller designed in accordance with standard protocol DMX512. Offers fast and accurate color temperature adjustment and brightness dimming of natural white, warm white and cold white. Designed with a touch color wheel, the DMX512 controller can adjust color temperature and brightness for all white LEDs smoothly and accurately. The DMX controller can control 1 zone with endless decoders.

Features

- 1 zone
- 6 color scenes
- DMX Control
- Touch Sensitive Glass Surface
- Dimming and Speed Control
- Memory Function
- Easily Fits Standard US Switch Boxes

Operating Voltage

12 - 24V DC

Color Parameters

- Brightness
- Saturation
- Primary colors
- Fading
- Color changing speed

ORDERING CODE

MODEL

TW-DMX

TW-DMX - DMX controller

The SLD DimTW is a constant voltage warm dimming LED dimming module. The unique dimming module accepts 0-10V control and mimics a smooth, incandescent dimming curve.

Features

- Flicker free 0-100% dimming
- High efficiency up to 97%
- High precision dimming ratio:>1:1000
- Fully isolated plastic housing
- Comply with EN55015 and FCC part 15 without additional input filter and capacitors
- compact size, high reliability
- 3 years warranty

Operating Voltage

8-48 VDC

ORDERING CODE

MODEL

SLD-DIMTW

SLD-DIMTW - Tunable white LED dimming module

Controllers and Decoders

For use with Tunable White, RGB/RGBW Power Supplies

Translates controller DMX512 programs for RGB and white LED strips.

Unique DMX address for the decoder can be set easily and displayed by the numeric display on the case. Changing and resetting the DMX address requires manual input.

Use power repeater to expand output.

Operating Voltage

12-36 VDC

Operating Temperature Range

from -4°F to +122°F in case

Power Capacity

up to 96W at 24V

ORDERING CODE

MODEL

DDMX-RGBW

DDMX-RGBW - DMX decoder

The RGBW receiver is easily paired with controller by the click of a button. Receiver can be reset to factory settings at any time.

Each receiver can store one static RGB color, one color sequence, and one brightness setting for the white LED strip. Receivers assigned to the same scene within the same zone will have the same LED static color and color sequence.

Operating Voltage

12-36 VDC

Operating Temperature Range

from -4°F to +122°F in case

Power Capacity

up to 96W at 24V

ORDERING CODE

MODEL

RGBW-RC-R

RGBW-RC-R - RGBW receiver

Extends identical signal when connected in series to an RGBW LED control system. The RGBW signal repeater works with Luminii RGB and RGBW controllers, receivers, and decoders.

RGBW signal can be extended indefinitely when adequate power supply (not included) is connected to the system.

Operating Voltage

12-36 VDC

Operating Temperature Range

from -4°F to +122°F in case

Power Capacity

up to 96W at 24V

ORDERING CODE

MODEL

RGBW-SR

RGBW-SR - RGBW signal repeater

optic arts
by luminii

Controllers and Decoders

For use with Tunable White, RGB/RGBW, Pixel Power Supplies

ORDERING CODE

MODEL

TSDMX-E

TSDMX-E - Touchscreen DMX controller

Programmable advanced DMX512 lighting controller featuring a touch-screen interface. Operates as stand alone controller or integrated with most architectural lighting control systems. Can controller endless DMX512 enabled devices.

Mounts to standard single or dual gang wall box with the included power supply inside the junction box. Terminal block design for power and data connections.

Features
- Sleek glass design which sits 0.43" from the wall
- Graphical color display to show selected environment
- Color/dimmer/speed palette
- Color temperature mixing
- Touch sensitive buttons. No mechanical parts
- Touch sensitive wheel allows for accurate color selection
- Multi-zone microSD memory
- Multi-room control with 500 scenes, 10 zones
- 1024 DMX channels. Control 340 RGB fixtures
- USB & Ethernet connectivity for programming and control

Power Supply
7 VDC (included)

Programmability
PC, Mac, Tablet, Smartphone

Output Signal
DMX512 (1024 channels)

Color Parameters
- Brightness
- Saturation
- Speed of color changing sequence
- Fading / dimming / brightness

For use with Tunable White, RGB/RGBW Power Supplies

ORDERING CODE

MODEL

DDMX-5CH-RDM-PRO

DDMX-5CH-RDM-PRO - DMX512 Decoder

DMX512 decoder with RDM functionality features 5 PWM output channels with common anode. High PWM output frequency range allows the product to be used in HD video conferencing spaces. All DMX products to be installed per DMX512 Standard.

Power
96 Watt

Inputs
RJ45, XLR-5Pin, Terminal Block

DMX Channels
1 to 5 settable

PWM Output Resolution Ratio
8 or 16 bit

PWM Output Frequency
500Hz - 30KHz

Output Dimming Curve Gamma Value
0.1 ~ 9.9

ORDERING CODE

MODEL

RGBW-WI-R

RGBW-WI-R - WIFI generator

RGBW-WI-R creates a local network that enables any electronic device (phone, tablet, etc.) to control the RGB/W strip connected to a RGBW-RC-R receiver.

The control functions are achieved through a free application download for Android and iOS devices called REALCOLOR.

Operating Voltage
12-36 VDC

Power Supply
PI-130-24 (included)

Operating Temperature Range
from -4°F to +122°F in case