Caution when Installing the Product
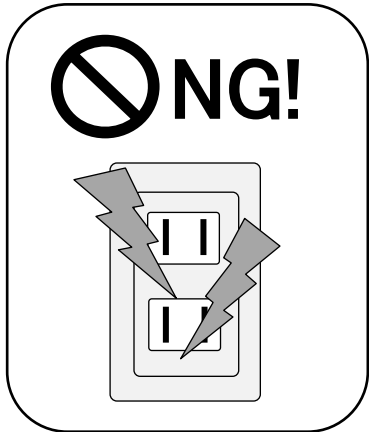
Keep the followings to prevent damages, electric shock, fume and fire.

Do not connect to AC power.
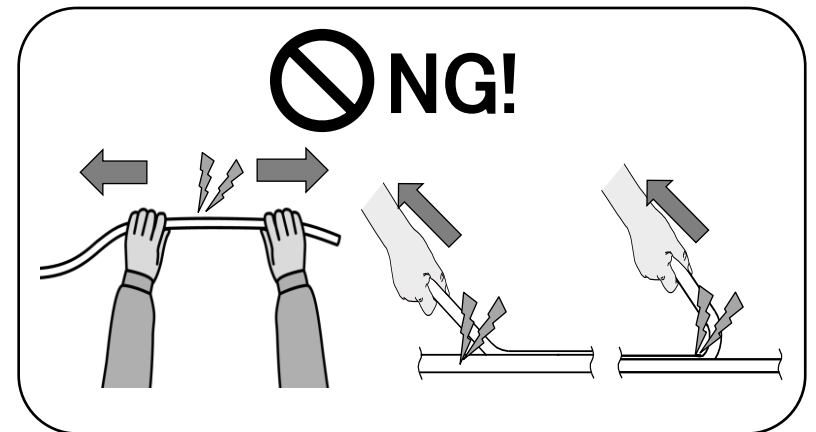
🚫NG!
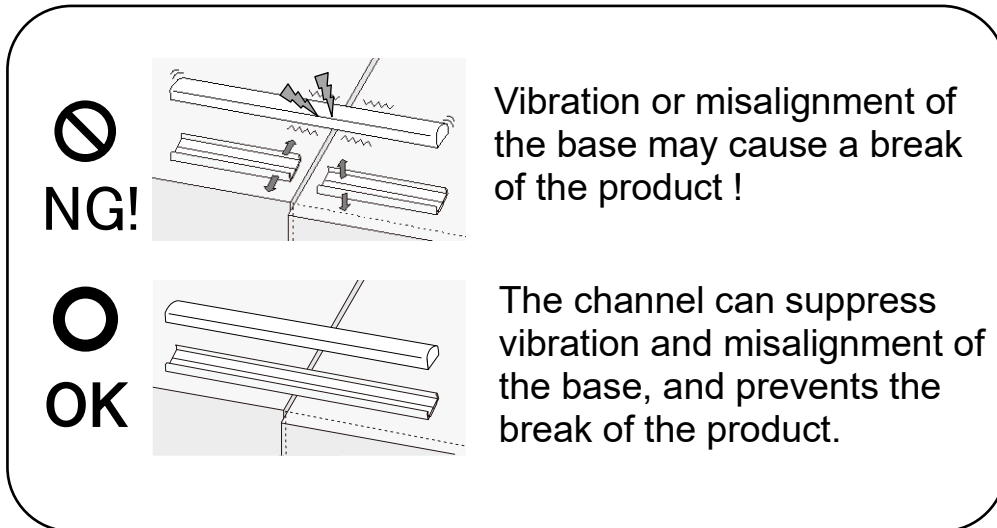
Do not use a tool with sharp point .

🚫NG!

Do not tramp on or strike the product.

🚫NG!

Do not pull out the product diagonallyfrom the channel.

🚫NG!

Do not separate the channel at the gap of mounting base.

🚫 NG!

Vibration or misalignment of the base may cause a break of the product !

⭕ OK

The channel can suppress vibration and misalignment of the base, and prevents the break of the product.

Do not bend the product toward horizontal direction.

⭕ Vertical bending is OK

※ See specfication for bending radius.

× ⊘ Horizontal bending is NG!
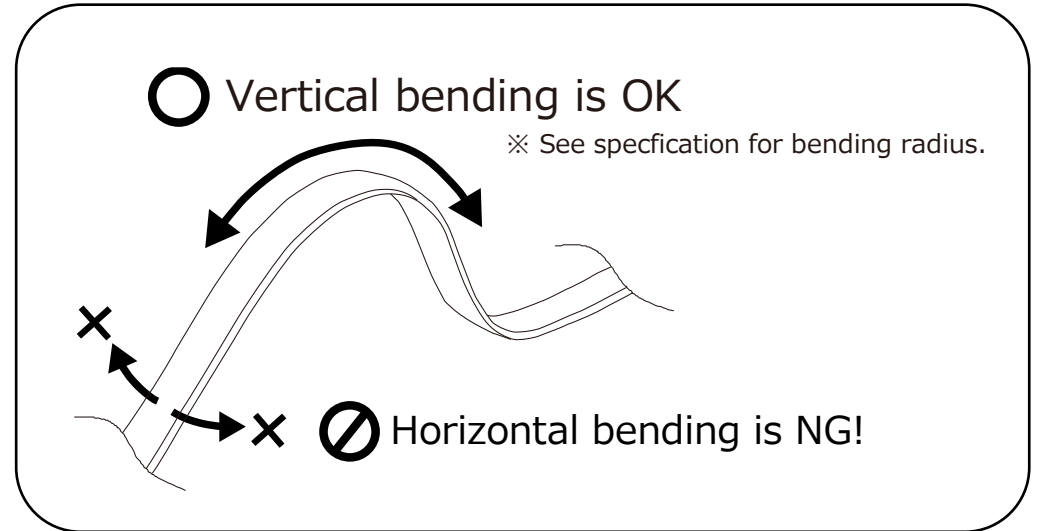
Tape Light Duo Indoor (Tunable White)
(TM-TU/TM-TU-S97 Ultra-High CRI Type) Instruction Manual

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　**For Keeping**

Atex Co.,ltd.　ZTE2TMTU　Ver.20241122

WARNING

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

☐ Qualifications are required to do electrical works. Check the laws of your country.
☐ 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 install the lead wires with tension. 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 (R60mm), 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	Tape Light Duo Indoor (Tunable White)	Tape Light Duo Indoor (Tunable White) Ultra-High CRI Type
Product No.	TM-TU	TM-TU-S97
Color Temperature　*1	2200K ～ 6500K	2700K ～ 6500K
Input Voltage	DC24V ±5%	
Power Consumption	Max.17W/m (2200K only：8.5W/m、6500K only：8.5W/m)	Max.17W/m (2700K only：8.5W/m、6500K only：8.5W/m)
Color Rendering Index (Ra)	82 ～ 90	95 ～ 97
Operating Temperature	-10 ～ +40℃ (Indoor only)	
Dimension	Refer to dimensional drawing.	
Weight	80g/m	
Minimum Bending Radius	R60 mm, 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.
　・ The white of RGB LED, and the white of single-color LED's is different in hues.
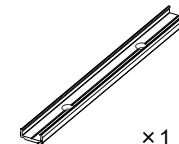　・ The balance of emitted light color may change over time.
*2 The connection length of the product is also limited by the power supply and PWM driver or DMX driver.

■ Options

Product Name	Product No.	Remarks
Polycarbonate Rigid Channel	FJS00-22	L=1,000mm
Polycarbonate Mounting Bracket	FJB00-21	5 pcs per pack.

Polycarbonate Rigid Channel
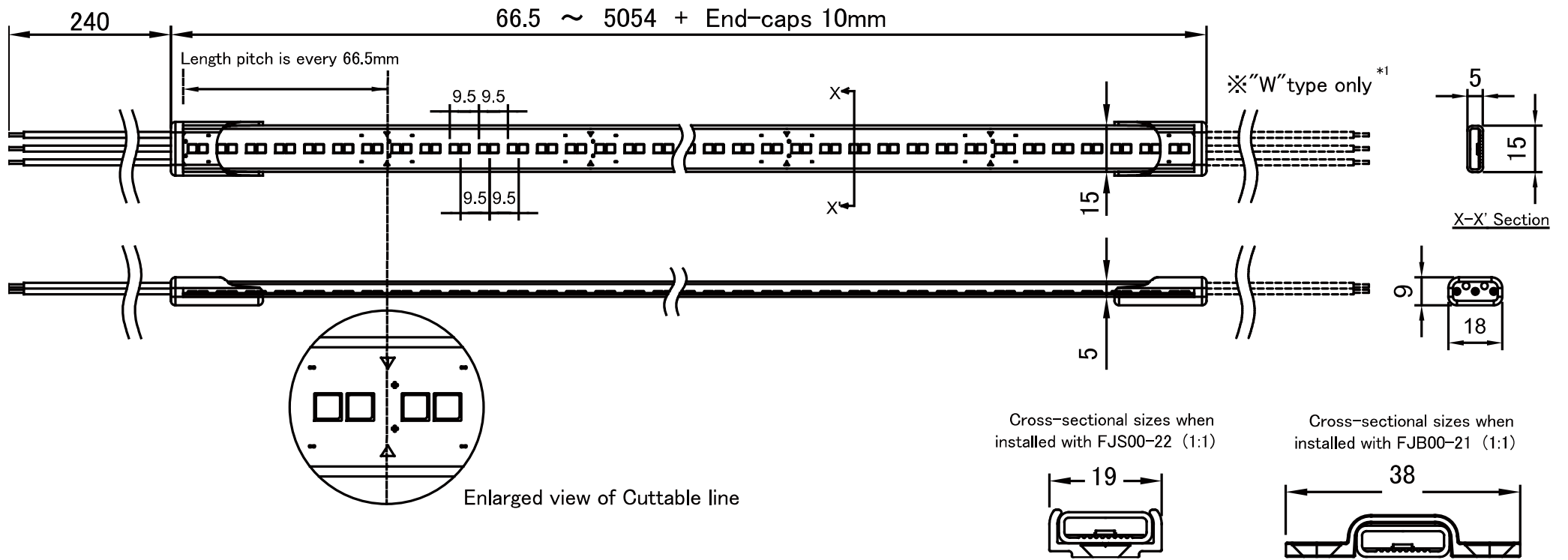
FJS00-22

×1

Polycarbonate Mounting Bracket

FJB00-21

×5

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

■ **Dimension**

240

66.5 ～ 5054 + End-caps 10mm

Length pitch is every 66.5mm

9.5 9.5

9.5 9.5

X

X'

※"W"type only *1

15

15

5

5

X–X' Section

Enlarged view of Cuttable line

9

18

Cross-sectional sizes when
installed with FJS00-22 (1:1)

19

Cross-sectional sizes when
installed with FJB00-21 (1:1)

38

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 11.2m. Please note that the series connection length of the products should be 5m or less.	LED output load: 2ch @ 24V: 4A

eldo (LIN222D1)	V+	
	1ch : 4.0A	
	2ch : 4.0A	

5m or less
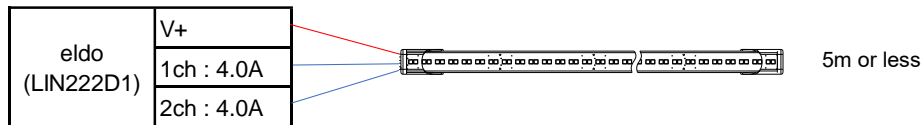
□ Use appropriate wires.

・ 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.

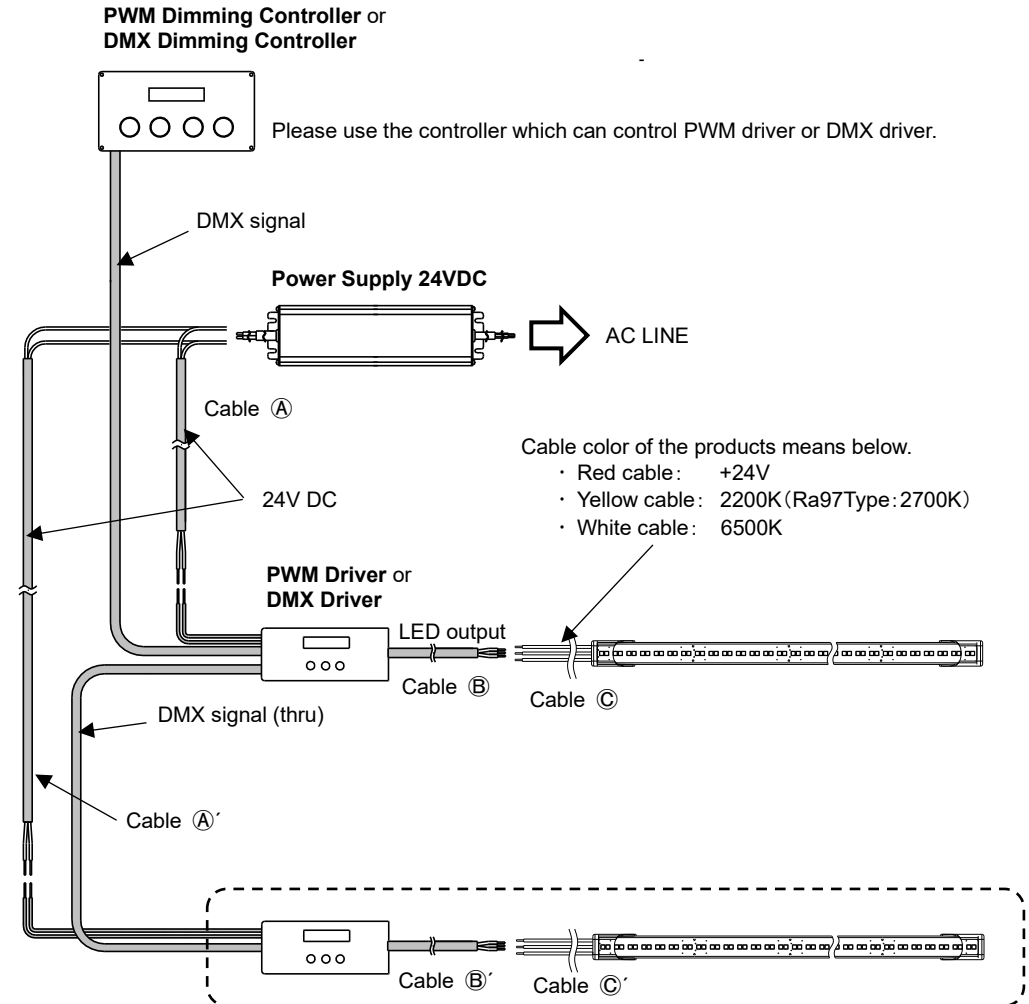| Wire		Ampacity	Product length	Recommended maximum total wire length of series connections of 24V DC and LED output(CableⒶ+Ⓑ+Ⓒ)
Size				
S-VCTF0.5sq-3C	AWG 20	7 A	5.0 m	Up to 3 m
S-VCTF0.75sq-3C	AWG 18	9 A	5.0 m	Up to 4 m
S-VCTF1.25sq-3C	AWG 16	12 A	5.0 m	Up to 7 m

※ 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.

PWM Dimming Controller or
DMX Dimming Controller

Please use the controller which can control PWM driver or DMX driver.

DMX signal

Power Supply 24VDC

AC LINE

Cable Ⓐ

Cable color of the products means below.
・ Red cable： +24V
・ Yellow cable： 2200K（Ra97Type：2700K）
・ White cable： 6500K

24V DC

PWM Driver or
DMX Driver

LED output

Cable Ⓑ

Cable Ⓒ

DMX signal (thru)

Cable Ⓐ´

Cable Ⓑ´

Cable Ⓒ´

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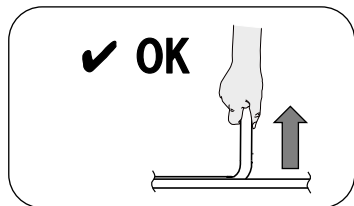
Installation Method

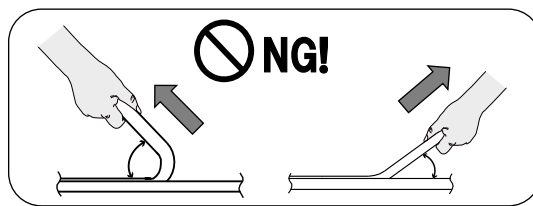### ■ Installation with the Polycarbonate Rigid Channel (option).

1. Cut the rigid channels as needed, and fix them to the location with flat head M4 screws (commercial item). Do not put screws into the products directly.
   Please fix all screw holes to prevent floating the channel.

2. Slide the lamp into the channel except end caps.

End cap

Polycarbonate
Rigid Channel

Flat head M4 screw
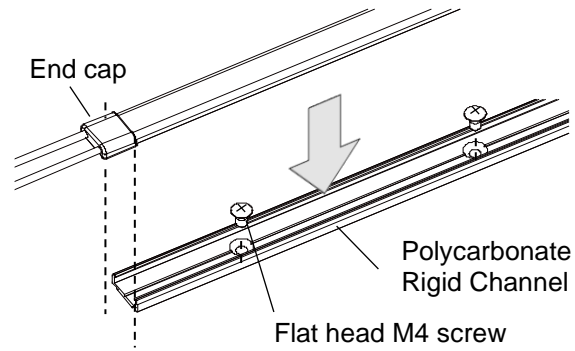
□ We DO NOT recommend to remove the product from the channel after the installation. Repeated installation and removing may causes failure.

□ If reinstalling is necessary, lift up the product slowly and pull it out vertically with your hands.

□ DO NOT pull out the product diagonally.

✔ OK

Vertically

🚫 NG!

Diagonally

■ Installation with the Polycarbonate Mounting Bracket (option).

Install the product with the Polycarbonate Mounting Bracket (optional) and flat head M4 screws (commercial item). The recommended distance between the brackets is about 180 mm.

180mm

180mm

More than R60mm