

**Notice to Customer** Thank you very much for purchasing our Patlite products.

- Request the installation and wiring to 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.
- In addition, please store this manual for future reference when performing maintenance, repairs or inspections.
- Visit our homepage (<https://www.patlite.com/>) and download the "Complete Operation Manual: NE-IL" to find out more about the operating method and features.
- If there are any questions concerning this product, refer to the contact information at the end of this document and contact your nearest PATLITE Sales Representative.

## 1 Read this First (Safety Precautions)



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

- To prevent from short-circuits or damage, observe the following:
  - Be sure the power is disconnected before replacement or repair, including the replacement of the fuse.
  - Use this product in a properly maintained condition. (Replace or repair if the globe, case, etc. are damaged.)
- If installing this product requires construction work, ask a specialist in order to avoid fire, or personal injury.
- When this product is used for security purposes, it should be inspected daily. In case a malfunction should occur, it is recommended that you use this product together with other security products.
- After installation, do not use this product to climb up onto the equipment with. Failure to comply will result in product damage and/or falling off the machinery.



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

- Be sure to put a fuse in the wiring circuit between the power source and equipment for protection. If a fuse is not added, it may result in product and/or equipment failure.
- Be sure to prevent electrostatic damage due to discharge when working with this product for wiring, exchanging units, setting up parameters, etc. by discharging static electricity on your body, etc.
- Do not disassemble or detach during operation.

## 2 Model Number Configuration

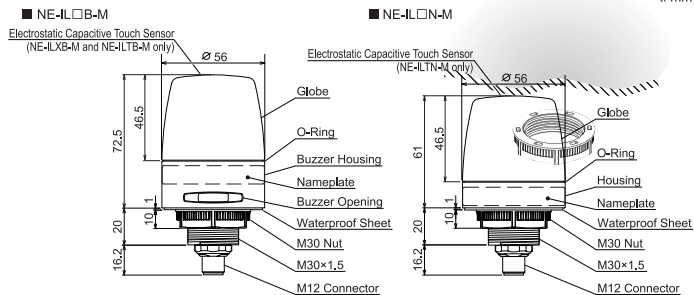
Model	Touch Sensor	Buzzer	LED Unit Color
Assembly Model	NE - IL		
	X With Touch Sensor/General-Purpose Digital/Analog Input *	B With Buzzer	M Multicolor
	T With Touch Sensor	N No Buzzer	
	N No Touch Sensor		

\*NE-ILXB-M only

Model Number Example **NE-ILXB-M**

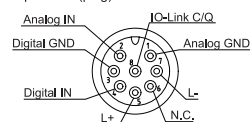
- Touch Sensor (General-Purpose Digital/Analog Input) • Buzzer • Multicolor • IO-Link

## 3 Part Names and Outer Appearance

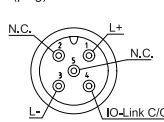


M12 Connector Pin Configuration

■ NE-ILXB-M  
8-pin male (plug)



■ NE-ILNN-M/NE-ILNB-M/NE-ILTN-M/NE-ILTB-M  
5-pin male (plug)



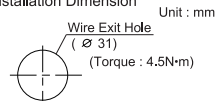
## 4 Installation

- \* The following requirements are necessary for proper installation:
  - Install the signal beacons where excessive vibration is not present.
  - Install the signal beacons on a sturdy surface.
  - Install the signal beacons on a level surface.
  - Install the signal beacons where an enough space to touch the touch sensor can be secured around the globe. (Only for NE-ILXB-M and NE-ILTB-M)

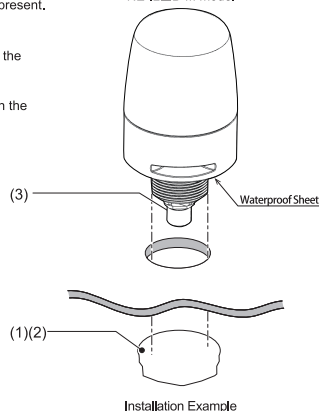
\* When waterproofing, apply a sealing coating onto the nuts on the backside of the installation surface.

- Remove the M30 nut.
- Fix on the mounting surface with the M30 nut.
- Connect the M12 cable to the M12 Connector.

### Installation Dimension



< NE-IL□B-M model >



- This product is for indoor use only. (Do not use it outdoors.)
- Do not leave the product, or use it without globe installed.
- Do not apply excessive force when mounting/removing the globe. Failure to comply will result in damage.
- Use a soft cloth moistened with water to clean the globe or case. (Do not use thinner, benzine, gasoline or oil.)
- The waterproof sheet must be used before installation.
- This product has a 1mm thick waterproof sheet at the bottom of the case. However, because installation surface unevenness may cause a lack of waterproofing protection, it is recommended to apply sealant between the unit and the installation surface to maintain waterproof conditions.

## 5 Wiring

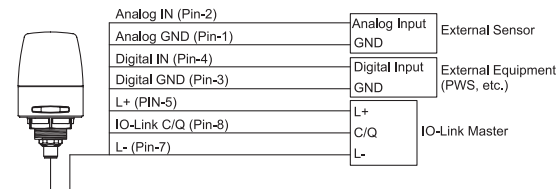


- Make sure the power is OFF before wiring. A short circuit may damage internal circuits.
- Ensure the proper working voltage is used. Improper voltage will damage internal circuits.
- When wiring, do not pull on the wires or force them into the buzzer housing.
- Be sure the wiring is done properly. Any mistake in wiring may result in damage.
- Be sure to put a fuse in the wiring circuit between the power source and equipment for protection. If a fuse is not added, it may result in product and/or equipment failure.

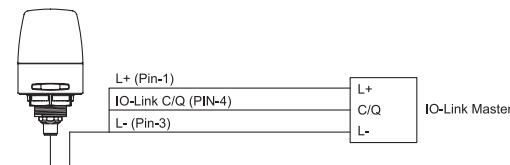
## Wiring Example

[ External Contact Capacity ]		[ Analog Input ]	[ Digital Input ]
Current Capacity	Is ≥ 50mA	Input Range	4mA - 20mA
Voltage Capacity	Vs ≥ 35V	Driving Method	Voltage Contact (NPN/PNP Transistor)
Leak Current	IL ≤ 0.1mA		

NE-ILXB-M



NE-ILNN-M/NE-ILNB-M/NE-ILTN-M/NE-ILTB-M  
< NE-IL□B-M model >



## 6 Specifications

Model	NE-ILNN-M	NE-ILNB-M	NE-ILTN-M	NE-ILTB-M	NE-ILXB-M
Rated Voltage	24V DC				
Maximum Current Consumption	50mA	100mA	50mA	100mA	
Mounting Direction	Upright				
Operating Temperature Range (Relative Humidity)	-25°C ~ 60°C (Less than 90%RH, No Condensation)				
Protection Rating	IP65, NEMA TYPE 4X, 13				
Touch Sensing Input Method	Electrostatic Capacitance				
Mass	0.09kg	0.10kg	0.09kg	0.10kg	

### IO-Link

Communication Specification	Revision	1.1
Baudrate	COM2 (38.4 kbps)	
Data Length	Process Data: 2 bytes / 2 bytes (write / reply)	
Vendor ID	763	
Device ID	60001	

- Conformity Standards
  - EMC Directive (EN61000-6-4, EN61000-6-2)
  - UL508, CSA-C22.2 No.14
  - KC (KN61000-6-4, KN61000-6-2)
  - RoHS Directive (EN50581)
  - FCC Part 15 Subpart B Class A

- Conformity requirements for the UL Standard:
  - Maximum surrounding air temperature rating of 60 °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.
- Conformity requirements for the CE Marking:
  - This product conforms to EN standards and shows the CE Marking.
  - This product has been tested and found to comply with the limits for a Class A device, pursuant to EMC DIRECTIVE. 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 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.

(Importer for EU)

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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**

[www.patlite.co.jp](http://www.patlite.co.jp)

J2F

〔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

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**PATLITE Corporation** G2J

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