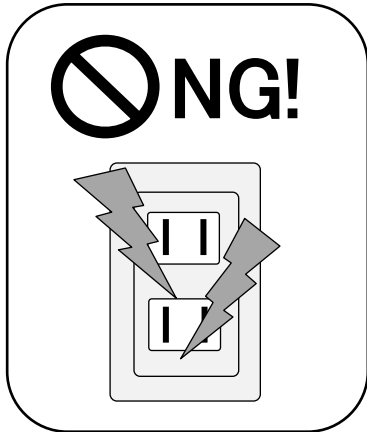


# Caution when Installing the Product

Keep the followings to prevent damages, electric shock, fume and fire.

Do not connect to AC power.



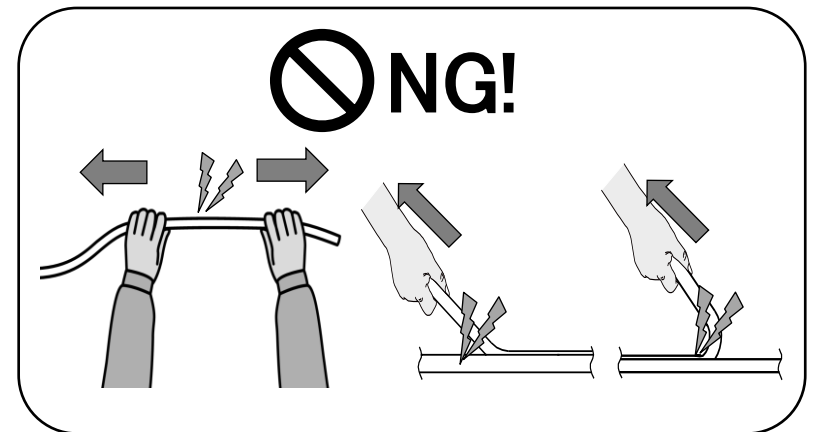
Do not use a tool with sharp point.



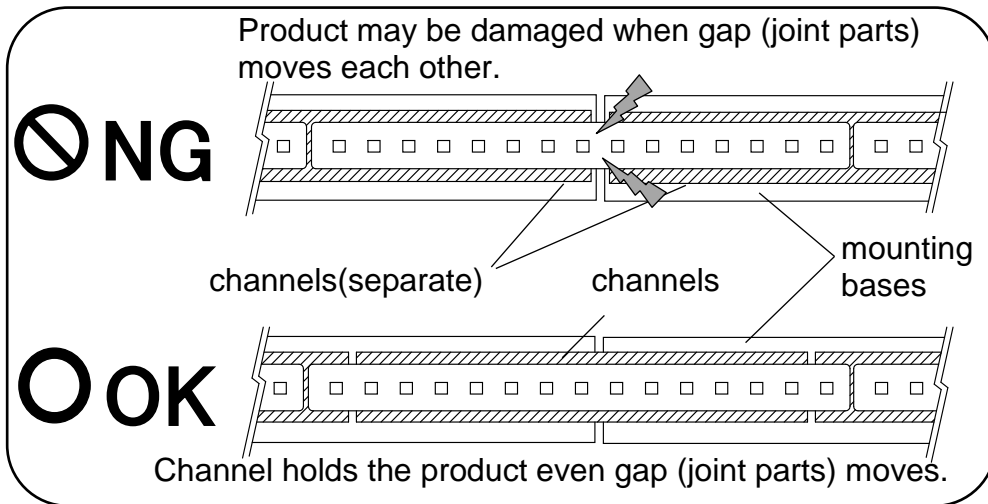
Do not tramp on or strike the product.



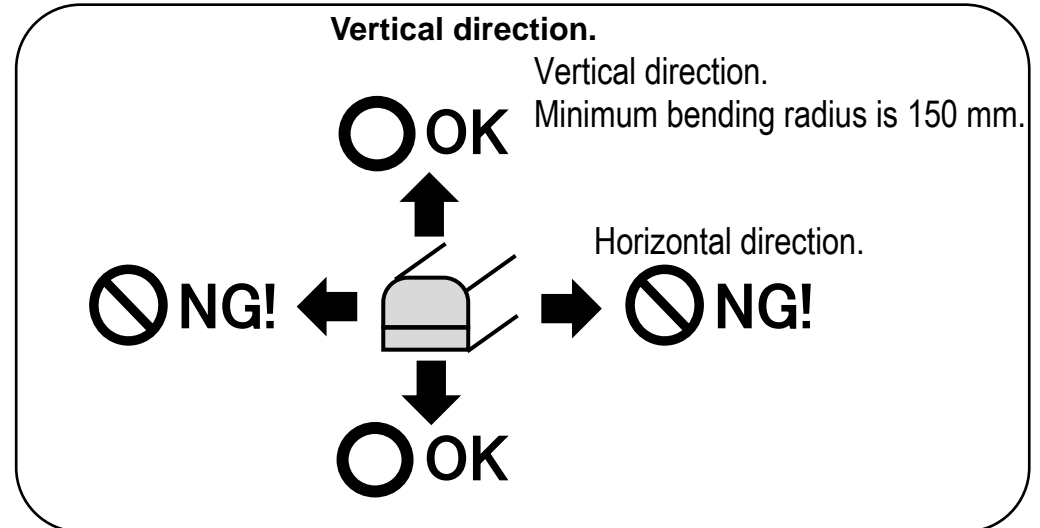
Do not pull out the product diagonally from the channel.



Do not separate the mounting channels at the gap (joint parts) between mounting bases.



Do not bend the product toward horizontal direction.



# Tsubaki Seamless Light Type V Duo (Tunable White) Instruction Manual

We will appreciate for your purchasing the product. Please carefully read this manual to install the product correctly and safely.  
The contents described on this manual are subject to change without prior notice.

**atex**  
Atex Co.,Ltd.

For Keeping

ZTE2TLDTU Ver.220720

## WARNING

Read this section carefully to prevent electrical shock, fire and other hazard.

- Electrical works certificate is required to install and inspect this product.
- Input voltage is 24V DC only. Do not apply other voltage such as AC power.
- Do not disassemble or alter the product.
- Turn off the power before installing or handling the product.
- Do not put screws into the products directly. It will cause damages. Please refer to "Installation Method".
- Please do not perform the following actions on the product.
  - Excessive bending and twisting of the product.
  - Dropping and strongly striking the product.
- Do not install or handle the product with wet hands.
- This product should not be installed in the following places.
  - Places where water is continuously splashed or underwater. (This product is IP67 rated)
  - Places where moisture tends to remain.
  - Places with poor heat dissipation.
  - Places with high temperature and humidity, such as bathrooms and saunas.
  - Places with large vibrations and shocks.
- Clean and inspect the product on a regular basis. Leaving the product for a long period of time may cause smoke, fire, or electric shock.
  - Voluntary inspection and cleaning (once a year).
  - Inspection and cleaning by specialists such as an electrician (once every three years).
- If there is any trouble with the product, please immediately turn off the power and contact the dealer or installer.

## CAUTION

- Please be careful that eyes might be hurt when you look straight at light emitting part.
- Please be careful about static electricity. It will damage LED's.
- The product is vertical bending type. Please do not bend the product toward horizontal direction. It may cause the failure.
- Do not pull the lead wire strongly. It may cause the failure.
- The temperature rise of the product is influenced with the capacity and the distance from housing. Ambient temperatures must remain the product specification.
- The product cannot be used in the atmosphere of corrosive gas and flammable gas, like the following.
  - Area with synthetic rubbers, cardboards, and other materials containing Sulphur.
  - Area with hot springs containing Sulphur.
- Even if the bending is looser than the minimum bending radius (R150mm), repeated bending of the product may cause a malfunction. Do not bend the product more than 5 times, including attaching to the channel. Also, do not attach it to doors that open and close.

## Specification

### Product Specification

Product Name	Tsubaki Seamless Light Type V Duo
Product No.	TLD-TU
LED Color *1	2200K ~5500K
Input Voltage	DC24V ±5%
Power Consumption	Max.17W/m (2200K only:9W/m, 5500K only:8W/m)
Operating Temperature	-10 ~ +55°C (IP67 rated. Indoor / Outdoor)
Dimension	Refer to dimensional drawing.
Weight	280g/m
Minimum Bending Radius	R 150mm, horizontal.
Maximum Series Connection Length *2	5m (5,054mm + End-caps)
LED Pitch	9.5mm

\*1 Please note that there is some variation in color among LED's.

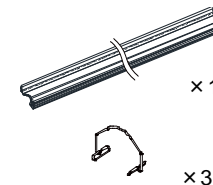
\*2 The connection length of the product is also limited by the power supply and PWM driver or DMX driver.

### Options

Product Name	Product No.	Remarks
Aluminum Rigid Channel	FAS00-11TD	For straight line installations. Rigid channel (L=1000mm) 1 pcs Fixing Spring 3 pcs
Aluminum Mounting Bracket	FATD-HA	For curvy line installations. Bracket (L=36mm) 5 pcs Fixing Spring 5 pcs

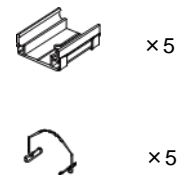
Aluminum  
Rigid Channel

FAS00-11TD



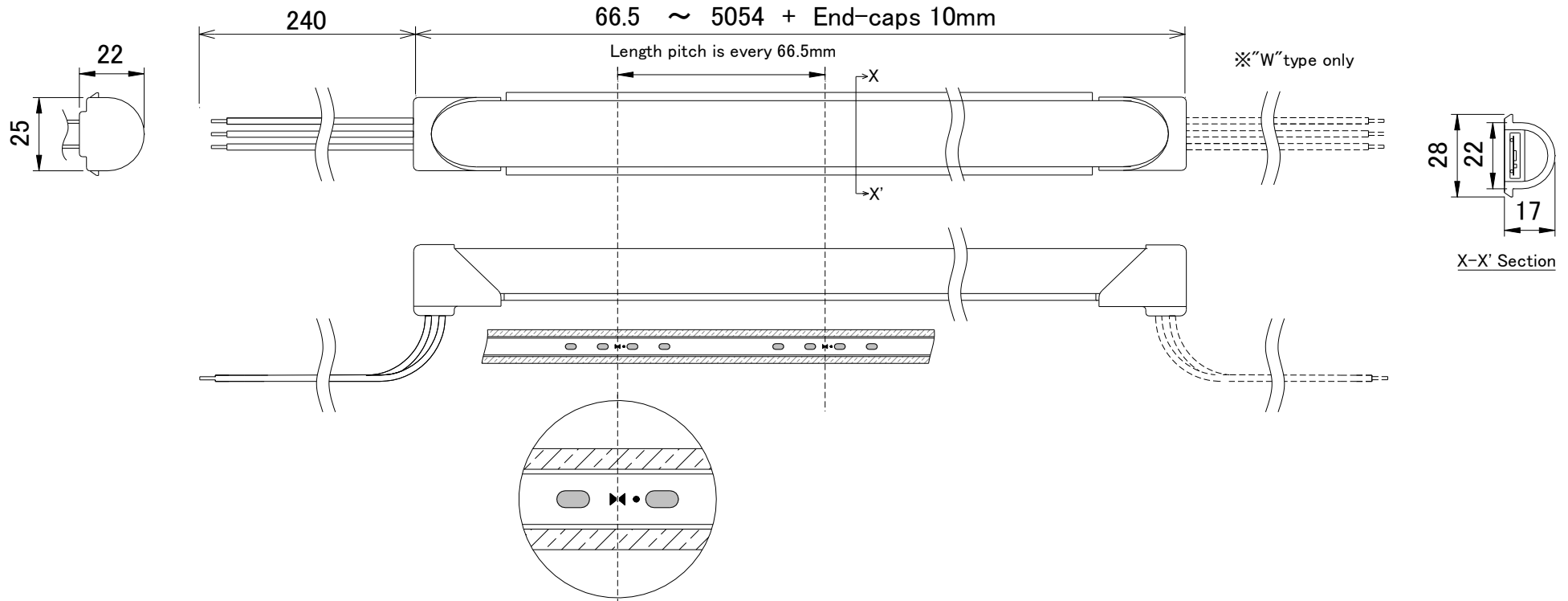
Aluminum Mounting  
Bracket

FATD-HA



- Please contact our sales representative for suitable PWM controllers or DMX controllers.

■ Dimension



Enlarged figure of cuttable line

Third-angle projection method (Unit : mm)

## Wiring Method

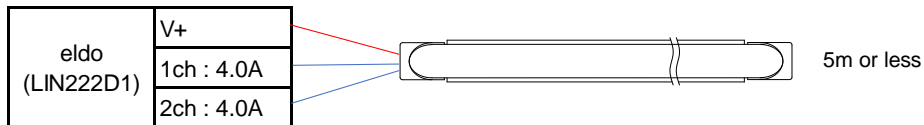
### ■ Maximum series connection length

- The product length to be connected in series should be 5m or less.

### ■ Limits of current value and wire

- Use the power supply and DMX Driver that has enough power to drive the products. The following is a connectable products length, when you use Linear Drive as DMX Driver.

DMX driver	Connectable products length to DMX driver	Remarks
LIN222D1 (2ch)	When you connect the products in parallel, you can connect them up to 10.6m. Please note that the series connection length of the products should be 5m or less.	LED output load: 2ch @ 24V: 4A



- Use appropriate wires.

- Check the wire specifications of the power supply and DMX driver.
- Keep the wires as short as possible.
- The total wire length of series connections of 24V DC and LED output is limited by the size of the wire and length of the products. Refer to the following list.

Wire		Product length	Recommended maximum total wire length of series connections of 24V DC and LED output(Cable(A)+B+C)	
Size	Ampacity			
S-VCTF0.5sq-3C	AWG 20	7 A	5.0 m	Up to 3 m
S-VCTF0.75sq-3C	AWG 18	9 A	5.0 m	Up to 4 m
S-VCTF1.25sq-3C	AWG 16	12 A	5.0 m	Up to 7 m

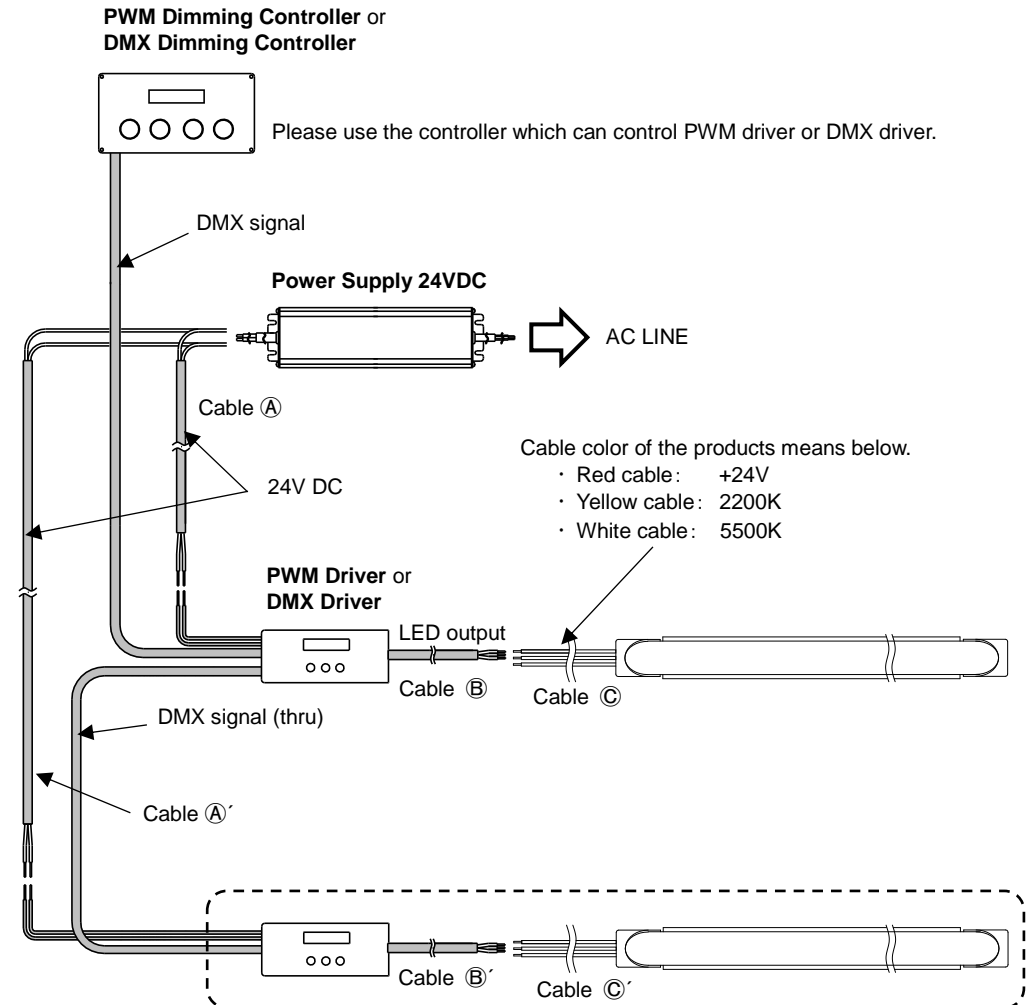
※ These values of ampacity are examples only. Refer to the specifications of wires you use.

※ When connecting products and power supplies in parallel in multiple systems, make sure that the types and lengths of the wires in each system are the same to prevent differences in brightness and color between the products.

- Please contact our sales representative for more information of wiring.

### ■ Example of wiring

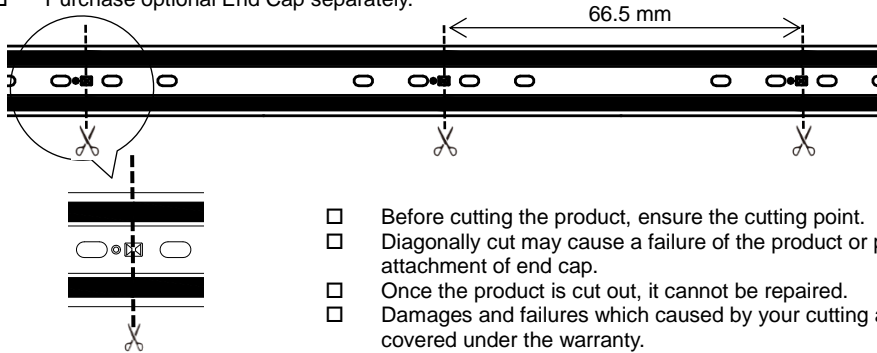
- Follow the documents of dimming controller, power supply and PWM Driver or DMX Driver that you use.
- Follow the specifications of the equipment and wires used for wiring.



- Divide the wiring in parallel not to exceed the "Maximum series connection length" and the "Limits of current value and wires".

## How to Cut the product at site

- When you have to shorten a length of the product, it can be cut at every 66.5 mm.
- Purchase optional End Cap separately.



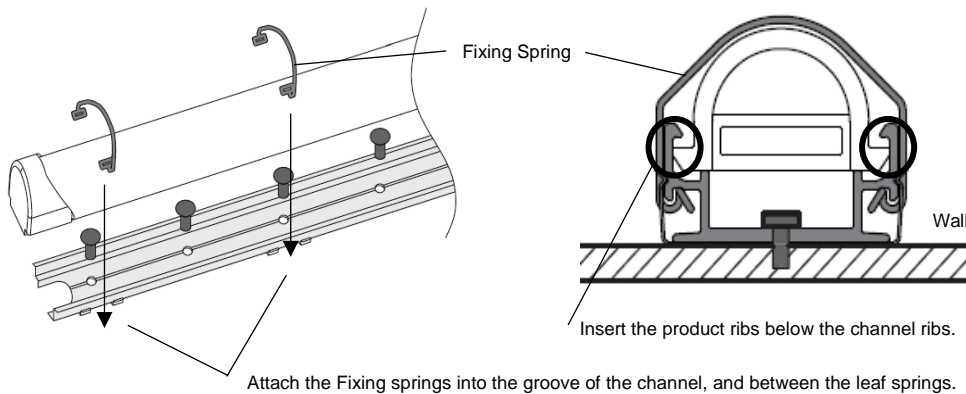
- Before cutting the product, ensure the cutting point.
- Diagonally cut may cause a failure of the product or prevent an attachment of end cap.
- Once the product is cut out, it cannot be repaired.
- Damages and failures which caused by your cutting are not covered under the warranty.
- After cutting, cover the cutting point with End Cap (optional).

## Installation Method

### ■ Straight line installations

Use Aluminum Rigid Channel, FAS00-11TD.

1. Please cut the channel as needed.
2. Remove the burr after cutting the channel, because the burr may cause damages, electric shock and smoke.
3. Securely mount the channel on the wall using screws and screw holes.
  - Please use the appropriate screws according to the wall.
4. Put and push the product into the channel securely.
  - Insert the product ribs securely below the channel Ribs.
5. Attach the Fixing Spring over the product into the groove of the channel, and between the leaf springs of the holder attached backside the channel.
  - After attaching the fixed springs, pull them to make sure they are completely fixed in the channel grooves. Otherwise, the product may be dropped off from the channel.

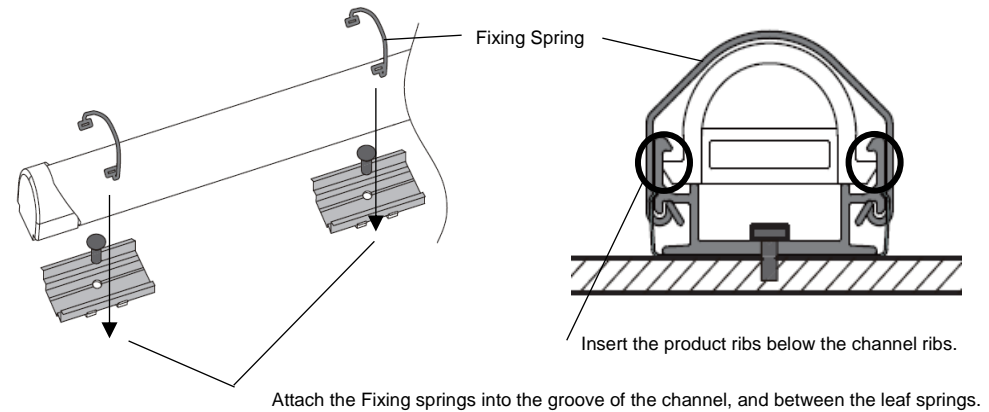


Attach the Fixing springs into the groove of the channel, and between the leaf springs.

### ■ Curvy line installations

Use Aluminum Mounting Bracket, FATD-HA.

1. Securely mount the bracket on the wall using screws and the screw holes.
  - Please use the appropriate screws according to the wall.
2. Put and push the products into the bracket securely.
  - Insert the product ribs securely below the bracket ribs.
3. Attach the Fixing Springs over the product into the grooves of the brackets, and between the leaf springs of the holder attached backside of the bracket.
  - Insert the product ribs securely below the bracket ribs.



Attach the Fixing springs into the groove of the channel, and between the leaf springs.

## CAUTION

- Use Atex Accessories to install the product.
- Do not put the screws on the product directly. It may cause damages.
- Do not use double sided tape and glue to install the products.
- Do not perform the excessive bending or twisting of the lead wires and End Caps. It may cause the failure and the decline in water resistant performance.
- In case of installing the product vertically, it may be slid down. As the right figure, set the L-shape metal corner brace beneath the product. Do not pinch the leads by the brace to prevent fire.

