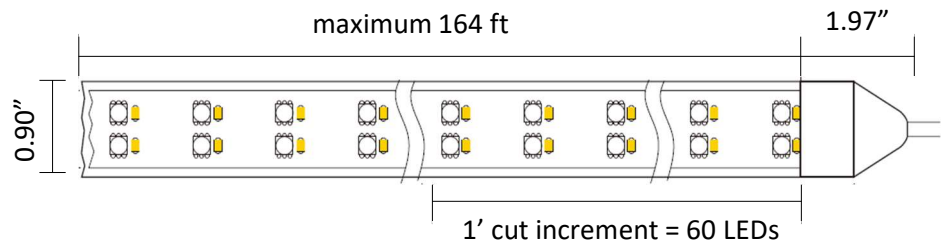
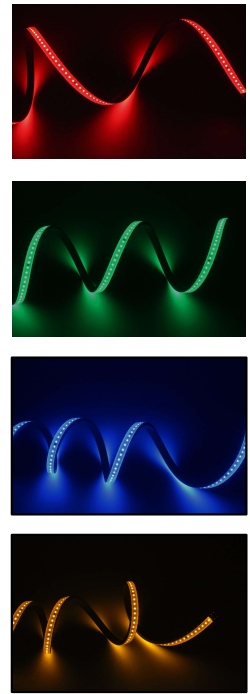


# Madrid – 120V RGBW LED Flex Spec



Madrid is an architectural grade flexible tape light for direct 120 Volt input with integrated over-temperature protection. No driver needed, it connects directly to line voltage, with an open bare wire. Can be installed into extrusions or can be mounted directly to surfaces with mounting clips. MacAdam Step 3 binning.



## Technical Information

Product	Output (lm/ft)	LEDs/ft	Consump. (watt/ft)	Voltage	Max run length	Cut increment
RGBW	RGBW	60	3.0	120	164'	1'

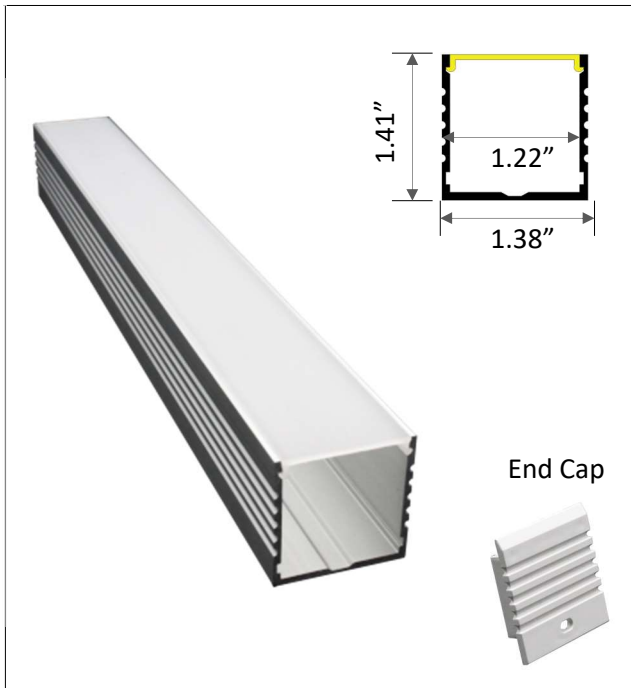
## Ordering Code

M	-	IP65		RGBW	-	4'
Model	+	IP Rating	+	CCT	+	Run Length
M Madrid		IP65 Outdoor		RGBW Red, Green, Blue, White		Enter run length

**Example: M-IP65RGBW-4'**  
Madrid, RGBW, IP65, 4ft

## Compatible Accessories

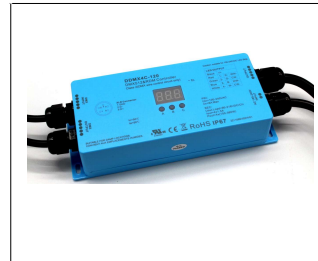
Extrusion + Lens + End Cap



JK02 + JK02-SL + JK02-EC

## Compatible Control System

DMX Decoder



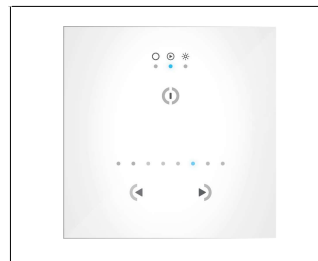
DDMX4C-120V

DMX Controller



CDMX4C

DMX Controller



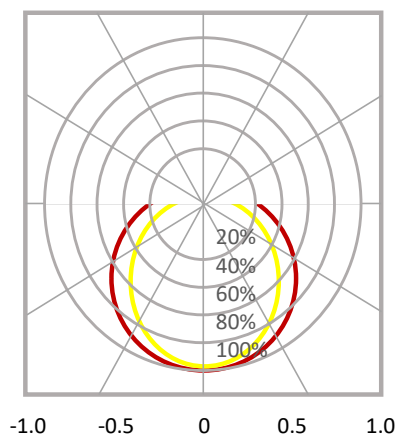
CDMX128C

DMX Controller

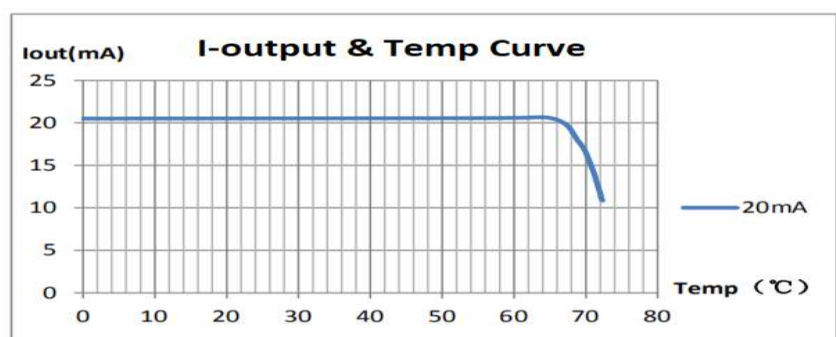


CDMX1024C

## Photometric



## Over-temp Protection



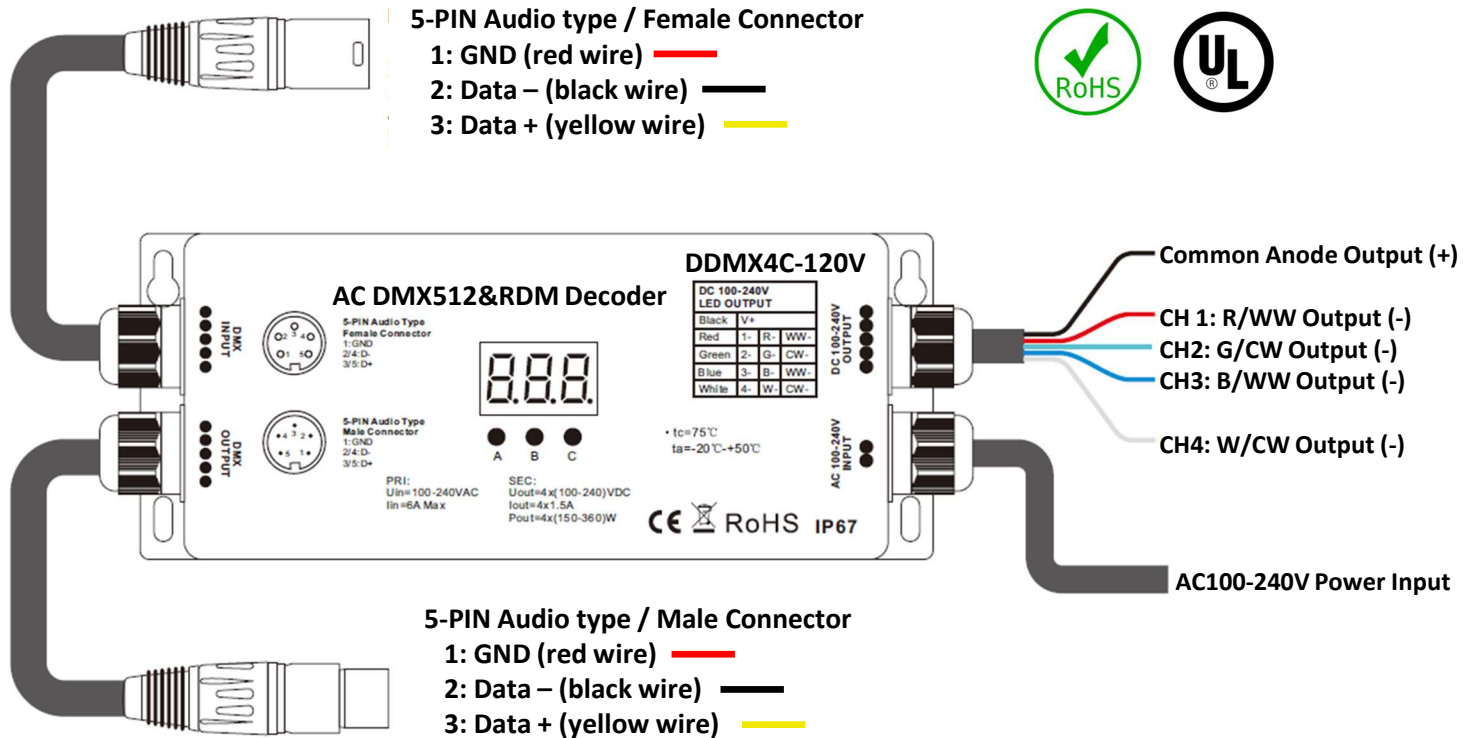
Madrid boasts an over-temperature protection. This means that if product's inner temperature rises above 150°F, the current will be slowly reduced (no immediate switch-off) so that the temperature falls under this threshold. Then the current will rise again to normal power. This will help in guaranteeing the expected longevity of the product.

# Madrid – 120V Decoder Spec



## DMX/RDM 120V / Line Voltage LED Tape Controller (DDMX4C-120V)

**Important:** Read All Instructions Prior to Installation



Input Voltage	Output Voltage	Output Current	Max Load	Size (L x W x H)	Ambient Temp.
AC 100-240V	DC 100-240V	Max. 4 x 1.5A	720W @ 120V	7.11" x 2.9" x 1.5"	-4°F to +122°F

- RDM enabled DMX high voltage LED strip controller
- Output for high voltage DC100~240V LED Strip
- Standard DMX512 compliant control interface
- RDM function enabled to realize intercommunication between DMX master and decoder.
- For example, DMX decoder's address can be assigned by DMX master console
- With digital display to show data directly, easily to set and show DMX address.
- Total 4 channels LED output, common anode
- DMX address manually settable
- DMX channel quantity from 1CH~4CH settable
- Output PWM frequency from 500HZ ~ 35K HZ settable, but do not set it higher than 3KHz.
- Output dimming curve gamma value from 0.1 ~ 9.9 settable
- Waterproof grade:IP67

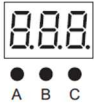





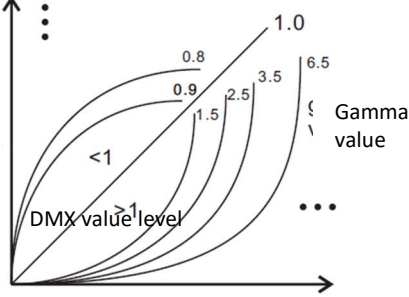
### Safety & Warnings

- DO NOT install with power applied to device.
- This device is IP67 rated and protected against damp environment.

## DMX/RDM 120V / Line Voltage LED Tape Decoder (DDMX4C-120V)

**Important: Read All Instructions Prior to Installation**

### Operation

	<p>To set desired DMX512 address through buttons</p> <ul style="list-style-type: none"> <li>▪ <b>button A</b> is to set “hundreds” position,</li> <li>▪ <b>button B</b> is to set “tens” position,</li> <li>▪ <b>button C</b> is to set “unit” position.</li> </ul>
	<p><b>Set DMX address (Factory default DMX address is 001)</b></p> <p>Press and hold down any of the 3 buttons for over 3 seconds, digital display flashes to enter into address setting, then keep short pressing button A to set “hundreds” position, button B to set “tens” position, button C to set “units” position, then press and hold down any button for &gt;3 seconds to confirm the setting.</p> <p>DMX signal indicator ● : When DMX signal input is detected, the indicator on the display following after the digit of “hundreds” position of DMX address turns on red </p>
	<p><b>Choose DMX Channel</b></p> <p>Press and hold down both buttons B+C simultaneously for over 3 seconds, CH digital display flashes, then keep short pressing button A to choose 1/2/3/4, which means total 1/2/3/4 channels. Press and hold down button A for &gt;3 seconds to confirm the setting. Factory default is 4 DMX channels.</p> <p>For example, the DMX address is already set as 001.</p> <ul style="list-style-type: none"> <li>▪ 1CH=1 DMX address for all the output channels, which all will be address 001.</li> <li>▪ 2CH=2 DMX addresses , output 1&amp;3 will be address 001, output 2&amp;4 will be address 002</li> <li>▪ 3CH=3 DMX addresses, output 1, 2 will be address 001, 002 respectively, output 3&amp;4 will be address 003</li> <li>▪ 4CH=4 DMX addresses, output 1, 2, 3, 4 will be address 001, 002, 003, 004 respectively</li> </ul>
	<p><b>Choose PWM frequency (Factory default PWM frequency is PF1 1KHz)</b></p> <p>Press and hold down both buttons A+B simultaneously for over 3 seconds, digital display will show PF1, PF means output PWM frequency, the digit 1 will flash, which means frequency, then keep short pressing button C to select a frequency from 0-9 and A-J, which stand for following frequencies: 0=500Hz, 1=1KHz, 2=2KHz, ..., 9=9KHz, A=10KHz, B=12KHz, C=14KHz, D=16KHz, E=18KHz, F=20KHz, H=25KHz, J=35KHz.</p> <p>Then press and hold down button C for &gt;3 seconds to confirm the setting.</p> <p><b>Note: DO NOT set the PWM frequency higher than 3KHz to avoid overheat and damage to the device.</b></p>
 <p>Output brightness level</p> 	<p><b>Choose Dimming Curve Gamma Value (Factory default dimming curve value is g1.0)</b></p> <p>Press and hold down all buttons A+B+C simultaneously for over 3 seconds, digital display flashes g1.0, 1.0 means the dimming curve gamma value, the value is selectable from 0.1-9.9, then keep short pressing button B and button C to select corresponding digits, then press and hold down both buttons B+C for &gt;3 seconds to confirm the setting.</p>

# Madrid – 120V Decoder Wiring Diagram **BEULUX**

## Wiring Diagram

### Restore to Factory Default Setting

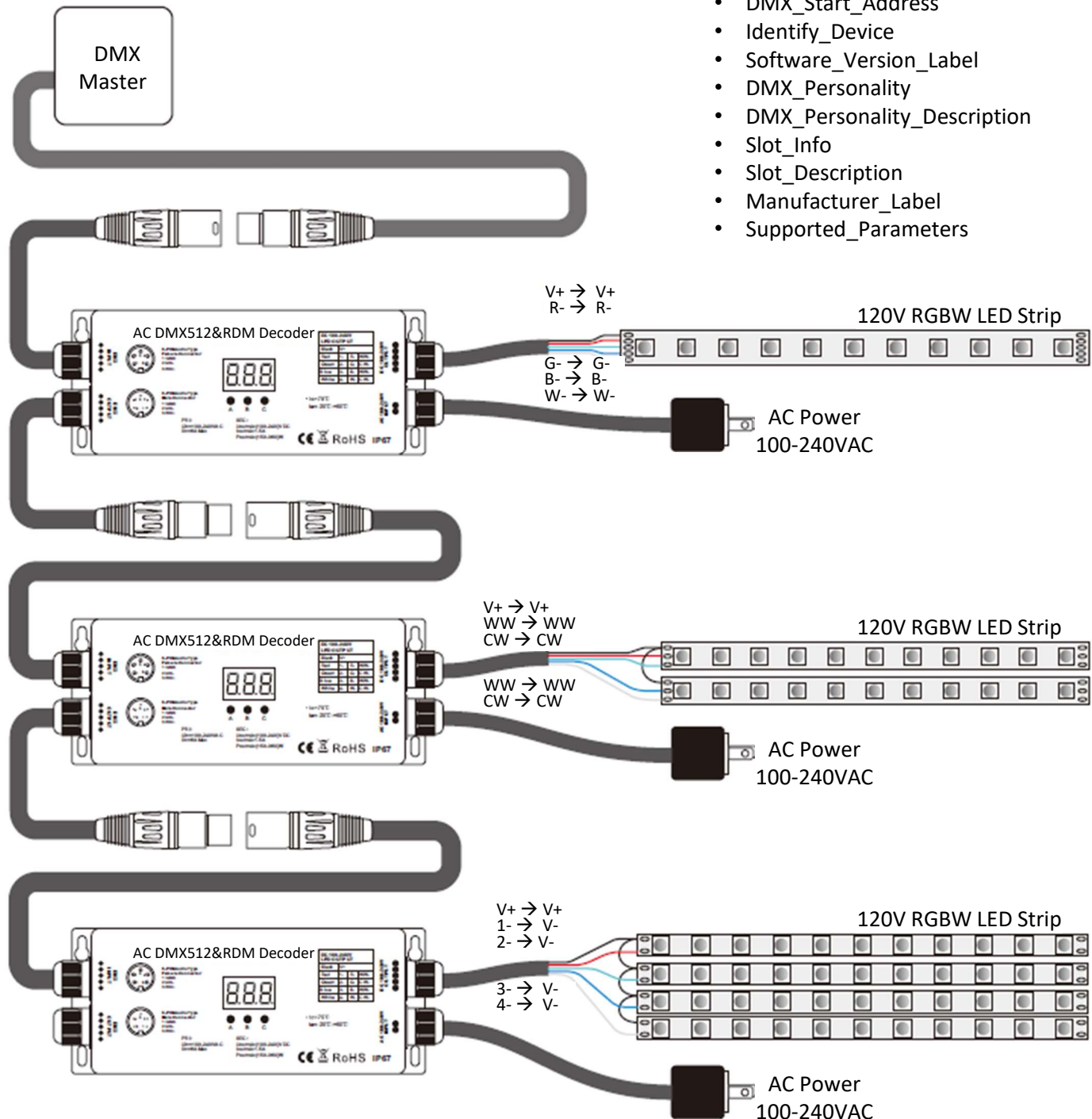
Press and hold down both buttons A+C for over 3 seconds until the digital display turns off and then turns on again, all settings will be restored to factory default.

Default settings are as follows:

- DMX Address: 001
- DMX Address Quantity: 4CH
- PWM Frequency: PF1
- Gamma: g1.0

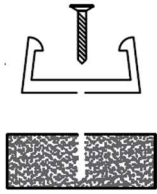
### The supported RDM PIDs are as follows:

- Disc\_Unique\_Branch
- Disc\_Mute
- Disc\_Un\_Mute
- Device\_Info
- DMX\_Start\_Address
- Identify\_Device
- Software\_Version\_Label
- DMX\_Personality
- DMX\_Personality\_Description
- Slot\_Info
- Slot\_Description
- Manufacturer\_Label
- Supported\_Parameters



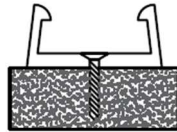


## Installation: 120V RGBW Tapelight + Mounting Clip



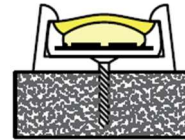
①

Insert flat head screw  
into mounting clip



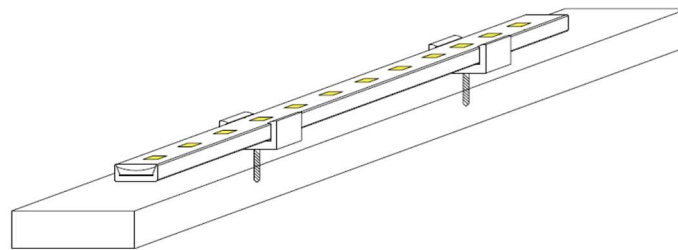
②

Screw mounting  
clip to surface



③

Secure 120V RGBW tapelight  
into mounting clip

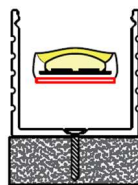


## Installation: 120V RGBW Tapelight + Extrusion + Lens



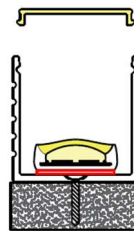
①

Use flat head screw to  
screw extrusion onto  
surface



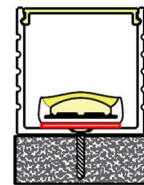
②

Secure 120V RGBW  
tapelight inside  
extrusion



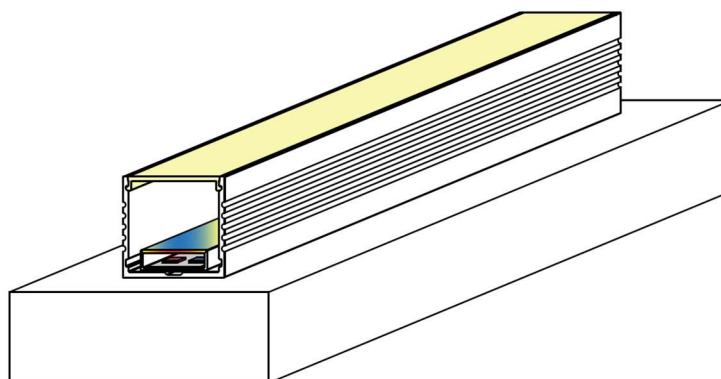
③

Snap lens on top of  
extrusion

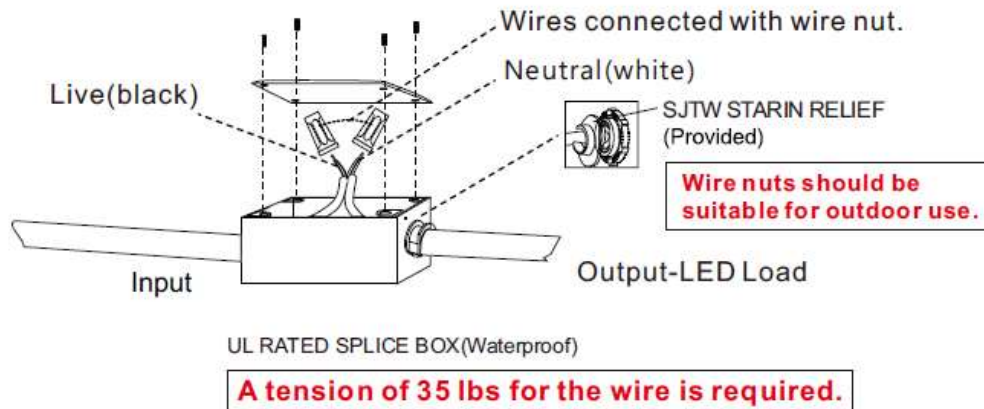


④

Adhere end caps on  
both sides of extrusion



## Wiring Instruction



## Caution

Warranty is VOID if any of the below are violated

<b>Do not cut</b> 	<b>Do not puncture</b> 	<b>Do not bend on horizontal plane</b> 	<b>Do not bend 90°</b> 	<b>Do not twist</b> 
<b>Do not paint over</b> 	<b>Do not step on or put object on top</b> 	<b>Do not power on when strip light is in a spool</b> 	<b>Do not hang</b> 	<b>Do not suspend or stress</b> 
<b>Do not use 3<sup>rd</sup> party mounting clips</b> 	<b>Do not use 3<sup>rd</sup> party connectors</b> 	<b>Do not use adhesive for installation</b> 	<b>Do not cover</b> 	<b>Do not install inside enclosure areas</b> 



## Warning

**READ AND FOLLOW ALL FOLLOWING SAFETY INSTRUCTIONS**

**Warranty is VOID if any of the below are violated**

### **RISK OF FIRE AND SHOCK**

- Uncoil 120V tape light prior to switching it on
- Do not cover this product as the covering may cause 120V tape light to overheat and melt or ignite
- Do not operate with the 120V tape light tightly coiled. To prevent overheating, no contact between 120V tape light cables and parts of light cables. Maintain at least ½ inch spacing between 120V tape light cables or parts of light cables
- Do not puncture, cut, shorten, or splice the 120V tape light
- Do not route the cord or 120V tape light through walls, doors, windows, or any similar part of the building structure
- Do not use if there is any damage to the light or cord insulation
- Do not submerge 120V tape light in liquids, or use the product in the vicinity of standing water or other liquids
- Secure this 120V tape light using only mounting clips provided. Do not secure this product or its cord with staples, nails, or similar that may damage the insulation or permanently attach to the building structure
- Do not subject 120V tape light to continuous flexing
- Do not exceed the maximum number of extensions or 120V tape light lengths permitted by the marking
- Do not install in cabinets, tanks, or enclosures of any kind
- Do not use near swimming pools, spas, tubs, fountains, or any other bodies of liquids
- Be caution when use in child's room, nursery, or other child's play area
- Avoid installing at locations with prolonged exposure to direct sunlight to prevent extended heat build up and to maintain optimum operating temperature
- This product has polarized plug (one blade is wider than the other) as a feature to reduce the risk of electric shock. This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the "save these instructions"

### **OUTDOOR INSTALLATION**

- **WARNING:** When using outdoor use portable lighting products, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.
- Ground Fault Circuit Interrupter (GFCI) protection should e provided on the circuits or outlet to be used for the outdoor use 120V tape light product. Receptacles are available having built-in GFCI protection for this measure of safety.
- Use only outdoor extension cords, such as type SW, SOW, STW, STOW, SJW, SJOW, SJTW, or SJTOW. These types are marked on the wire of the extension cord.
- Do not submerge in liquid or in areas where water will puddle
- Caution: Do not install closer than 10 ft from swimming pool surface