INSTRUCTIONS
NEON FLEX INSTALLATION

RAB Lighting is committed to creating high-quality, affordable, well-designed and energy-efficient LED lighting and controls that make it easy for electricians to install and end users to save energy. We'd love to hear your comments. Please call the Marketing Department at 888-RAB-1000 or email: marketing@rablighting.com

TNFY

IMPORTANT

READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.
RAB fixtures must be wired in accordance with the National Electrical Code and all applicable local codes. Proper grounding is required for safety. THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

1. The operation instruction does not supersede federal, state, local, or *(inter)* national laws, regulations, rules, ordinances, and codes that may apply to electrical installations.
2. The installation and electrical connection process must be operated by a professional electrician using the applicable and appropriate electrical codes.
3. Installation, usage and storage must occur in the environment within the temperature range *(usually -20~45℃ for installation & usage and -20~60℃ for storage)* indicated on the product datasheet of the neon flex.
4. Make sure the operating voltage of the neon flex coincides with the voltage of the extra LED power supply certified for the LED lighting industry, do not connect the neon flex directly to the AC power such as 120V input.
5. Please choose the suitable waterproof rating of the neon flex according to the actual application scene.
6. Unroll the neon flex from reel before illumination, to avoid product damage caused by the heat.
7. The neon flex can be cut into certain shorter lengths, and also can be spliced into longer lengths. Please refer to the standard length and increment written on the product datasheet of the neon flex. Beyond working length will lead to quality issues like overload, uneven brightness, etc.
8. Turn off the power supply before wiring, assembly, processing, cleaning, maintenance, etc, and ensure all wiring and polarities are correct before powering on.
9. Do not secure the neon flex with staples, nails, or similar objects that can damage the insulated housing for waterproofing.
10. Be aware of ESD protection, handle with care without colliding or crushing, do not mechanically press down on LED and other components, and do not cover the neon flex with heat insulation gasket material.
11. Try to use in a well ventilated environment and avoid complete sealing. Avoid installing and using the neon flex near heat sources, or other potentially dangerous sources like corrosive solvents.
12. To protect your eyes, do not stare at the light for a long time when illuminating the neon flex.
13. An additional heat sink is helpful for the heat conductivity and LED lifetime, pleasure refer to the heat sink and LED lifespan definition on the product datasheet of the neon flex.
14. To reduce the voltage drop as much as possible, the wire length between neon flex and power supply should be as short as possible.
15. Considering the reliability of the LED power supply, it's recommended to use the loading powers not exceed 80% of its rated output power.
16. Make sure that the LED power supply does not generate reverse voltage, it will damage the neon flex.
17. Dust and dirt accumulated over time should be removed from the light emitting surface to assure optimal functioning of the neon flex. Disconnect the power before maintenance and cleaning.
18. Paints, solvents and corrosive cleaning chemicals may not contact and thus affect the neon flex.
19. This product may not be treated as household waste, dispose of the material through the waste recycling of electrical and electronic equipment.
20. CAUTION: The mounting means provided with this neon flex has not been evaluated for reliability. If installed where failure of the mounting means could cause injury to persons or damage to property below, supplemental means of securement should be considered.

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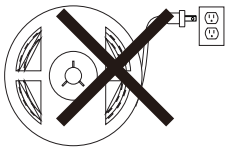
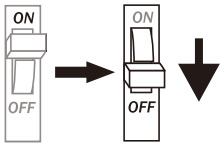
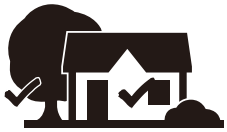
WARNING

SHOCK HAZARD!
IT MAY RESULT IN SERIOUS INJURY OR DEATH!
Do not connect the neon flex directly to the high voltage power.
Please turn off the power prior to installation.

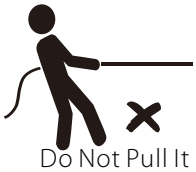




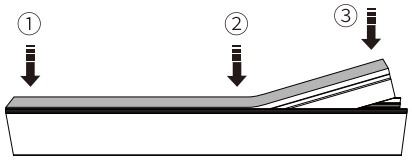
HANDLE PRODUCT WITH CARE!


Indoor & Outdoor Usage


Do Not Step On It

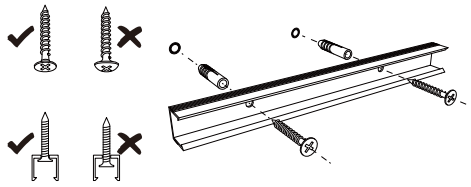

Do Not Pull It

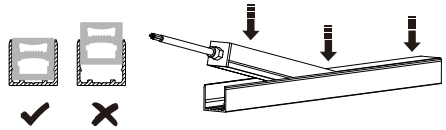

Do Not Twist It



Apply small amounts of force in the same direction, and press downwards or lift upwards in sections.

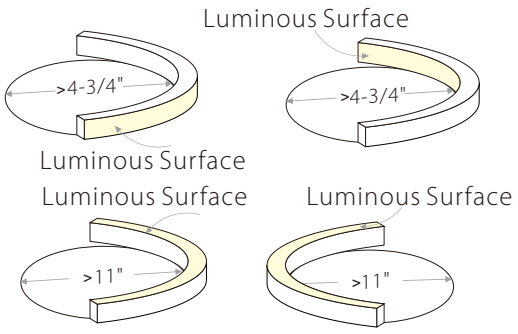
> 6.56ft. Long ⚠ Operated by 2 people

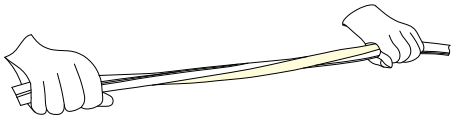




(1) When installing in environments with significant temperature changes, it is important to consider thermal expansion. Based on the characteristics of the material, the product will have thermal expansion due to temperature changes.
(2) Try to use tools made of soft and elastic material for installation or disassembly, as dragging or pulling by hand may cause damage to the product.
(3) Installation or disassembly of products for 6.56ft. or longer requires 2 people to operate, to avoid damage to the product.

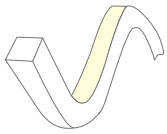
BEND & TWIST DIAGRAM



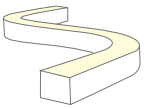


⚠ Max. Twist Angle is 360° per 39-3/8".

Can be top-bend



Can be side-bend



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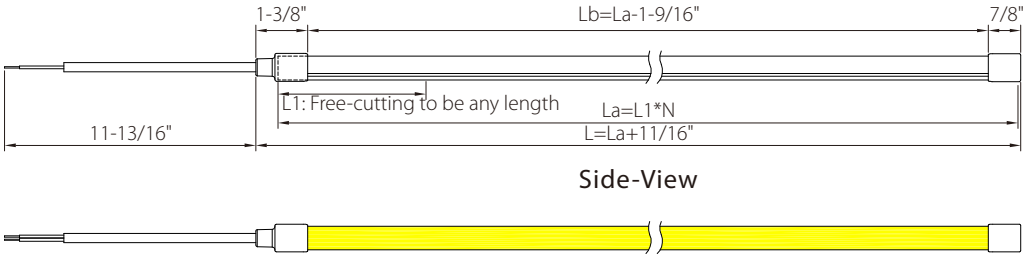
DIMENSIONAL DRAWINGS

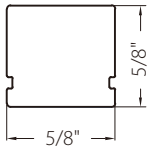
Endcap sealed by gluing process

Power entry from the tail



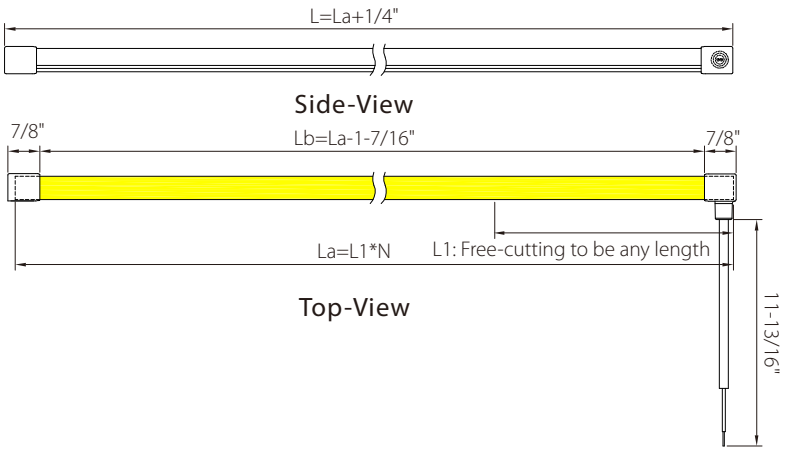
Side-View

Top-View



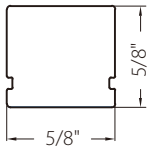
Sectional-View

Power entry from the side



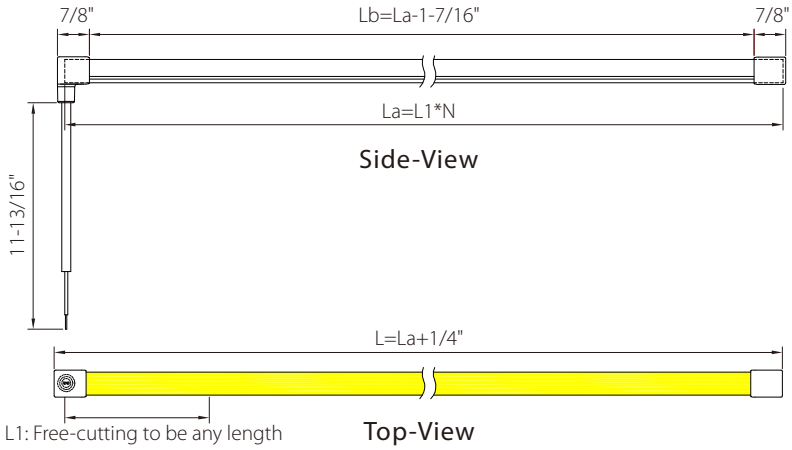
Side-View

Top-View



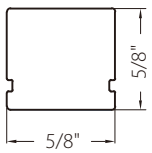
Sectional-View

Power entry from the bottom



Side-View

Top-View



Sectional-View

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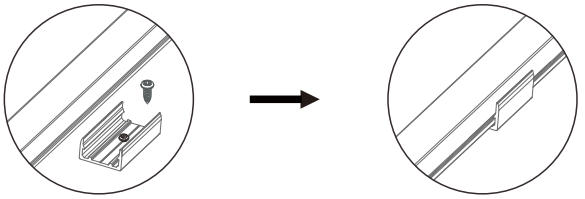
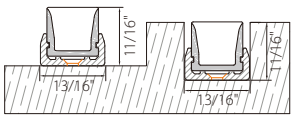
INSTALLATION

Option 1: Fixed by bracket and screw in TB16.



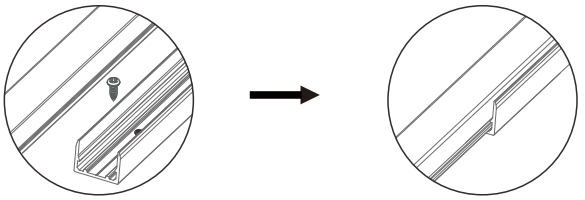
Space & Groove are shown as below



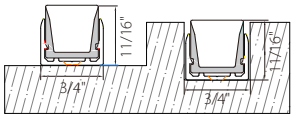
Surface & Recessed mounting

Note: White color is standard. PC material is not recommended for long-term exposure to outdoor sunlight.

Option 2: Fixed by aluminum profile and screw in TAP16.



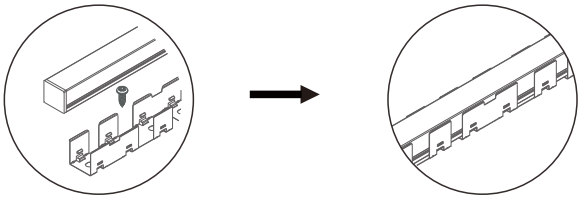
Space & Groove are shown as below



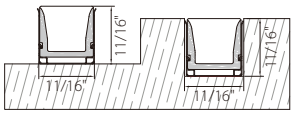
Surface & Recessed mounting

Note: Silver color is standard.

Option 3: Fixed by bendable bracket and screw in TBB16.



Space & Groove are shown as below



Surface & Recessed mounting

Note: Silver color is standard.

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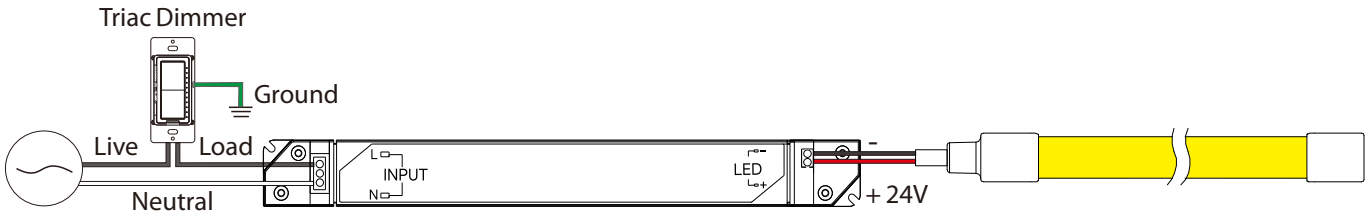
WIRING

Option 1: use TID-60 or TID-96 driver with non-dimming.

Option 2: use TID-60 or TID-96 driver with TRIAC dimming
(Use the compatible phase dimmer in XDIM, or Lightcloud Blue phase dimmer in XDIM/LCB or XDIM/LCBS.)



Wire Specification		Value
Input Wire	Gauge	16-20 AWG
Output Wire	Gauge	18-22 AWG

Notes:

- This driver is compatible with both leading edge and trailing edge triac dimmer.
- This driver should be installed by qualified and professional person.
- Please make sure the driver is installed in ventilation environment for good heat dissipation.
- For avoiding driver damage, please make sure the electric wiring is correct before testing.

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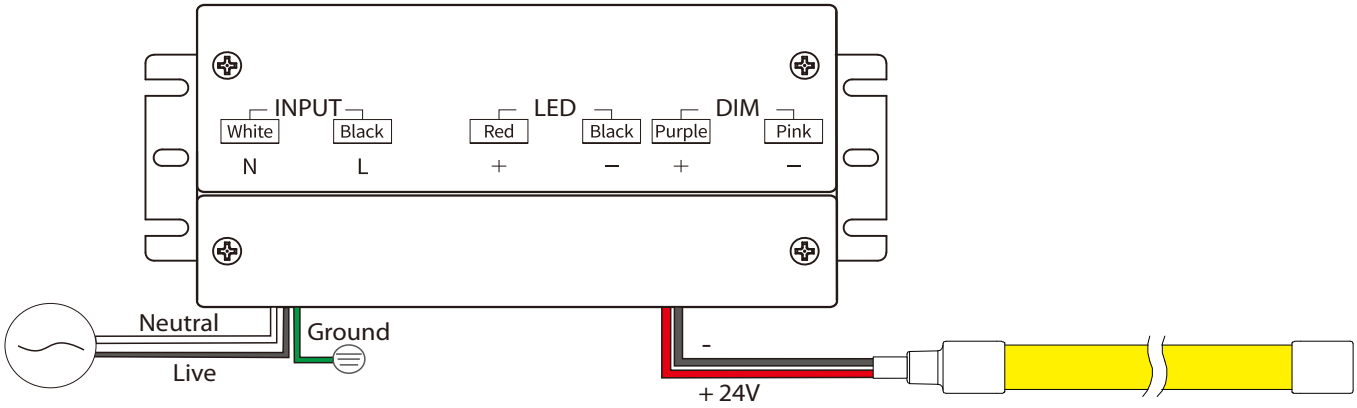
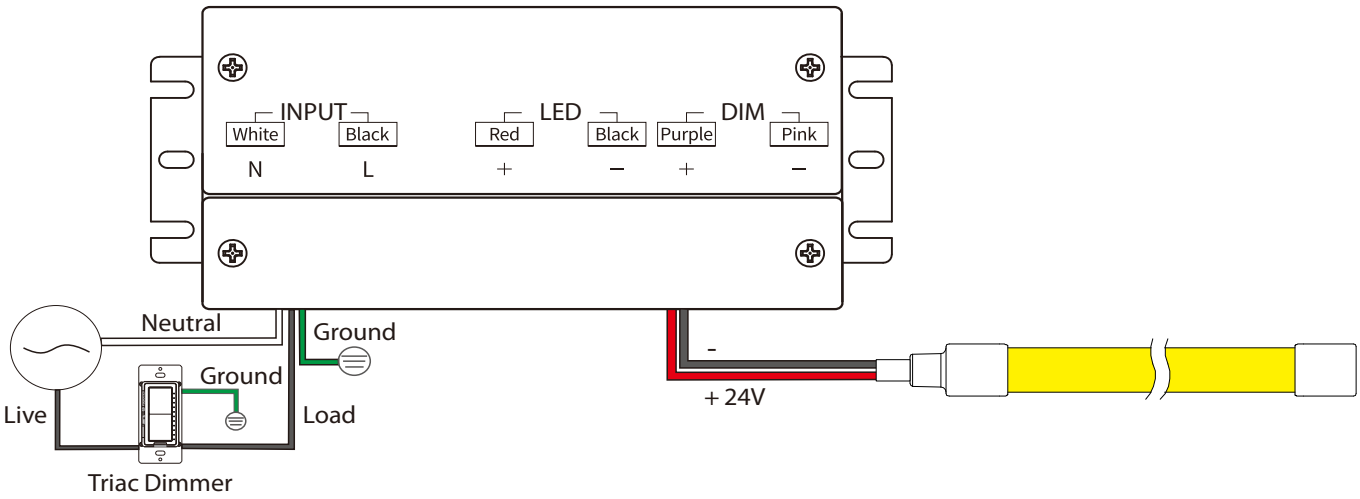
WIRING *(cont'd)*

Option 3: use TOD-96 driver with non-dimming.



Option 4: use TOD-96 driver with TRIAC dimming
(Use the compatible phase dimmer in XDIM, or Lightcloud Blue phase dimmer in XDIM/LCB or XDIM/LCBS.)



Notes:
- This driver is compatible with both leading edge and trailing edge triac dimmer.
- This driver should be installed by qualified and professional person.
- Please make sure the driver is installed in ventilation environment for good heat dissipation.
- For avoiding driver damage, please make sure the electric wiring is correct before testing.
- Although the waterproof level of the LED driver can reach the wet location in IP65, considering the safety of wiring, it is required that the LED driver should not be directly exposed to outdoor environments that are soaked in rain or water, and should be shielded, such as being placed in a power box.

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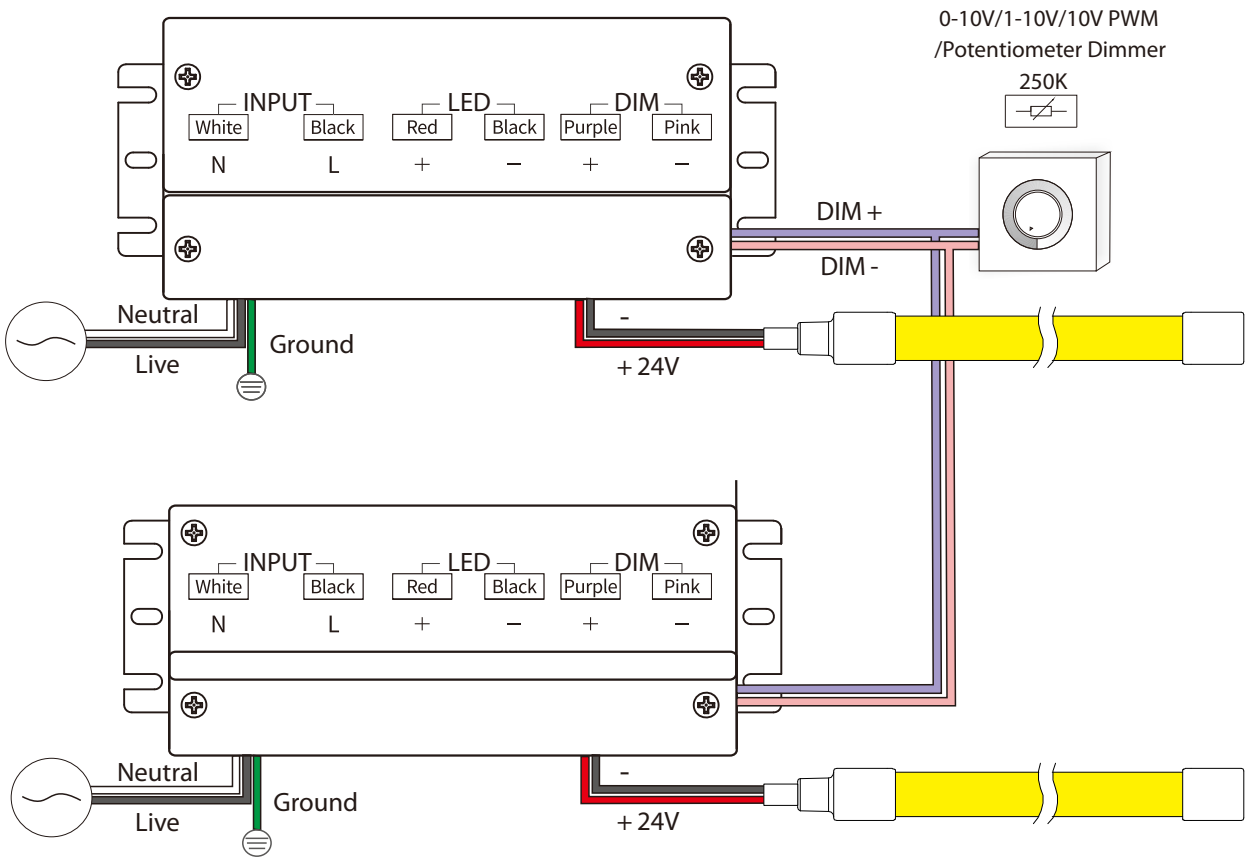
WIRING *(cont'd)*

Option 5: use TOD-96 driver with 0-10V/1-10V/10V PWM/Potentiometer dimming.



Notes:

- Dimming interface characteristics: 0.9V and below are closed, 1V is the darkest, 10V is the brightest,1-10V is the dimming range.
- The dimming interface distinguishes between positive and negative, DIM+ is positive, DIM- is negative, please do not reverse.
- Dimming interface does not support voltage access higher than 20V, otherwise it will cause damage to the internal components.
- When the dimming interface is open, the driver outputs the maximum current. When the interface is short-circuited, the current output is closed.
- When multiple synchronous dimming is required, the positive poles of the dimming interface of each driver are connected together, and the negative poles are connected together.
- Support passive dimmer or isolated active dimmer dimming, does not support non-isolated active dimmer dimming.
- In general, it is recommended that the number of drivers connected in parallel under the same dimmer does not exceed 30pcs, and the Max. wiring length of dimming wires do not exceed 328ft.
- It is recommended that the dimming wires should not be lower than the 22AWG wire.
- Do not put the dimming wires with high voltage or interference sources. If it is unavoidable, please use the shielded wires.
- Although the waterproof level of the LED driver can reach the wet location in IP65, considering the safety of wiring, it is required that the LED driver should not be directly exposed to outdoor environments that are soaked in rain or water, and should be shielded, such as being placed in a power box.

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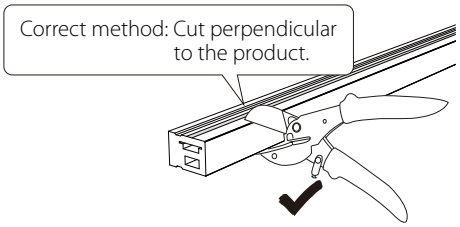
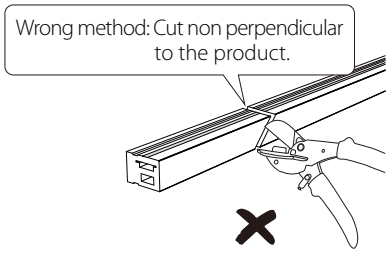
ASSEMBLY

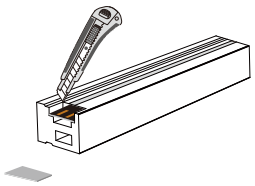
Apply the wire soldering process in TPF2NF.

(1) Cut the product (free-cutting) according to the required length.

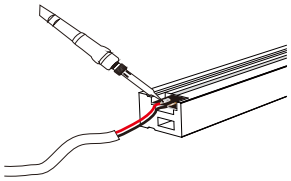




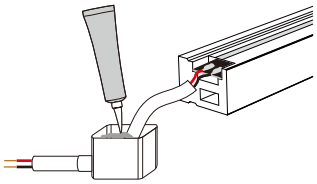
(2) Peel off the jacket on the back of the PCBA to expose the solder pads.



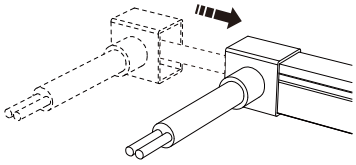
(3) Solder the cables to the corresponding polarity on the solder pads.



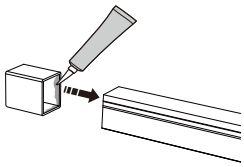
(4) Thread the cable through the front end cap and fill it with 1/3~1/2 capacity glue.



(5) Push the end cap onto the product, and lay it flat to dry for 2 hours.



(6) Fill the tail end cap with 1/3~1/2 capacity glue, push it onto the product, and lay it flat to dry for 2 hours.



Easy Answers

rablighting.com
Visit our website for product info

Tech Help Line
Call our experts: 888 722-1000

e-mail
Answered promptly - sales@rablighting.com

Free Lighting Layouts
Answered online or by request

NEONFLEX-IN-0525
P-101646

RAB WARRANTY: RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.