

Installation Instructions - Kurba

Models KBS-W-XX, KBM-W-XX, KBL-W-XX, KBX-W-XX, KBL-PL-XX, KBL-SN-XX

Please read all instructions prior to installation and keep for future reference!

1. PRODUCT TO BE INSTALLED BY A QUALIFIED ELECTRICIAN.
2. USE ONLY WITH CLASS 2 POWER UNIT
3. 24 VOLTS DC
4. SUITABLE FOR WET LOCATIONS, SAUNA, POOL RATED

5. POOL-RATED KURBA SHOULD BE INSTALLED WITH ARTICLE 680 OF NFPA 70, "NATIONAL ELECTRICAL CODE" (NEC)
6. NO ADHESIVE ALLOWED TO AFFIX THE PRODUCT



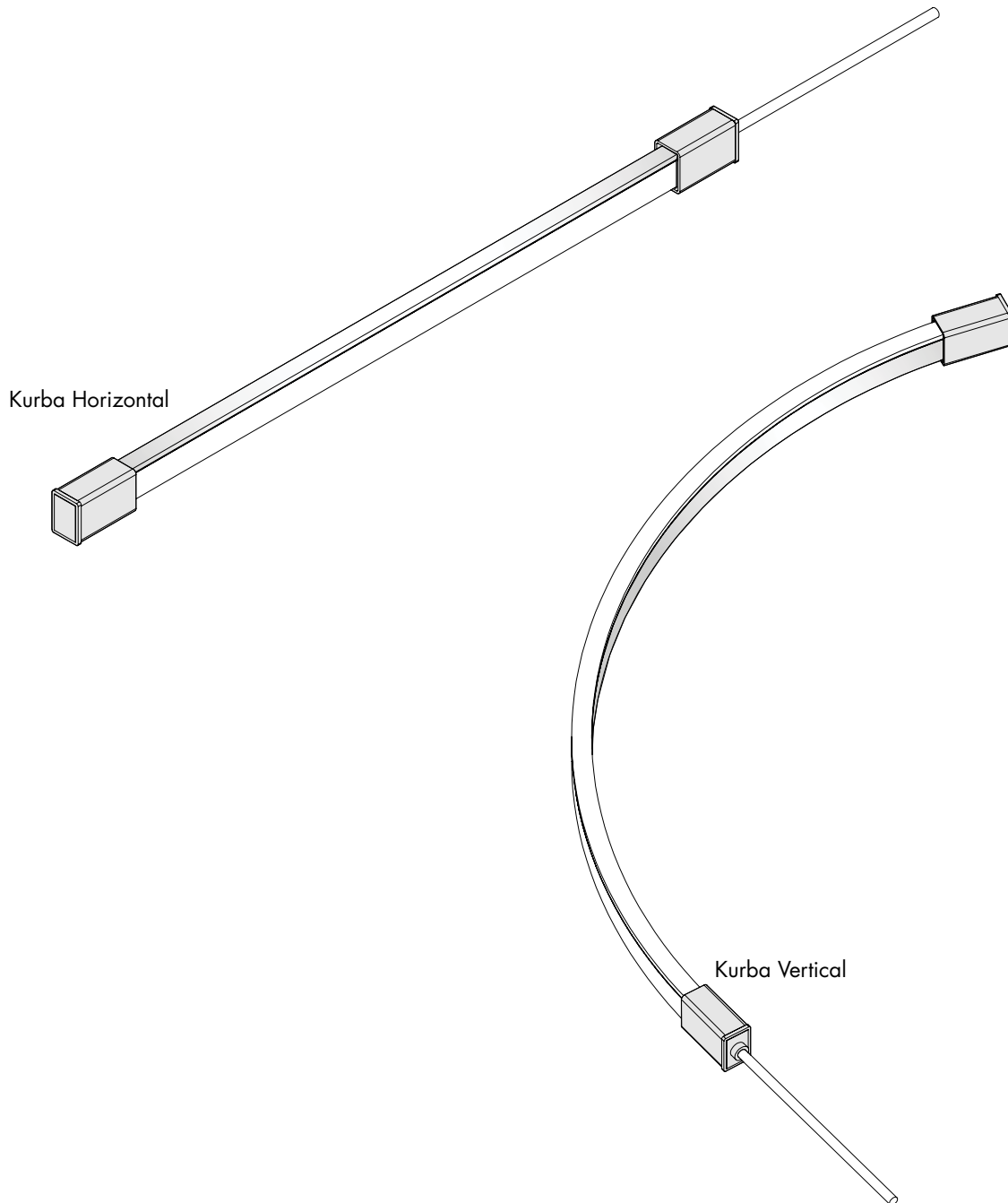
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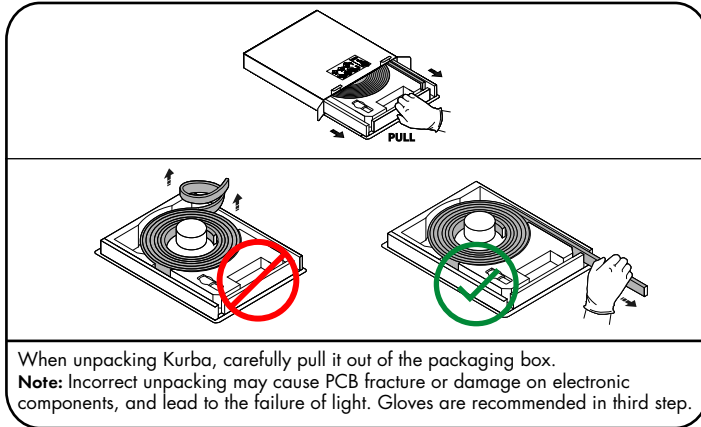
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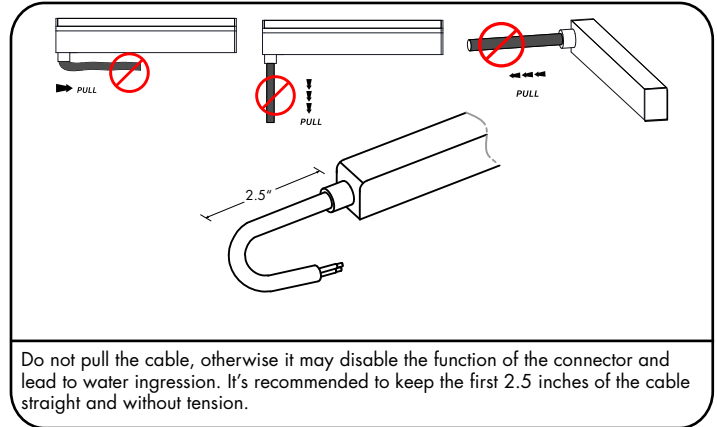


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CAUTION: Reference to below before installing Kurba



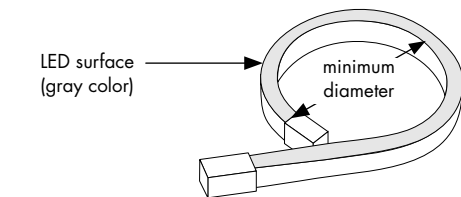
When unpacking Kurba, carefully pull it out of the packaging box.
Note: Incorrect unpacking may cause PCB fracture or damage on electronic components, and lead to the failure of light. Gloves are recommended in third step.



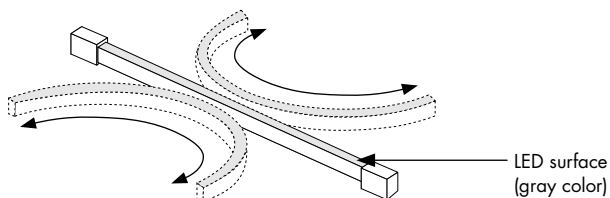
Do not pull the cable, otherwise it may disable the function of the connector and lead to water ingress. It's recommended to keep the first 2.5 inches of the cable straight and without tension.

Kurba Horizontal

CAN Bend LED in these positions to avoid damage

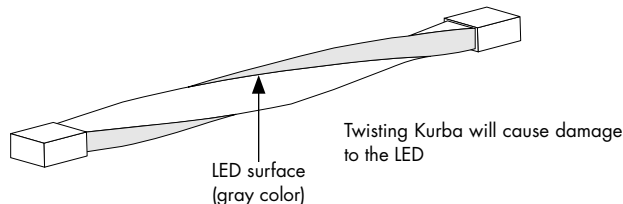


Bend in this direction only



Product Name	Minimum Diameter
Kurba Max	16.0in
Kurba Large	12.0in
Kurba Medium	5.0in
Kurba Small	4.0in

CANNOT Twisting or bending LED in these positions will cause damage to the LED

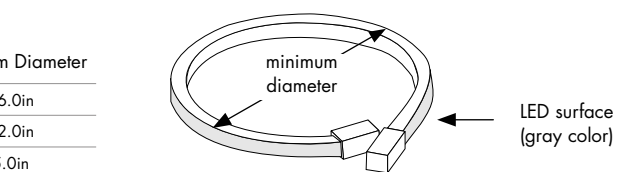


Do not make sharp bends near the endcap

Bending in the same direction as the LED will cause damage to the LED

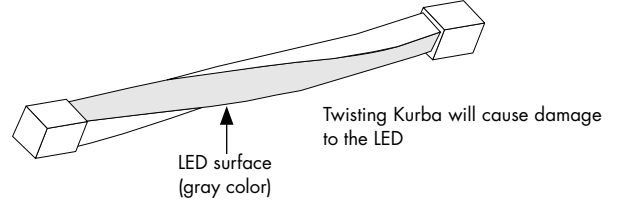
Kurba Vertical

CAN Bend LED in these positions to avoid damage



Bend in this direction only

CANNOT Twisting or bending LED in these positions will cause damage to the LED



Do not make sharp bends near the endcap

Bending in the same direction as the LED will cause damage to the LED

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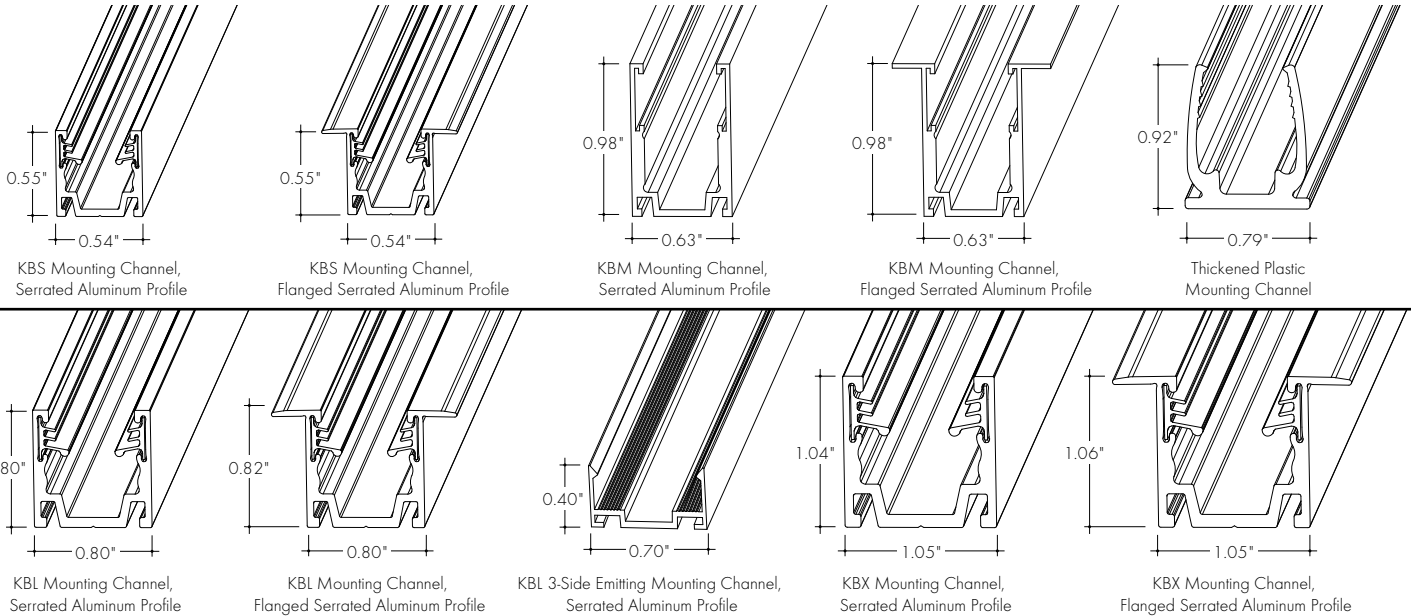


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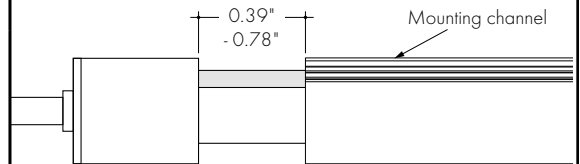
NOTE: All straight mounting channels listed below should refer to this step during the installation.

Straight mounting channels



NOTE: Prior to installation all 24VDC wires must be present within 72" of the installation. Refer to the power supply installation instruction for additional information.

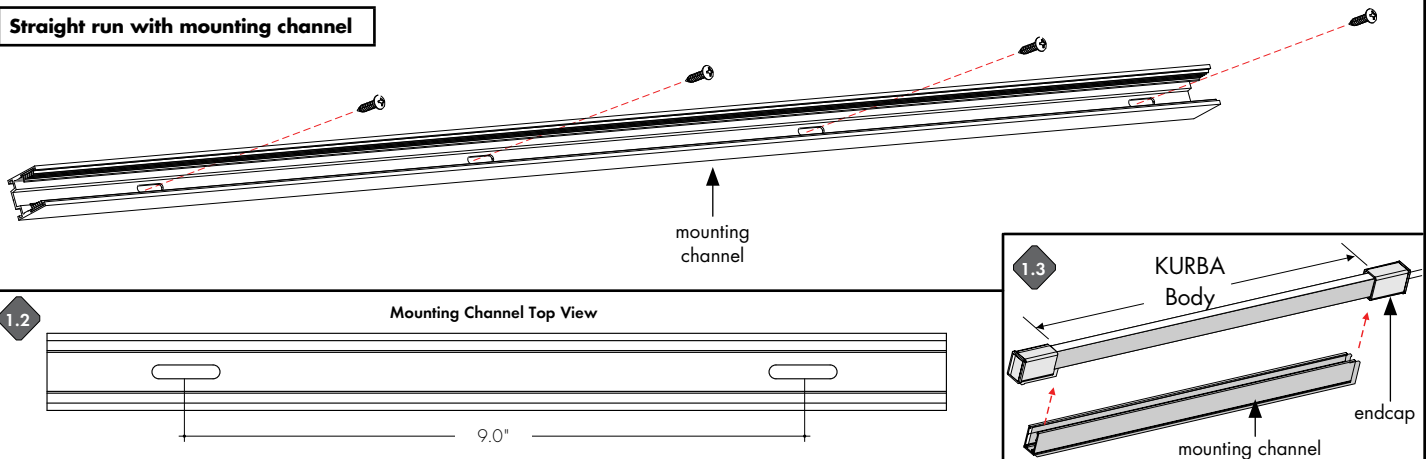
NOTE: More than one person is recommended for this installation.



NOTE: Keep a 0.39" - 0.79" spacing between the end of the fixture and the mounting channel

- 1.1 Once the location or pattern is determined for Kurba to be installed, start off by marking the area. Amount of brackets may vary dependant upon pattern. Reference diagrams below.

Straight run with mounting channel



- 1.2 Drill holes into the surface 9" apart from each other, followed by placing the mounting channel to the surface. Make sure its straight by using a level.

- 1.3 Secure channel to the surface by tightening all the provided screws. If mounting to something other than wood, we recommend using the proper hardware.

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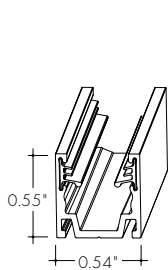
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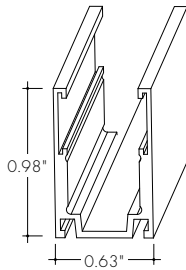
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NOTE: All straight mounting channels listed below should refer to this step during the installation.

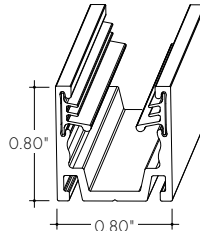
Mounting brackets



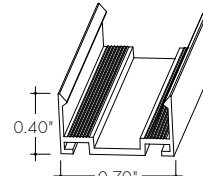
KBS Mounting Channel,



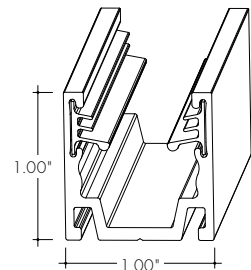
KBM Mounting Channel,



KBL Mounting Channel,



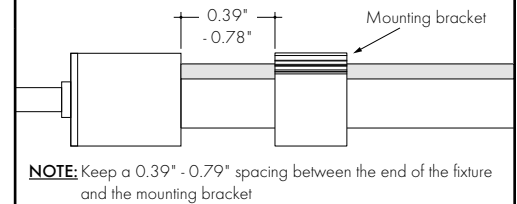
KBL 3-Side Emitting Mounting Channel,



KBX Mounting Channel,

NOTE: Prior to installation all 24VDC wires must be present within 72" of the installation. Refer to the power supply installation instruction for additional information.

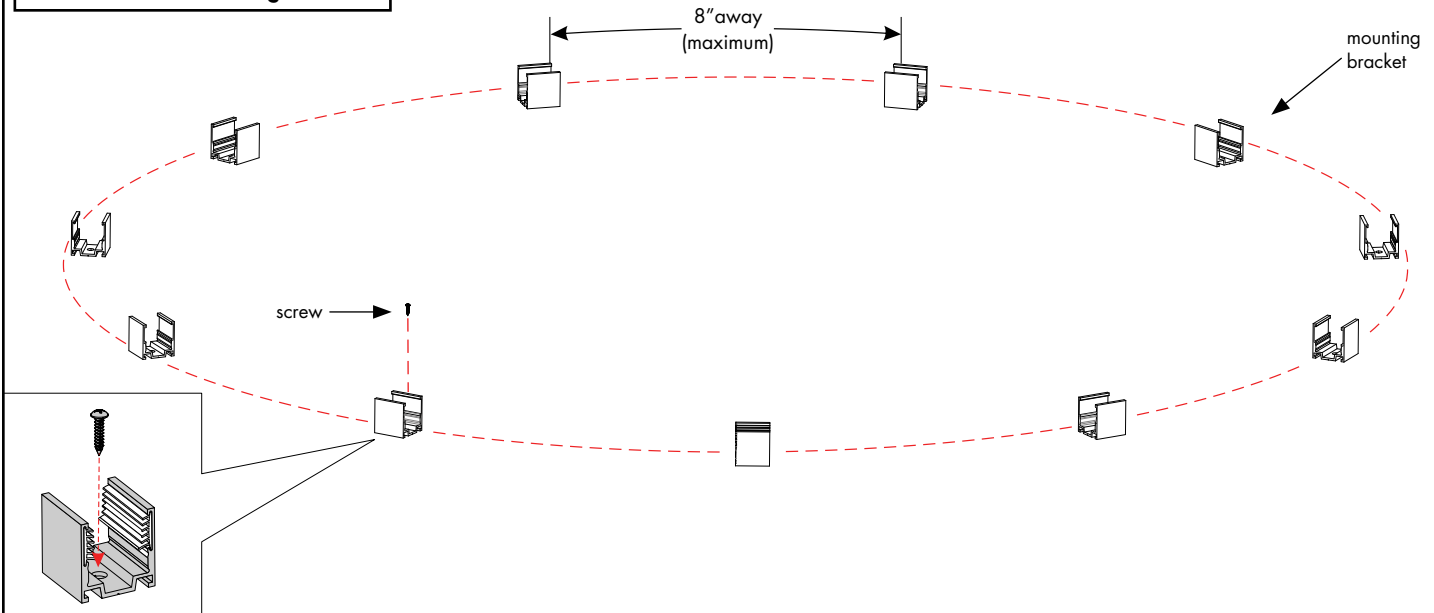
NOTE: More than one person is recommended for this installation.



NOTE: Keep a 0.39" - 0.79" spacing between the end of the fixture and the mounting bracket

- 2.1** Once the location or pattern is determined for Kurba to be installed, start off by marking the area. Amount of brackets may vary dependant upon pattern. Reference diagrams below.

Curved run with mounting brackets



- 2.2** Determine the shape of the Kurba layout, then mark the pattern onto the surface. Then, place a mounting bracket every 8" (minimum). The pattern may vary dependant upon the amount of curves.
- 2.3** Secure the mounting brackets to the surface by tightening the screw. If mounting to something other than wood, we recommend using the proper hardware.

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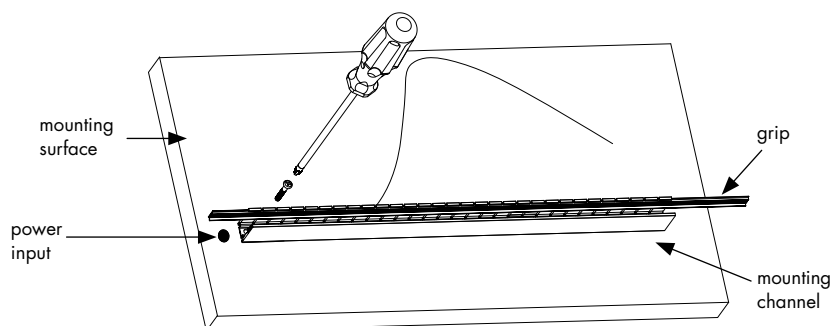
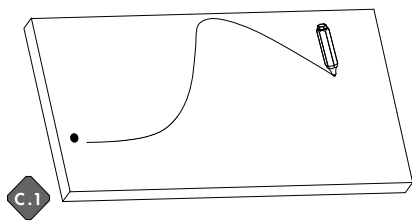
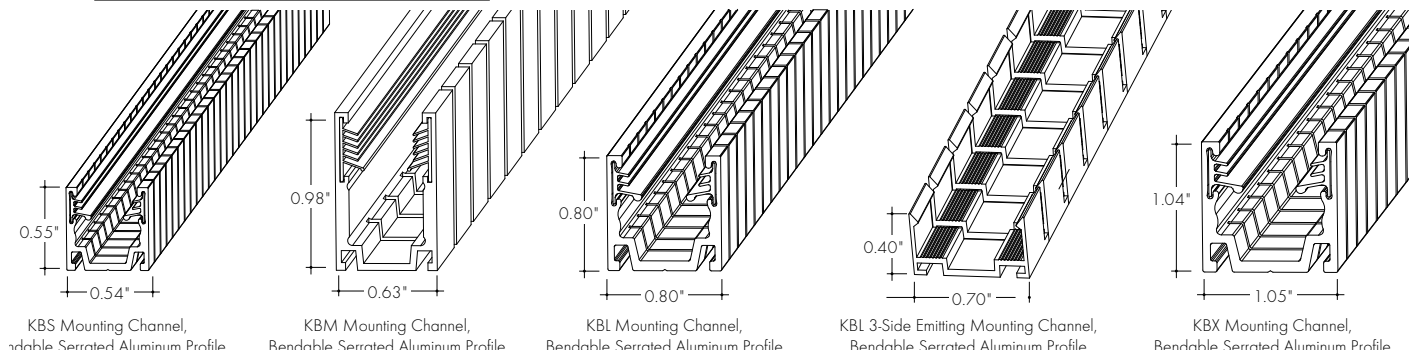


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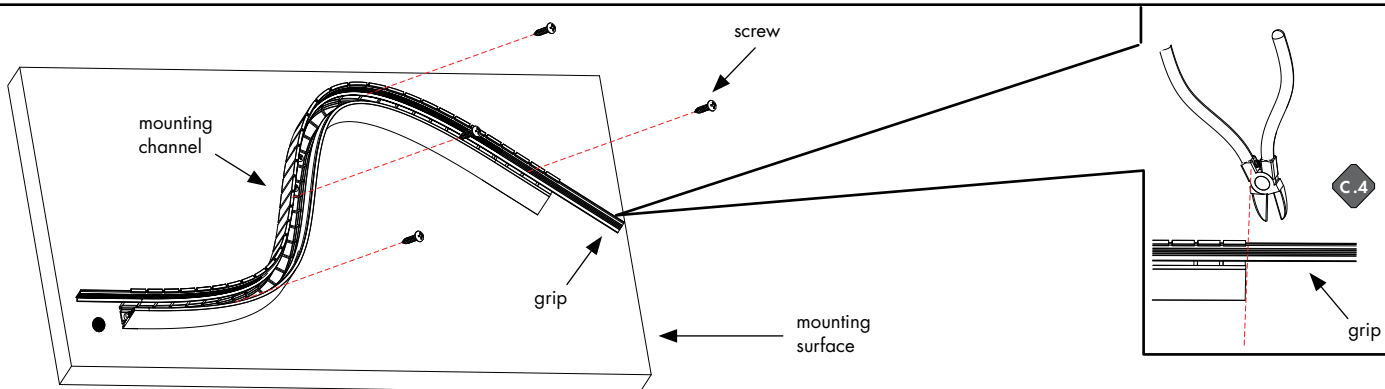
NOTE: All straight mounting channels listed below should refer to this step during the installation.

Bendable Mounting Channel with Grip



C.1 Mark the required shape on the mounting surface.

C.2 Fix the screw starting from the power input end. Keep some distance between the channel and power input.



C.3 Fix the rest in sequence along with the marks.

C.4 Adjust the serrate silicone tape and remove the extra lengths at both ends.

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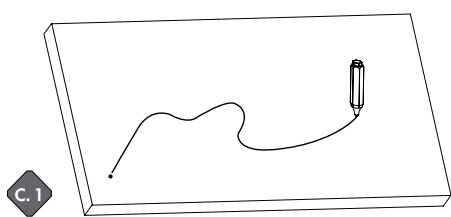
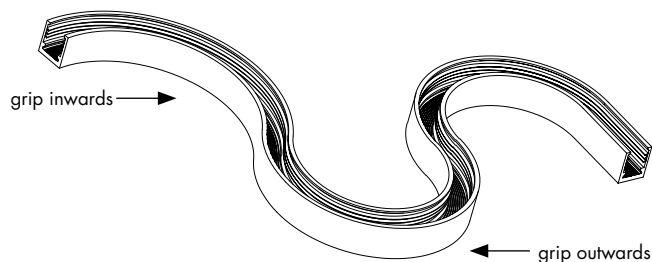


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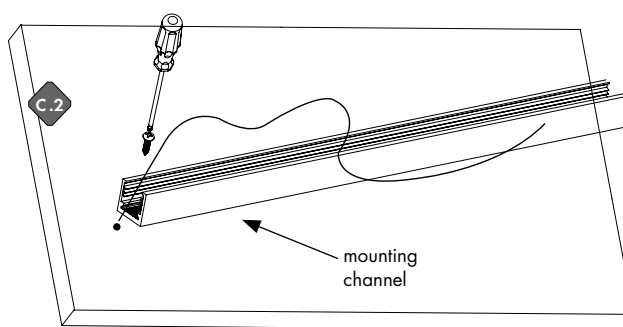
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NOTE: All straight mounting channels listed below should refer to this step during the installation.

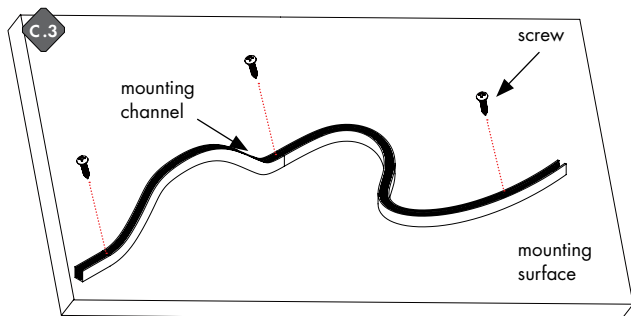
KBL Mounting Channel, Bendable Anole Profile



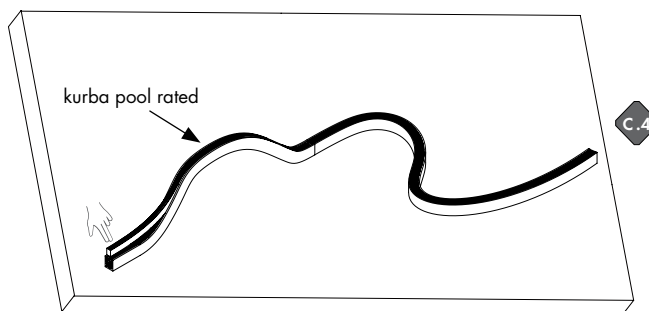
C.1 Mark the required shape on the mounting surface.



C.2 Fix the screw starting from the power input end. Keep some distance between the channel and power input.



C.3 Secure the channel with screws



C.4 Insert kurba to mounting channel.

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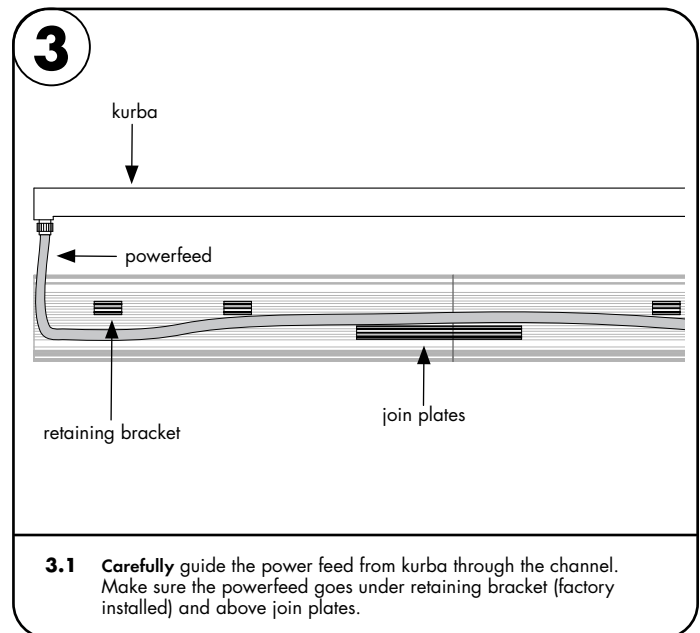
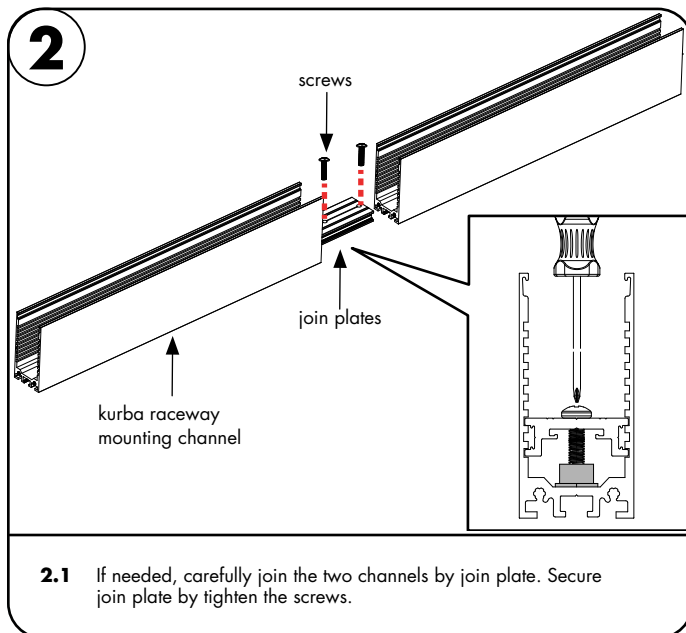
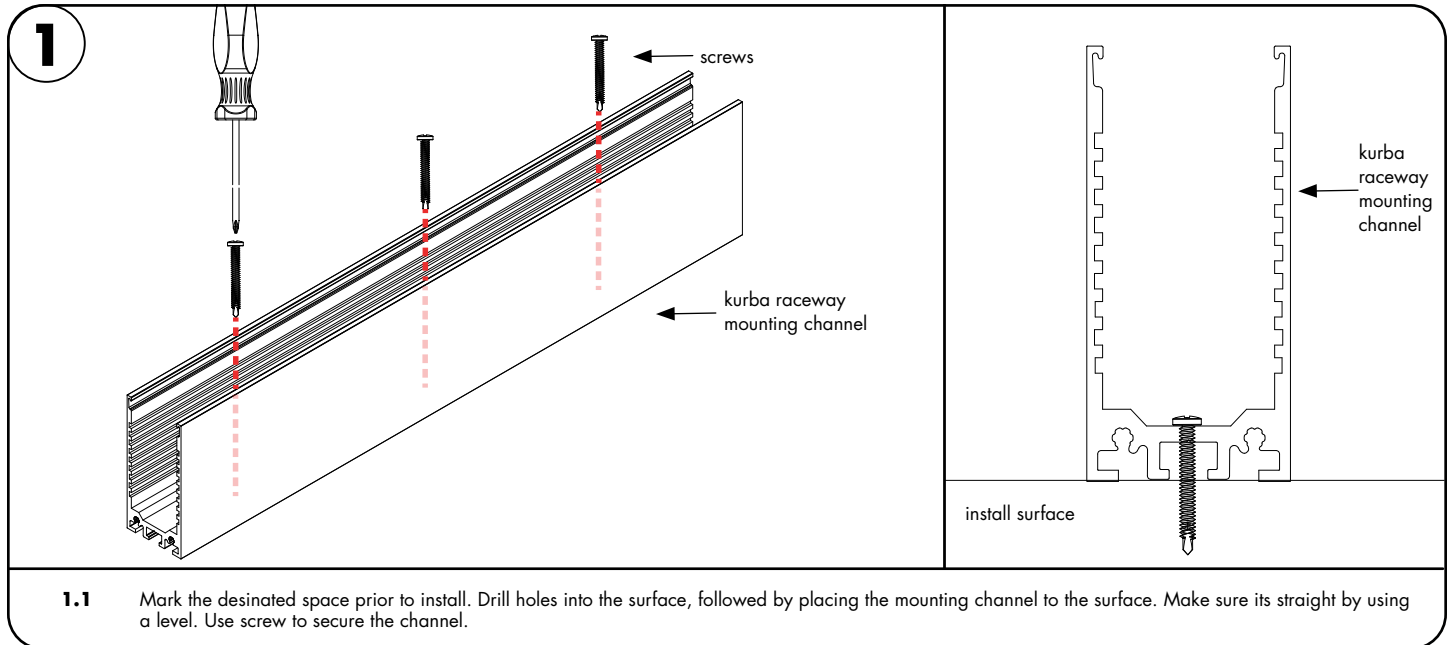
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Kurba Raceway Mounting Channel

only applicable to KBM and KBL



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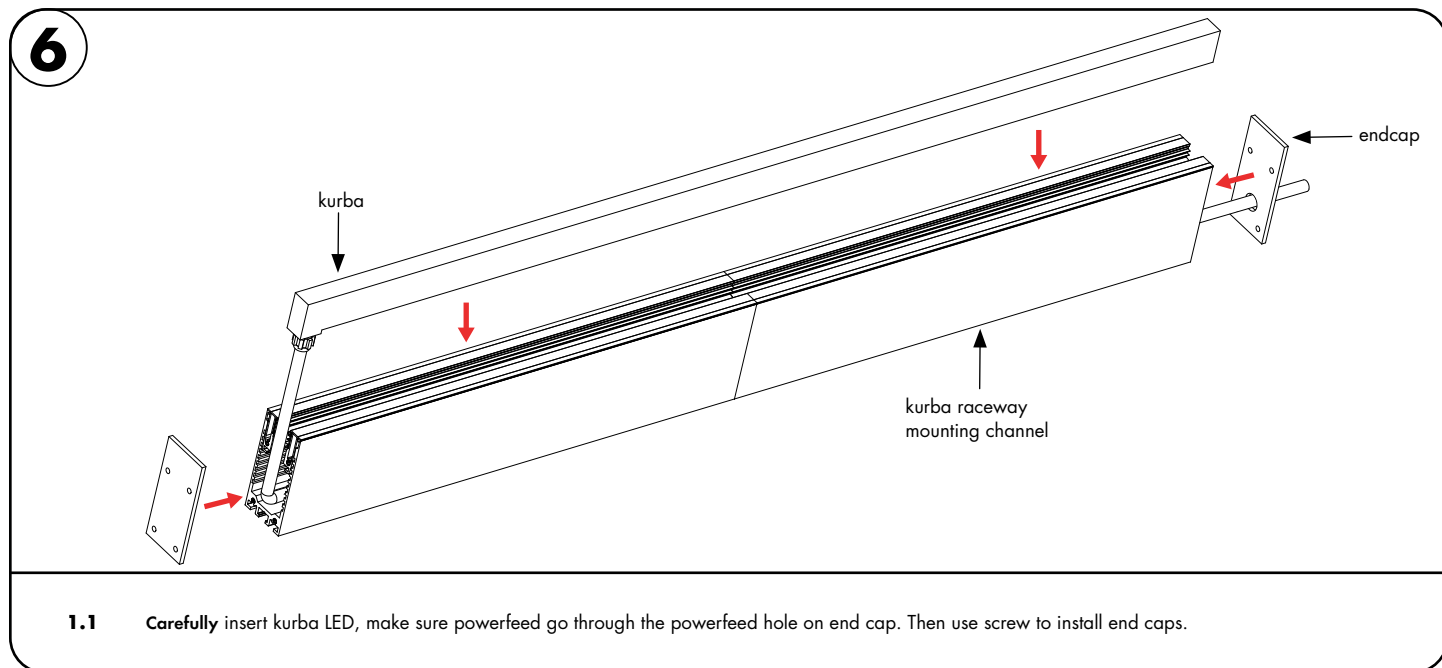
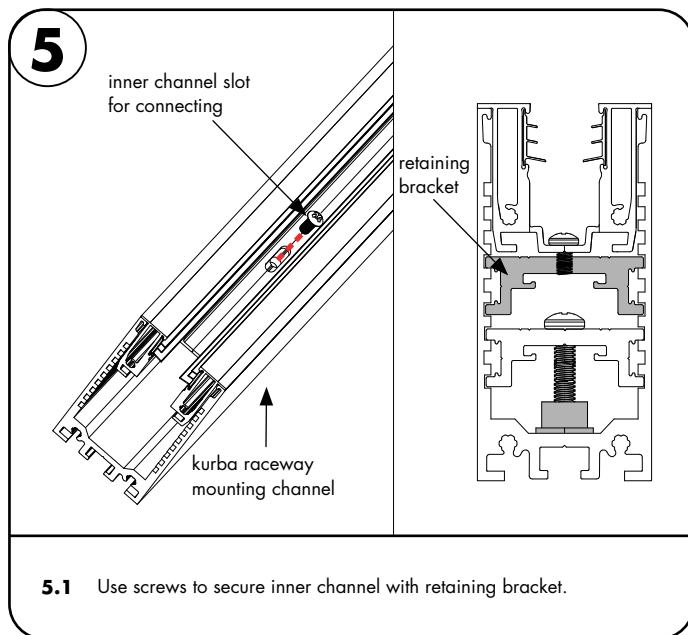
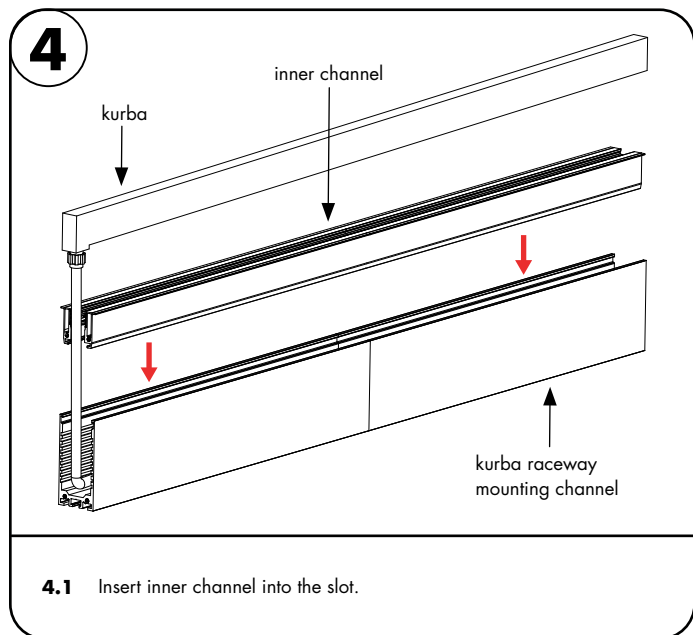
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Kurba Raceway Mounting Channel



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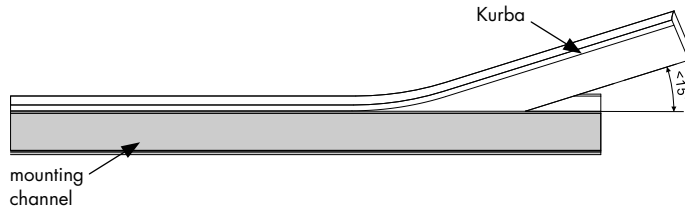
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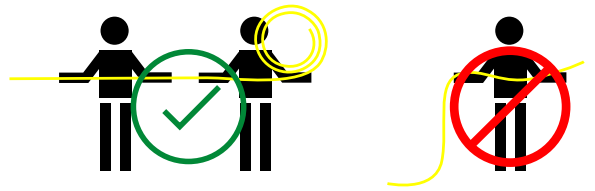


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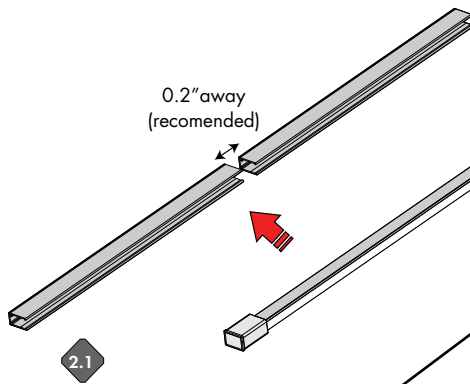


Make sure the angle between the light and profile is not bigger than 15°, otherwise Kurba might be damaged.

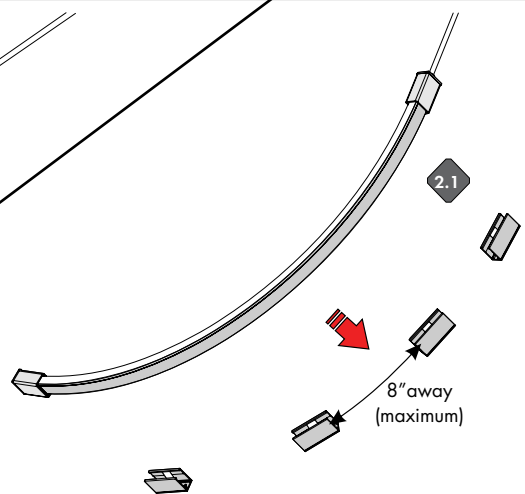


When light length longer than 6ft, make sure somebody helps to lift the light, in case the heavy weight of light itself generates too small bending angle or twisting, which may damage Kurba.

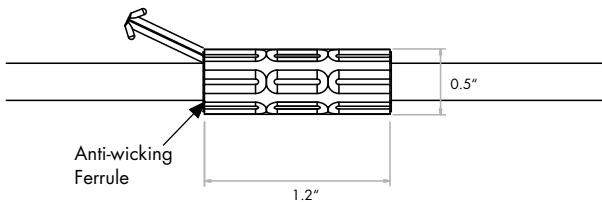
Straight run with mounting channel



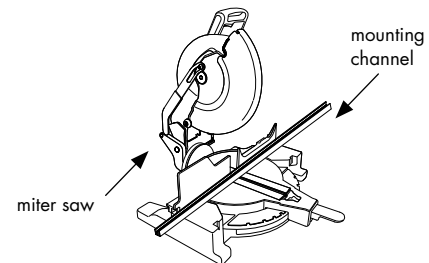
Curved run with mounting brackets



- 2.1** Carefully push the Kurba onto the channel or mounting brackets using your palms, then press in completely to secure in place.
Note: It is recommended to leave a 0.2" gap between extrusions to enable room for contraction and expansion



The removal of anti-wicking ferrule will increase the risk of water ingress and void the warranty out of it. For underwater application, do not immerse antiwicking ferrule in the water.



If needed, use miter saw to cut mounting channels into desired length

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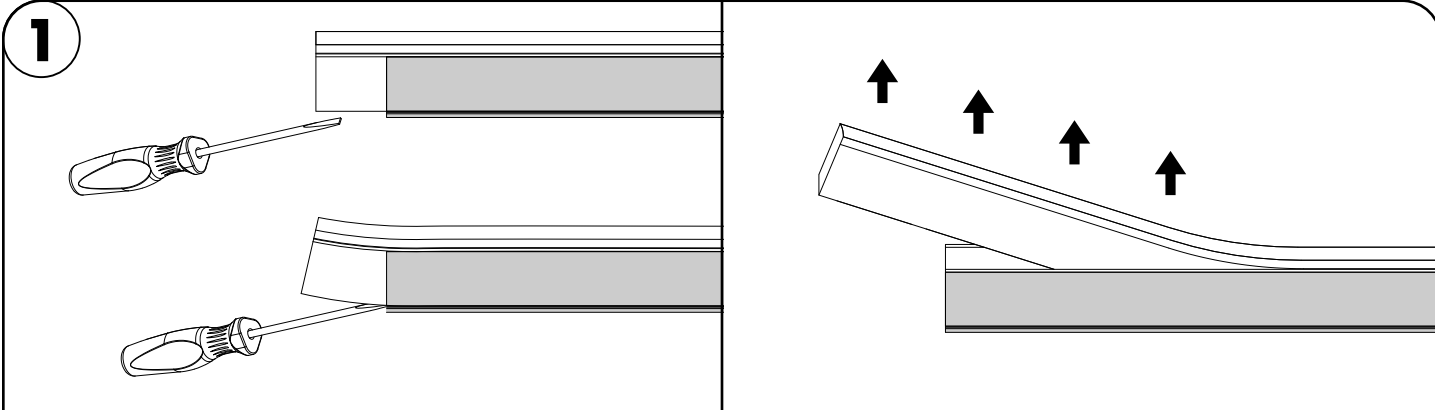
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Removing Kurba from Mounting Brackets

1



1.1 To remove Kurba fixture from mounting bracket, gently push a **FLAT** head screw driver between the **BOTTOM** of the fixture and the mounting bracket, carefully pry up the Kurba Fixture. Once Kurba fixture has started coming out of the bracket, stop using the screw driver and instead use your hands and fingers to pull the fixture out of the bracket making sure to keep it at a 15° angle.

Power Supply Wiring Diagram

Note: Prior to installation all 24VDC wires must be present near fixture. Refer to the power supply installation instructions for additional information.



Pixel
Wiring Diagram PDF

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WIRING DIAGRAM

SR-DMX-SPI

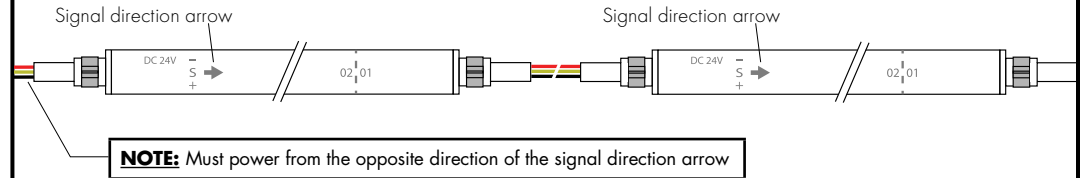
Smart Pixel LineLED Decoder

NOTE: Please make sure that power is turned off before wiring.

Also, ensure that the correct power supply (voltage and wattage) is used to power the LED strips connected to the decoder. Follow illustrated wiring diagram. Use screwdriver to open and close connection slots.

NOTE: When connecting two or more LED strip lights or light fixtures, always make sure the signal direction arrows are pointing to same direction

The signal direction arrow should appear on each section (cut increment) of LED strip

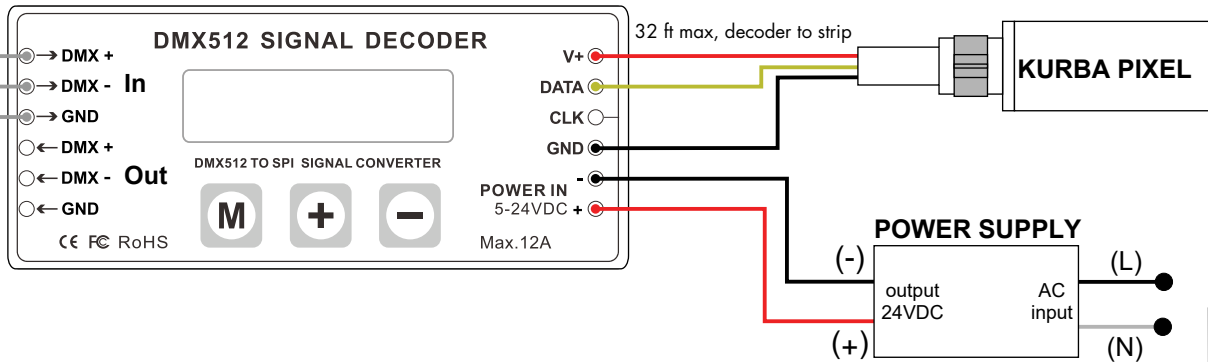


DMX Terminator for the last DMX decoder*

120 ohms

CONTROLLER WIRES

1000 ft max,
decoder to Controller
*Provided by others



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3. 24 VOLTS DC
4. SUITABLE FOR WET LOCATIONS, SAUNA, POOL RATED

5. POOL-RATED KURBA SHOULD BE INSTALLED WITH ARTICLE 680 OF NFPA 70, "NATIONAL ELECTRICAL CODE" (NEC)
6. NO ADHESIVE ALLOWED TO AFFIX THE PRODUCT



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OPERATING GUIDE

SR-DMX-SPI

Smart Pixel LineLED Decoder

There are three buttons on the decoder.



Parameter Setting



Increase Value



Decrease Value

After operation, if no action was taken within 30s, the button lock, and backlight of the screen will turn off.

1. Long press M button for 5s to unlock the buttons, and the backlight will turn on.
 2. Long press M button for 5s to switch between test mode and decode mode after unlocked.
- During test mode, the first line of LCD will show: TEST MODE. Use test mode to verify RGBW Pixel functionality.
- During decoder mode, the first line of LCD shows: DECODER MODE. Use decoder mode when connecting to a Controller and for final installation and customization.

The second line of the LCD Display shows the current setting and value. Note: 1 Pixel = 1 Cut Increment

MODE TABLE

SETTING	LCD DISPLAY	VALUE RANGE	DESCRIPTION
Built-in Programs	TEST MODE MODE NO.:	1-26	See Program Table below
Program Speed	TEST MODE RUN SPEED:	0-7	0: fast, 7: slow
DMX Address	DECODER MODE DMX ADDRESS:	1-512	Address of the starting point/Pixel of a program
DMX Signal RGB	DECODER MODE DMX RGB SEQ:	RGB, BGR, etc.	N/A
Pixel Quantity	DECODER MODE PIXEL QTY:	1-170(RGB), 1-128(RGBW)	Number of Pixels to follow a program
IC TYPE	DECODER MODE IC TYPE:	2903, 8903, 2904, 8904	2903: N/A, 2904: for RGBW, 8903: N/A, 8904: N/A
Color	DECODER MODE COLOR:	MONO, DUAL, RGB, RGBW	MONO: N/A, DUAL: N/A, RGB: N/A, RGBW: for RGBW
Pixel Merging / Pixel Size	DECODER MODE PIXEL MERGE:	1-100	Number of Pixels to merge together
RGB Sequence	DECODER MODE LED RGB SEQ:	RGBW, BGRW, etc.	Sequence of RGBW, 24 possible combinations
Integral Control	DECODER MODE ALL CONTROL:	YES, NO	Yes: Merge all Pixels No: Maintain individual Pixels or Merged Pixels
Reverse Control	DECODER MODE REV-CONTROL:	YES, NO	Reverse program order
Overall Brightness	DECODER MODE BRIGHTNESS:	1-100	1: dimmest setting 100: brightest setting

NOTE:

When connected to a controller, DMX512 Signal Decoder will stay in "Decoder Mode".

NOTE:

The actual maximum control pixels of the controller are 1360 (2903) ,1024 (2904). Please set the pixel and pixel combination value according to the actual situation, and DO NOT exceed the maximum.

NOTE:

For Program Table
Change: no fading/dimming between color changes
Fade: fade/dim between color changes
Chase: change pixel by pixel
Chase with Trail: change pixel by pixel with fading between

PROGRAM TABLE

PROGRAM NO.	PROGRAM DESCRIPTION	PROGRAM NO.	PROGRAM DESCRIPTION	PROGRAM NO.	PROGRAM DESCRIPTION
1	Solid color: Red	10	RGB fading	19	Red chasing green, chasing blue
2	Solid color: Green	11	Full color fading	20	Orange chasing purple, chasing cyan
3	Solid color: Blue	12	Red chase with trail	21	Rainbow chase (7 colors)
4	Solid color: Yellow	13	Green chase with trail	22	Random twinkle: white over red
5	Solid color: Purple	14	Blue chase with trail	23	Random twinkle: white over green
6	Solid color: Cyan	15	White chase with trail	24	Random twinkle: white over blue
7	Solid color: White	16	RGB chase with trail	25	White fading
8	RGB change	17	Rainbow chase with trail	26	Off
9	Full color change	18	RGB chasing and fading		