



PATLITE MES-A LED Signal Light Instruction Manual

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PATLITE MES-A LED Signal Light Instruction Manual



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Safety Precautions

Notice to Customer : Thank you very much for purchasing our Paulite products.

- This product requires installation, wiring, and other related work. Be sure to ask an expert technician to perform these procedures.
- This installation manual is intended for the technician who performs the installation and wiring of the product.
- A separate user's manual is provided for customers who operate the product after installation.
Be sure to read the user's manual before operating the product.



WARNING : indicates an imminently dangerous condition: failure to follow the instructions may lead to death or serious injury.

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



CAUTION : indicates a potentially dangerous condition: failure to follow the instructions may lead to slight injury or property damage.

To Installers or Contractors

- Read this manual thoroughly before using this product to ensure correct use.
- If there are any questions concerning this product, refer to the contact information at the end of USER's manual and contact your nearest PATLITE Sales Representative,



Warning

- Make sure the power is off before wiring, repairing, or replacing parts to avoid a short-circuit, electric shock, or burn.
- Please use this product in a properly maintained condition. If parts such as the Body or LED Unit are damaged,

they should be repaired.)

- Do not use this product with the lens damaged or removed, or without the head cover in order to avoid an electric shock.
- If installing this product requires construction work, please ask a specialist in order to avoid electric shock, 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.
- Do not use this product to support your weight while climbing onto a machine. Mount the product so that it is clear of any moving parts – such as a machine cover.



CAUTION

- Concerning replacement parts, such as LED unit, bulb or fuse, be sure use those specified in this manual.
- For safety, make sure to connect an external fuse to the power source as shown in the wiring example.
- Do not substitute parts from other products as this may cause a breakdown.

Model Number Configuration

Type ME- A

ME□-□02A-□

| Body Length | |
|-------------|---------|
| Blank | : 200mm |
| S | : 40mm |
| L | : 500mm |

| Tier |
|-----------|
| 1~5 Tiers |

| Rated Voltage |
|---------------|
| 02 : DC 24V |
| 02 : 24V DC |

| / Luminous Color | |
|------------------|------------|
| R : | / R: Red |
| Y : | / Y: Amber |
| G : | / G: Green |
| B : | / B: Blue |
| C : | / C: White |

Type MP

MP□-□02-□

| Body Length | |
|-------------|---------|
| Blank | : 220mm |
| S | : 45mm |

| Tier |
|-----------|
| 1~5 Tiers |

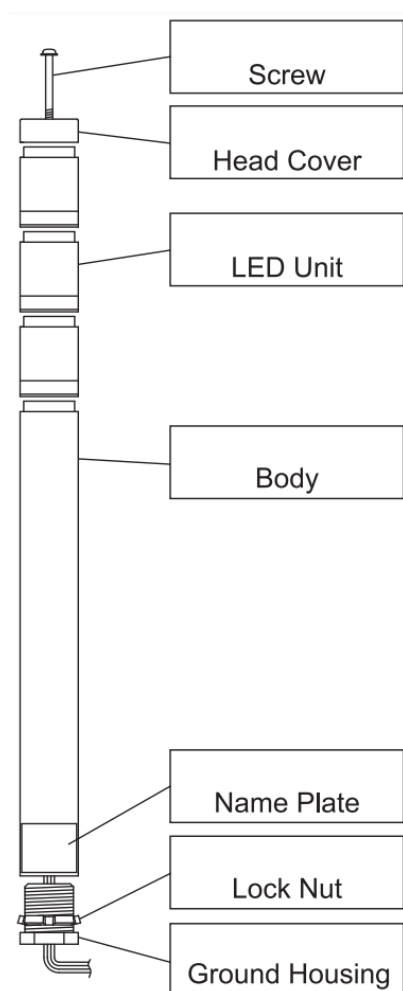
| Rated Voltage |
|----------------|
| 02 : AC/DC 24V |
| 02 : 24V AC/DC |

| Luminous Color | |
|----------------|------------|
| R : | / R: Red |
| Y : | / Y: Amber |
| G : | / G: Green |
| B : | / B: Blue |
| C : | / C: White |

Part Names and Outer Appearance

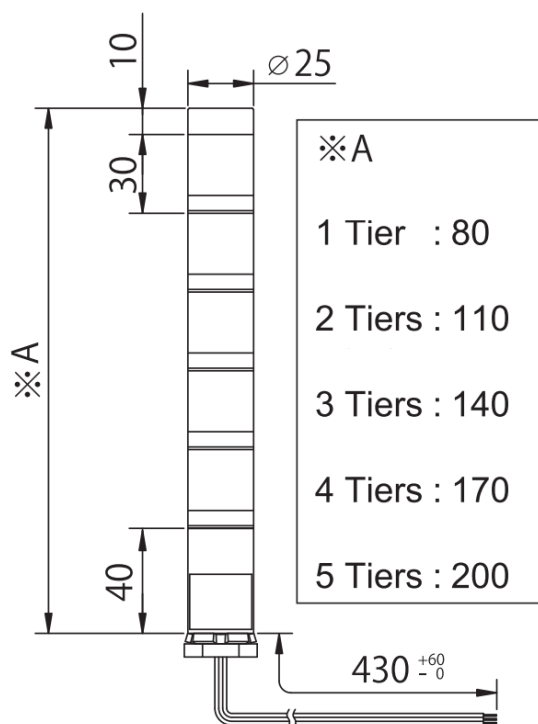
Type ME- A

(Part Names)

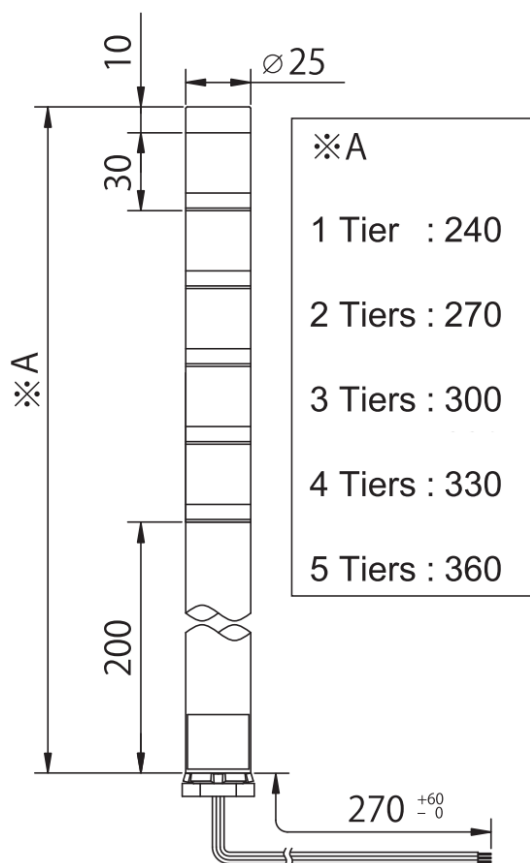


(Dimensions)

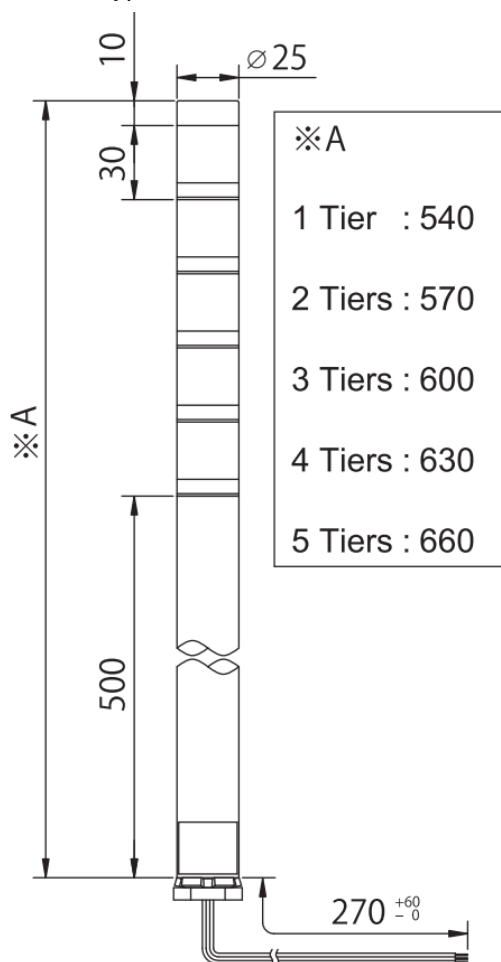
- MES-A/ Type MES-A



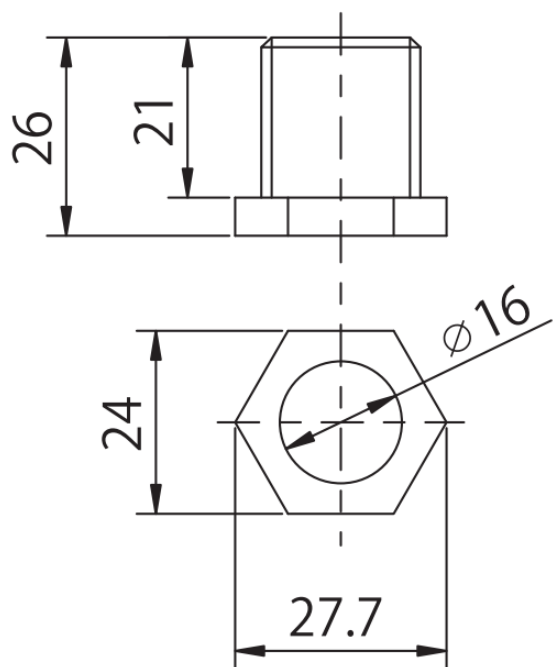
- ME-A / Type ME



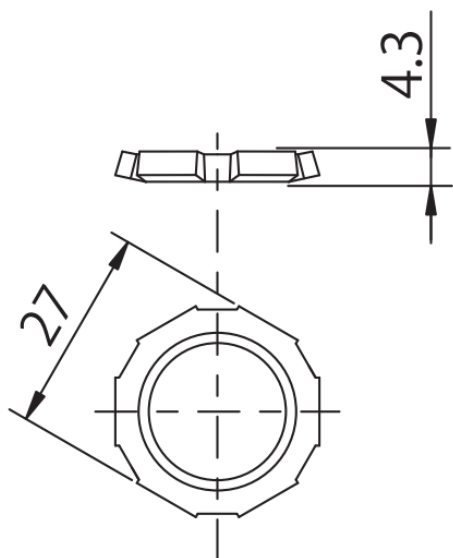
- MEL-A/ Type MEL-A



- Ground Housing

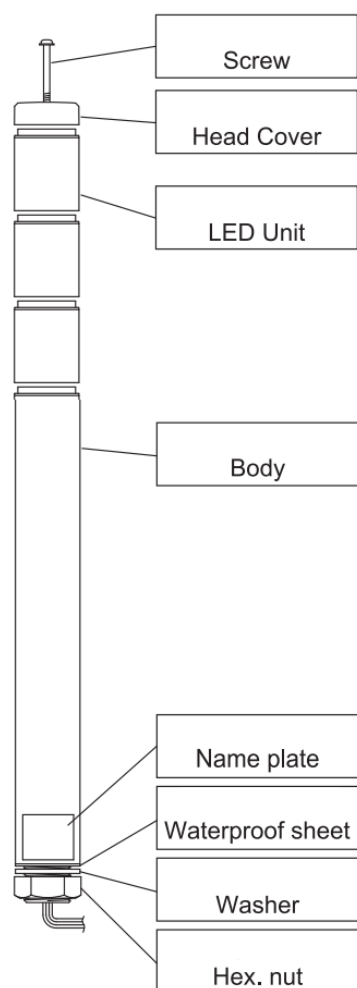


- Lock Nut



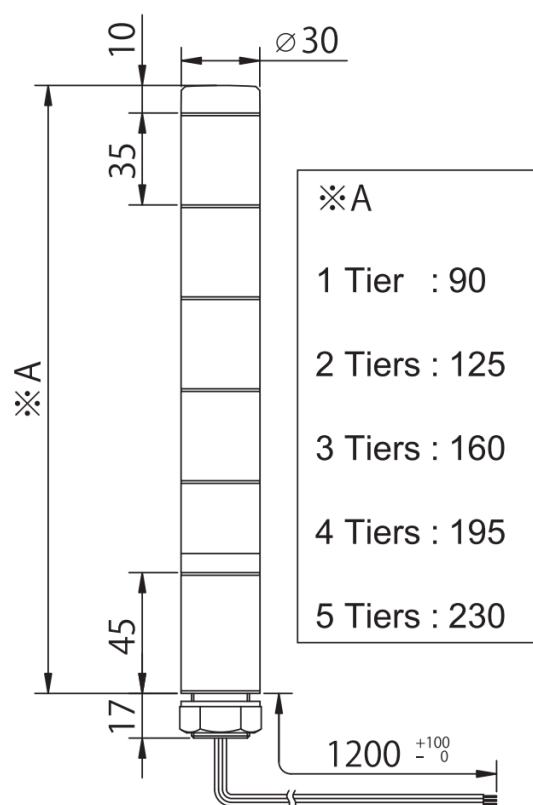
Type MP

(Part Names)

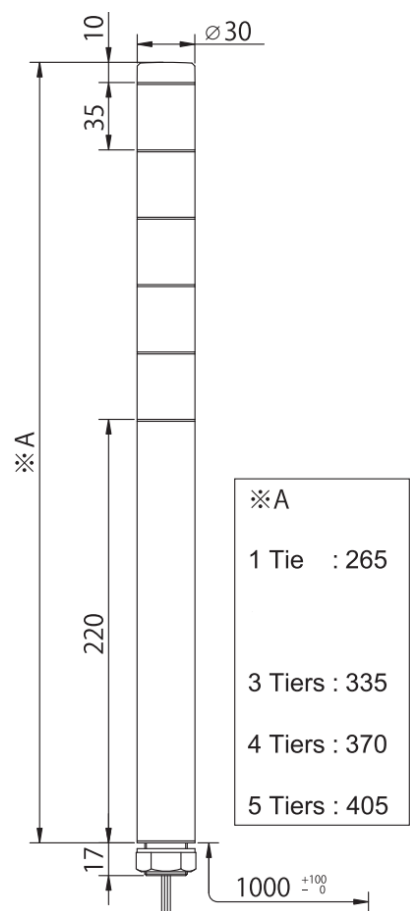


(Dimensions)

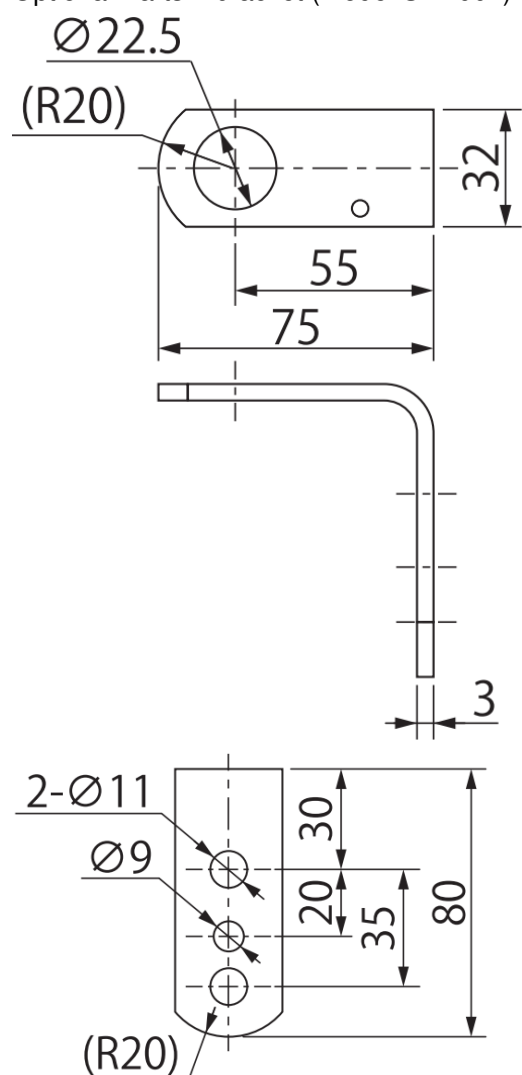
- MPS / Type MPS



- MP / Type MP



Optional Parts L bracket (Model SZL-001)



Installation

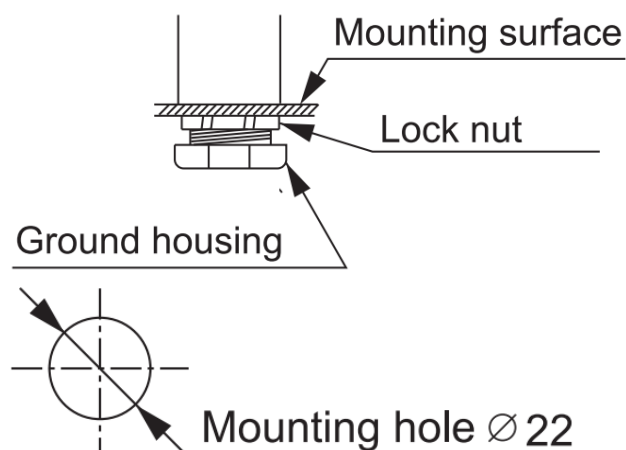


Caution

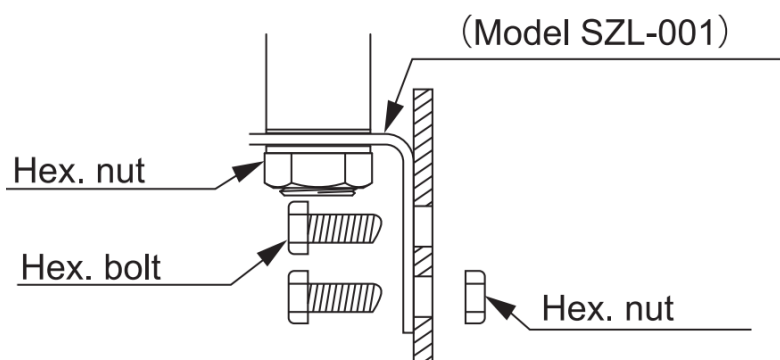
- « The following requirements are necessary for proper installation
 - Install where no excessive vibrations are present.
 - Install on a strong surface.
 - Install in an upright position. (Do not install the Signal Tower sideways or inverted.)
- This product can only be used indoors. (Do not use it outdoors.)
- When installing this product, do not use excessive torque, or the product may be damaged
- During installation, do not remove the waterproof sheet, it will increase possible water penetration and may cause a malfunction. (Type MP only)

How to Install

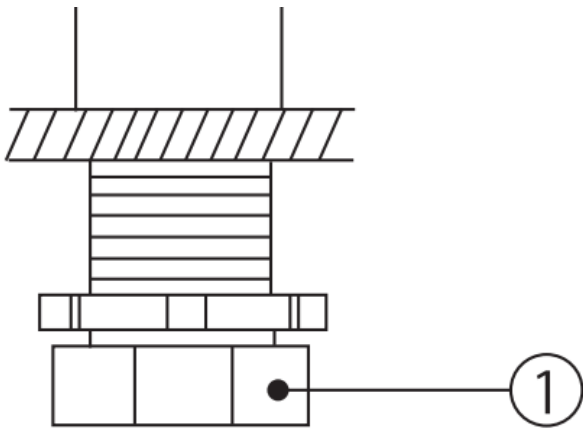
ME-A / Type ME-A



The possible thickness of the installation plate is 10 mm or less.

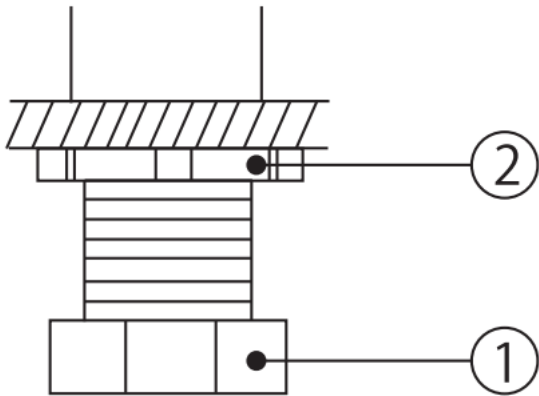


1. Turn nut () three threads (5 mm) or more,



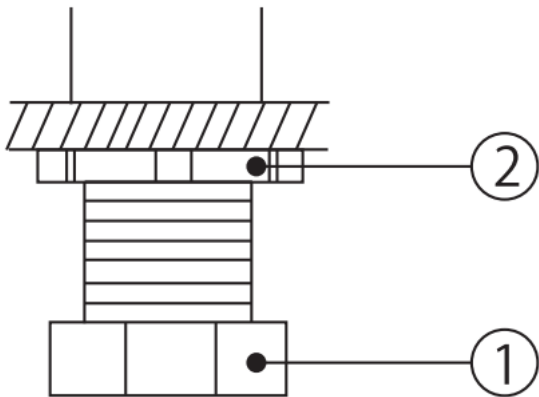
2. Hold nut

1. in one hand and wWHTL M10%2 @ (5 mm) or more, tighten nut
2. with the other hand Hold nut (D using an 24 spanner, and e as far as the plate surface.



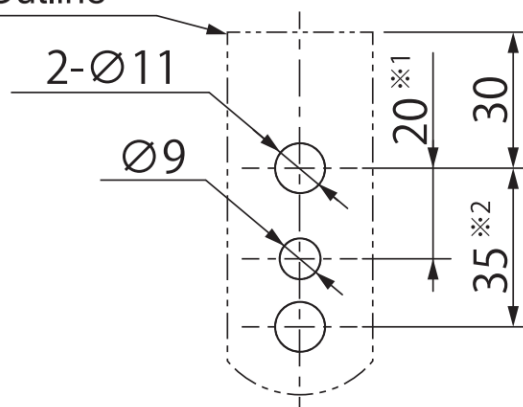
3. Hold nut

1. using an 24 spanner, and tighten nut
2. using an 27 spanner.



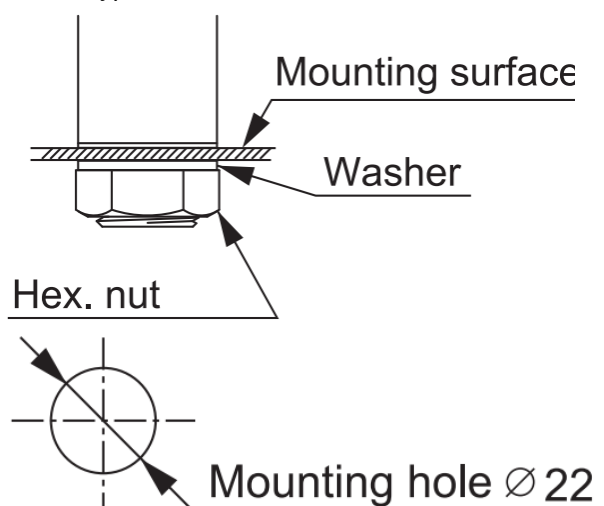
Mooting Dimension

L-bracket Outline



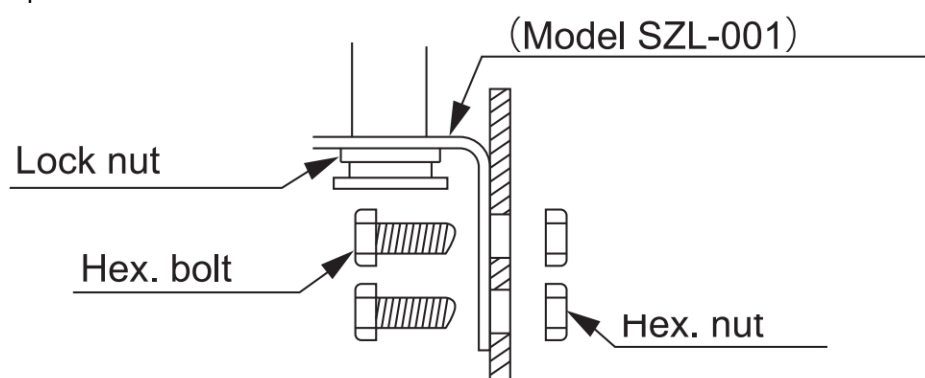
| |
|------------------------------|
| Bolt/Nut |
| 1 : M 8 x 2 1: M8x 2 pcs |
| 2 : M 8 x 2 2 : M8x 2 pcs |

MPE / Type MP

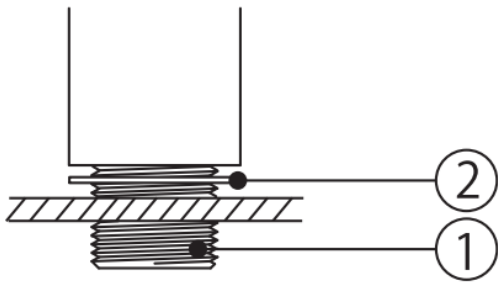


The possible thickness of the installation plate is 5 mm o less.

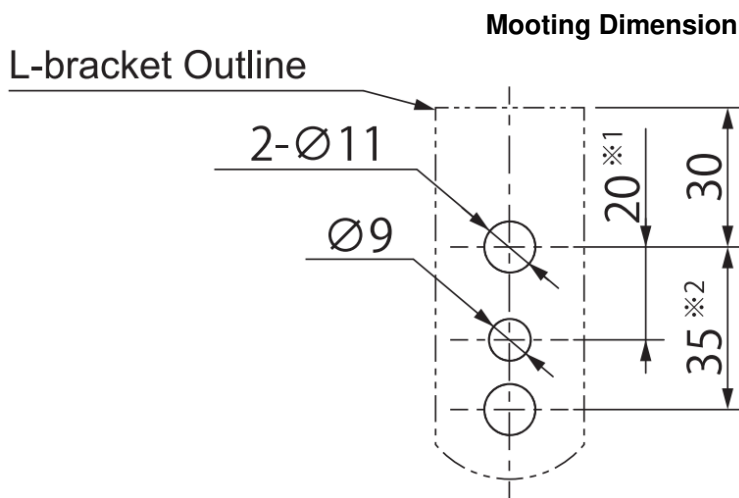
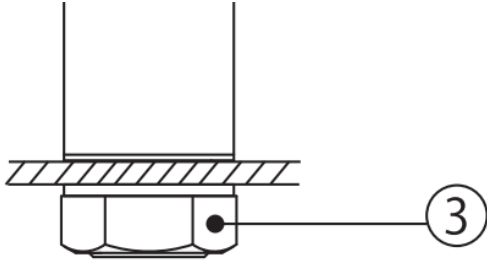
Optional Parts L bracket



1. Install the water proof 2 in the body, and through the mounting hole.



2. Please use the washer and the Hex. nut for installation. (Fasten it with the torque of 3.5±0.5Nm.)



| Bolt/Nut |
|------------------------------|
| 1 : M 8 x 2 1: M8x 2 pcs |
| 2 : M 8 x 2 2 : M8x 2 pcs |

Wiring



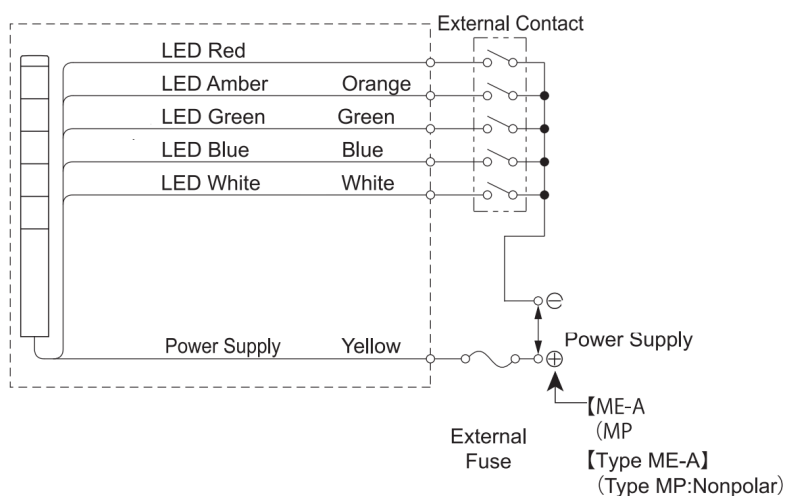
Caution

- Make sure the power is OFF before wiring. A short circuit may damage internal circuits or cause an electric shock.
- Enough attention shall be paid for wiring because if there is any mistakes in wiring a circuit may break down,
- Install the external contact fuse on the power supply side as shown in the wiring example in order to prevent burn in case of a wiring error.
- Do not pull out the lead wire or push it into the body.

How to perform wiring

- Turn the power OFF.
- Make wiring connection according to wiring example.
- When wiring 5 layers or less, please make wiring connection by increasing or decreasing external contacts in each layer according to wiring example.
- When using LED units of the same color, calculate the contact current capacity to be equal to the number of the LED units multiplied by the contact capacity for 1 light. (This is because current passes through one signal line for the multiple LED units of the same color. When wiring is completed, insulate the end of each unused lead wire with insulation tape.
- Any questions regarding applications for multiple units, or other special operations, contact your nearest PATLITE Sales Representative before wiring.
- To be recognized as a UL standard.]
- Fuse for protection of external contact should be installed within 305mm from the connected point of the power source wire.
- Use a "Class 2 Circuit" or the power supply Source and be sure to use the fuse and fuseholders authorized by UL, Inc.
- Use the fuse conforming to the rated current of the machine which the product was installed on. (Example : Class J type fuse)

Wiring Example



Wire Color Table

| LED Luminous Color | Wire Color |
|--------------------|------------|
| Red | Red |
| Amber | Orange |
| Green | Green |
| Blue | Blue |
| White | White |

ANI 5 wires (Red, Orange, Green, Blue, White) are connected regardless of the number of LED units.

External Contact (Transistor) Capacity

| A / Type | | ME-A E-A | / M MP |
|-------------------------------|-----------------------------|---|--|
| LED (1 LED Unit (Per Light)) | ICurrent Consumption | M 25.2mA 13.3mA Red <ul style="list-style-type: none"> • Amber : 25.2mA • Green • Blue • White : 13.3mA | 29.0mA, M : 29.5mA <ul style="list-style-type: none"> • : 17.1mA Red : 29.0mA, Amber : 29.5mA <ul style="list-style-type: none"> • Green • Blue -White : 17.1mA |
| | A4111Contact city | Is.50mA, Vs ?35V DC | 151'50mA, Vs? 35V DC |
| CAPower Supply | ;A Ot ILCurrent Consumption | 200mA (Max.) | |
| | ?0,441Contact Capacity | Is200mA, Vs' 35V DC | |
| IIAMITCA Leakage Current | | 1160.1mA | |

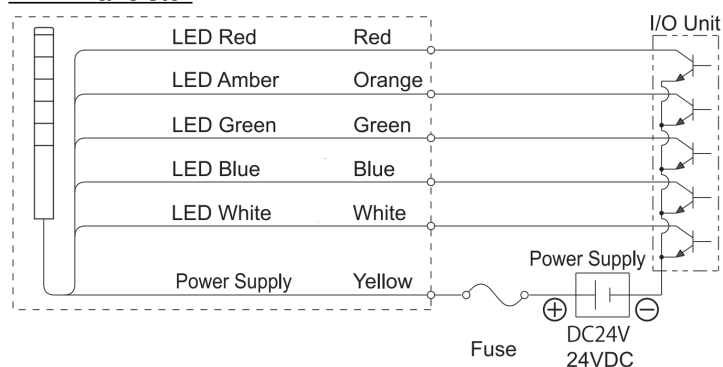
Is – Current Capacity, Vs : Withstand Voltage, I.: Leakage Current

Fuse Rating: #Use the fuse conforming to the rated current of the machine which the product was installed in.
(Example : Class J type fuse)
250V 1A

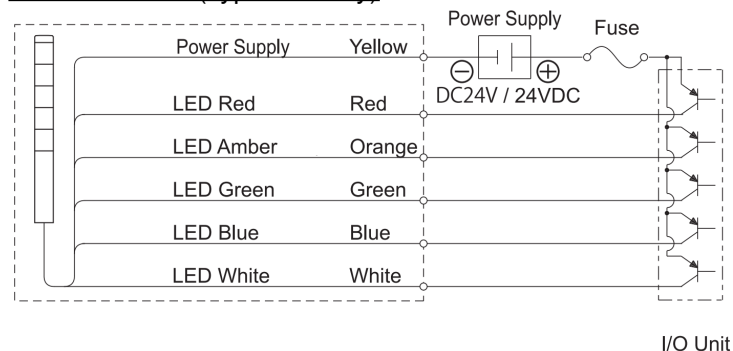
(NPN(PNP)Transistor drive example)

Model ME-A : NPN type only

NPN Transistor



PNP Transistor (Type MP only)



Changing LED Unit positions

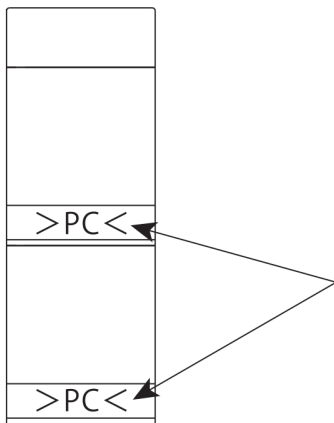


Caution

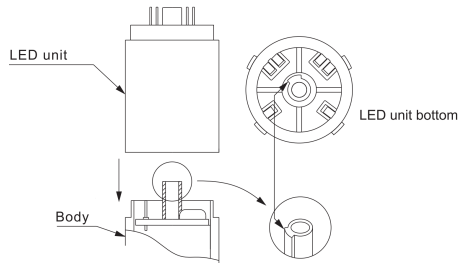
- Make sure the power is off before wiring to avoid a short-circuit, electric shock, or burn.
- Do not remove the LED unit forcibly as it may damage the unit.
- When the center screw is loosened or removed, the LED units become unstable and may separate. Therefore, handle carefully to avoid damage.
- Handle the LED units carefully to avoid warping or damage when changing their positions on the tower.
- Screwing the head cover too tight may damage it. The recommended torque is about 0.6N·m.

Changing LED Unit positions

- Unscrew the head cover and remove the LED unit.
- The upper and lower LED units are secured to align the marks on the lens surface. (Type ME-A>PC<, Type MP:>SAN<.)
- When you join the bottom LED unit with the body, make sure the center of the LED unit is aligned with the chassis in the center of the body. (Make sure the marks on the lens surface is facing the same direction as the name plate. (Type ME-A>PC<, Type MP:>SAN<.)
- When changing the number of modules, install a center screw to match the number of tiers.



With marks (Type ME-A>PC<, Type MP:>SAN<.) aligned between the upper and lower units, press the two parts straight together.



Align this part with the position setting to join the parts together.

Specifications

| Tiers | Model | Registration | Rated Voltage | Power Consumption | Mass | Wire type Diameter |
|---------|----------------------------------|---------------------------------|---------------|---|--------------------------------------|--------------------|
| 1 Tiers | ME-102AMES-102AMEL-102A | ME-102AME-102AME-102A | 302A 24VDC | Red-Amber :060W Green*Blue+White :0.32W | 0.22kg 0.12kg 0.34kg 0.23kg | ULT007/AWG22 |
| 2 Tiers | ME-202AMES-202AMEL-202A | ME-_02A MES-_02A MEL-_02A | | | 0.13kg 0.35kg 0.24kg 0.14kg | |
| 3 Tiers | ME-302A MES-302A MEL-302A | ME-_02A MES-_02AM EL-_02A | | | 0.36kg 0.25kg 0.15kg | |
| 4 Tiers | ME-402A MES-402A MEL-402A | ME—_02A MES—_02A MEL—_02A | | | 0.15kg 0.37kg 0.26kg0.18kg | |
| 5 Tiers | MES-502A MES-502A MEL-502A | ME-02A MES-02A MEL-02A | | | 0.38kg | |

Type MP

| Tiers | Model | Registration | Rated Voltage | Power Consumption | Mass | Wire type Diameter | |
|---------|-------------------|-------------------|---|--|----------------------------|--------------------|--|
| 1 Tiers | MP-102 MPS-102 | MP-02 MPS-02 | Red 0.70W Amber:0.71W Green*Blue+White :0.41W | Red-Amber :060W Green*Blue+White :0.32W | 0.21kg 0.11kg 0.23kg | ULT007/AWG22 | |
| 2 Tiers | MP-202 MPS-202 | MP—_02 MPS—_02 | | | 0.13kg 0.25kg 0.15kg | | |
| 3 Tiers | MP-302 MPS-302 | MP-_02 MPS—_02 | | | 0.27kg 0.17kg 0.29kg | | |
| 4 Tiers | MP-402 MPS-402 | MP- 02 MPS—_02 | | | 0.19kg | | |
| 5 Tiers | MP-502 MPS-502 | MP—_02 MPS_02 | | | | | |

- This product is recognized as a UL standard. For recognition as a UL standard;
 - Use on a flat surface with a Type 1 Enclosure.
 - For type ME-A, maximum surrounding air temperature is at 40°C.
 - For type MP, maximum surrounding air temperature is at 60°C.
- 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.

User's Manual

Notice to Customer

Thank you very much for purchasing our Patlite products

- This product requires installation, wiring, and other related work. Be sure to ask an expert technician to perform these procedures.
- Read this manual thoroughly before using this product to ensure correct use.
- 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. 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.



WARNING Indicates an imminently dangerous condition: failure to follow the instructions may lead to death or serious injury.

- Request the installation and wiring to be accompanied by a professional contractor. If installation is done improperly, it may result in fire, electric shock, falling, or malfunction.
- Be sure to disconnect the power from the product when performing maintenance or repairs. If the power is not disconnected, it may result in electric shock.



CAUTION indicates a potentially dangerous condition: failure to follow the instructions may lead to slight injury or property damage.

- Do not use this product to support your weight while climbing onto a machine. Mount the product so that it is clear of any moving parts – such as a machine cover.
- The images in this manual may vary in comparison to the actual product and are only for the purpose of illustration.
- Specifications may change without notice due to continual product improvement.
- Despite the cautions and warnings provided in this manual, it is not the responsibility of PATLITE for any failure or damage occurred from mishandling.

PATLITE Corporation

PATLITE : Corporation Head office : www.patlite.com/

PATLITE : (U S A) Corporation : www.patlite.com/

PATLITE : Europa GmbH :-Germany : www.patlite.eu/

PATLITE : (SINGAPORE) PTE LTD : www.patlite-ap.com/

PTE LTD PATLITE : (CHINA) Corporation : www.patlite.cni/

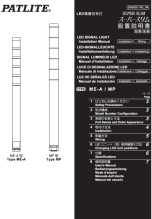
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PATLITE : TAIWAN CO., LTD. : www.patlite.tw/

PATLITE : (THAILAND) CO., LTD. : www.patlite.co.th/
PATLITE : MEXICO S.A. de C.V. : www.patlite.com.mx/



Documents / Resources



The thumbnail shows the cover of the instruction manual for the PATLITE MES-A LED Signal Light. It features a technical drawing of the light fixture on the left and a table of contents or specifications on the right.

[PATLITE MES-A LED Signal Light](#) [pdf] Instruction Manual
MES-A LED Signal Light, MES-A, LED Signal Light, Signal Light, Light

[Manuals+](#)