

Notice to Customer

Thank you very much for purchasing our PATLITE products.

Request the installation and wiring be performed by a professional contractor if construction work is involved.

- Prior to installation, read this manual thoroughly before using this product to ensure correct use.
- Please store this manual for future reference when performing maintenance, repairs or inspections.
- Visit our homepage (www.patlite.com) and download the "Complete Operation Manual:LR6-IL" to find more about the operating method and features.
- This product is an IO-Link compliant product. Use it according to the corresponding IO-Link communication specification in an appropriate way.
- If there are any questions concerning this product, refer to the contact information at the end of this document or contact your nearest PATLITE Sales Representative.

To the Contractor

- Read this manual carefully prior to installation.
- Be sure to return this manual to the customer.

1 Read this First (Safety Precautions)



Warning Failure to observe the following may result in death or serious injury.

- Request the installation and wiring be accompanied by a professional contractor. If installation is done improperly, it may result in fire, electric shock, failure, or malfunction.



Caution Failure to comply with the following points may result in injury, physical loss or damage.

- Avoid long exposure to the Buzzer sound from a close distance. Failure to observe this may lead from irritation to permanent damage to the ears. (When Buzzer Unit is used)
- In order to maintain protection of this product against dust and waterproofing performance, be sure to use the headcover, LED unit and buzzer unit in the condition that it was originally attached.
- To ensure the waterproofing performance of this product, do not remove the O-ring or the waterproof packing. Dust and waterproofing performance will decrease.
- When removing covers or packing from the equipment, which is attached to this product, be careful not to snag the product. Failure to comply may result in damage to the product.

Notice

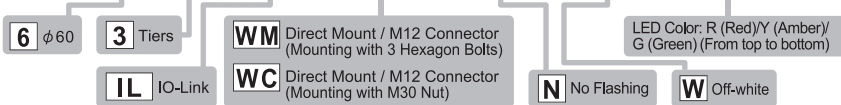
To ensure proper safety while using the signal tower, observe the following:

-Perform periodic pre-maintenance. -As a precaution against problems occurring, use this product together with other equipment, by discharging static electricity on your body, etc.

- Be sure to prevent electrostatic damage due to discharge when working with this product for wiring, exchanging units, setting up parameters, etc. (To prevent damage from static electricity, touch hands or other body parts to metals or an earth ground to discharge the body from static charge.)
- Use a soft cloth, etc., dampened with water to wipe the product. Do not use cleaners containing thinners, such as benzine gasoline, oil, Chemicals, etc., to wipe with. It may result in discoloration and deterioration.
- To ensure safety when this product is installed onto equipment, observe the following:
 - Do not remove parts beyond those designed to be removed from this product.
 - Do not modify or disassemble this product.
 - Use only the specified replacement parts listed in the "Complete Operation Manual:LR6-IL".

2 Model Number Configuration

	Model	Tiers	Extended Functionality	Mounting/Wiring	Buzzer	Body Color	LED Unit Color
Assembly Model	LR 6 - 3		IL	WM	N	W	- RYG
Unit Model (Body Unit)	LR 6 -		IL	WM	N	W	
Unit Model (Body Unit)	LR 6 -		IL	WC	N	W	



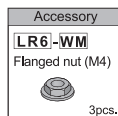
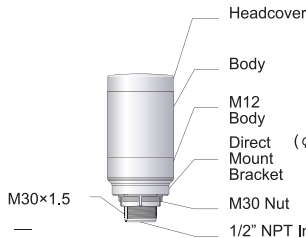
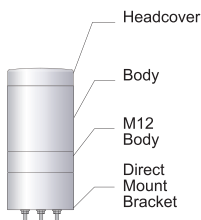
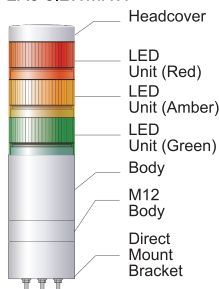
3 Part Names

The name of each part is indicated as an example for the specific model.

■ LR6-3ILVWMNW

■ LR6-ILVWMNW

■ LR6-ILWCNW



※M12 connector cable is sold separately. (φ 16mm or less, straight socket)

4 Installation

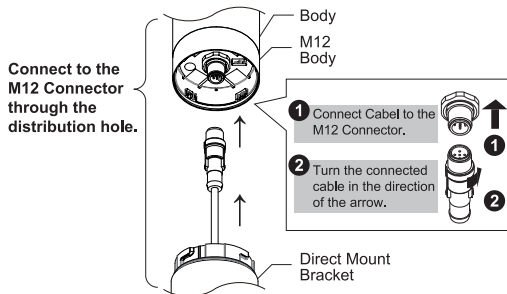
Notice

- The following requirements are necessary for a proper mounting location:
 - Location with **strong** and **even surface** with **minimal vibration**. -Install with the mounting direction in the **upright position**.
 - When the installation location is unavoidably irregular and waterproof performance is required, use a sealant between the product and the installation surface.

Basic Mounting Instructions

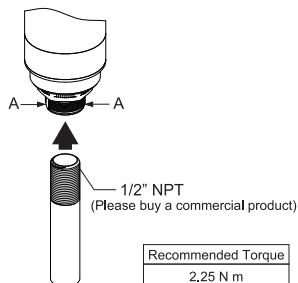
- 1 Make holes for the mounting and wire-distribution for the product.
(Check the Model and refer to the suitable mounting dimension figure.)
- 2 Connect to the product through the distribution hole.
- 3 Secure the product with the nuts.

■ WM WC Installation Figure (M12 Connector Installation Figure)

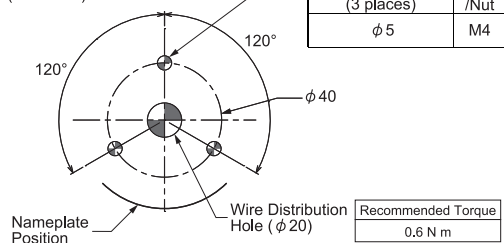


■ WC Installation Figure (1/2" NPT Installation Figure)

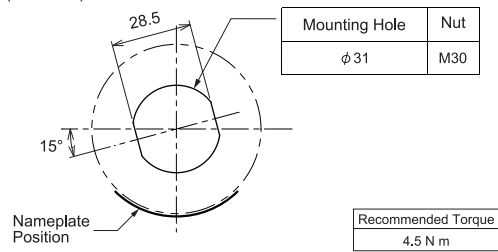
While holding part 'A', install the 1/2" NPT.
Failure to comply may result in damage.



■ WM Mounting Dimensional Drawing (Unit : mm)



■ Mounting Dimensional Drawing (Unit : mm)



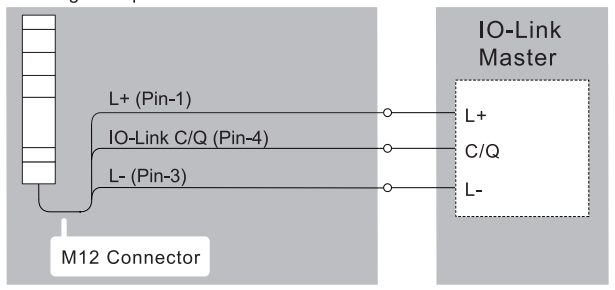
5 Wiring

- Warning** Ensure the proper working voltage is used and that direct current or alternating current is properly applied. Any mistake in wiring may result in damage or fire.

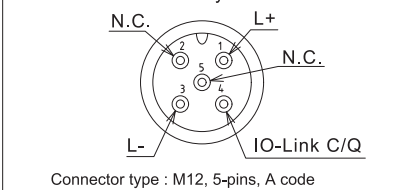
- Caution** Do not pull the wire, or stuff it inside of this product. Possible cause of failure may occur.

Wiring Example and M12 Connector Pin Layout

■ Wiring Example



■ M12 Connector Pin Layout



6 Unit Detachment Method

Caution

- Be sure that it is **disconnected** from the power source before working on it.
- **Do not apply excessive torque or strong shock** to each unit or body. Failure to comply will result in damage or malfunction.
- **Do not touch the connector area or the inside of the body and LED unit.** Failure to comply will result in damage or malfunction.
- **Be sure to lock** each unit securely when attaching. Failure to comply will result in damage or malfunction.
- Detach the unit in the following manner. Any other method may result in damaging the product.

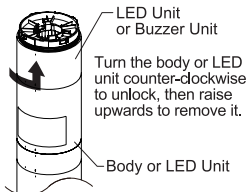
Attachment : Attach one unit at a time to the body.

Removal : Firmly hold the bottom section while removing the upper section.

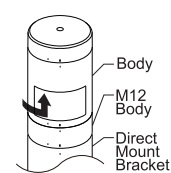
Notice

- The maximum number of attachment tiers per product are five LED tiers, plus one buzzer tier.
- When using Multi-Color LED Unit for LR6 60mm Signal Towers LR6-E-MZ, the maximum number of attachment tiers per product are one LED tier, plus one buzzer tier.
- When using Wireless Data Acquisition System WDT, the maximum number of attachment tiers per product are three LED tiers.

■ Removal <LED/Buzzer Unit>

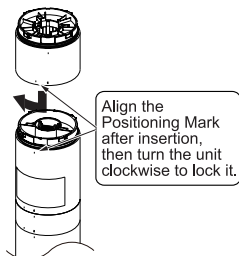


<Body Unit>

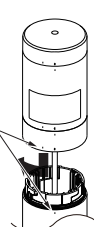


While holding the Direct Mount Bracket, turn the M12 Body counter-clockwise, until it unlocks, then pull it upwards to remove.

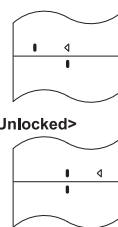
■ Attachment <LED/Buzzer Unit>



<Body Unit>



■ Positioning Mark <Locked>



7 Specifications

Model	Unit Model Combination		Rated Voltage	Rated Current Consumption
	Body Unit	LED Unit		
LR6-3ILWMNW-RYG	LR6-ILWMNW	LR6-E-R, LR6-E-Y, LR6-E-G	24V DC	Max. 200mA
LR6-ILWMNW	LR6-ILWMNW			
LR6-ILWCNW	LR6-ILWCNW			

IO-Link Communication Specification			
Model	LR6-3ILWMNW-RYG	LR6-ILWMNW	LR6-ILWCNW
Communication Specification	Revision	1.1	
	Bit rate	COM2 (38.4 kbps)	
	Process data length	6 bytes / 0 bytes (input from master / output to master)	
Vendor ID	763		
Device ID	80001		

- UL 508, CSA-C22.2 No. 14
- EMC Directive (EN 61000-6-4, EN 61000-6-2)
- RoHS Directive (EN IEC 63000)
- FCC Part 15 Subpart B Class A
- KC (KN 61000-6-4, KN 61000-6-2)
- Low Voltage Directive (IEC/EN60947-5-1, EN62471)

- Conformity requirements for the UL Standard:
Maximum surrounding air temperature rating of 50 °C
This product is designed for use on a flat surface for a **Type 1 Enclosure**.
Use a "**class 2**" power supply specified in the guidelines under **UL1310**.
For use in Pollution Degree 2 Environment.
- This product has been tested and found to comply with the limits for a Class A device.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This product must not be used in residential areas.
- Conformity to FCC Compliance:
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
The equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

(Note) • Dimensions and specifications may change without notice due to continual product improvement.
• PATLITE and the PATLITE logo is a trademark, or registered trademark of the PATLITE Corporation of Japan and each country.

世界中に「安心・安全・楽業」をお届けする
株式会社 **パトライト**

J2F

www.patlite.co.jp

〔受付〕月～金 9:00～17:00

土・日・祝日・当社休業日を除く

●技術・修理相談窓口(無料) :0120-497-090

※ご注文・価格・納期等は、販売店または各営業所拠点にお問い合わせください。

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G2J

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