# Sheet Light, Sheet Light DMX, Sheet Light Duo, Sheet Light Duo DMX

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.

ARNING ad 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.  Please do not perform the following actions on the product.  Excepsive bending and twisting of the product.
<ul> <li>Dropping and strongly striking the product.</li> <li>Do not install or handle the product with wet hands.</li> <li>This product should not be installed in the following places.</li> <li>Places where water is continuously splashed or underwater. (This product is IP67 rated)</li> <li>Places where moisture tends to remain.</li> <li>Places with poor heat dissipation.</li> <li>Places with high temperature and humidity, such as bathrooms and saunas.</li> <li>Places with large vibrations and shocks.</li> </ul>
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.

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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.
Do not bend the product tighter than the minimum bending radius (R 300 mm). It may cause a malfunction.
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 (R 300 mm), repeated bending of the product may cause a malfunction.

## **Specification**

Product Name	Product No.	Size	Weight	Color Temperature	Input Voltage	Power Consumption	Operating Temperature	Light diffusing distance	Minimum bending radius	Maximum number of sheets connected in series	Remarks			
Sheet Light	SHL-**K-29	W:290mm	160~	2000K, 2200K, 2500K, 2800K,		6 W  12 W  Indoor Outdoor				40.01	PWM dimming is possible.(*2)			
Sheet Light DMX	SHL-**K-29DMX	t:1.8mm *1	l:290mm 160g 1.8mm *1	3000K, 3500K, 4000K, 5000K 7500K						16 Sheets	Built-in DMX driver, DMX512 compliant.			
Sheet Light	SHL-**K-44	W:440mm	200-	'**' in product No. indicates the						8 Sheets	PWM dimming is possible.(*2)			
Sheet Light DMX	SHL-**K-44DMX	H:440mm t:1.8mm *1	360g	upper two digits of color temperature.	DC 24V						Built-in DMX driver, DMX512 compliant.			
Sheet Light Duo	SHL-TU-29	W:290mm		- 2000K ~ 7500K		DC 24V	2000K:3 W	-10 ~ +50°C	60 mm or more	R 300 mm		PWM dimming is possible.(*2)		
Sheet Light Duo DMX	SHL-TU-29DMX	H:290mm t:1.8mm *1	160g		2000K ~ 7500K				< ~ 7500K	7500K:3 W Total 6 W				16 Sheets
Sheet Light Duo	SHL-TU-44	W:440mm			2000K:6 W 7500K:6 W Total 12 W					PWM dimming is possible.(*2)				
Sheet Light Duo DMX	SHL-TU-44DMX	H:440mm t:1.8mm *1	360g							8 Sheets	Built-in DMX driver, DMX512 compliant. 1ch:2000K 2ch:7500K			

<sup>\*1</sup> Thickness of lead wire bonding is 5mm.

☐ For detailed specifications such as external drawings, please refer to the drawings of the product.

☐ Please note that there is some variation in color among LED's.

☐ This product should be installed in a cover with a light diffusing plate. Also, the distance to the light diffusing plate should be "Light diffusing distance".

☐ When place the products side by side, keep the interval within 10 mm. If the interval exceeds 10 mm, non-uniformity of light may be conspicuous.

☐ In advance, check light uniformity with your light diffusing plate. If non-uniformity of light is conspicuous, increase the distance from products to the light diffusing plate.

☐ The laminated film may contain wrinkles, air bubbles, and foreign smatter, but it does not affect the quality of the product.

☐ Please contact our sales for custom size products and on-site size adjustment.

<sup>\*2</sup> Dimming devices with PWM output can also be connected. (Example: DMX-512, DALI and 0-10V devices).

# Parts for Installation (Options)

### ■ For Sheet Light

Product Name	Product No.	Specifications	Out lo	oking	Remarks
Power cable (2 pin)	WCSHL-2PC	Water proof, 240 mm length Red: V+ (DC24V)		Red	Cable for the first product.
		Black: V-		Black	
Power Relay cable (2 pin)	WCSHL-2RC	Water proof, 350 mm length Red: V+ (DC24V)		Red	Cable for sending V+ and V- to the next product via the 2-branch connector CTK2.
		Black: V-		Black	
Power Terminal cable (2 pin)	WCSHL-2TC	Water proof, 350 mm length Red: V+ (DC24V)		Red	Cable for the terminating product.
(2 piii)		Black: V-			
				Black	
Branch connector (2 pin)	CTK2	Water proof			
		Trates proof			

## ■ For Sheet Light Duo

Product Name	Product No.	Specifications	Out looking	Remarks
Power cable (3 pin))	WCSHL- 3PC	Water proof, 240 mm length Red: V+ (DC24V) White: V2- (7500K) Yellow: V1- (2000K)	Red White	Cable for the first product.
Power Relay cable (3 pin)	WCSHL- 3RC	Water proof, 350 mm length Red: V+ (DC24V) White: V2- (7500K) Yellow: V1- (2000K)	Red White	Cable for sending V+ and V- to the next product via the 2-branch connector CTK3.
Power Terminal cable (3 pin)	WCSHL- 3TC	Water proof, 350 mm length Red: V+ (DC24V) White: V2- (7500K) Yellow: V1- (2000K)	Red White	Cable for the terminating product.
Branch connector (3pin)	СТКЗ	Water proof		

## ■ For Sheet Light DMX and Sheet Light Duo DMX

Product Name	Product No.	Specifications	Out looking	Remarks
Power cable (2 pin)	WCSHL- 2PC	Water proof, 240 mm length Red: V+ (DC24V) Black: V-	Red	Cable for the first product.
Power Relay cable (2 pin)	WCSHL- 2RC	Water proof, 350 mm length Red: V+ (DC24V) Black: V-	Red	Cable for sending V+ and V- to the next product via the 2-branch connector CTK2.
Power Terminal cable (2 pin)	WCSHL- 2TC	Water proof, 350 mm length Red: V+ (DC24V) Black: V-	Rèd Black	Cable for the terminating product.
Branch connector (2 pin)	CTK2	Water proof		
Cable for XLR3	WCADR- XLR3C	Water proof (except XLR3 connector) 1m length.	To DMX Controller  To Sheet Light	Cable for connection to DMX controllers with XLR3 connectors
Cable for XLR5	WCADR- XLR5C	Water proof (except XLR5 connector) 1m length.	To DMX Controller  To Sheet Light	Cable for connection to DMX controllers with XLR5 connectors
Cable for RJ45	WCADR- RJ45C	Water proof (except RJ45 connector) 1m length.	To DMX Controller To Sheet Light	Cable for connection to DMX controllers with RJ45 connectors
Relaying cable	WCADR- DMXRC	Water proof 1m length.	OUT IN	Cable for sending DMX signal to the next product.

#### ■ Aluminum rail

Product Name	Product No.	Specifications	Out looking	Remarks
Aluminum rail	FAS00-04SHL	Length: 890mm Includes 6 self-drill screws of M4.		The included self-drill screws are to fix the product to the aluminum rail.  The screws to fix the aluminum rail to the wall are not included. Prepare screws suitable for the material of the wall by yourself.
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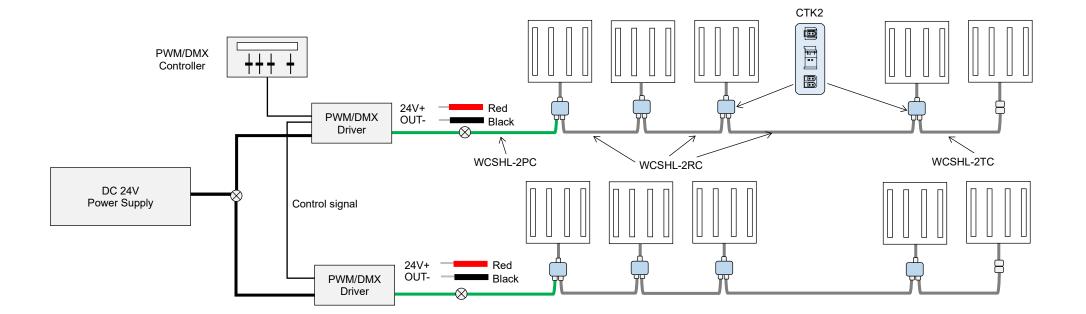
## Wiring method (Sheet Light)

☐ All of the following conditions must be met.

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Ĺ		Conditions	Remarks							
	1	The number of products connected in series must be met the "Maximum	Maximum number of sheets connected in series is 16 for SHL-**K-2, and 8 for SHL-**K-44.							
		number of sheets connected in series" shown in "Specifications".	If you use more sheets, connect in parallel.							
	2	The total load capacity meet the capacity of the power supply you use.	Please confirm the specification of the power source you use.							

- ☐ To maintain waterproof performance, be sure to use a dedicated cables listed in Parts for Installation (Options).
- ☐ Please contact our sales for the types and lengths of wires that can be used.
- ☐ When using multiple sheets and power supplies in parallel, it is recommended to use the wires of same type and length for each system, to prevent differences in brightness and color between products.

#### ■ Example: Sheet Light+ PWM/DMX controller



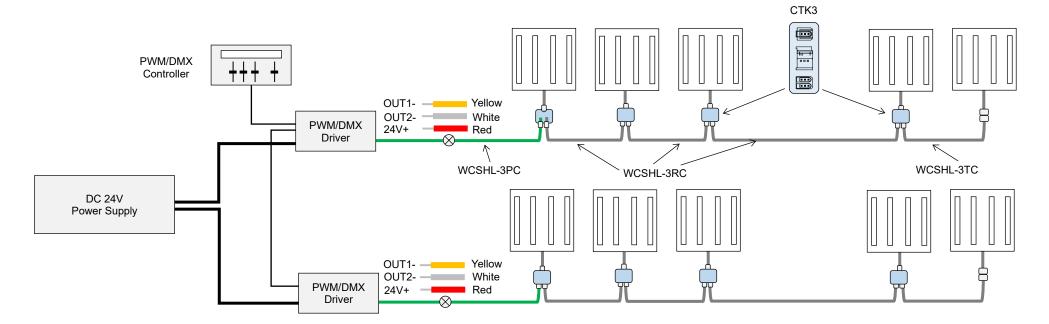
## Wiring Method (Sheet Light Duo)

☐ All of the following conditions must be met.

	Conditions	Remarks				
1	The number of products connected in series must be met the "Maximum number of sheets connected in	Maximum number of sheets connected in series is 16 for SHL-TU-29, and 8 for				
	series" shown in "Specifications".	SHL-TU-44. If you use more sheets, connect in parallel.				
2	The total load capacity meet the capacity of the power supply you use.	Please confirm the specification of the power source you use.				

- ☐ To maintain waterproof performance, be sure to use a dedicated cables listed in Parts for Installation (Options).
- ☐ Please contact our sales for the types and lengths of wires that can be used.
- When using multiple sheets and power supplies in parallel, it is recommended to use the wires of same type and length for each system, to prevent differences in brightness and color between products.

#### ■ Example: Sheet Light Duo + PWM/DMX controller



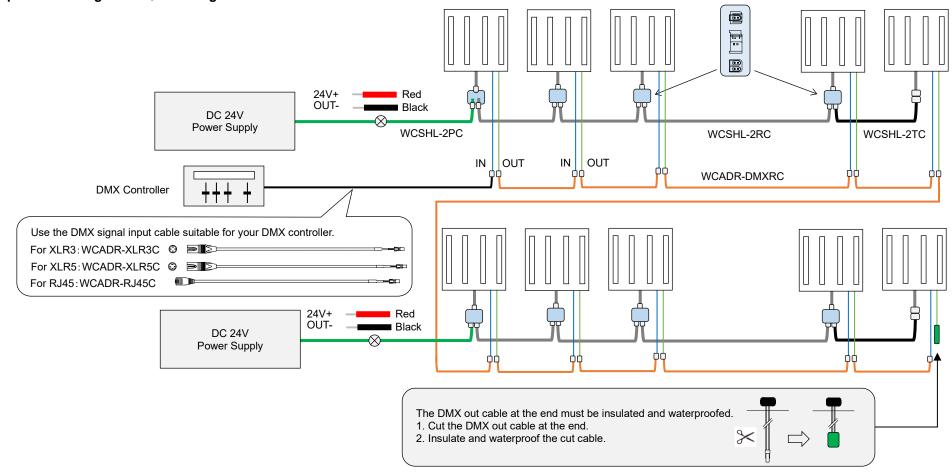
### Wiring Method (Sheet Light DMX, Sheet Light Duo DMX)

☐ All of the following conditions must be met.

	Conditions	Remarks				
1	The number of products connected in series must be met the "Maximum number of sheets connected in	Maximum number of sheets connected in series is 16 for SHL-**K-29DMX 、SHL-				
	series" shown in "Specifications".	TU-29DMX, and 8 for SHL-**K-44DMX 、SHL-TU-44DMX.				
		If you use more sheets, connect in parallel.				
2	The total load capacity meet the capacity of the power supply you use.	Please confirm the specification of the power source you use.				

- ☐ To maintain waterproof performance, be sure to use a dedicated cables listed in Parts for Installation (Options).
- ☐ Please contact our sales for the types and lengths of wires that can be used.
- ☐ When using multiple sheets and power supplies in parallel, it is recommended to use the wires of same type and length for each system, to prevent differences in brightness and color between products.

#### ■ Example: Sheet Light DMX, Sheet Light Duo DMX + PWM/DMX controller



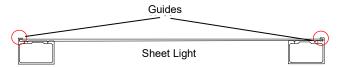
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Secure the product to the wall using the mounting screw holes and suitable screws. Mounting screws are not included. Prepare screws suitable for the material of the wall by yourself.
Confirm the Operating temperature of " <u>Specification</u> " before install the products. When the product is placed inside the cover, the temperature inside the cover meet the specification.
Do not bend the product tighter than the minimum bending radius (R300mm). Otherwise, it may cause malfunction.
Do not pull the lead wire strongly.
Please remove the protective film before installation.
When using the aluminum rail (FAS00-04SHL)
Before starting installation, carefully check the mounting position, length, and wiring location of the aluminum rail.
The aluminum rail has a guide to sandwich the product. Please attach the aluminum rail after fully checking the left and right direction and spacing.
The length of the aluminum rail is 890 mm. It meets 2 sheets of the "440 size", and meet 3 sheets of "290 size".
The intervals between the Sheet Lights should be 10 mm and even.
Be sure to install the Sheet Light so that the LEDs and the aluminum panel are parallel.

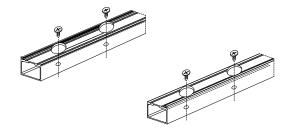
1. Cut the aluminum rail if necessary.

Remove burrs on the cut surface. Burrs may damage the product and may cause failure, electric short, and fire.

2. Confirm the positions of the aluminum rails on the wall, so that the guides can fix the sheet light.



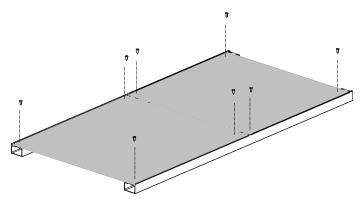
Fix the aluminum rails to the wall with screws suitable for the material of the wall. Do not use the included drill screws yet.



4. Insert the sheet light into the aluminum rail guides.

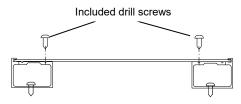


Fix the Sheet Light to the aluminum rails with the holes at the corners of the Sheet Light and the included drill screws.

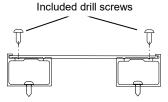


☐ The holes to be used differ between 440 size and 290 size.

For 440 size:



For 290 size:

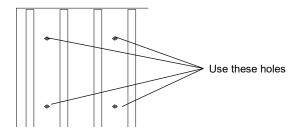


6. After lighting test, attach the light diffusion plates you use.

#### ■ When installing the Sheet Light directly on the wall

It is also possible to install the Sheet Light directly on the wall. In that case, please note the following.

- ☐ Make sure that the wiring and connectors do not affect the light of the LED.
- ☐ The intervals between the Sheet Lights should be 10 mm and even.
- ☐ Fix the Sheet Lights rail to the wall with screws suitable for the material of the wall. Do not use the included drill screws.t



☐ After lighting test, attach the light diffusion plates you use.