

English

PATLITE®

Flashing Beacon

TYPE GL10 Series

Instruction manual [Digest version]

■ Notice to Customer

- Thank you very much for purchasing this product.
- This product requires installation and wiring work. Always have installation and wiring performed by a professional contractor.
 - Before use, please read this manual carefully and use the product correctly. Also, keep this manual safe for future reference.
 - If you have any questions, contact your nearest PATLITE sales representative listed at the end of the manual.
 - For details on the method of use, download the [Instruction Manual \[web version\]](#) from our website.

Website Address	www.patlite.com
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■ To the Contractor

- Prior to installation, read this manual thoroughly to ensure it is installed correctly.
- Return this manual to the customer.

1 Before You Begin

■ About Safety Symbols

- To prevent injuries to the user and other personnel, as well as to prevent damage to assets, note the following.
- The following symbols classify warnings and cautions, and describe the level of harm and damage that will occur when the corresponding instructions are ignored.

	WARNING This symbol indicates, "Failure to follow the instructions may lead to death or serious injury."
	CAUTION This symbol indicates, "Failure to follow the instructions may lead to injury or property damage."

- The following symbols classify and describe the content of associated messages.

	This symbol identifies "Prohibited" operations that should never be carried out.		This symbol identifies "Mandatory" instructions that should always be carried out.
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■ Safety Precautions

- WARNING** ⚠ Disconnect the power before wiring, repairs or replacing a fuse. There is a risk of electric shock, short and damage. ⚠ Install the product properly. Otherwise electric shock, short or damage may occur. ⚠ Be sure to ask a professional contractor if installation work is necessary. The work carries the risk of electric shock, fire or falling. ⚠ After installation on a machine, be very careful to prevent anyone from climbing onto it by grabbing the product or its cover from getting snagged on the product during removal. Otherwise it may fall or drop causing extreme danger. ⚠ Check the points where the product is fixed periodically (once or twice a year) to re-tighten the mounting hardware with the specified torque. Looseness at the points where it is fixed may lead to its falling, damage or customer injury. ⚠ When using the product for security with an emphasis on safety, perform daily inspection and use it together with another device to prepare for unexpected malfunction or breakdown. ⚠ Its lifespan varies greatly depending on the frequency and environment of use, but refrain from using it for more than 10 years. Deterioration of the electrical components or circuit boards, their poor insulation or contact may cause safety problems like fuming, ignition or electric shock. Aging deterioration of resin, metal, rubber, sealant or other materials may cause deformation, damage, soaking and breakdown. (The products used outdoors deteriorate faster than those indoors.)

- CAUTION** ⚠ To protect the device connected to the product, be sure to install a fuse in the power supply wiring. Otherwise the connected device may break down or catch fire. ⚠ Before handling the product, discharge static electricity from your body (by touching a metal part of another earthed object with bare hands). Otherwise ESD damage may occur. ⚠ When removing packing/packaging from the equipment on which the product was installed, be careful not to let them get caught in the product. Otherwise the product may be damaged. ⚠ Do not use the product near fire, in hot and humid places or in places where corrosive or flammable gases are generated. Otherwise the product may break down. ⚠ Do not install it near equipment or power lines that generate strong electric or magnetic fields. Otherwise inductive noise may cause a malfunction. ⚠ Do not use this product near chemicals. The product might melt or deform if a specific chemical adheres to it. ⚠ Do not continuously apply high-pressure water current to the points where the product is fixed or the joints of individual parts. Otherwise waterproofing may be impaired. ⚠ Do not look at the light at close range when it flashes. It may damage your eyesight. ⚠ Do not disassemble the product. Otherwise waterproofing may be impaired.

- Note** ● Wipe off any dirt on the product body with a soft cloth dampened with water (do not use thinner, benzine, gasoline, oil, etc.).

2 Model Number Configuration

	Model	-	Control spec.	-
Model Number	GL10	-M1N	↓	-T

(Blank)	Voltage application control
C1	CAN communication (J1939)

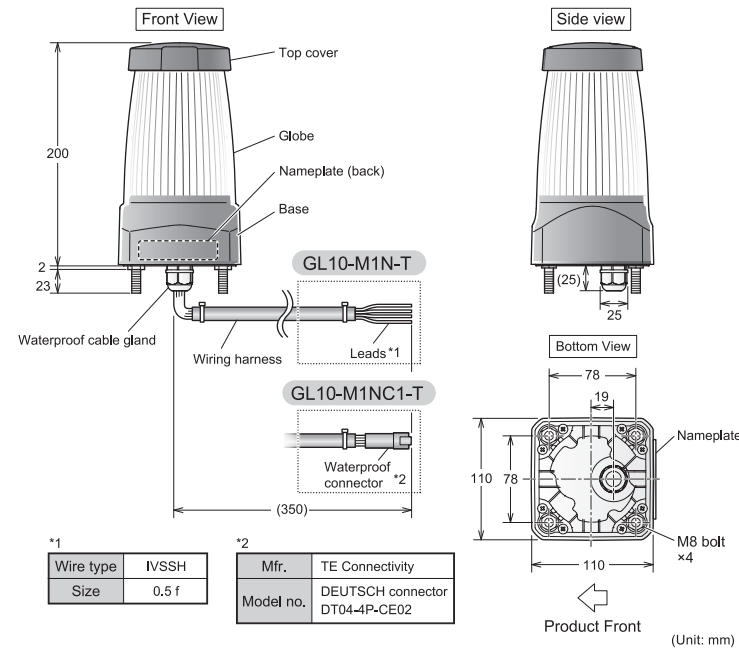
3 Package Contents

Accessories		
Flat washer Size: nominal dia. 8 Mat.: stainless steel	Spring washer Size: nominal dia. 8 Mat.: stainless steel	Nut Size: M8 Mat.: stainless steel
x4	x4	x4

Main Unit: ×1
Instruction manual (this document): ×1

*Depending on the model, the end of the harness differs.
For details, refer to "4. Names and Dimensions."

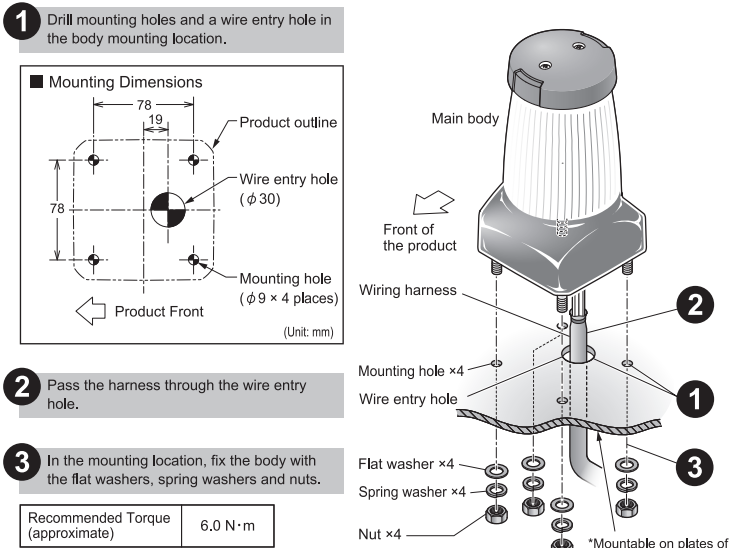
4 Names and Dimensions



5 Mounting Method

The product has two models, but their mounting method is the same. Read the following carefully before mounting.

- WARNING** ⚠ Before installation, wiring or repairs of the product, be sure to disconnect the power (such as removing the ⊕ terminal of the battery). Otherwise ignition, electric shock or breakdown may result. ⚠ To protect the device connected to the product, install a fuse of the specified capacity in the power supply wiring. Otherwise the connected device may break down or catch fire.
- CAUTION** ⚠ This product can only be mounted upright. ⚠ Mount it on a sufficiently strong surface. ⚠ Keep it as far away from radios, antennas of wireless devices, and wiring as possible. If the product is too close to them or depending on the surrounding environment, its and their operation may be affected. ⚠ Do not pull the harness or push it into the body. This will cause a breakdown.



6 Wiring Method

- The wiring method differs depending on the model of the product. See and use the wiring method appropriate to your model.
- The example of basic wiring is shown. For questions about other methods of use, please contact your nearest PATLITE sales representative listed at the end of this manual.

- CAUTION** ⚠ Be very careful not to make a wiring error. Improper wiring will cause burn damage to the internal circuits. ⚠ Use the correct working voltage. Otherwise it may cause a breakdown. ⚠ Be sure to wrap each unused lead with insulating tape. Otherwise a short circuit may cause a malfunction. ⚠ The product's IP rating does not cover the ends of the leads. If the ends of the leads are exposed to splashes of water or the like or dew condensation, make them waterproof or oilproof as described below.
- Route the ends of the leads to a location that is free from splashes of water and oil.
 - Apply sealant to the ends of the leads (silicone or the like).

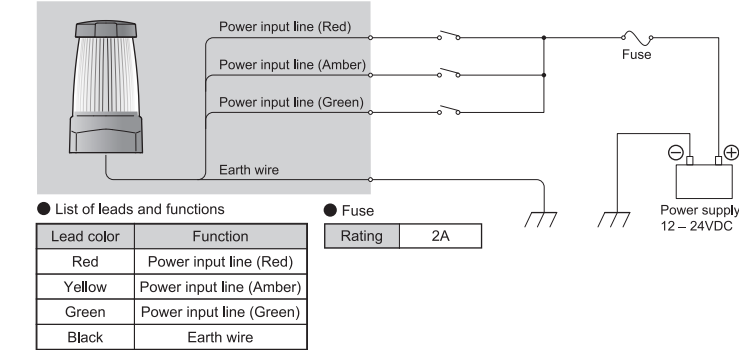
6.1. Wiring Method for GL10-M1N-T

■ About Flash Patterns

For "GL10-M1N-T," 3 colors of light are emitted from the product. Each color has an assigned flash pattern. The following table shows the flash patterns and number of flashes for each color.

Luminous color	Flash pattern	Number of flashes
Red	Triple flash 1 cycle	Approx. 125 times/min (high speed)
Amber	Double flash 1 cycle	Approx. 63 times/min (medium speed)
Green	Slow flash 1 cycle	Approx. 31 times/min (Low speed)

■ Wiring Example



■ Control Method

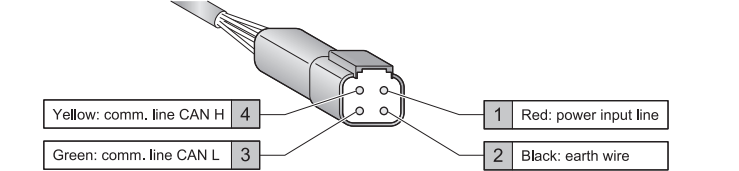
By changing the wiring method, you can control the color of the emitted light. The control method is shown below.

Luminous color	Lead color			
	Red	Yellow	Green	Black
Red	Power supply ⊕	Unconnected	Unconnected	Earth ⊖
Amber	Unconnected	Power supply ⊕	Unconnected	Earth ⊖
Green	Unconnected	Unconnected	Power supply ⊕	Earth ⊖

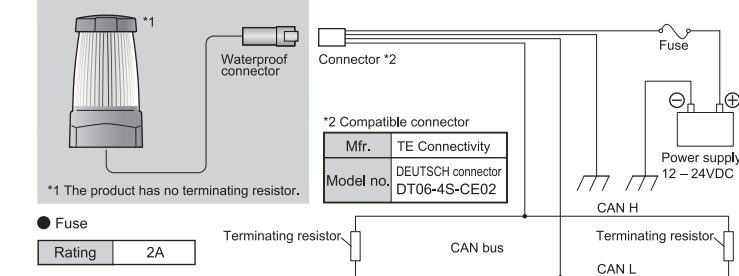
- Point**
- Simultaneous connection of the red color and yellow color power input lines to the power supply ⊕ will produce a amber color light.
 - Simultaneous connection of the red color and green color power input lines to the power supply ⊕ will produce a green color light.
 - However simultaneous connection of the yellow color and green color power input lines to the power supply ⊕ will turn off the light.

6.2. Wiring Method for GL10-M1NC1-T

■ Waterproof Connector Pinout



■ Wiring Example



■ Control Method

For the control method for GL10-M1NC1-T, refer to the Instruction Manual. The Instruction Manual can be downloaded from our website.

7 Specifications

Model			GL10-M1N-T	GL10-M1NC1-T
Rated Voltage			12 - 24VDC	
Operating Voltage Range			10 - 32VDC	
Rated Current Consumption	12 V DC	Typ.	0.32A (Red, Triple flash, High speed)	
		Max.	1.0A	
	24 V DC	Typ.	0.17A (Red, Triple flash, High speed)	
		Max.	0.5A	
Rated Power Consumption		Max.	12.0W	
Operating Ambient Temperature			-40°C to +85°C	
Operating Ambient Humidity			90% RH or less (No condensation)	
Storage Ambient Temperature			-40°C to +85°C	
Storage Ambient Humidity			90% RH or less (No condensation)	
Mounting Location			Indoor/Outdoor (Construction equipment allowed)	
Mounting Direction			Upright	
Protection Rating			IP6X, IPX6 (IEC 60529), IPX9K (ISO 20653)	
Environmental Condition		Upright*		
Vibration Resistance			110m/s ² (JIS D 1601:1995)	
Impact Resistance			1,000m/s ² 11ms (IEC60068-2-27:2008)	
Communication Specification			-	CAN
Communication Protocol		-	SAE J1939	
Baud Rate		-	250kbps, 500kbps (auto detection)	
Source Address		-	183 (default)	
Terminating Resistor		-	None	
Mass (Tolerance ±10%)			840g	
Conformity Standards			EN ISO 13766-1 EN IEC 63000	
Remarks			<ul style="list-style-type: none">• Conforms to the CE requirements.• Conforms to the UKCA requirements.• The EMC level is in conformity with a requirements of ECE Regulation No.10.06 standards.• Due to the characteristics of the LED elements, there may be a slight variation in color tone and brightness between products.• When mounting holes and wire entry holes machined in accordance with the mounting dimensions diagram are used. (Refer to Mounting Dimensions diagram in "5. Mounting Method")	

• FCC Statement

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.

(Responsible party in U.S.A.) PATLITE (U.S.A.) Corporation, 20130 S. Western Ave, Torrance, CA90501, U.S.A.
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