

SIGNAL TOWER

Type : WE/WEP

INSTALLATION MANUAL

Notice to Customer

Notice to Contractor

- Thank you very much for purchasing our PATLITE product.
- 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.
 - After reviewing this manual, if there are any questions regarding this product, please contact the nearest PATLITE office listed on the back cover of this manual.
- Read this manual carefully prior to installation.
 - Be sure to return this manual to the customer.

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.

| | |
|---|---|
| <p>⚠ WARNING Indicates an immediately dangerous condition: failure to follow the instructions may lead to death or serious injury.</p> | <p>⚠ CAUTION Indicates a potentially dangerous condition: failure to follow the instructions may lead to slight injury or property damage.</p> |
|---|---|

1 Safety Precautions

Safety Precautions

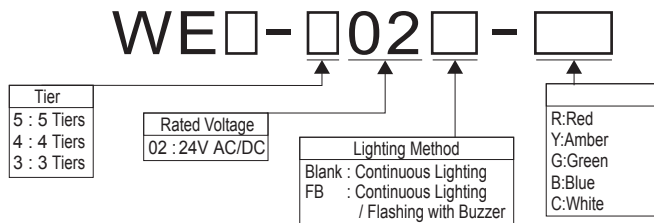
⚠ WARNING

- 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 Cover is 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.

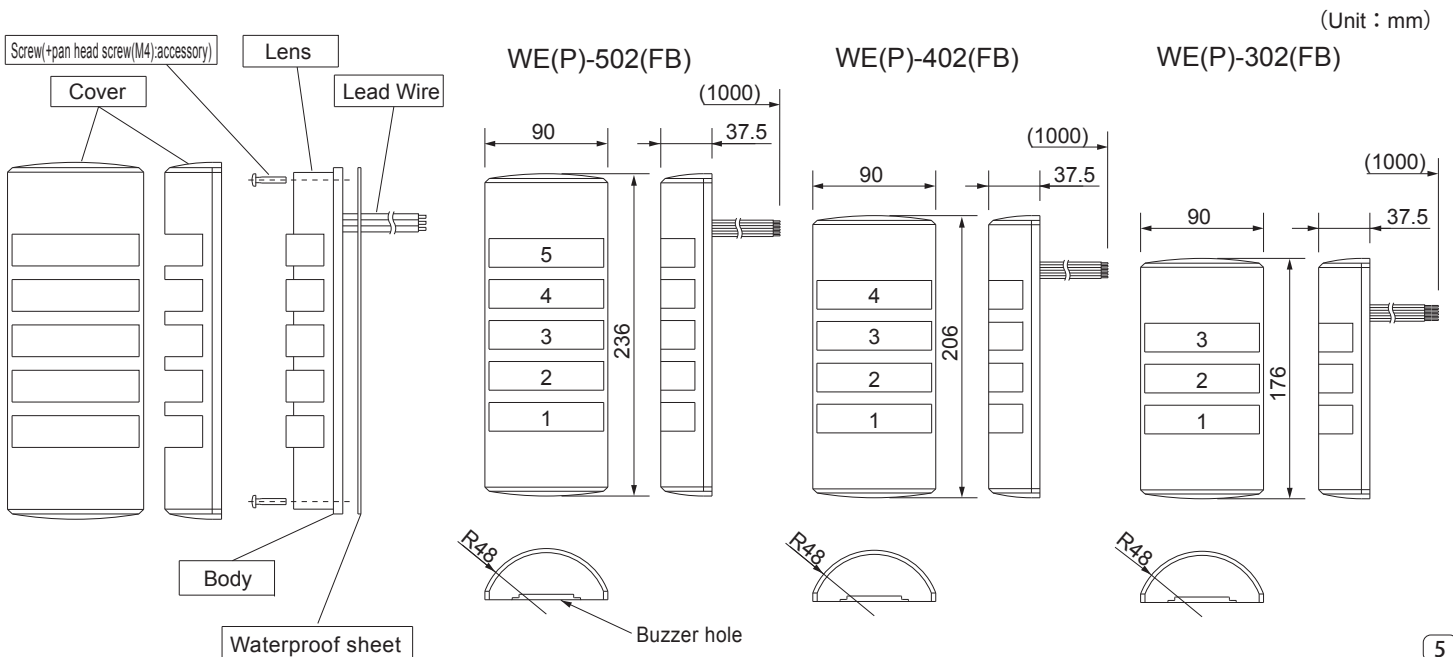
⚠ CAUTION

- Concerning replacement parts, such as Cover, be sure to 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.

2 Model Number Configuration



3 Part Names and Outer Appearance



4 How to Install

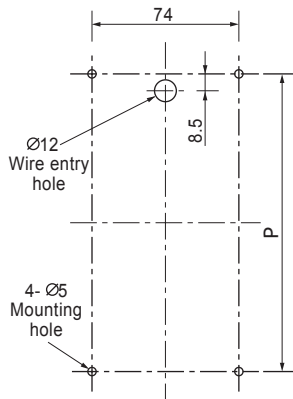
CAUTION

- The following requirements are necessary for proper installation.
 - Install where excessive vibration is not present.
 - Install on a strong surface.
- Install in an upright position when placed in a wet environment. (FB Type)
- Can be used only indoors. (Do not use it outdoors.)
- Use the soft cloth with moisture when the LED Unit or Body must be cleaned up. (Do not use thinner, benzine, gasoline or oil.)
- During installation, do not remove the waterproof sheet. It may cause a malfunction.
- This product has 1.5mm thick waterproof packing at the bottom of the pole bracket. However, when complete waterproofing is not provided due to the unevenness of the installation surface, apply waterproof sealant between the unit and the installation surface to maintain waterproof conditions.

How to Install

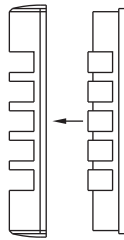
Drill mounting holes in the wall. (See the following installation diagram.)

- Secure the mounting bracket with the hex bolts and hex nuts.
- Install the Signal Tower vertically at a location that has sufficient strength and minimal vibration.
- With buzzer models, the alarm can be heard best from the front direction. Therefore make sure the Signal Tower is facing the correct direction before installing.



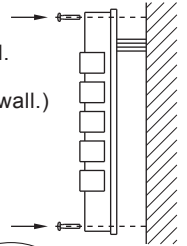
| | P |
|---------------|-----|
| WE(P)-302(FB) | 150 |
| WE(P)-402(FB) | 180 |
| WE(P)-502(FB) | 210 |

① Remove the cover from the unit.

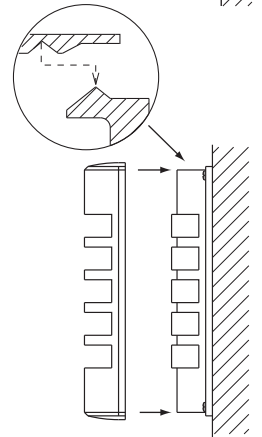


② Mount the unit on the wall.

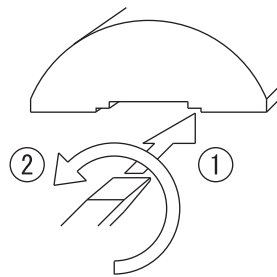
Push the lead wires through the hole in the wall. Be careful not to pinch the wires. Use four 4mm screws to secure the unit to the wall.)



③ Hook the upper part of the cover tab to the body, and snap the bottom of the cover onto the body.



Removing Method



① Insert a flathead screwdriver in the removal slot in the buzzer hole of the cover.

② Turn the screwdriver counterclockwise.

※Caution
Do not remove the cover by hand. Failure to comply may result in personal injury.

5 How to 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 apply voltage directly to the brown wire. It may cause a breakdown.(FB type)
- Do not pull out the lead wire or push it into the body.

Caution

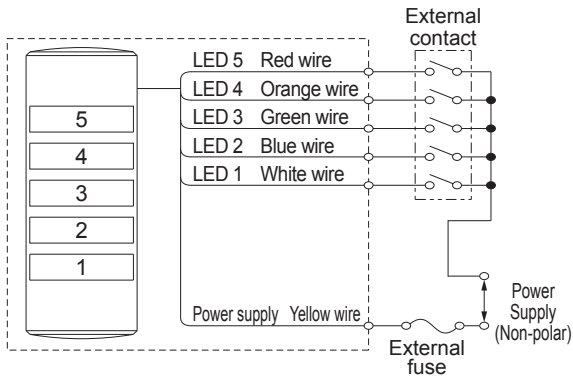
- Simultaneously turning on the external contact for both constant lighting and flashing for the same light may cause another light to light up. To avoid this, provide separate switches for flashing or continuous lighting.
- When turning on the same function, such as flashing or alarms, for more than one product simultaneously, be sure to use separate external contacts for each product and function.
- When using both alarm sounds on one product, use separate contacts for the alarms and the lights.

How to Install

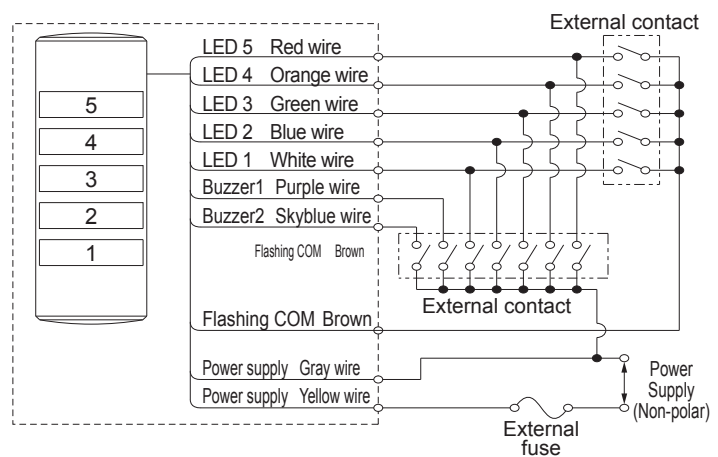
- Turn the power OFF.
- Please make wiring connection according to wiring example.
 - For wiring of 5 Tiers or less, please make wiring connection by increasing or decreasing external contacts in each layer according to wiring example.
- When wiring is completed, insulate the end of each unused lead wire by using insulation tape.
- If you have any questions about simultaneous use of multiple units or other special operations, contact PATLITE Customer Service before wiring. [For 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 "Class 2 Circuit" for the power supply source(Type:24V DC) and concerning fuse and fuse-holder, be sure to use the products authorized by UL Inc.
- Use the fuse conforming to the rated current of the machine which you install product. (Example : Class J type fuse)

Wiring Example

WE(P) Type [Continuous Lighting]



WE(P)-FB Type [Continuous Lighting/Flashing/Buzzer]

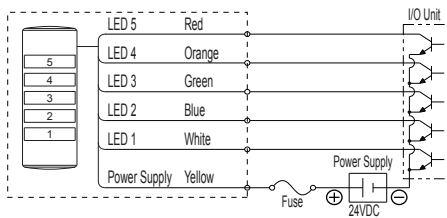


CAUTION Do not apply voltage to Flashing COM (Brown).

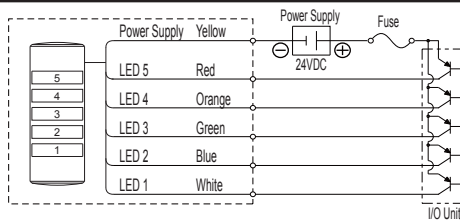
Wiring Example (NPN/PNP Transistor drive)

WE(P) Type [Continuous Lighting]

NPN Transistor

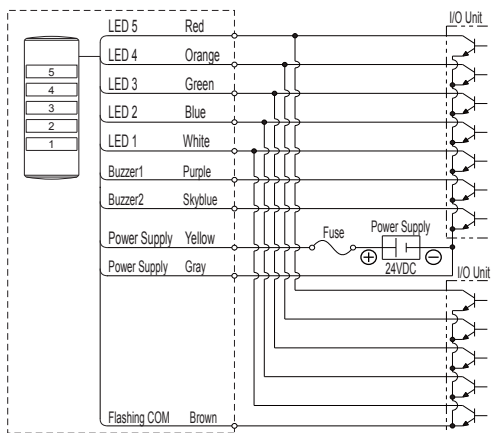


PNP Transistor



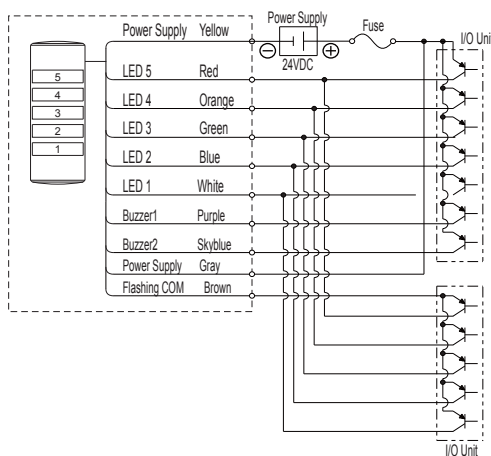
WE(P)-FB Type [Continuous Lighting/Flashing/Buzzer] (When using the FB type, use a separate I/O unit for flashing)

NPN Transistor



CAUTION Do not apply voltage to Flashing COM (Brown).

PNP Transistor



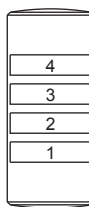
CAUTION Do not apply voltage to Flashing COM (Brown).

Wire Color Table



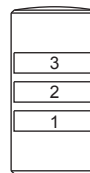
5 Tiers

| | Wire Color |
|---|------------|
| 5 | Red |
| 4 | Orange |
| 3 | Green |
| 2 | Blue |
| 1 | White |



4 Tiers

| | Wire Color |
|---|------------|
| 4 | Red |
| 3 | Orange |
| 2 | Green |
| 1 | Blue |



3 Tiers

| | Wire Color |
|---|------------|
| 3 | Red |
| 2 | Orange |
| 1 | Green |

Buzzer (FB Type)

| Buzzer | Wire Color |
|-----------------------|------------|
| Buzzer1: Continuous | Purple |
| Buzzer2: Intermittent | Skyblue |

※ Lead wires are only included with the flashing/buzzer option.

※ Buzzer 1 is priority when connected simultaneously to common with buzzer 2.

External Contact(Transistor) Capacity

| Voltage Specifications | | 24V AC/DC |
|------------------------|---------------------|--|
| LED Unit (Per Light) | Current Consumption | Red/Amber: 24.0mA, Green/Blue/White: 14.3mA |
| | Contact Capacity | $I_s \geq 50\text{mA}$, $V_s \geq 35\text{V DC}$ |
| Buzzer | Current Consumption | 40mA |
| | Inrush Current | 250mA |
| | Contact Capacity | $I_s \geq 300\text{mA}$, $V_s \geq 50\text{V DC}$ |
| Power Supply | Current Consumption | 360mA(MAX) |
| | Contact Capacity | $I_s \geq 500\text{mA}$, $V_s \geq 50\text{V DC}$ |
| Leakage Current | | $I_L \leq 0.1\text{mA}$ |

※ I_s : Current Capacity, V_s : Withstand Voltage, I_L : Leakage Current

External Fuse

| Voltage | Fuse Rating |
|-----------|-------------|
| All Model | 250V 1A |

※ Use the fuse conforming to the rated current of the machine which you install product. (Example: Class J type fuse)

6 Specifications

| Tiers | Model | UL Registration Model | Rated Voltage | Power Consumption | Flash Cycle (fpm) and sound level | Wire type/Dia |
|---------|---------------|-----------------------|---------------|-------------------|--|--|
| 3 Tiers | WE(P)-302(FB) | WE(P)-_02(FB) | 24V AC/DC | 2.6W | FB Type 60 Flashes per minute Sound level 90 dB / m | Power source wire and Lead wire UL1007/AWG22 |
| 4 Tiers | WE(P)-402(FB) | | | 3.0W | | |
| 5 Tiers | WE(P)-502(FB) | | | 3.4W | | |

- This product is recognized as a UL standard.
For recognition as a UL standard;
 - Use on a flat surface with a Type 1 Enclosure.
 - Maximum surrounding air temperature is at 40°C.
- This product conforms to EN standard 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.

Caution

- PATLITE Corporation disclaims all liability for any malfunction or damage occurring as a result of handling contrary to the instructions, cautions and warnings mentioned in this manual.
- Specifications may change without notice due to continual product improvement.

PATLITE Corporation

G2E

International Division

4-4-25, Hommachi, Chuo-ku, Osaka-shi, Osaka 541-0053 Japan TEL. +81-6-7711-8953

PATLITE (U.S.A.) Corporation ■ <http://www.patlite.com/>

PATLITE Europe GmbH *Germany ■ <http://www.patlite.eu/>

PATLITE (SINGAPORE) PTE LTD ■ <http://www.patlite.com/>

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