Kurba Large Vertical Pixel RGBW | Flexible LED strip - 24 VDC

optic arts by luminii

Features

Kurba Vertical Pixel is a direct view, small profile, energy efficient and flexible LED strip suitable for wet locations capable of vertical/top bends up to 2.5" radius. Built with robust factory made power feeds or joiners, Kurba Vertical Pixel mounts to a specifically designed aluminum extruded channel.

Applications
Outdoor wet location

Operating Voltage
24VDC

Operating Temperature
-4°F to 113°F (-20°C to 45°C)

Average Life
50,000 hours

Approvals
Class 2 wet listed, IP67

Warranty
3 years

c(UL)us LISTED
RoHS
DIM
IP67

Warm Dimming · Dynamic White · RGB · RGBW

Technical Information

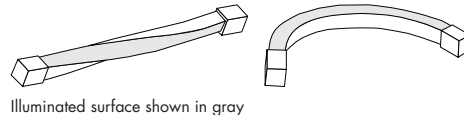| Model	KBL-F-V-SPI-RGBW
LEDs/ft	26
Light Output	Red: 24 lm/ft Green: 58 lm/ft Blue: 9 lm/ft White: 58 lm/ft All On: 116 lm/ft
Average Power Consumption at 4'	6.70 W/ft
Ordering Increment / Pixel Length	3.28″
Maximum Run Length (In Series)	16′
DMX Addresses Occupied	4 channels per pixel

Constraints

Bend Direction
Bend LED in these positions only to avoid damage

2.5" radius minimum

Illuminated surface shown in gray
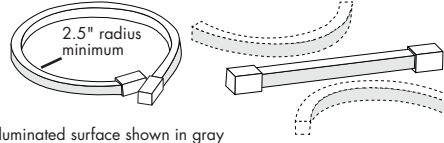
Prohibited Bends
Twisting or bending LED in these positions will cause damage
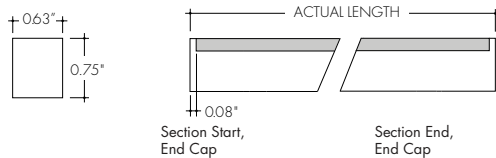
Illuminated surface shown in gray

Note: for horizontal bends refer to Luminii KBM series
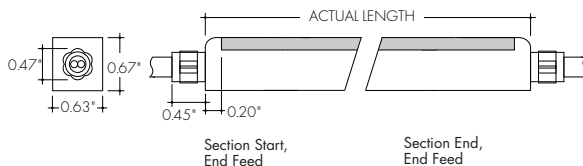**Do not make sharp bends near the endcap**
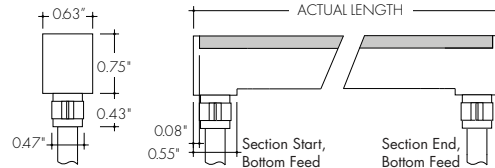
Power Feed Locations

Section Start
End PF
Side PF
Bottom PF

Bottom PF
Side PF
End PF
Section End
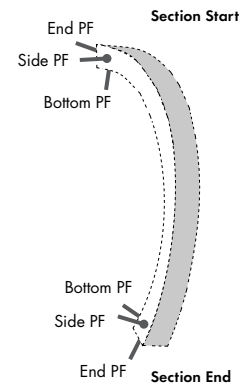
Section Start/End Power Feed Options

Injection Molded End Cap (IEC)

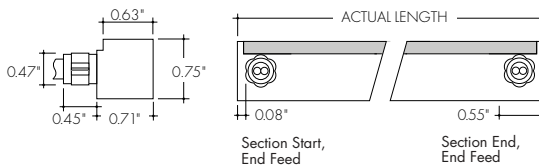0.63"
0.75"
ACTUAL LENGTH
0.08"
Section Start, End Cap
Section End, End Cap

Injection Molded Bottom Power Feed (IBPF)

0.63"
0.75"
0.43"
0.47"
0.08"
0.55"
ACTUAL LENGTH
Section Start, Bottom Feed
Section End, Bottom Feed

0.43"
4.50" ± 0.40"
1.18"
0.59"

Anti-Wicking Ferrule
Included on every power feed wire. For protection against water ingress from inside of wire. IBPF shown for reference.

Injection Molded End Power Feed (IEPF)

0.47"
0.67"
0.63"
0.45"
0.20"
ACTUAL LENGTH
Section Start, End Feed
Section End, End Feed

Injection Molded Side Power Feed (ISPF)

0.63"
0.47"
0.75"
0.45"
0.71"
0.08"
0.55"
ACTUAL LENGTH
Section Start, End Feed
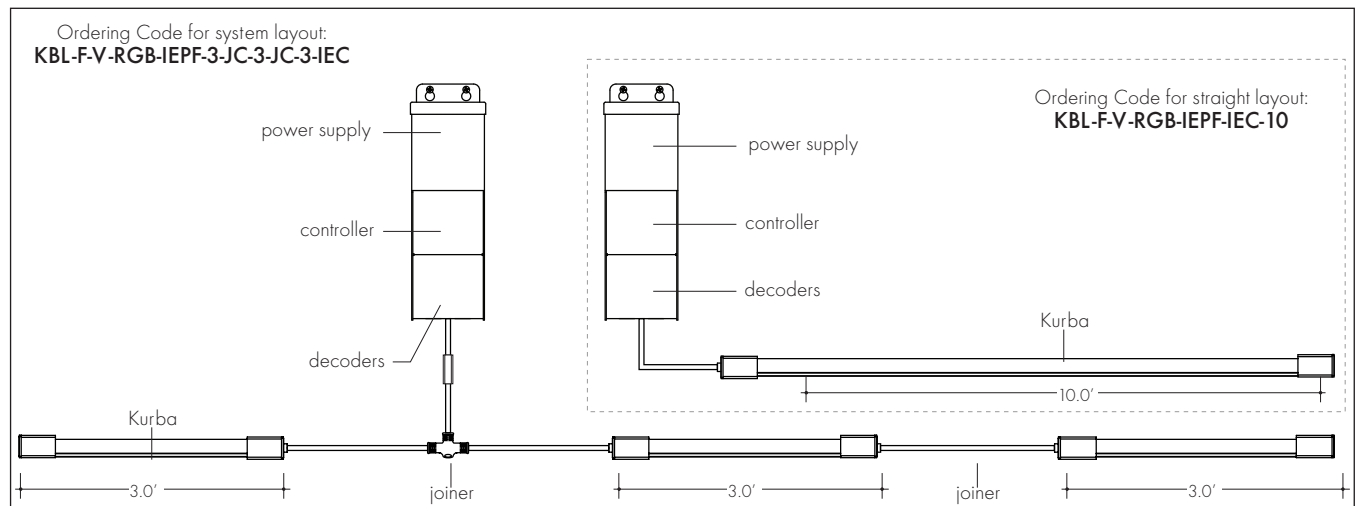Section End, End Feed
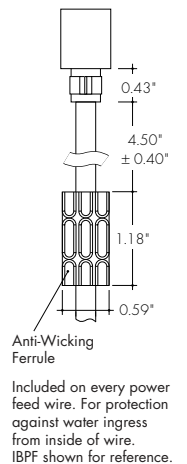
Ordering Code

MODEL	COLOR	SECTION START	SECTION END	ACTUAL LENGTH
KBL-F-V-SPI - Kurba Large, flat vertical, Smart Pixel Control	RGBW - Red, Green, Blue, White (4000K)	IEC - Injection Molded End Cap[1] IEPF - Injection Molded End Power Feed (9' wire lead)[1] IBPF - Injection Molded Bottom Power Feed (9' wire lead)[1] ISPF - Side Power Feed (9' wire lead)[1]	IEC - Injection Molded End Cap[1] IEPF - Injection Molded End Power Feed (9' wire lead)[1] IBPF - Injection Molded Bottom Power Feed (9' wire lead)[1] ISPF - Side Power Feed (9' wire lead)[1]	See Power Consumption table on page 4 for available lengths

1 - 6-8 weeks lead time. Kurba injected-molded orders are non-cancellable. IEPF, IBPF, ISPF cannot be mixed and matched from Start to End except with IEC.
2 - ISPF Side power feeds selected for both Section Start and End will be located on the same side of the strip.
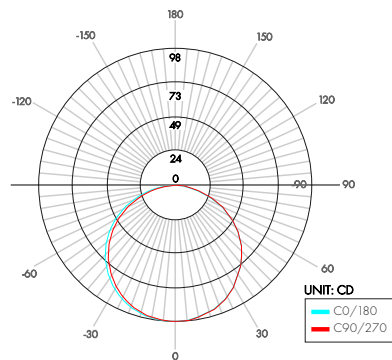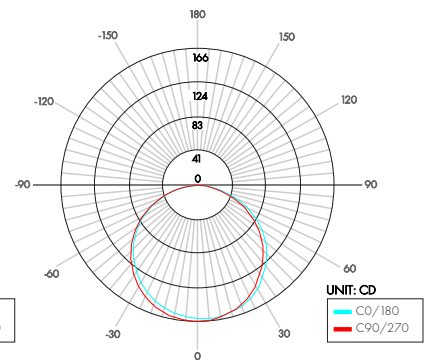
Kurba System Run

Sample layout

Ordering Code for system layout:
KBL-F-V-RGB-IEPF-3-JC-3-JC-3-IEC

power supply
controller
decoders
Kurba

Ordering Code for straight layout:
KBL-F-V-RGB-IEPF-IEC-10

power supply
controller
decoders
Kurba
10.0′

Kurba
3.0′   joiner   3.0′   joiner   3.0′

SECTION START/END OPTIONS

Joiner (JC)

10.00″

Candle Power Distribution (41K)

KBL-RGB-XX

180
150
-150
120
-120
98
73
49
24
0
90
-90
60
-60
30
-30
0

UNIT: CD
C0/180
C90/270

KBL-RGBW-XX

180
150
-150
120
-120
166
124
83
41
0
90
-90
60
-60
30
-30
0

UNIT: CD
C0/180
C90/270

Ordering Code

MODEL		COLOR		SECTION START		FIXTURE LENGTH		JOINER TYPE		FIXTURE LENGTH		SECTION END
KBL-F-V	-	**RGB**	-	**IEPF***	-		-	**JC**	-		-	**IEC**
KBL-F-V-SPI- Kurba Large, flat vertical, Smart Pixel Control		RGBW - Red, Green, Blue, White (4000K)		IEC - Injection Molded End Cap[1] IEPF - Injection Molded End Power Feed (9′ wire lead)[1] IBPF - Injection Molded Bottom Power Feed (9′ wire lead)[1] ISPF - Side Power Feed (9′ wire lead)[1]		View table on page 1 for ordering increment		JC - Joiner		Reference page 3 additional information		IEC - Injection Molded End Cap[1] IEPF - Injection Molded End Power Feed (9′ wire lead)[1] IBPF - Injection Molded Bottom Power Feed (9′ wire lead)[1] ISPF - Side Power Feed (9′ wire lead)[1]

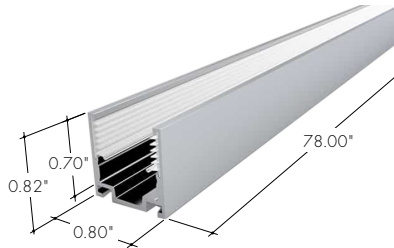1 - 4–8 week lead time, depending on length of the order.
Each system run must be kept under power supply max wattage.
Refer to page 4 for power supply information. Additional runs can be added to system, by continuing the same ordering code logic reference sample above.

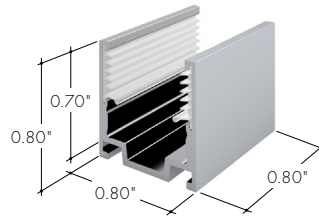## Mounting Accessories & Optional Connectors

MC-NFS-KBL-F-V-78
Mounting Channel with Grip, 78"

Aluminum mounting channel providing grip. For use with light strip mounted to the ceiling.
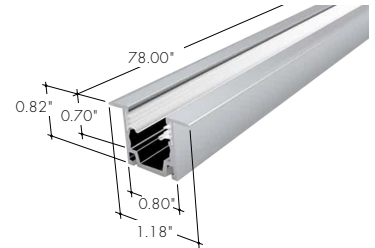
MB-KBL-F-V-ST
Mounting Bracket with Grip

Aluminum mounting bracket providing grip. For use with light strip mounted to the ceiling. 1 recommended every 8 in.

MC-FS-KBL-F-V-78
Flanged Mounting Channel with grip, 78"

Flanged aluminum mounting channel providing grip. For use with light strip mounted to the ceiling.
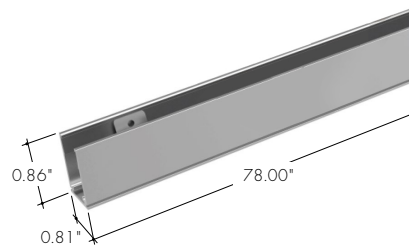
MC-BNS-KBL-F-V-34
Bendable Mounting Channel with grip, 34"

Bendable stainless steel mounting channel providing grip. For use with light strip mounted to the ceiling.
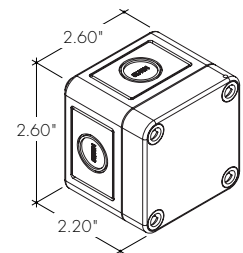
MC-KBL-F-V-78
Mounting Channel, 78"

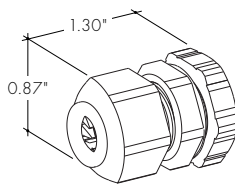IK08 rated, when aluminum channel used throughout the complete installation.

LVSP-WET
Splice Box

Wet rated, low voltage splice box, gray.

LVSP-WET-CM
Connector

Low voltage splice box wet cable management, gray.
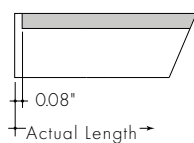
Power Consumption Per Fixture Length

Based on operation with PSD 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"
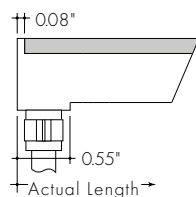
Nominal Length [inches]	W	Actual Length [inches] IEPF IEPF	IEC IEPF	IEC IBPF ISPF
4	2.1	3.7	3.6	3.4
7	3.9	7.0	6.8	6.7
10	5.7	10.2	10.1	10.0
(1 ft) 14	7.6	13.5	13.4	13.3
17	9.4	16.8	16.7	16.6
20	11.2	20.1	20.0	19.8
(2 ft) 23	13.1	23.4	23.2	23.1
27	14.9	26.6	26.5	26.4
30	16.7	29.9	29.8	29.7
33	18.6	33.2	33.1	33.0
(3 ft) 36	20.4	36.5	36.4	36.2
40	22.2	39.8	39.6	39.5
43	24.1	43.0	42.9	42.8
46	25.9	46.3	46.2	46.1
(4 ft) 50	27.7	49.6	49.5	49.4
53	26.6	52.9	52.8	52.7
56	28.3	56.2	56.1	55.9
(5 ft) 59	29.9	59.5	59.3	59.2
63	31.6	62.7	62.6	62.5
66	33.2	66.0	65.9	65.8
69	34.9	69.3	69.2	69.1
(6 ft) 73	36.5	72.6	72.5	72.3
76	38.2	75.9	75.7	75.6
79	39.8	79.1	79.0	78.9
(7 ft) 82	41.5	82.4	82.3	82.2
86	43.1	85.7	85.6	85.5
89	44.8	89.0	88.9	88.7
92	46.4	92.3	92.1	92.0
(8 ft) 96	48.1	95.5	95.4	95.3
99	49.7	98.8	98.7	98.6
102	51.4	102.1	102.0	101.9
105	53.0	105.4	105.3	105.1
(9 ft) 109	54.7	108.7	108.5	108.4

Nominal Length [inches]	W	Actual Length [inches] IEPF IEPF	IEC IEPF	IEC IBPF ISPF
112	56.3	111.9	111.8	111.7
115	58.0	115.2	115.1	115.0
(10 ft) 118	59.6	118.5	118.4	118.3
122	61.3	121.8	121.7	121.5
125	62.9	125.1	124.9	124.8
128	64.6	128.3	128.2	128.1
(11 ft) 132	66.2	131.6	131.5	131.4
135	67.9	134.9	134.8	134.7
138	69.5	138.2	138.1	137.9
141	71.2	141.5	141.4	141.2
(12 ft) 145	72.8	144.8	144.6	144.5
148	74.5	148.0	147.9	147.8
151	76.1	151.3	151.2	151.1
(13 ft) 155	77.8	154.6	154.5	154.4
158	79.4	157.9	157.8	157.6
161	81.1	161.2	161.0	160.9
164	82.7	164.4	164.3	164.2
(14 ft) 168	84.4	167.7	167.6	167.5
171	86.0	171.0	170.9	170.8
174	87.7	174.3	174.2	174.0
178	89.3	177.6	177.4	177.3
(15 ft) 181	91.0	180.8	180.7	180.6
184	92.6	184.1	184.0	183.9
187	94.3	187.4	187.3	187.2
(16 ft) 191	95.9	190.7	190.6	190.4

Note: all values are rounded to the nearest 0.1 inch

Injection Molded
End Cap (IEC)
0.08"
Actual Length
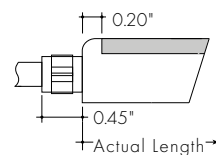
Injection Molded
Bottom Power Feed (IBPF)
0.08"
0.55"
Actual Length

Injection Molded
Side Power Feed (ISPF)
0.08"
0.55"
Actual Length

Injection Molded
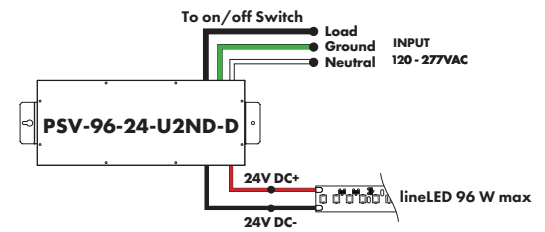End Power Feed (IEPF)
0.20"
0.45"
Actual Length
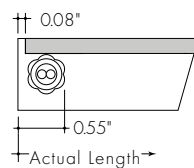
Power Supplies

See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.
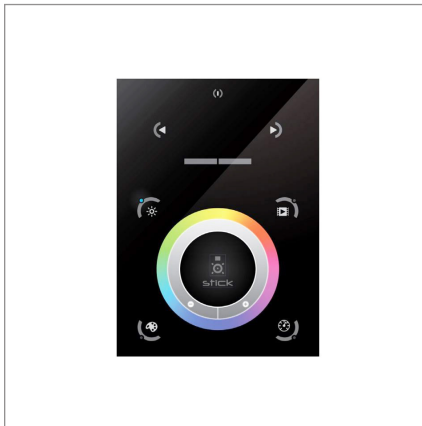
Non-Dimming Power Supply 120VAC - 277VAC

MODEL	-	POWER	-	OUTPUT	-	DIMMING	-	LOCATION

PSV - PSV Series   96 - 96 Watt   24 - 24 VDC   U2ND - Non Dimming   D - Damp

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

To on/off Switch

Load
Ground
Neutral

INPUT
120 - 277VAC

PSV-96-24-U2ND-D

24V DC+
24V DC-

lineLED 96 W max

Touch DMX Controller

Touchscreen digital LED 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.

ORDERING CODE

MODEL

TSDMX-E

TSDMX-E - Touchscreen DMX controller

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

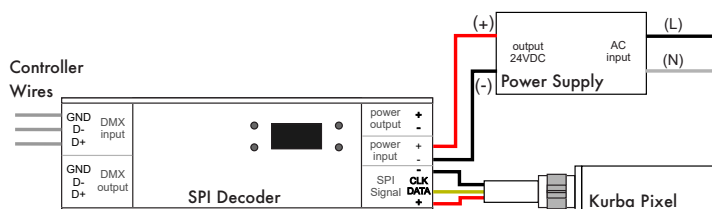## Smart Pixel Decoder

SPI signal to DMX signal decoder

The SR-DMX-SPI is a smart LED pixel decoder that controls RGB/RGBW pixel LED strips with SPI signal. Designed with an OLED backlit panel, the pixel controller allows for easy configuration of most settings. Four push buttons are available for control of the LED functions.

Model

SR-DMX-SPI

SR-DMX-SPI - Smart Pixel Decoder

Controller Wires

| GND D- D+ | DMX input |
| GND D- D+ | DMX output |

power output + -
power input + -
SPI Signal CLK DATA +

SPI Decoder

(+)
(-)

output 24VDC
AC input

Power Supply

(L)
(N)

Kurba Pixel

Operating voltage
12-36 VDC

Power capacity
up to 96W at 24V

Operating temperature range
from -4˚F to +122˚F in case

Features

- SPI signal output for RGB/RGBW pixel light control
- DMX512 controllable and RF/WIFI remote controllable
- Capable of addressing up to 1020 RGB pixels & 765 RGB pixels
- OLED panel allows for easy configuration