

LED Work Light Instruction Manual [Model : CWK]

Thank you for purchasing the LED Work Light for your application. Prior to installation, please read through this manual for proper installation and precautionary steps. In addition, please store this manual for future reference when performing maintenance, repairs or inspections. If you have any questions regarding this product, please contact our PATLITE Sales Representative.

Safety Precautions

In order to prevent any damage to the user and other personnel or to assets, note the following:

◆ The following symbols classifies the following precautions into two categories and explains the level of harm inflicted when caution is disregarded while using this product.

- Warning** Displays the warning "Failure to follow warning may lead to death or severe injury".
- Caution** Displays the warning "Failure to follow caution may lead from light to medium injury or may lead to property loss or injury to others".

◆ The following symbols indicate and explains the nature of the information to be observed.

- Prohibited** This symbol indicates "Prohibited", which should not be carried out by all means.
- Enforced** This symbol indicates "Enforced", which should be observed and carried out by all means.

1. For safe application, observe the following:

Warning

- Prohibited**
 - Do not disassemble or modify this product. Failure to comply may result in electric shock or fire.
 - After installing this product, be careful not to use this product to climb onto a machine, or to get anything snagged onto this product while it is mounted on equipment, etc. Failure to comply may result in falling off the machinery or product damage may occur.

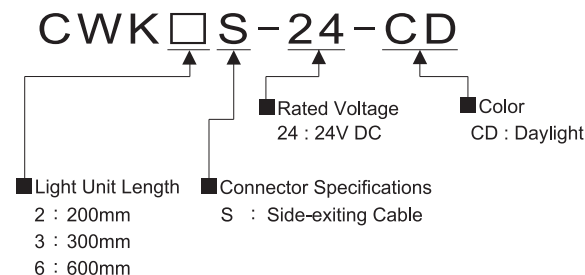
- Enforced**
 - Be sure to disconnect the power when wiring, mounting, exchanging, or repairing the product. Failure to comply may result in damage of the internal circuitry and the danger of electric shock due to short-circuiting.
 - Request the installation and wiring to be accompanied by a professional contractor. Failure to comply may result in electric shock, fire, or falling from high places.
 - When this product is used for security purposes, it should be inspected daily, and to be used in conjunction with other security products, in case a malfunction should occur.
 - Verify the installation location is a firm location which can handle the weight of the product and has no adverse vibrations. If installed in a place where vibration is frequent and/or exceeds the specifications, damage to the product may occur.
 - The designated screws should be used for installation. Any parts used that are not specified may result in product damage or personal injury.

Caution

- Prohibited**
 - In order to avoid danger to the eyes, do not stare into the beam, do not view directly into the optical instrument, and don't turn the beam towards someone's eyes. The LED beam is hazardous to the eyes.
 - Do not loosen any body screws. It will have an adverse effect on the protection rating.
- Enforced**
 - Verify that the specified operating voltage is not exceeded.
 - For safety measures, be sure to connect an external fuse to protect from overcurrents or overvoltages from mis-wiring, etc. The product can be protected by short-circuiting due to mis-wiring and overcurrents or overvoltages which can damage it.
 - Avoid installation in the following locations:
 - Near space heaters or places where high s are present.
 - In locations where chemical or explosive gasses, etc., are present.

2. Model Number Configuration

2-1. Model Number Configuration

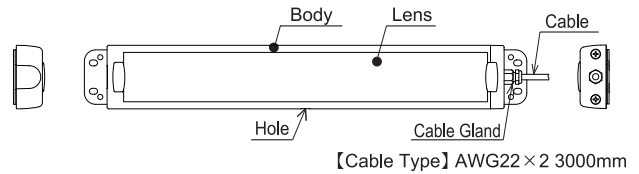


2-2. Model List / Accessory

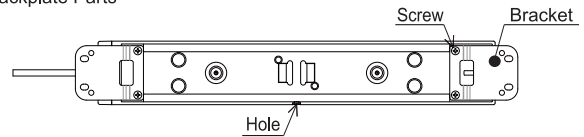
CWK□S-24-CD	Body (Cable with Cable Gland) Bracket, M4×8 Screw, Instruction Manual
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3. Part Names and Dimensions

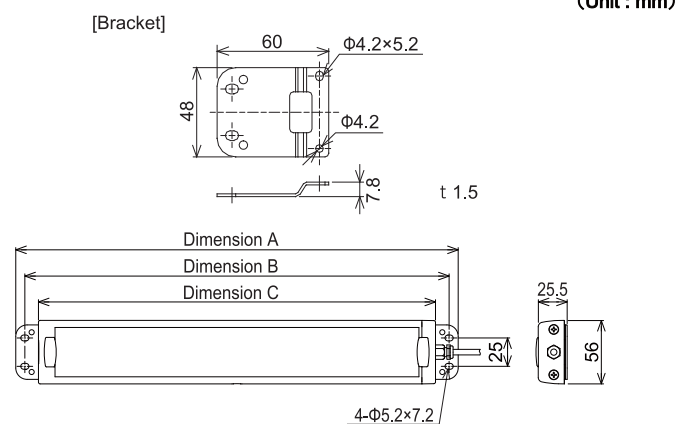
3-1. Part Names and Dimensions



◆ Backplate Parts



◆ Dimensions



[Table1. Dimensions]

Model	Dimension A	Dimension B	Dimension C
	Full Length	Mounting Pitch	Body Length
CWK2S-24-CD	290	274	250
CWK3S-24-CD	390	374	350
CWK6S-24-CD	690	674	650

4. Installation

4-1. Installation Location

- ◆ Suitable for wet or damp location.

Warning

- Prohibited**
 - Do not modify or disassemble the product. Failure to comply may result in electric shock or fire.
 - After installing this product, be careful not to use this product to climb onto a machine, or to get anything snagged onto this product while it is mounted on equipment, etc. Failure to comply may result in falling off the machinery or product damage may occur.

- Enforced**
 - To prevent from electrocution, disconnect power prior to mounting or performing maintenance.
 - Verify the installation location is a firm location which can handle the weight of the product and has no adverse vibrations. If installed in a place where vibration is frequent and/or exceeds the specifications, damage to the product may occur.
 - The designated screws should be used for installation. Any parts used that are not specified may result in product damage or personal injury.

Caution

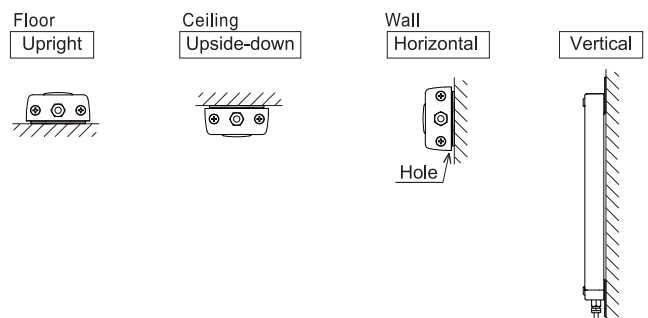
- Enforced**
 - Ensure this product is securely mounted, to prevent from falling, etc.
 - This product is for indoor use only. (Not for outdoor use)

4-2. Mounting Direction

- ◆ The attachment direction common to all the models is shown.

◆ Beware of the following:

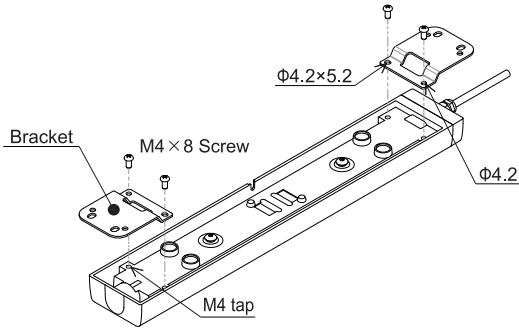
1. To prevent liquid to accumulate, install with the "Hole" in the downward direction. (When Horizontal)



4-3. Mounting Method

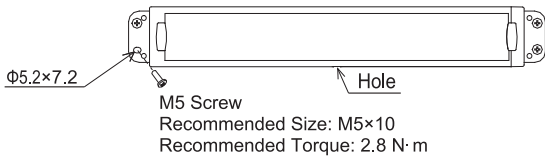
① Attach the bracket to the Body.

Attach an M4 screw to "Φ4.2", "Φ4.2×5.2", and "Body M4 tap".
Tighten in the order of "Φ4.2", then "Φ4.2×5.2".
Use a mounting torque of 1.4 N·m.



② After tapping the mounting holes to a flat and sturdy surface, use four M5 screws for mounting.

Attach an M5 screw in the "Φ5.2×7.2", and tighten.
The recommended torque for the M5 screw is 2.8 N·m.
Mount with the "Hole" in a downward direction. (When Mounting Horizontally)



5. Wiring and Proper Use

Warning

[Enforced] Be sure to disconnect the power when wiring, mounting, exchanging, or repairing the product. Failure to comply may result in damage of the internal circuitry and the danger of electric shock due to short-circuiting.

Caution

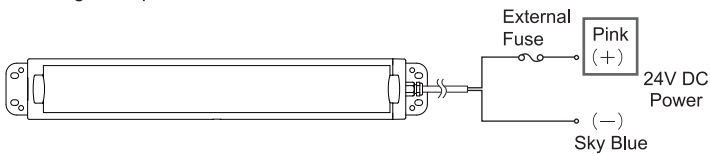
[Enforced]

- Check that the proper voltage is connected before applying power.
- Do not pull on the cable, or try to push it inside the unit. Possible cause of failure may occur. In addition, allow a margin of slack for the wire and cable to prevent stress.
- Use a constant-voltage regulated power supply. Possible cause of failure may occur with the use of a constant current power supply.
- Install a fuse to protect it from the power supply. The product can be protected by short-circuiting due to mis-wiring and overcurrents or overvoltages which can damage it.

5-1. Wiring

- Use a UL authenticated Class 2 power supply unit to connect power to this product. The power supply unit is constant voltage type.
- This product contains a 2A (slow-blow) fuse inside.
- Use an external fuse rated for the machine, which is connected to the product, to protect the machine from damage.

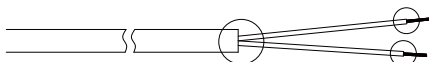
Wiring Example



Caution

[Enforced]

- The protection rating for the side exiting wire (2S, 3S, 6S) does not include the cable ends. **If the ends of the cable are in contact with water or exposed to dew or condensation, refer to the indications below to dress the cable ends for water and oil resistance.**
 - Connect the wire ends in a location which will not expose the ends to water or oil.
 - Use Fillers, such as silicon, etc., to seal the cable ends. Refer to the circled part of the figure below for the sections requiring protection from water and/or oil intrusion.



6. Maintenance and Inspection

If the product does not work after referring to the table below, please request for repair. In addition, if there are any questions concerning this product, feel free to contact your PATLITE Sales Representative.

Problem	Where to Check	What to Do
Does not light up	Is the power properly supplied?	Verify the voltage has been connected.
		Verify the proper polarity.
		Verify the proper voltage is supplied. (24V DC)
		Verify the external fuse has not been burned-out.

7. Specifications

Model	CWK2S-24	CWK3S-24	CWK6S-24	
Color Code	CD			
Luminous Color	Daylight			
Color Temperature (typ.)	6500 K			
Illuminance (typ.) (Center, at DC24V)	1.0m	600 lx	850 lx	1500 lx
Total Luminous Flux (typ.)	800 lm	1200 lm	2400 lm	
Rated Voltage	24V DC (Polarized)			
Operating Voltage Range	24V DC ±10%			
Rated Current Consumption	360 mA ±10%	480 mA ±10%	960 mA ±10%	
Rated Power Consumption	8.6 W	11.5 W	23 W	
Operating Ambient Temperature	-10 °C ~ +50 °C			
Operation Ambient Humidity	90% RH or less, no condensation			
Main Unit Material	Body : Aluminum Alloy , Lens : Tempered Glass			
Mounting Location	Indoor			
Mounting Direction	All Directions			
Protection Rating	IP66G/67G (JIS C0920)			
Environmental Condition	The end of Cable not included			
Insulation Resistance	500V DC 5MΩ or more			
Withstand Voltage	500V AC for 1 minute (between terminals and chassis)			
Vibration Resistance	30Hz 20 m/s ² Back and Forth, Up and Down, Left and Right for 2 hrs. each			
Mass (Tolerance ±10%)	600 g	750 g	1230 g	

Note

It has passed the oil resistant test from the following common cutting oils. The following oil was diluted by 20 times and the adhesive used for the product was immersed at 55 °C for 240 hours (10 days).

Company Name (Manufacturer)	Oil Name
Hangsterfer's Laboratories Inc.	Hangsterfer's S-500
Yushiro Chemical Industry Co., Ltd.	Yushiroken Synthetic #663
Castrol	Syntilo 9954
Blaser Swisslube Inc.	Blasocut BC35LFSW

Confirmation in result of swelling, contraction, dissolution, exfoliation, separation, cracks, and discoloration by the accelerated impregnation examination with the above-mentioned oil type for diluted oil at 55°C for 240 hours (ten days) was made.

Due to the additive agents in oil, the application of oils other than the ones mentioned above may influence physical properties, therefore, please investigate before purchasing.

* The mentioned company names, product names, trademarks, etc. are the registered trademarks or trademarks in Japan for each company, and/or other countries.

CAUTION

- Specifications and dimensions may change without prior notice for improvements, etc.
- Due to the characteristics of the LED, color temperature, brightness and hue will differ for every LED and every product.
- Since all IP examinations are done according to specified conditions and regulated time, the protection rating is not guaranteed for an extended period of time.

PATLITE Corporation

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