

PATLITE[®]
New Frontiers in Safety, Security and Comfort.

GENERAL CATALOG

sensorMATIC
SPECIALIST&SOLUTIONS

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www.patlite.com



New Products



LA6

Signal Tower



- LED
- 11 Alarm Sounds
- 85dB at 1m
- IP65 (B Type:IP54)
- Ø60

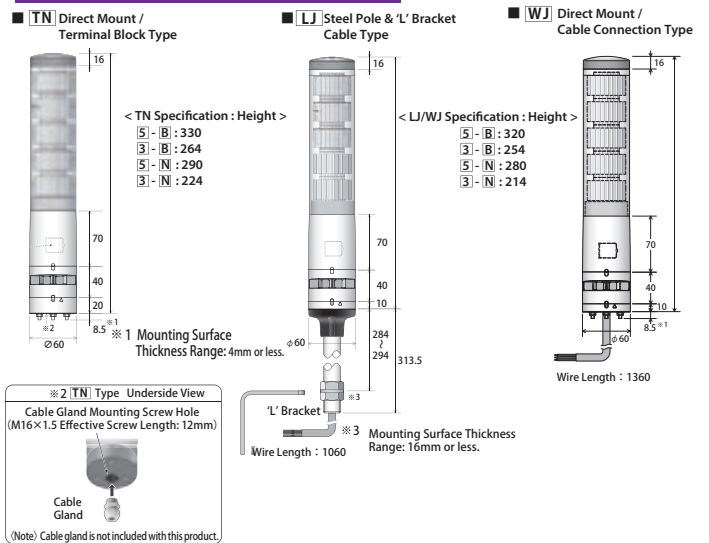


Display a variety of colors in various ways to improve your processes.

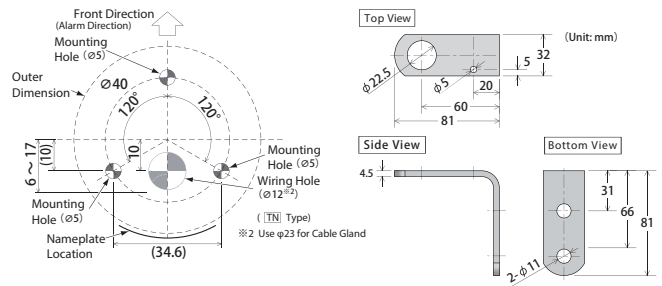
FEATURES

- Indicate abnormal conditions with a variety of color patterns. Can freely set up multiple colors. For example, a serious condition can be indicated with the "All-point Lighting" where the entire signal tower is the same color, thus conveying important information.
- Use "Operating Modes" to enhance a visual status condition. The downloadable program can be used to make patterns change at set intervals so the signal tower can be used to count time or set a pace.
- Simple and easy to use complimentary programming software. The downloadable complimentary programming software can be used to easily control which colors are displayed and how they are to behave.

Dimensions (Unit: mm)



'L' Bracket Dimensional Drawing



How to Order

Signal Tower LA6- ① D ② ③ ④ - ⑤

Example: LA6-5DTNUB-RYGBC

- LED Tiers...5
- Body Color...Silver
- Flashing-Alarm...with Flash and Alarm
- Mounting/Wiring...Direct Mount/Terminal Buss
- Color...Red/Amber/Green/Blue/White

① LED Tiers ② Mounting/Wiring ③ Body Color ④ Flashing/Alarm ⑤ Color

3: 3 Tiers WJ: Direct/Cable W: Off-white B: With RYG: 3 Tiers

5: 5 Tiers TN: Direct/Terminal U: Silver N: Without RYGBC: 5 Tiers

LJ: Steel Pole & Angle/Cable

※ The LED light color for each tier can be changed after purchase. ※ LJ type does not have a "U" (Silver) specification.



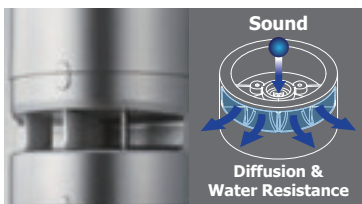
An internal Mode Switch is available. Use the internal mode switch to easily set up various functions, such as the alarm volume.



A new lens design optimizes visibility. The newly developed lens design efficiently diffuses LED light so that it is unmistakably visible, even from great distances.



Freely change luminescence colors and patterns with editing software. Upload colors and patterns using the editing program to the signal tower using a USB cable* connected to a PC. *The USB cable is sold separately (USB microB type with Charging/ Data Transfer capability).



The alarm has a total of 11 sounds to match various applications. The water-resistant speaker design is able to play clear sounds of up to 85 dB (at 1m) despite it's compact size. Alarm sounds can be set up with every display pattern.



Replacement Parts



Headcover (Off-white) B31310001-7F1 (Silver) B31310001-9F1



USB Port Cover (Off-white) B22100071-7F1 (Silver) B22100071-9F1



Waterproof Ring 'B' B25110042-F1

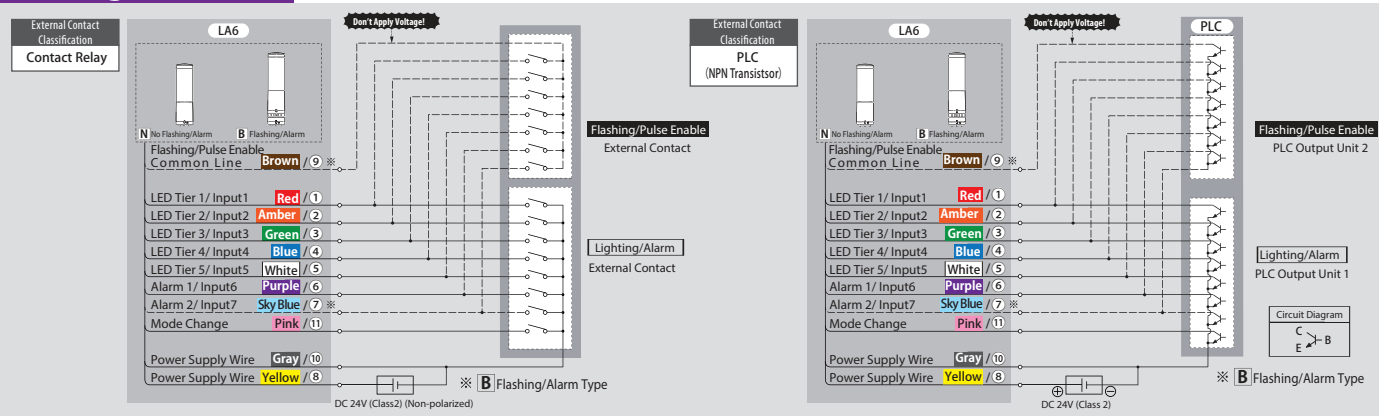


Pole Bracket (Off-white) B22210134-7F1



Waterproof O-ring B25110047-F1

Wiring



Specifications

Model		LA6-□D□□□-□					
Rated Voltage		DC24 V					
Operating Voltage Range		±10% of Rated Voltage					
Rated Power Consumption	Standard	LA6-5 D□□N-RYGB	5W		LA6-5 D□□B-RYGB	6.5W	
		LA6-3D□□N-RYG	3.5W		LA6-3D□□B-RYG	4.5W	
	Maximum	LA6-5 D□□N-YYYY	7W		LA6-5 D□□B-YYYY	8W	
		LA6-3D□□N-YYY	4.5W		LA6-3D□□B-YY	5.5W	
Test Condition		Power Consumption test with alarm set at Alarm Sound No.1 at maximum volume					
Signal Wire Current		Maximum 70mA					
Standby Current		Maximum 15mA					
Operating Ambient Temperature		-25□ to +60□					
Operating Humidity Range		Less than 90% RH (No Dew or Condensation)					
Storage Temperature Range		-25□ to +60□					
Storage Humidity Range		Less than 90% RH (No Dew or Condensation)					
Mounting Location		Indoor Only					
Mounting Direction		Upright/Inverted Direction					
Protection Rating		IP65 (With alarm: IP54) IEC 60529					
Test Condition		Installed in an upright position					
Vibration Resistance	LA6-□□LJ□□	Sweep Durability: Total amplitude: 0.3 mmp-p (10 - 57.5 Hz), Acceleration: 20.0 m/s ² (57.5 - 150 Hz) Fixed pitch durability: Acceleration 20.0 m/s ²					
	LA6-□□TN□□ LA6-□□WJ□□	Sweep Durability: Total amplitude 0.3 mmp-p (10 - 57.5 Hz), Acceleration: 20.0 m/s ² (57.5 - 150 Hz) Fixed Vibration Frequency Durability: Acceleration 10.0 m/s ²					
	JIS C 60068-2-6:2010						
Test Condition		Tested while installed in an upright position					
Insulation Resistance		More than 1Mohm at DC500V between the power input lead and chassis.					
Withstand Voltage		500VAC for 1min between terminals and chassis without breaking insulation					
Display Color		red (1000 mcd) yellow (1700 mcd) green (2600 mcd) blue (1000 mcd) white (1250 mcd)					
(Typical Luminous Intensity)		Purple (800 mcd) pink (850 mcd) cyan (2150 mcd) lemon (2150 mcd) * Due to the characteristics of the LED elements, a variation in difference of the color tone and brightness of every product may occur.					
Flash Rate		60 ±2 fpm					
Alarm Sound (Typical Frequency)	No. 1	2400Hz Continuous beep sound		No. 2	2400Hz Rapid intermittent beep		
	No. 3	2400Hz Long intermittent beep		No. 4	2400Hz Fast intermittent beep		
	No. 5	3600Hz Continuous beep		No. 6	3600Hz Rapid intermittent beep		
	No. 7	3600Hz Long intermittent beep		No. 8	3600Hz Fast intermittent beep		
	No. 9	2400Hz & 3375Hz Multiplexed Beep		No. 10	2400Hz & 3600Hz Multiplexed Beep		
	No. 11	4000Hz & 4800Hz Multiplexed Beep					
	Sound Level		Maximum: 85dB				
Test Condition		Alarm Sound No.1 measured from the front direction of the alarm opening at 1m					
Volume Control		The set up button is the fourth step (Factory Default: Maximum). [Maximum] -> [-5dB drop from maximum (standard)] -> [-10dB drop from maximum (standard)] -> [OFF] (-> Returns to [Maximum])					
Data Transfer Interface	Main Unit	USB micro-B Terminal Female USB2.0/1.1 Interface, Transmission Rate: USB2.0/1.1/1.0					
	Transfer Cable	Charge /Data Transfer Micro USB (not included); Connector: USB Male- USB (MicroB) male					
Application Software		Exclusive Application Software (Downloadable from our Homepage)					
Mass (Tolerance 10%)	LA6-3DTN□B	480g	LA6-3DLJ□B	980g	LA6-3DWJ□B	450g	
	LA6-3DTN□N	420g	LA6-3DLJ□N	930g	LA6-3DWJ□N	400g	
	LA6-5 DTN□B	590g	LA6-5 DLJ□B	1090g	LA6-5 DWJ□B	560g	
	LA6-5 DTN□N	530g	LA6-5 DLJ□N	1040g	LA6-5 DWJ□N	510g	
Compliance Standards	EMC Directive (EN 61000-6-4, EN 61000-6-2)			RoHS Directive (EN 50581)			
	UL508, CSA-C22.2 No.14			KC (KN 61000-6-4, KN 61000-6-2)			
	FCC Part 15 SubpartB Class A			CE Marking			
Remarks		UL Recognized Component (File No.E215660)					

Success Story

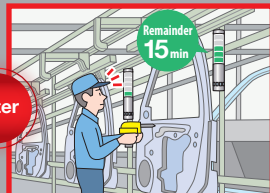
Case 1 Manage and control assembly line progress with "takt time visualization!"



Before

Uneven task completion!

Worker did not know how long it was taking to complete task, causing uneven progress of the entire assembly line and delays.

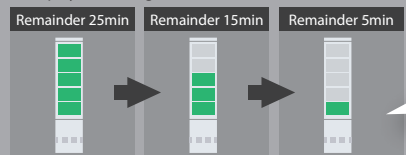


After

Visible progress -> Even completion!

Workers can pace themselves to complete their tasks on time. The entire line can move more evenly and delays are reduced.

■ Display remaining work time with the number of tiers



Task progress is understood in real time!

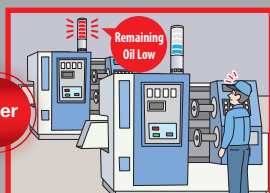
Case 2 Replenish with precise timing with "cutting fluid level visualization!"



Before

The amount of oil is unknown!

Cutting fluid level in the underground tank was unknown. Operators wasted a lot of time opening the tank to verify how much fluid was left.



After

The amount of oil is visible from a distance!

The amount of fluid in the tank could be determined with a glance, even from great distances, allowing quicker response to multiple machines, and improved operator productivity.

■ Remaining tank level indication



The status of the amount of oil can be seen at a glance from a distance!

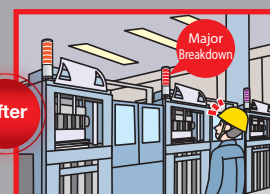
Case 3 Various machines can be monitored more precisely for abnormal conditions!



Before

An error condition is not understood!

Abnormalities for equipment was displayed and could be seen from a distance but its severity could not be determined unless extra time was taken to approach the machine.

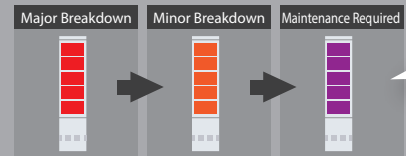


After

Various errors are now visible from a distance!

Now equipment can be checked for abnormalities at a glance from a distance, and when all tiers light up prompt attention can be given.

■ All tiers light-up for abnormal conditions.



According to color, each status can be seen at a glance from a distance!

NE-M1-CL7

LED Dome Signal Light



LED



IP66/67

Φ57

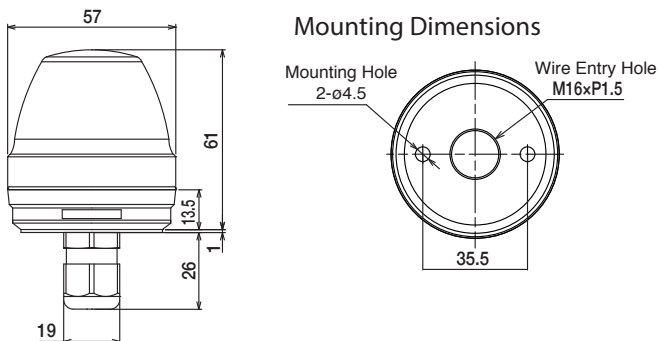
NPN/PNP
Open-collector

NE-M1-CL7 Series LED Dome Signal Light; One Signal Light with 7 LED color combinations provide multiple solutions with years of maintenance-free operation.

FEATURES

- Seven multicolored LEDs.
- Low power consumption to increase energy efficiency.
- High protection rating for outdoor use.
- Color-coded wires for easy wiring.
- Applications are suitable for AGV units, small tooling machines, control panels, etc.
- One unit can make colors in Red, Yellow, Green, Blue, Light Blue, Purple and White.
- Has the CE mark and conforms to the requirements for the EC directive.

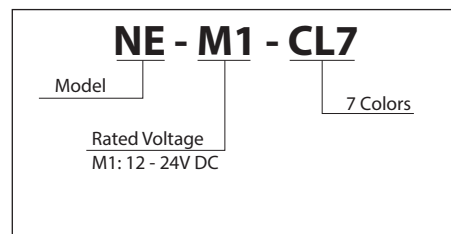
Dimensions (Unit: mm)



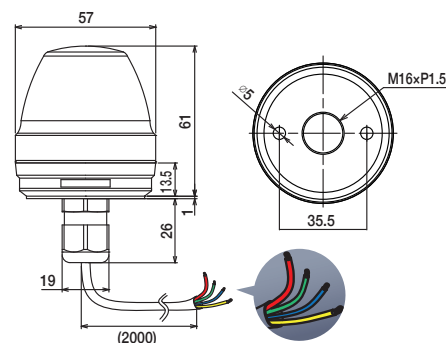
Specifications

Model	Rated Voltage	Operating Temperature Range	Operating Humidity	Protection Rating	Mass
NE-M1-CL7	12 - 24V DC	-30 C - +50 C	90% or less	IP66/IP67	55g

How to Order



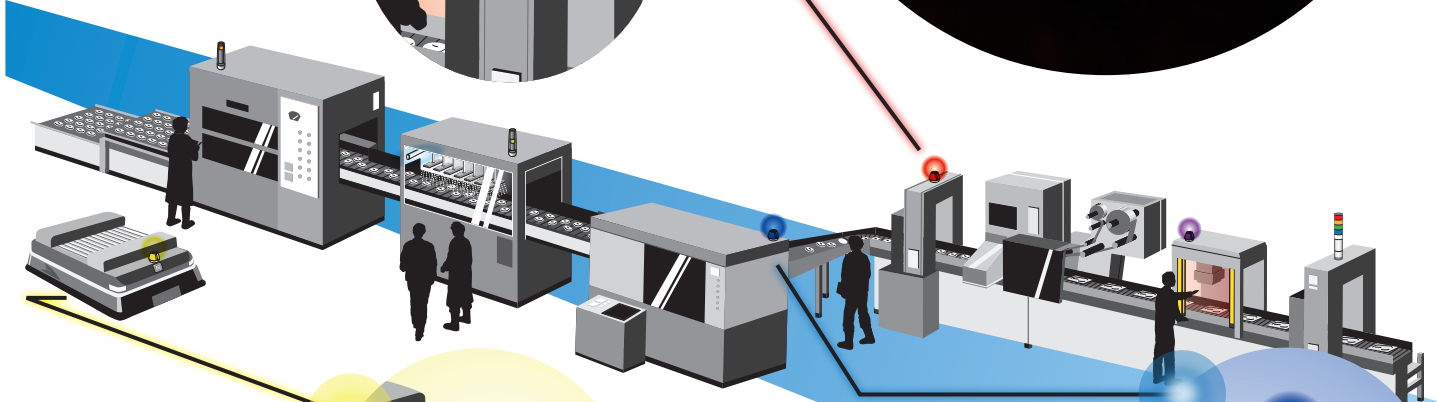
Wiring



Application Examples

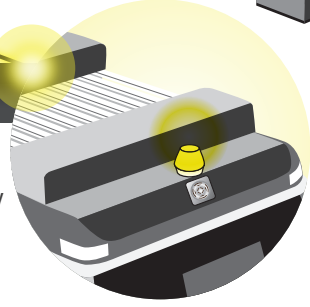
Conveyor Line

- Emergency Stop
- Error
- Operating
- Material Jammed
- Inspection
- Call Supervisor
- Ready to Start



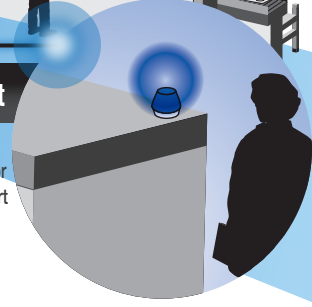
AGV

- Error
- Obstacle Detected
- Forward
- Reverse
- Turn
- Idle
- Dead Battery



Compact Equipment

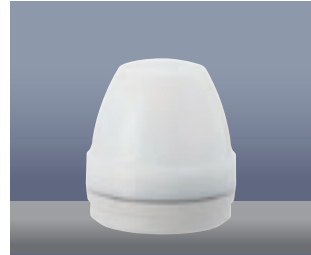
- Emergency Stop
- Error
- Operating
- Out of Material
- Idle
- Call Supervisor
- Ready to Start



Diverse Color Possibilities



Compact Size



A compact design to fit with any piece of equipment.

Opaque Lens



The white colored lens displays various colors much clearer and uniformly diffuses the light source.

Environmental Resistant Characteristics



High Protection for an IP rating of 66 and 67, it can be used in environments with higher humidities and dust exposure.

Color Chart	
Wiring	LED Color
RED	RED
GREEN	GREEN
BLUE	BLUE
RED/GREEN	YELLOW
BLUE/GREEN	LIGHT BLUE
RED/BLUE	PURPLE
RED/GREEN/BLUE	WHITE

Model Name	NE-M1-CL7
Rated Voltage	12V DC~24V DC
Operating Voltage Range	10 V DC~30 V DC
Operating Temperature Range	-30 °C to + 50°C (90% RH or less)
Protection Rating	IP66/IP67
Display Color	7 Colors





Signal Tower

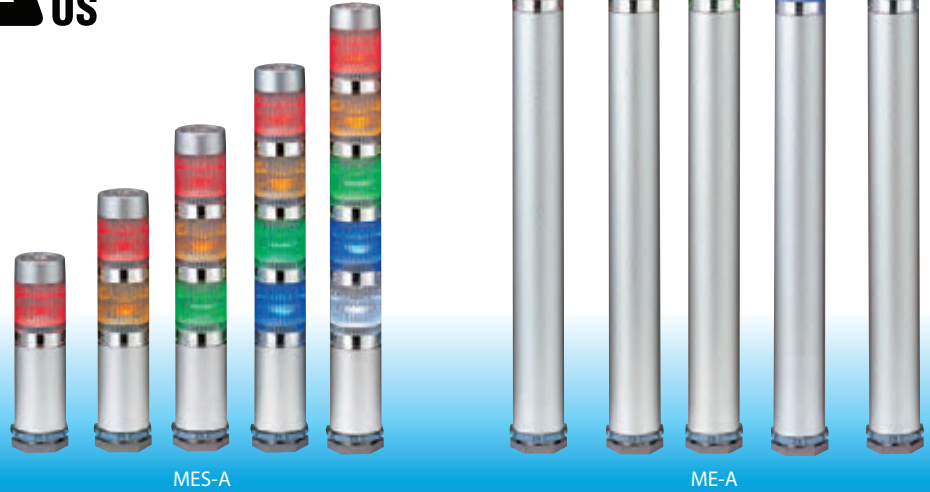


ME-A/MES-A

Signal Tower



- LED 
- IP42
- Ø25
- NPN
Open-collector
- Cable 



Super-slim 25mm Signal Tower with aluminum body, ideal for small devices.

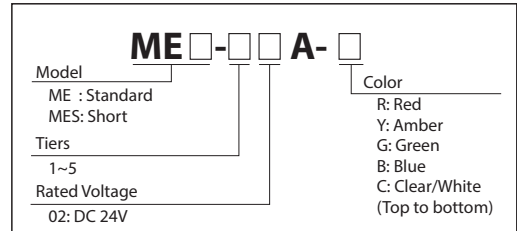
FEATURES

- PATLITE's exclusive hybrid prism-cut lens designed for enhanced visibility from any direction and distance.
- Lens is made of superior impact and heat resistant polycarbonate resin for superior durability and light transmission.
- Available Colors are in Red, Amber, Green, Blue, and Clear/White.
- Specially enhanced high intensity illumination design.
- Direct mount installation with just a single hole.
- Interchangeable Modules need no re-wiring, even after installation.
- Main body is constructed of corrosion resistant anodized aluminum to retain its external beauty.
- Body Length for MES-A is 40mm, and for the ME-A is 200mm.
- Conforms to the CE requirements.
- UL recognized components (File No. E215660)

AVAILABLE BY SPECIAL ORDER

- Cable: Versatile and flexible 3m cable.
- IP65 (for ME/MES).
- PNP Compatible: ME and MES 24V Types.

How to Order

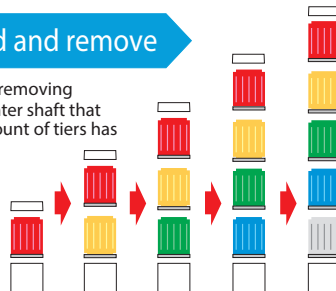


Patented reflection system increases visibility.



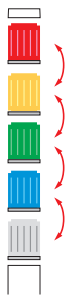
Easy to add and remove

- When adding or removing modules, the center shaft that matches the amount of tiers has to be purchased.



Interchangeable LED Modules

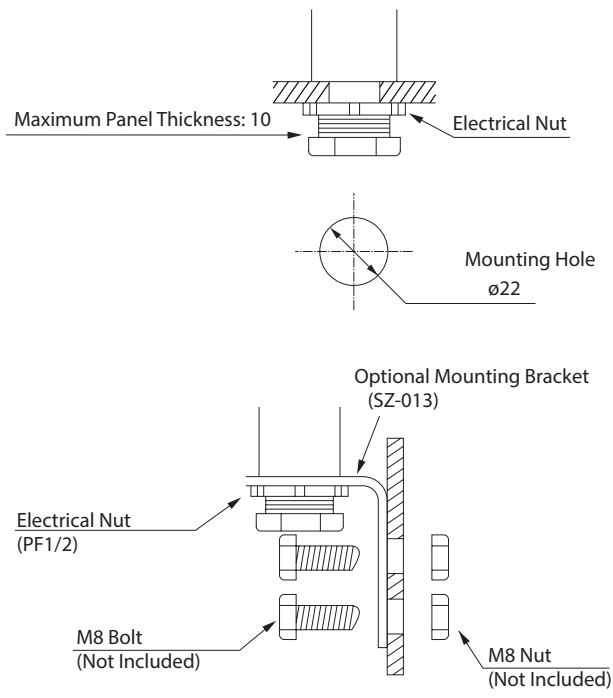
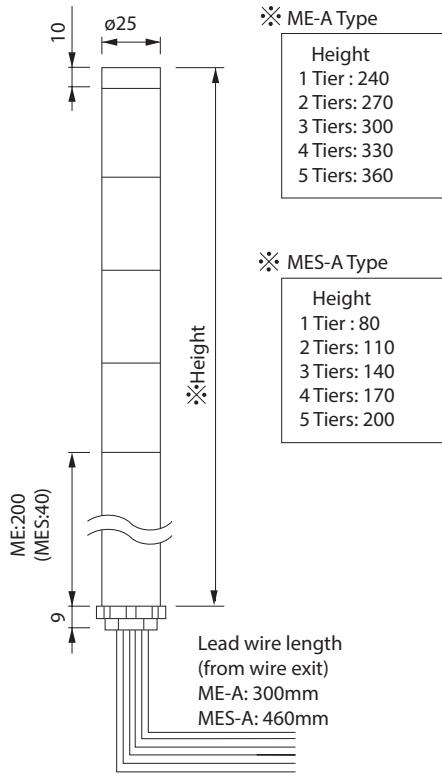
- Changeable color sequence: Easy to add/ remove up to 5 colored modules even after installation.
- Note: LED modules of the same color within a signal tower will light up simultaneously.



Wiring doesn't change

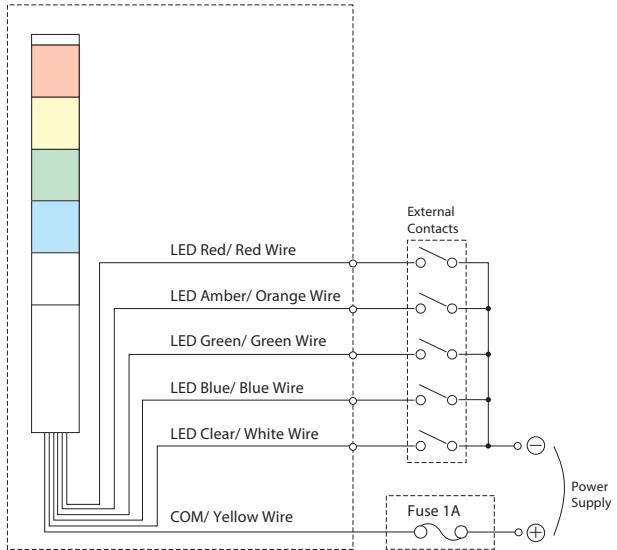
- The LED Module colors correspond to the wiring, so re-wiring is not necessary.

Dimensions (Unit: mm)

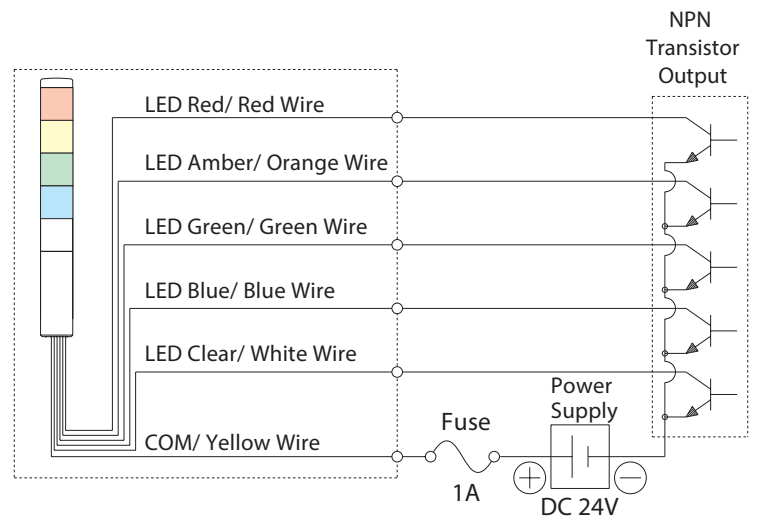


Wiring

- ME-A/MES-A Contact/ Switch



- ME-A/MES-A NPN Open Collector



Specifications

Stack Number	Model	Rated Voltage	Power Consumption	Mass	
				ME	MES
1 Tier	ME/MES-102A-R	DC 24V	0.6W	220g	120g
	ME/MES-102A-Y		0.6W		
	ME/MES-102A-G		0.5W		
	ME/MES-102A-B		0.5W		
	ME/MES-102A-C		0.5W		
2 Tiers	ME/MES-202A-RY		1.2W	230g	130g
	ME/MES-202A-RG		1.1W		
	ME/MES-202A-RB		1.1W		
	ME/MES-202A-RC		1.1W		
3 Tiers	ME/MES-302A-RYG		1.7W	240g	140g
	ME/MES-302A-RYB	1.7W			
	ME/MES-302A-RYC	1.7W			
4 Tiers	ME/MES-402A-RYGB	2.3W	250g	150g	
	ME/MES-402A-RYGC	2.3W			
5 Tiers	ME/MES-502A-RYGBC	2.8W	260g	160g	

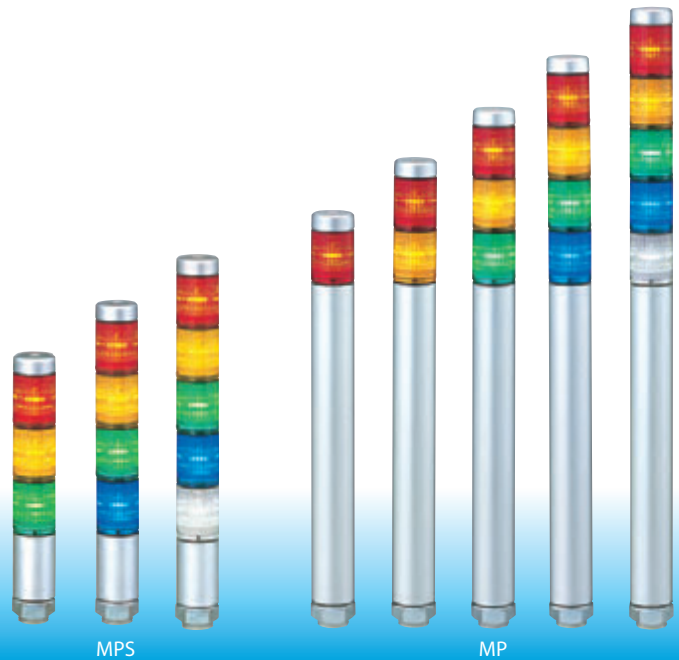
MP/MPS



Signal Tower



- LED
- IP65
- Ø30
- Cable
- NPN/PNP
Open-collector



MPS

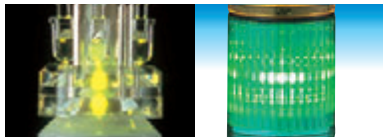
MP

Super slim 30mm silver body Signal Tower, ideal for small devices.

FEATURES

- PATLITE's exclusive hybrid prism-cut lens designed for enhanced visibility from any direction and distance.
- Double-insulated construction for enhanced durability and safety in the work environment.
- Direct mount installation with just a single hole.
- Interchangeable Modules need no re-wiring, even after installation.
- Main body is constructed of superior impact and heat resistant ABS resin.
- Lens is made of superior weather resistant and light translucent AS resin.
- Available Colors are in Red, Amber, Green, Blue, and Clear/White.
- Conforms to the CE requirements.
- UL Recognized Components (File No. E215660)

Patented reflection system increases visibility.



High-intensity LED

Good visibility from any direction

AVAILABLE BY SPECIAL ORDER

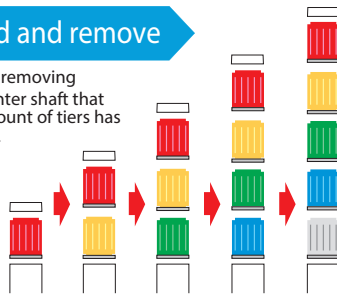
- All Clear Lenses: Distinctive color recognition when operated with clear lenses (B0738 type).
- Cable: Versatile and flexible 3m cable.



Optional MP-B Buzzer
(See Pg. 193)

Easy to add and remove

- When adding or removing modules, the center shaft that matches the amount of tiers has to be purchased.



Interchangeable LED Modules

Changeable color sequence: Easy to add/remove up to 5 colored modules even after installation.

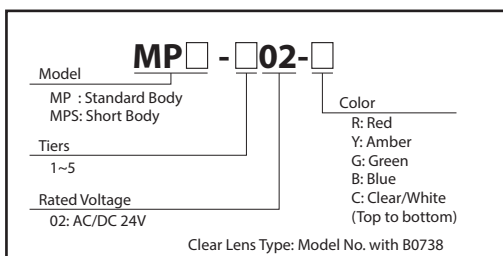
Note: LED modules of the same color within a signal tower will light up simultaneously.



Wiring doesn't change

- The LED Module colors correspond to the wiring, so re-wiring is not necessary.

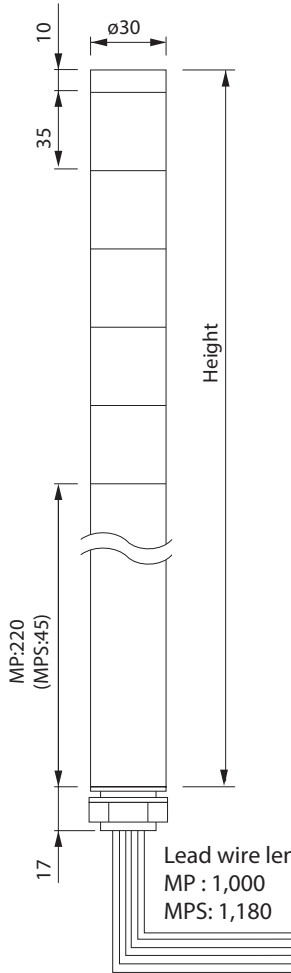
How to Order



Specifications

Stack Number	Model	Rated Voltage	Power Consumption	Mass	
				MP	MPS
1 Tier	MP/MPS-102	AC/DC 24V	0.7W	210g	110g
2 Tiers	MP/MPS-202		1.4W	230g	130g
3 Tiers	MP/MPS-302		2.0W	250g	150g
4 Tiers	MP/MPS-402		2.6W	270g	170g
5 Tiers	MP/MPS-502		3.2W	290g	190g

Dimensions (Unit: mm)

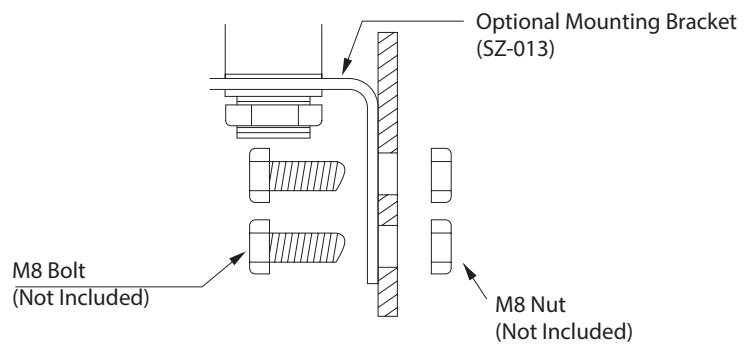
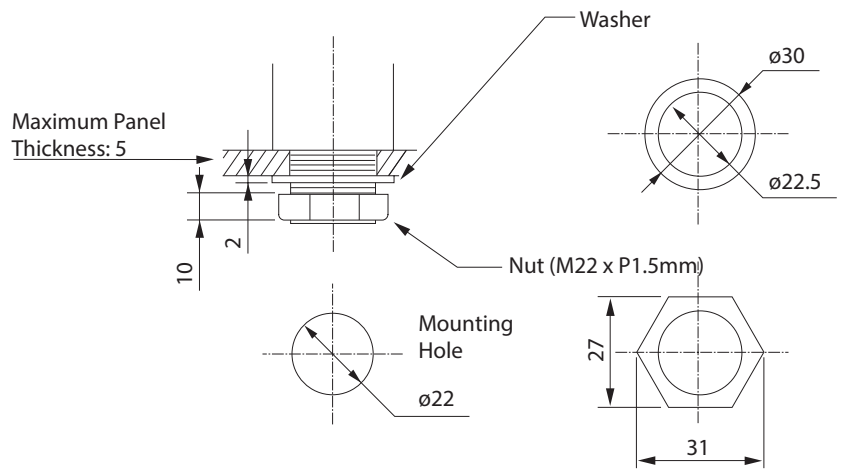


MP Type

Height
1 Tier : 265
2 Tiers : 300
3 Tiers : 335
4 Tiers : 370
5 Tiers : 405

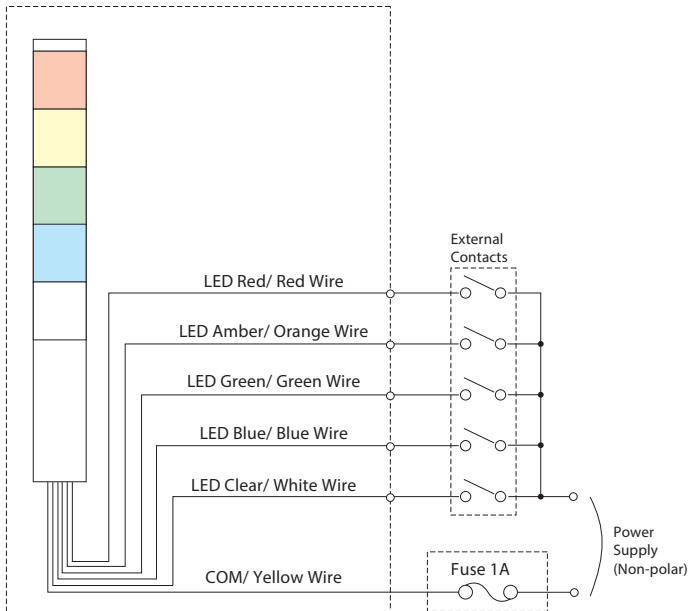
MPS Type

Height
1 Tier : 90
2 Tiers : 125
3 Tiers : 160
4 Tiers : 195
5 Tiers : 230

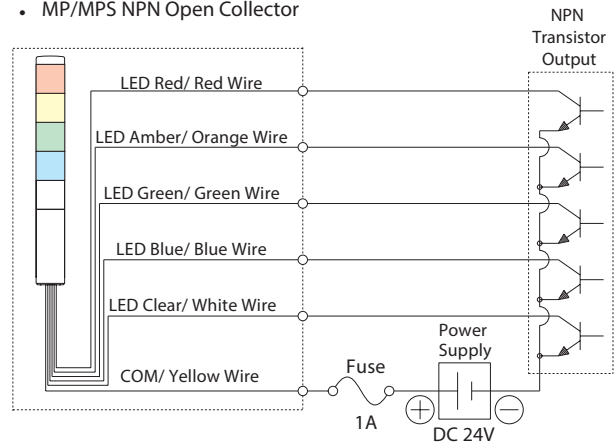


Wiring

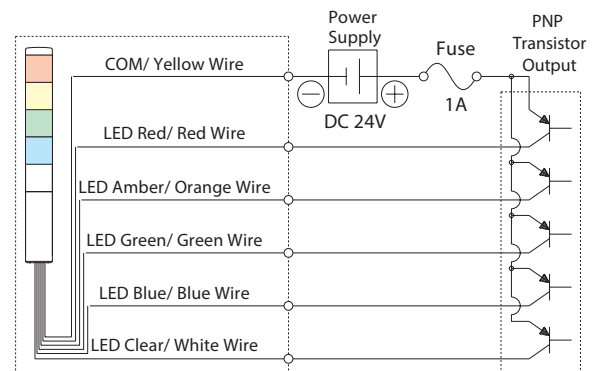
• MP/MPS Contact/ Switch



• MP/MPS NPN Open Collector



• MP/MPS PNP Open Collector



MP-C



Signal Tower



- LED
- IP65
- Ø30
- M12 Cable
- NPN/PNP
Open-collector

Super slim 30mm silver body Signal Tower with M12 disconnect.

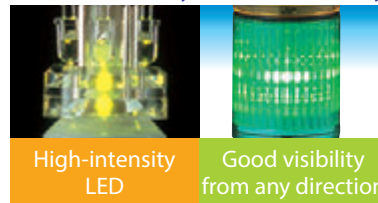
FEATURES

- Quick Disconnect M12 connector for the MP Signal Tower.
- PATLITE's exclusive hybrid prism-cut lens designed for enhanced visibility from any direction and distance.
- Double-insulated construction for enhanced durability and safety in the work environment.
- Direct mount installation with just a single hole.
- Interchangeable Modules need no re-wiring, even after installation.
- Main body is constructed of superior impact and heat resistant ABS resin.
- Lens is made of superior weather resistant and light translucent AS resin.
- Available in 1, 2 or 3 tier stacks with colors in Red, Amber and Green.
- Conforms to the CE requirements.
- UL Recognized Components (File No. E215660)



Optional MP-B Buzzer
(See Pg. 193)

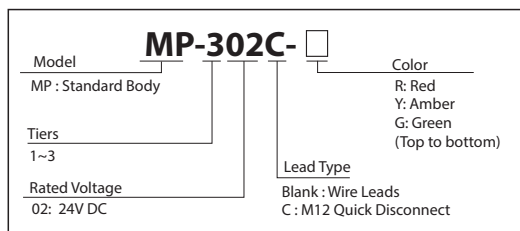
Patented reflection system increases visibility.



High-intensity LED

Good visibility from any direction

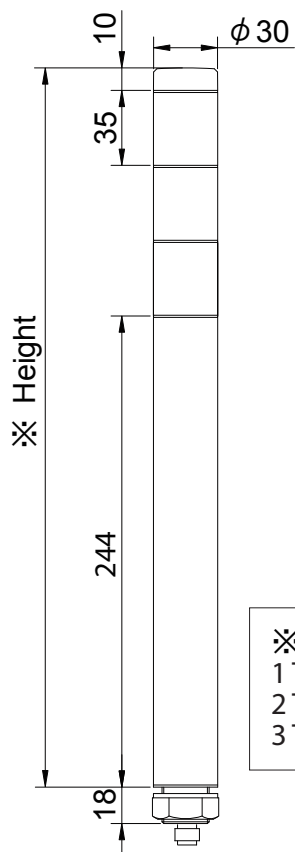
How to Order



Specifications

Stack Number	Model	Rated Voltage	Power Consumption	Mass
1 Tier	MP-102	DC 24V	0.7W	240g
2 Tiers	MP-202		1.4W	260g
3 Tiers	MP-302		2.0W	280g

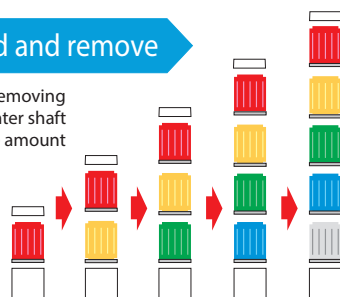
Dimensions (Unit: mm)



※ Height
 1 Tier : 289
 2 Tiers: 324
 3 Tiers: 359

Easy to add and remove

- When adding or removing modules, the center shaft that matches the amount of tiers has to be purchased.



Interchangeable LED Modules

- Changeable color sequence: Easy to add/ remove up to 5 colored modules even after installation.
- Note: LED modules of the same color within a signal tower will light up simultaneously.



Wiring doesn't change

- The LED Module colors correspond to the wiring, so re-wiring is not necessary.

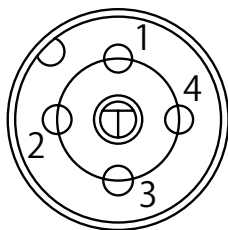
Wiring

External Contact Capacity		Is: Current Capacity		Vs: Withstand Voltage
LED Unit (1 Tier)	Current Consumption	Red: 29.mA	Amber: 29.5mA	Green: 23.9mA
	Capacity	Is≥50mA		Vs≥35V DC
Power Supply	Current Consumption	200mA		
	Capacity	Is≥200mA		Vs≥35V DC

- MP-C M12 Connector

M12 Connector Pin No.

Pin No.	LED Unit Color
1	Green
2	Red
3	Common
4	Amber



M12 Connector Pin Layout

LS7

Signal Tower



LED



2 Alarm Sounds (FB Type)

90dB at 1m (FB Type)

IP65 (B Type:IP54)

Ø70

NPN/PNP
Open-collector



Off-white Body without Buzzer



Dark Gray Body without Buzzer



Silver Body without Buzzer



Off-white Body with Buzzer



Dark Gray Body with Buzzer



Silver Body with Buzzer



New concept!
Smart & smooth signal light body which improves harmony with equipment.

How to Order

LED Signal Tower

LS7- ① 02 ② ③ ④ W ⑤ — ⑥

- ① No. of Lighting Units
3:3 Tiers
5:5 Tiers
- ② Body Color
No Mark:Off-white
D: Dark Gray
S: Silver
- ③ Lighting
No Mark:Illumination Only
F: Illumination·Flashing
- ④ Buzzer
No Mark: No Buzzer
B: Buzzer
- ⑤ Wiring
C:M12 Connector
H:Lead Wires[※]
- ⑥ LED Color
R:Red
Y:Yellow
G:Green
B:Blue
C:White
N:Blank

Ex.: LS7-302WC-RYGNN

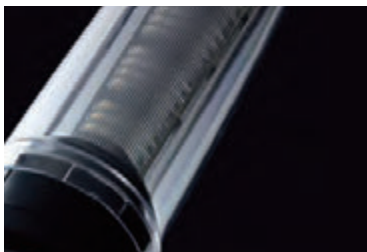
- Body Color...Off-white
- Buzzer...None
- LED Colors:Red, Yellow, Green, (Blank), (Blank)
- Lighting...Illumination
- Wiring...M12 Connector

- F type models with Illumination·Flashing are only available for Lead Wire and requires an H mark.
- C type models (M12 Connector Type) are only available with a continuous sound buzzer.

Specifications

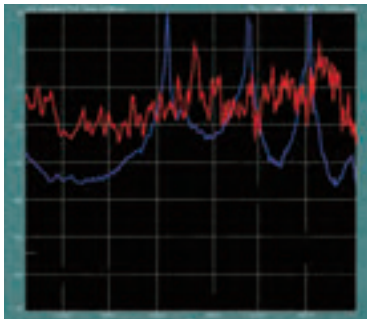
Model	Number of Lighting Units	Rated Voltage	Mounting	Rated Current Consumption	Maximum Rated Current	Maximum Sound Pressure	Operating Temperature Range	Protection Rating	Mass:			
									Lead-wire Type (H)		M12 Connector Type (C)	
									Illumination (No Mark)	Illumination/Flash/2 Alarms (FB)	Illumination (No Mark)	1 Alarm (B)
LS7-302	3 Tiers	DC 24V (±10%)	Direct (Indoors Only)	Red: 20mA	Red: 35mA	Buzzer1 ab. 82dB Lead-wire Type (Intermittent Beep1) M12 Connector type (Continuous Beep)	-30°Cto+60°C (Less than 85% RH)	Illumination Type: IP65* Buzzer Type: IP54	280g ±10%	370g ±10%	260g ±10%	320g ±10%
LS7-502	5 Tiers			Amber, Green, Blue, Clear/White 30mA	Amber, Green, Blue, Clear/White 40mA	Buzzer2 ab. 85dB Lead-wire Type (Intermittent Beep2) M12 Connector type (None)						

* IP67 available by special order




A smooth-surfaced body without any metal exposed

By changing the surface of the body into a smoother form, the adhesion of water and dust is reduced. Also, the structure does not have screws, shafts, etc., exposed, which gives comfort for applications in the lithium ion battery manufacturing and food processing industries. And, with the outer lens structure, the risk of environmental stress cracks due to oil mist is reduced. The lens cover is made of shock-resistant polycarbonate.

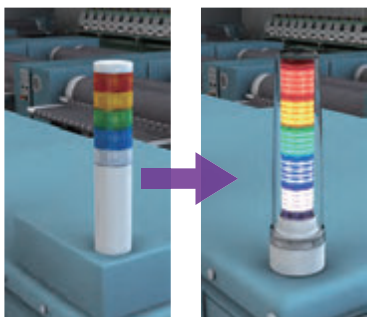


A sound heard throughout various environments

In addition to the existing lead wire, M12 connector quick disconnect is also available. Moreover, when moving to carry and to go out of the device, it is possible to detach it easily with the M12 connector.  Speaker Horn (Alarm Type)

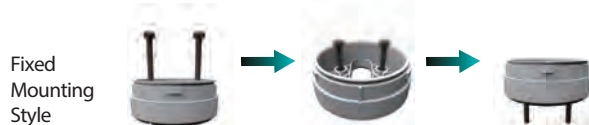
Frequency graph of a metal-working shop sound mixed with buzzer2 alarm. (Inter-corporate Measurement)

* Buzzer1 (H type or C type) is measured at 2000Hz.



Easy attachment, no need for Relay Box

In addition to the conventional three-bolt installation, a two-bolt installation from the upper mount has been added to help make a smoother installation. Therefore, by using the mount as a relay box, it reduces the manufacturing cost for an extra relay box, which used to be a necessity up until now.



M12 Connector Wiring & Tiered Construction

The stackable design and M12 connector quick disconnect (Cable Sold Separate) can drastically reduce labor and time. Moreover, the disconnection and reconnection of the body when removing it to relocate a machine has become smoother.

Stackable Construction 



High-contrast Visibility

With the adoption of an inner lens, the LED emits a more efficient light. Moreover, the contrast is increased when the Signal Tower lights up or flashes, with a distinguishable signal color which remarkably improves visibility.

Remarkable display in ANY environment

The LS7 has passed various tests for water resistance, dust, temperature, and variable vibration frequency tests, etc., so that it can endure various environments.

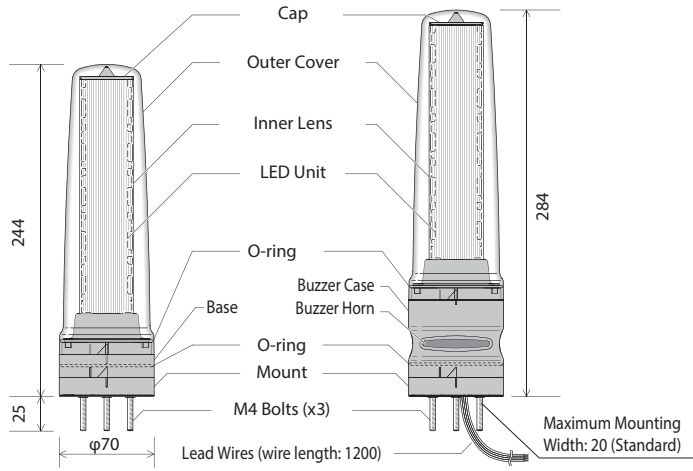


All-plastic Bracket

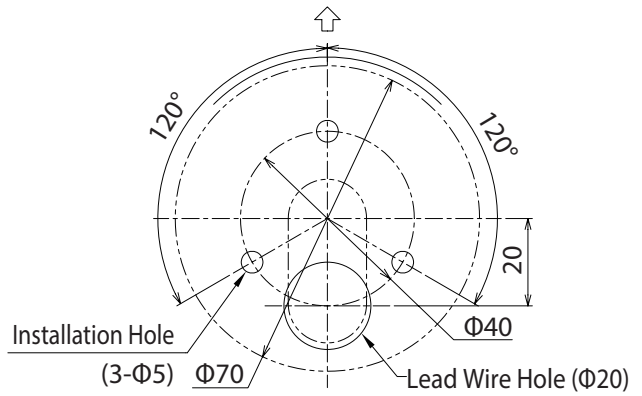
Like the body, the smooth-shaped platform bracket won't collect water or dust. Since no metal parts like screws and shafts are exposed, worries of food tampering can be put to rest in the food process lines.



Dimensions (Unit: mm)



Product Front (Buzzer Horn Direction)



Optional Parts

Like the body, the smooth-shaped platform bracket won't collect water or dust. Since no metal parts like screws and shafts are exposed, worries of food contamination can be put to rest in food processing.

Platform Bracket SZ-100



Wall Mounting Bracket SZ-110

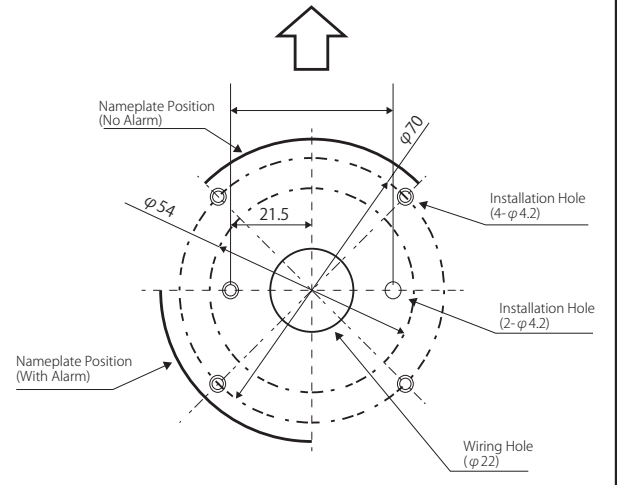


Multi-mount Bracket SZ-130



Multi-mount Bracket SZ-130 Installation Dimensions

Front (Audible Alarm Opening)



M12 Connector & Cable

Manufactured by the OMRON Corp.)

SZ-120-02 Cable Length 2 m (XS2F-D821-DH0-R)

SZ-120-05 Cable Length 5 m (XS2F-D821-GH0-R)

SZ-120-10 Cable Length 10m (XS2F-D821-JH0-R)

*Only for connecting to the LS7.

Replacement Parts



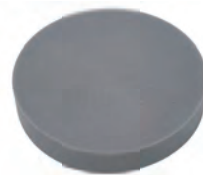
Outer Cover for LS7*

Material: Polycarbonate



O-ring for LS7

Material: Silicone

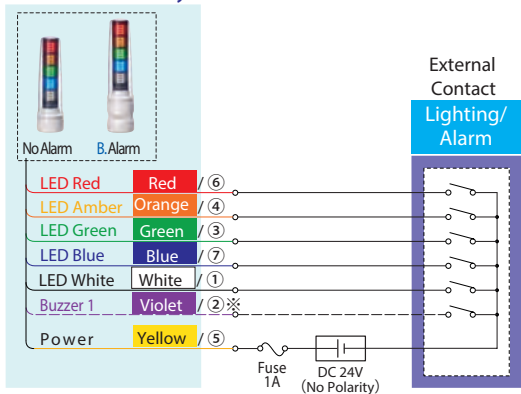


Mount Cover for LS7 (Accessory)

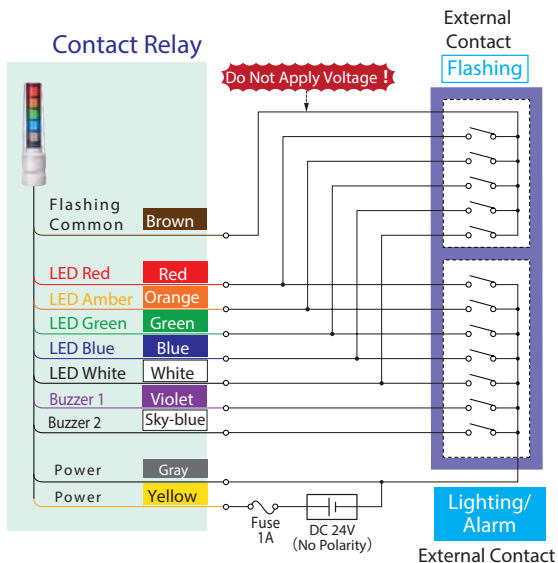
Material: Silicone



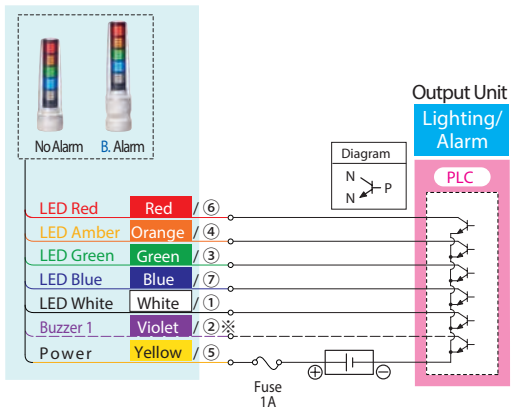
Contact Relay



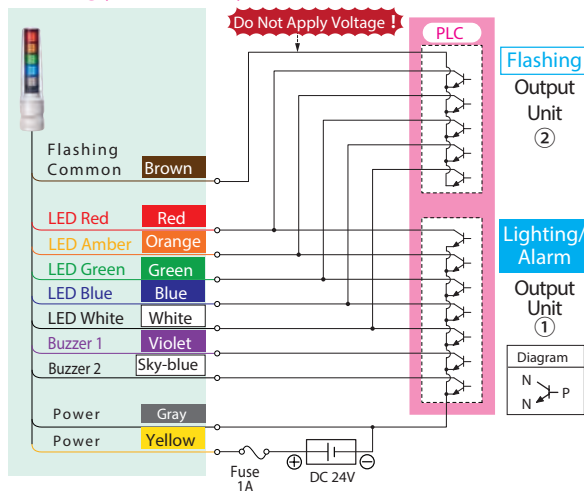
Contact Relay



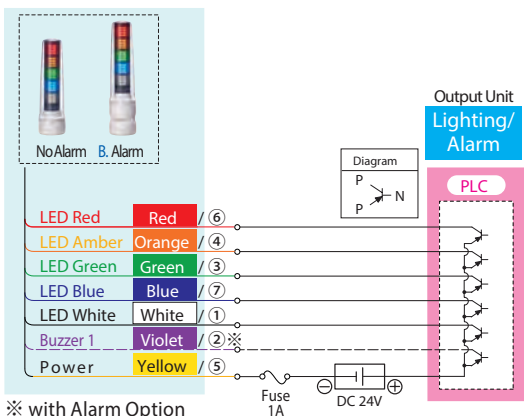
PLC (NPN Transistor)



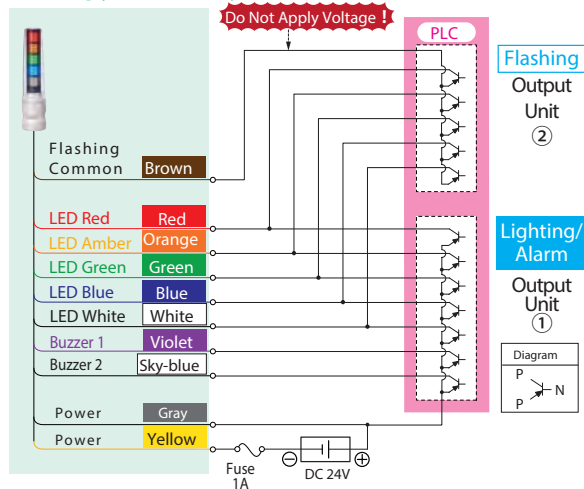
PLC (NPN Transistor)



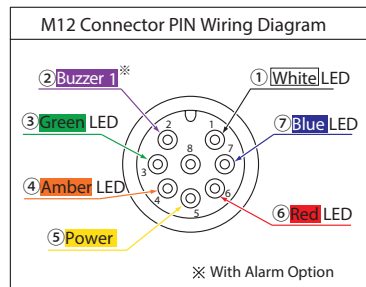
PLC (PNP Transistor)



PLC (PNP Transistor)



※ with Alarm Option



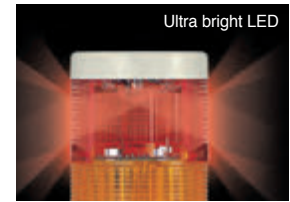
Note: When connecting the PLC outputs for illumination and flashing functions, the wiring (Common Wires) has to be separate between the flashing and non-flashing circuits.

PATLITE's LU5 & LU7 Series signal towers deliver the advantages of superior LED technology, innovative design, and the convenience of modular assembly with only 9 basic modular components to meet just about every indicating need.



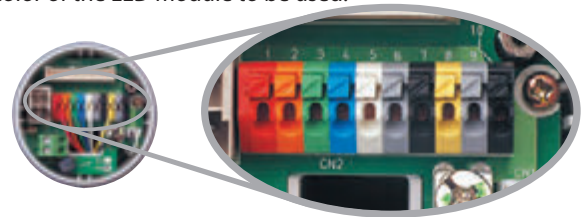
Ultra Bright LEDs combined with an Innovative Prism Lens Design

Allows the light emitted from the signal tower to be seen from greater distances. This also allows for use of a smaller diameter light, reducing the cost of the light tower.



Color-coordinated & Spring-loaded Terminal Block

Makes wiring easy and more reliable compared to screw-type connections. Each color corresponds to the color of the LED module to be used.



Wiring Terminals

Two user-selectable Alarms Integrated in the Base Module

Allows sound to enhance the critical nature of a visual signal, bringing more attention to certain conditions. Also, since the modules are built into the base, up to 5 LED modules can be used on the light tower.



Delivers Sounds up to 90dB (at 1 m)

Alarm can be easily heard over ambient noise.

Modular Design

Makes it easy to configure and assemble a light tower. Modules can be put away before shipping the machine, reducing shipping and crate costs.



Modular Construction

O-rings

Seal out liquids so that the tower achieves an IP65 rating allowing the tower to be used in wet conditions.



IP65 Protection

IP65 & IP66 with Optional Cable Gland

The O-rings seal the tower from liquids so that an IP65 rating can be achieved to allow the tower to be used in wet environments. Adding a Cable Gland (user supplied) the tower's IP rating is increased to IP66.





- LED**
- 1 Alarm Sound** (FB Type)
- 85dB** at 1m
- IP54**
- Ø100**
- NPN/PNP**
Open-collector

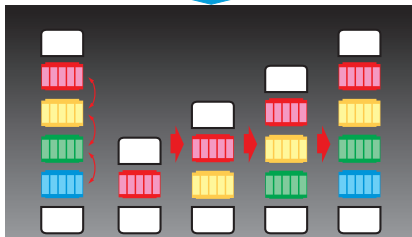
Large Signal Tower featuring enhanced visibility and downward illumination, designed for large machines.

Triple Reflection System



PATLITE's triple-reflection system creates an even brighter and distinctive illumination with its exclusive hybrid prism-cut lens for 5 color LED module variations.

Interchangeable LED Modules



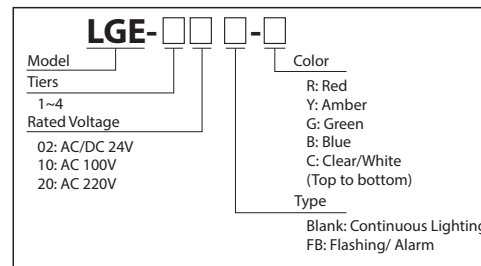
LED Tiers are changeable, even after installation.

Note: Shafts that match the number of tiers also has to be purchased.

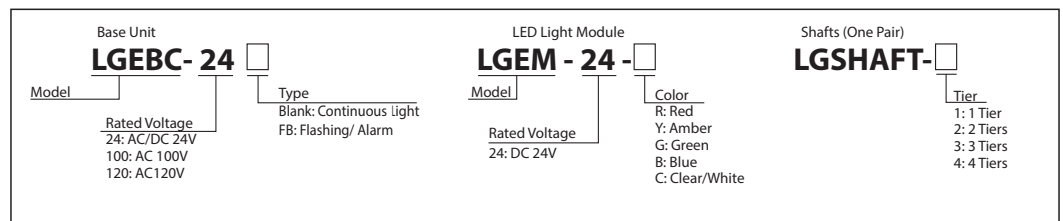
FEATURES

- PATLITE's large prism cut lens to enhance illumination in the downward direction. (Lens Size: ϕ 100mm x 60mm high)
- The FB type offers a flashing and continuous lighting pattern.
- A built-in buzzer (FB type) has a sound of up to 85dB (at 1m).
- Direct mount Installation.
- Interchangeable Modules need no re-wiring, even after installation.
- Lens is made of superior impact and heat resistant polycarbonate resin for superior durability and illumination.
- Both NPN and PNP compatible for the DC24V type; NPN compatible with the AC 100/220V type only.
- Available Colors are in Red, Amber, Green, Blue, and Clear/White.
- Has the CE mark and conforms to the requirements for the EC directive. (for 24V type)

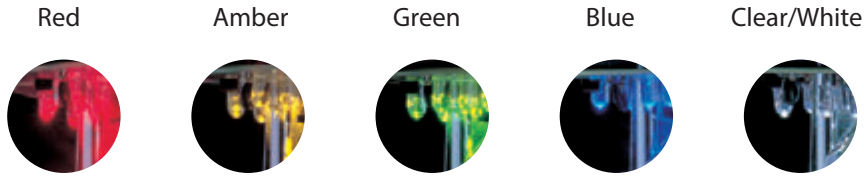
How to Order (Pre-assembled)



How to Order (Module)



5 "Super Bright" LED Colors to choose from!



Specifications (Pre-assembled)

(No Alarm)				
Light System	Model	Rated Voltage	Power Consumption	Mass
1 Tier	LGE-102	AC/DC 24V	2.0W	0.4kg
	LGE-110	AC 100V	5.2W	1.0kg
	LGE-120	AC 220V		
2 Tiers	LGE-202	AC/DC 24V	4.0W	0.6kg
	LGE-210	AC 100V	7.7W	1.2kg
	LGE-220	AC 220V		
3 Tiers	LGE-302	AC/DC 24V	6.0W	0.8kg
	LGE-310	AC 100V	10.2W	1.4kg
	LGE-320	AC 220V		
4 Tiers	LGE-402	AC/DC 24V	8.0W	0.9kg
	LGE-410	AC 100V	12.7W	1.5kg
	LGE-420	AC 220V		

Alarm Type (Intermittent Rate: ab. 60 beeps per min)				
Light System	Model	Rated Voltage	Power Consumption	Mass
1 Tier	LGE-102FB	AC/DC 24V	2.5W	0.4kg
	LGE-110FB	AC 100V	5.7W	1.0kg
	LGE-120FB	AC 220V		
2 Tiers	LGE-202FB	AC/DC 24V	4.5W	0.6kg
	LGE-210FB	AC 100V	8.2W	1.2kg
	LGE-220FB	AC 220V		
3 Tiers	LGE-302FB	AC/DC 24V	6.5W	0.8kg
	LGE-310FB	AC 100V	10.7W	1.4kg
	LGE-320FB	AC 220V		
4 Tiers	LGE-402FB	AC/DC 24V	8.5W	0.9kg
	LGE-410FB	AC 100V	13.2W	1.5kg
	LGE-420FB	AC 220V		

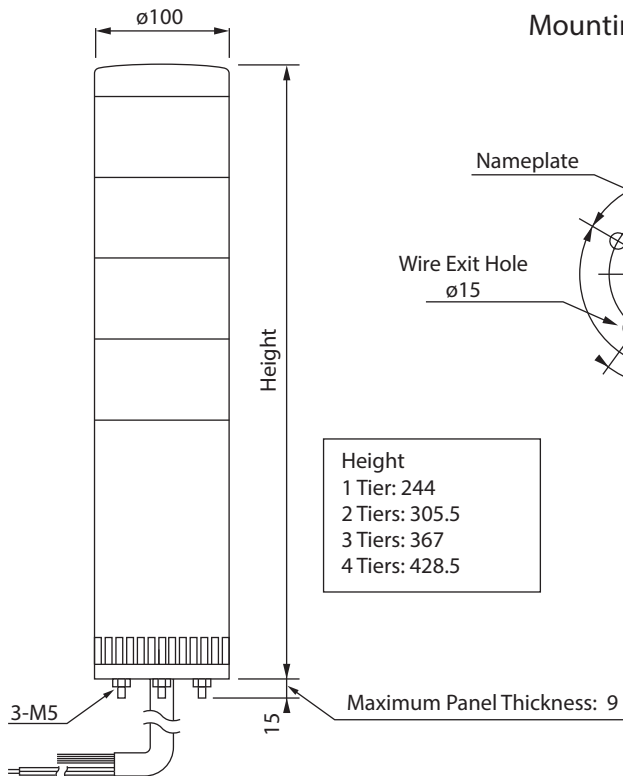
Specifications (Modules)

Light Unit	Color	Rated Voltage	Power Consumption
LGEM24-R	RED	AC/DC 24V	2.0W
LGEM24-Y	AMBER		
LGEM24-G	GREEN		
LGEM24-B	BLUE		
LGEM24-C	CLEAR		

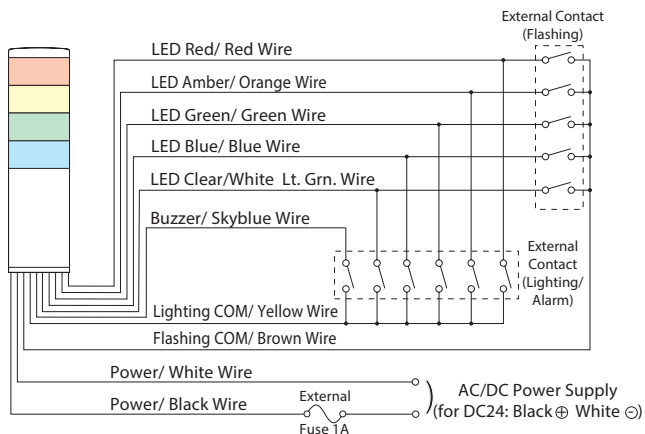
Power Unit	Rated Voltage	Operation
LGEBC-100	AC 100V	Continuous
LGEBC-120	AC 120V	
LGEBC-24	AC/DC 24V	
LGEBC-100FB	AC 100V	Continuous/ Flashing/Alarm
LGEBC-120FB	AC 120V	
LGEBC-24FB	AC/DC 24V	

Part No.	Light Units per Base
LGSHAFT-1	1
LGSHAFT-2	2
LGSHAFT-3	3
LGSHAFT-3	3
LGSHAFT-4	4

Dimensions (Unit: mm)



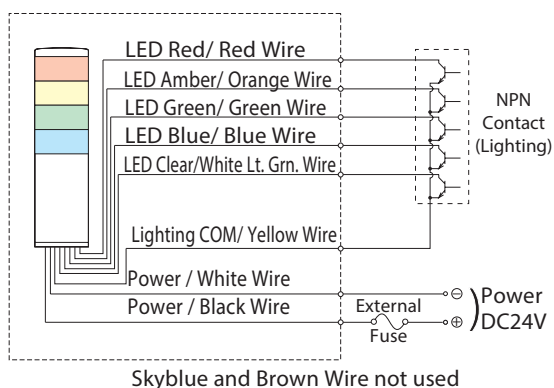
AC/DC 24V Lighting/Flashing Type



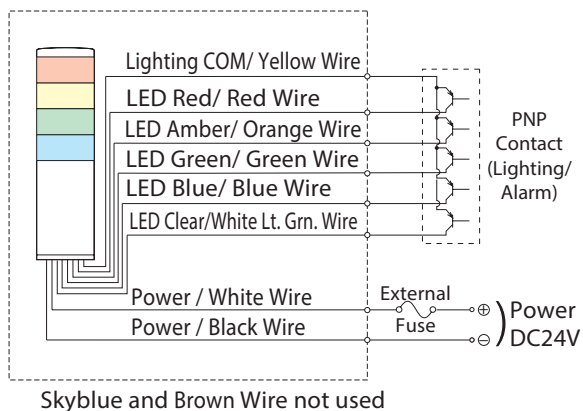
Signal Line voltage and current per LED Module

Model	Rated Voltage	Signal Line Voltage	LED		
			Signal Line Current	Alarm Signal Line Current	Inrush Current
LGE-A	AC/DC 24V	AC/DC 24V	90mA	20mA	250mA
LGE-A	AC 100	DC 24V			
LGE-A	AC 220V				

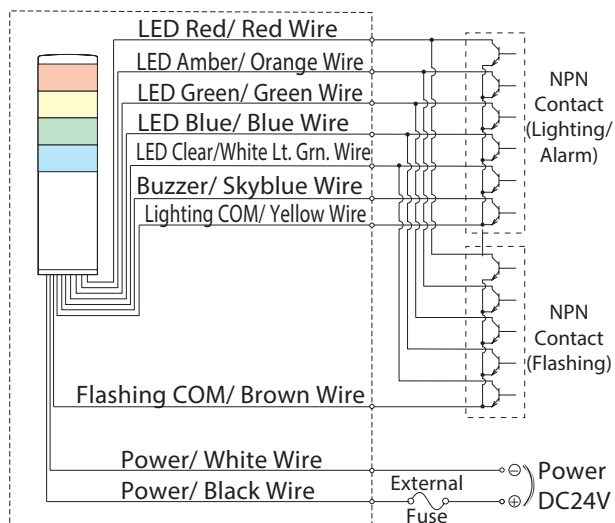
DC 24V NPN Type



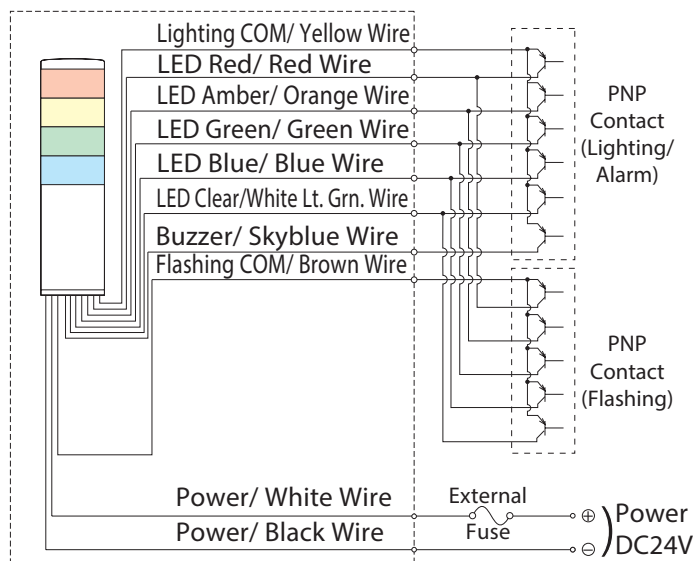
DC 24V PNP Type



DC 24V NPN FB Type



DC 24V PNP FB Type



WE/WEP

Signal Tower



LED



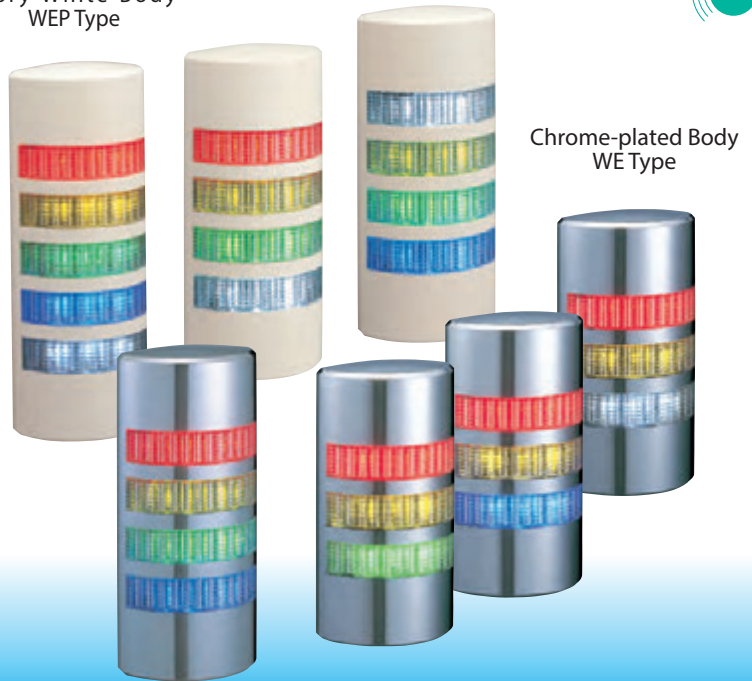
2 Alarm Sounds (FB Type)

90dB at 1m (FB Type)

IP65 (FB Type: IP54)

NPN/PNP
Open-collector

Ivory White Body
WEP Type



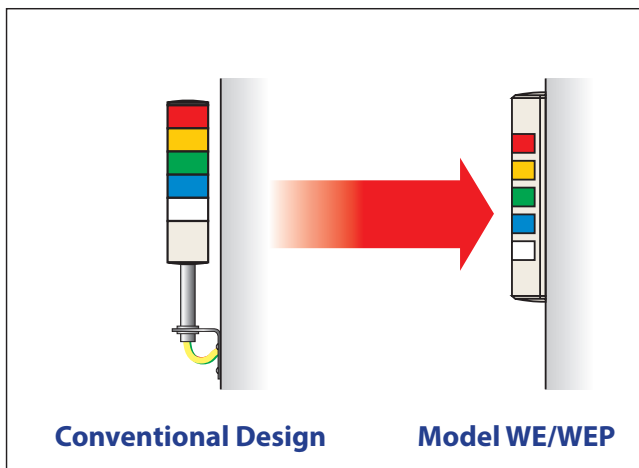
Chrome-plated Body
WE Type

Ultra slim half-moon shaped Signal Tower offers seamless integration with most equipment.

FEATURES

- Clear vertical-cut lens for enhanced illumination over a wide perspective.
- Has an optional built-in audible alarm (FB type) with an output of 90dB (at 1m).
- Installation can be vertical or horizontal.
- Two body color selections of chrome plated or ivory white.
- Lens made of superior impact and heat resistant polycarbonate resin for superior durability and enhanced illumination.
- Both NPN and PNP Compatible for direct connection to a PLC (24V DC ONLY)
- Two lighting patterns of flashing and continuous lighting.
- Dust and water resistance rating of IP65 (except for FB type: IP54).
- Available colors are in Red, Amber, Green, Blue, and Clear/White.
- Has the CE mark and conforms to the requirements for the EC directive.
- Is a UL Recognized Component (File No. E215660).

37.5mm Super-thin Design!

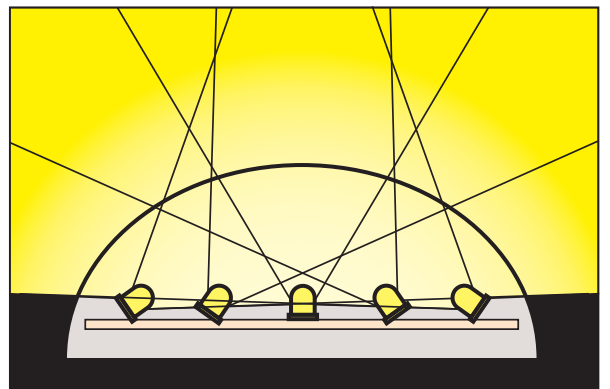


Conventional Design

Model WE/WEP

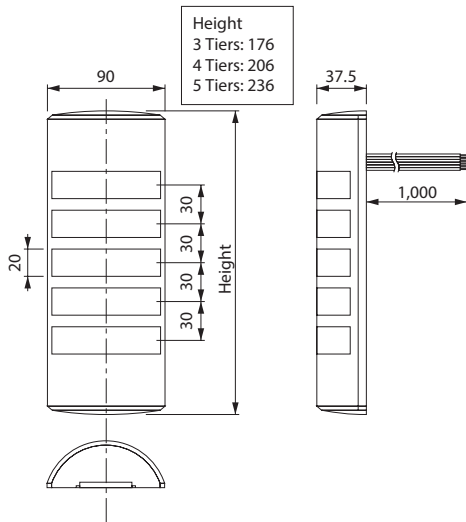
Patlite has perfected a 37.5mm-thin design that significantly enhances integration with the equipment as a built-in signal system.

Exclusively New LED Lighting Design

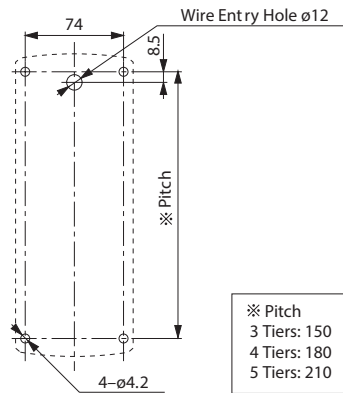


Patlite has created a revolutionary patented lighting design in which multiple LEDs project light across a broad peripheral area, ensuring equal intensity at the sides as well as the front. This design, with its side-projection technology, is a unique achievement in signal light design.

Dimensions (Unit: mm)

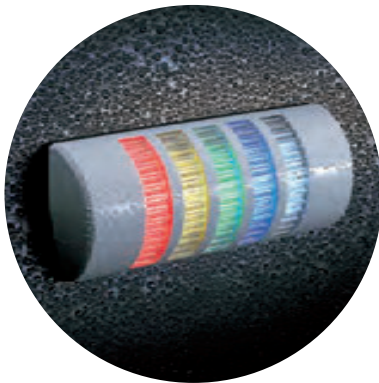
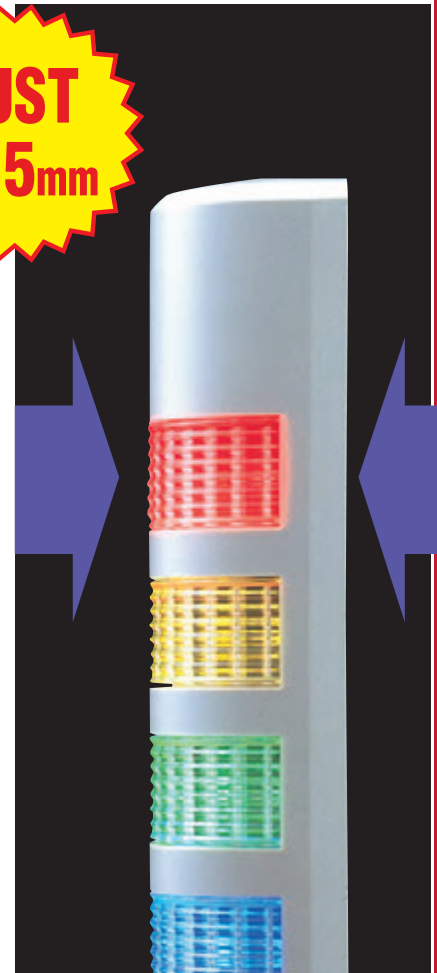


Mounting Dimensions



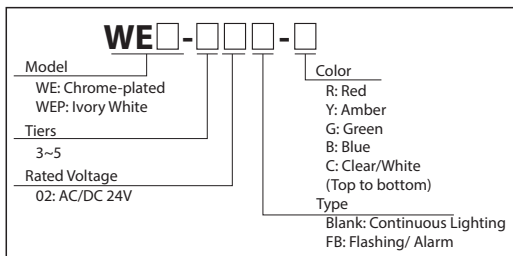
※ Pitch
3 Tiers: 150
4 Tiers: 180
5 Tiers: 210

JUST 37.5mm



IP65 construction is safe for installation in damp locations and dusty factory environments.

How to Order



Specifications

Stack Number	Model	Rated Voltage	Power Consumption	Mass
3 Tiers	WE(P)-302	AC/DC 24V	1.7W	260g
	WE(P)-302FB		2.7W	300g
4 Tiers	WE(P)-402		2.0W	310g
	WE(P)-402FB		3.2W	350g
5 Tiers	WE(P)-502		2.7W	310g
	WE(P)-502FB		3.7W	350g

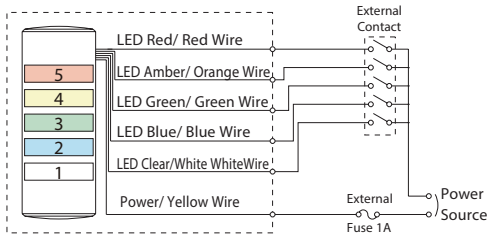
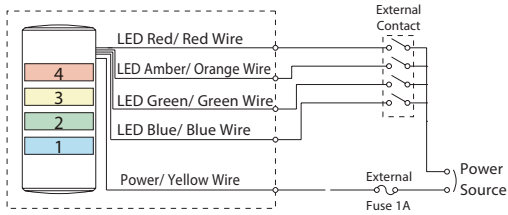
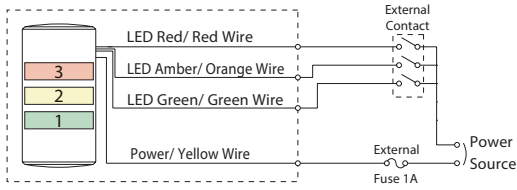
Alarm Sounds	Lead Wire Color
Buzzer 1	Purple
Buzzer 2	Skyblue

Signal Line voltage and current per LED Module

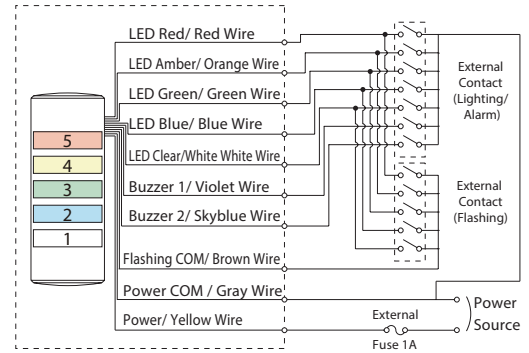
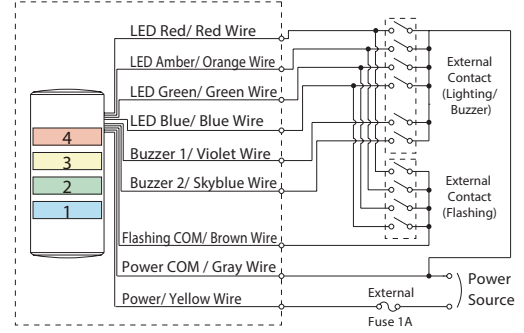
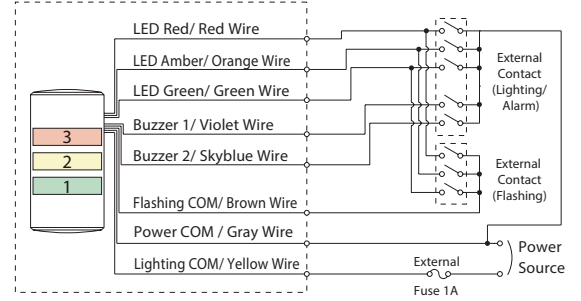
Model	Rated Voltage	Signal Line Voltage	LED		Alarm	
			Signal Line Current		Signal Line Current	Inrush Current
			R, Y	G, B, C		
WE/WEP	AC/DC 24V	AC/DC 24V	30mA	25mA	40mA	250mA

Wiring

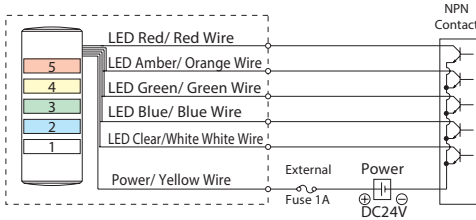
AC/DC 24V Lighting Type



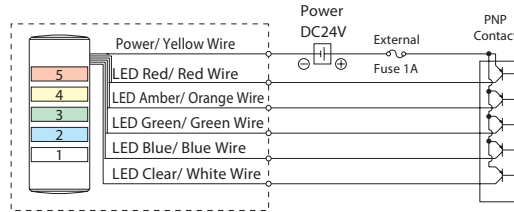
AC/DC 24V Lighting/Flashing Type



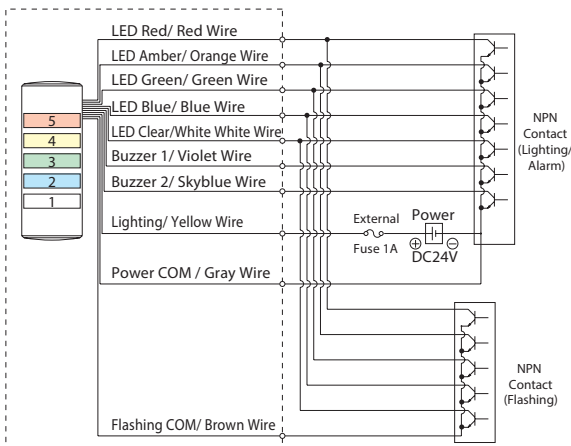
DC 24V NPN Type



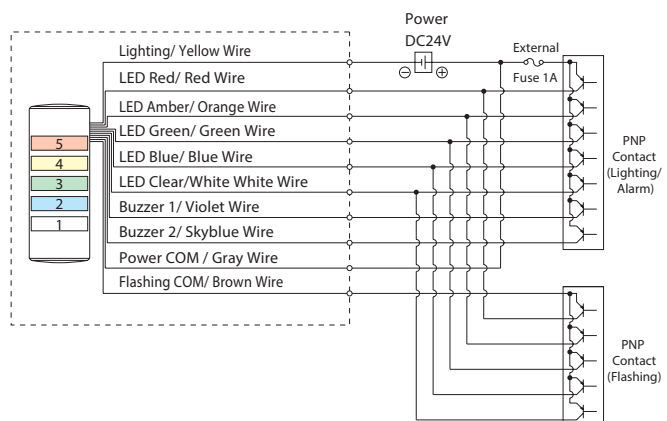
DC 24V PNP Type



DC 24V NPN FB Type



DC 24V PNP FB Type





WME-A

WME-A

Signal Tower



- LED
- 2 Alarm Sounds (FB Type)
- 90dB at 1m
- IP65 (FB Type:IP54)
- W70 D80
- NPN/PNP Open-collector

Exclusive wall-mount design saves space and enhances its integral appearance.

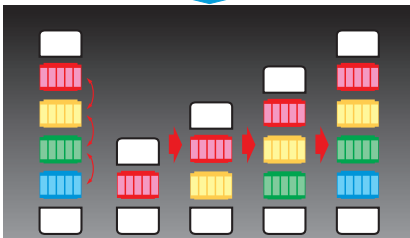
Interchangeable LED Modules

FEATURES

- Built-in audible alarm (FB type)
- Volume output of up to 90dB (at 1m).
- Easy vertical or horizontal installation when used with mounting brackets.
- Interchangeable Modules need no re-wiring, even after installation.
- Install as an option with a compatible household switch box (JISC 8336 with 82.5m pitch).
- Main body is made of ABS resin.
- Lens is made with superior impact and heat resistant polycarbonate resin for superior durability and illumination.
- Compatible for use with NPN or PNP controlled inputs (24V DC type ONLY).
- Available Colors are in Red, Amber, Green, Blue, and Clear/White.
- Has the CE mark and conforms to the requirements for the EC directive.
- Is a UL Recognized Component (File No. E215660).

AVAILABLE BY SPECIAL ORDER

- 1 Tier Type
- Individual module control for single color



LED Tiers are changeable, even after installation.

Note: Shafts that match the number of tiers also has to be purchased.

5 "Super Bright" LED Colors to choose from!

Red



Amber



Green



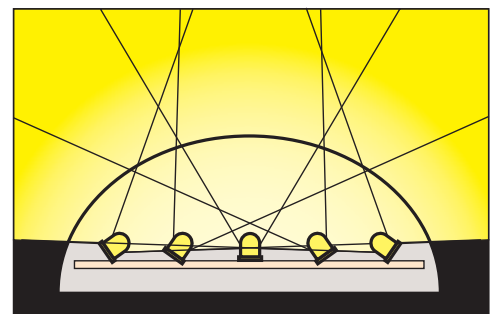
Blue



Clear/White

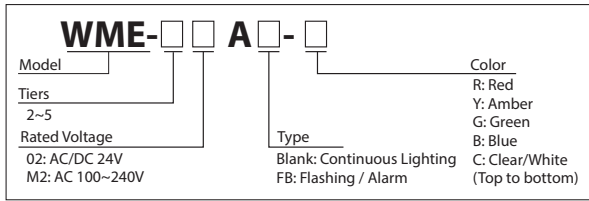


Exclusively New LED Lighting Design



Patlite has created a revolutionary patented lighting design in which multiple LEDs project light across a broad peripheral area, ensuring equal intensity at the sides as well as the front. This design, with its side-projection light technology, is a unique achievement in signal light design.

How to Order



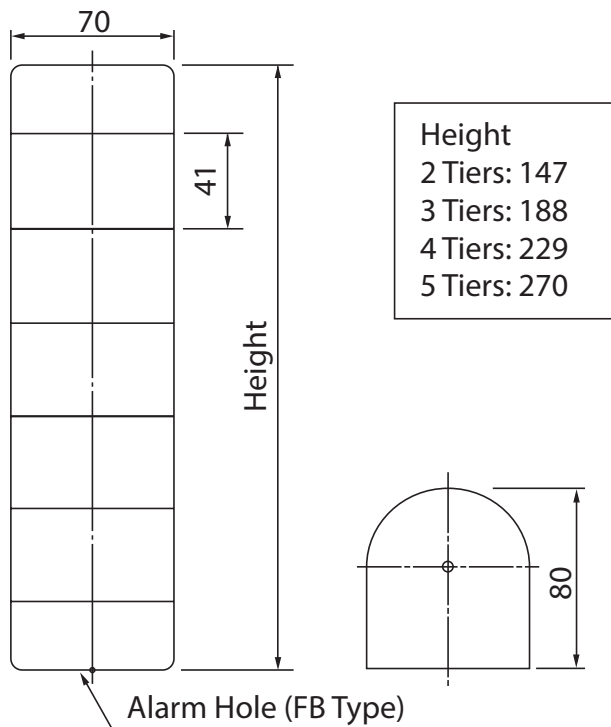
Specifications

Stack Number	Model	Rated Voltage	Power Consumption	Mass
2 Tiers	WME-202A	AC/DC 24V	2.7W	390g
	WME-2M2A	AC 100 - 240V	4.6W	460g
3 Tiers	WME-302A	AC/DC 24V	3.3W	470g
	WME-3M2A	AC 100 - 240V	6.0W	540kg
4 Tiers	WME-402A	AC/DC 24V	4.4W	550g
	WME-4M2A	AC 100 - 240V	8.0W	620g
5 Tiers	WME-502A	AC/DC 24V	5.5W	630g
	WME-5M2A	AC 100 - 240V	10.0W	700g

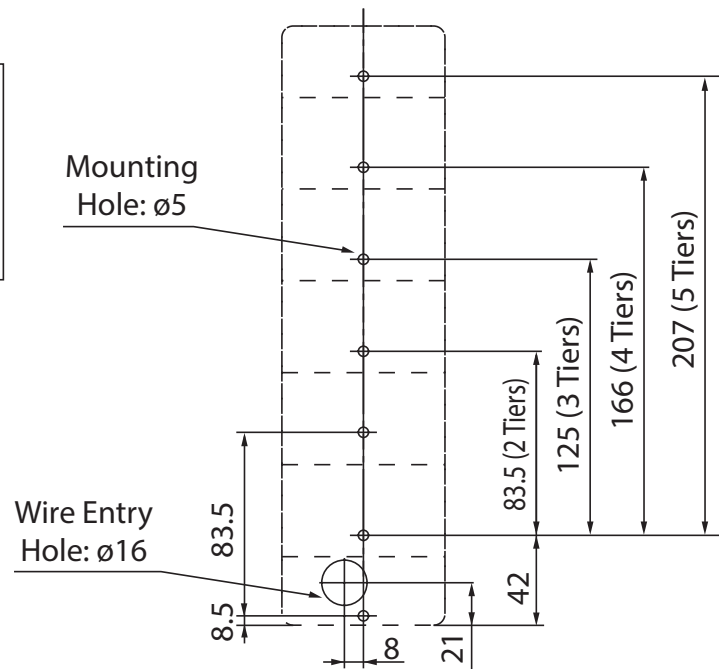
Signal Line voltage and current per LED Module

Model	Rated Voltage	Signal Line Voltage	LED		Alarm	
			Signal Line Current		Signal Line Current	Inrush Current
			R, Y	G, B, C		
WME-A	AC/DC 24V	AC/DC 24V	35mA	50mA	40mA	250mA
	AC 100V - 240V	DC 24V				

Dimensions (Unit: mm)

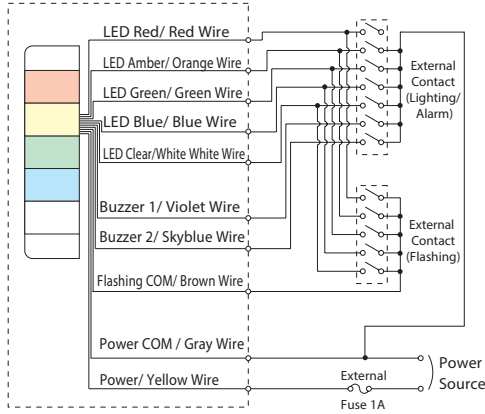


Mounting Dimensions

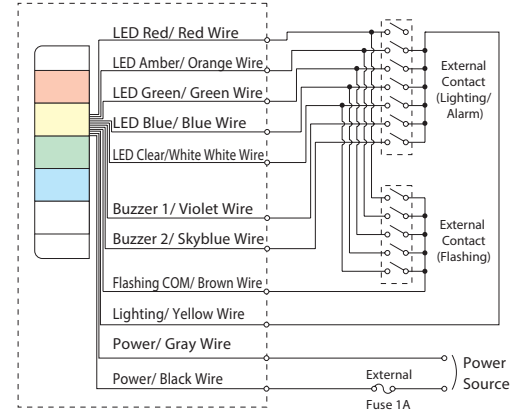


- The LED Colors are stackable, even after installation. However, the applicable Center Shaft and backplate needs to be purchased.
- Install with the alarm in the downward direction in order to preserve the IP54 rating.

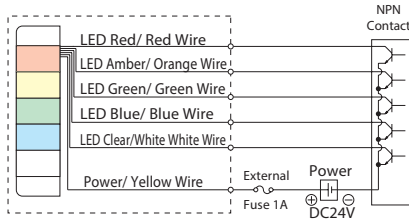
AC/DC 24V Lighting/Flashing Type



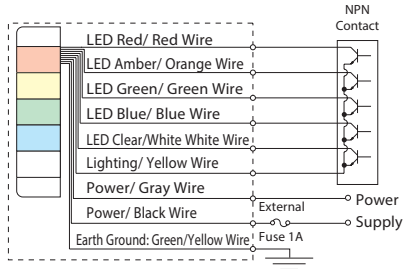
AC Power Lighting/Flashing Type



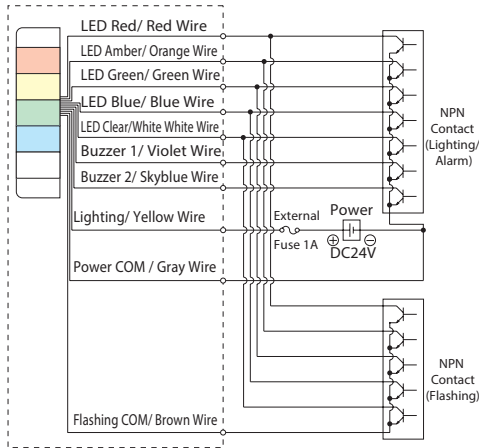
DC 24V NPN Type



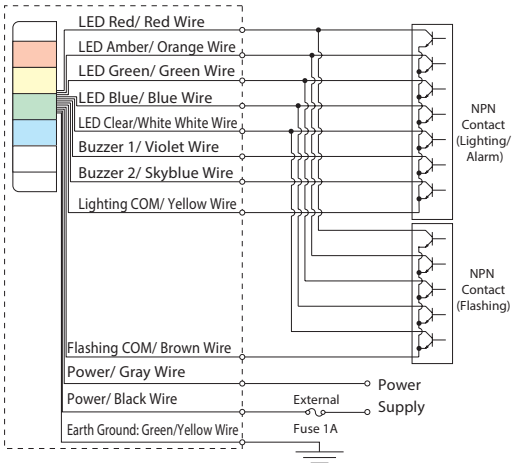
AC Power NPN Type



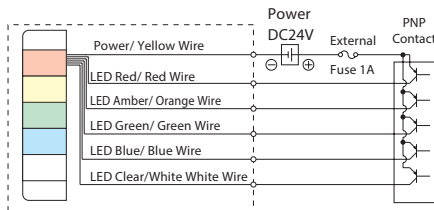
DC 24V NPN FB Type



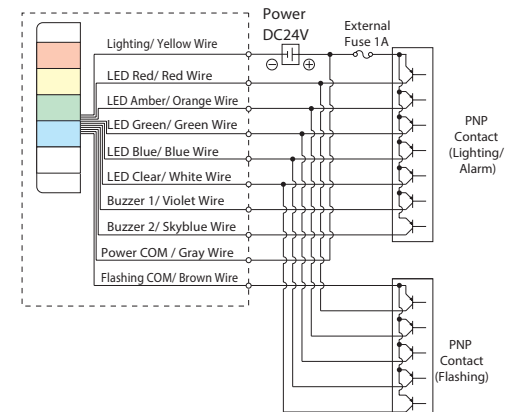
AC Power NPN FB Type



DC 24V PNP Type



DC 24V PNP FB Type



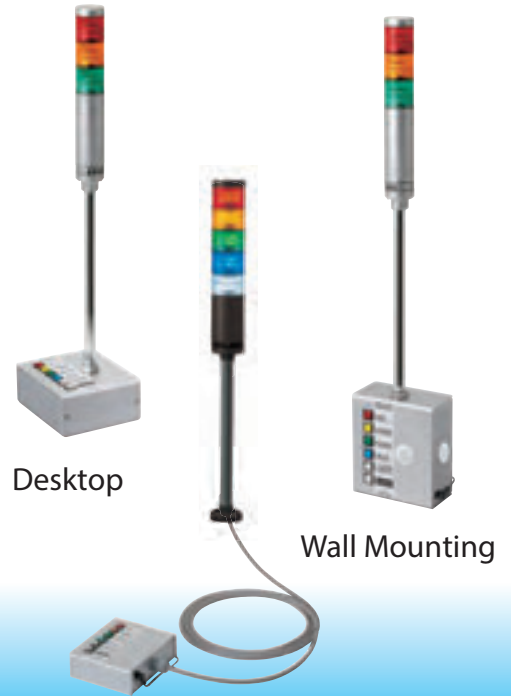
WSST

Manual Control Box

Terminal



WSST Manual Control Box



Desktop

Wall Mounting

Signal Towers, Cables and poles sold separately

PATLITE's WSST Control Box offers excellent all-in-one functionality to meet the growing needs of the manufacturing sector and beyond.

APPLICATIONS

- Workstations and work cells
- Real-time line status indication for managers and line supervisors
- Lean manufacturing, safety and security applications
- Manual assembly operations
- Retail check-out stations
- Call centers

FEATURES

- Universal manual control box for PATLITE LED Signal Towers.
- Sturdy metal construction with 6 color-coordinated push buttons.
- Recommended Signal Towers to choose from are ME; MES; LCE; LE; LES; LME-L; and SZ-60L & SZ-50L Pole Kits
- Install up to 5 Tiers (Red, Amber, Green, Blue and Clear/White).
- Add optional sound alarm or flash functionality (must purchase FB type Signal Towers).
- Various mounting methods include Wall or Desktop installations or as Remote. Recommended Signal Towers for Remote applications (10 ft. cable included) are the LCE-U (with "L" bracket) or LME-U (with flange-mount bracket) Signal Towers.
- Power Supply is included (WSST-KIT).

How to Order

WSST-KIT

Package Description

- KIT: Complete Kit includes
- Control Box
 - Cable Gland
 - 16mm Plug (1pc)
 - 22mm Plug (2 pcs)
 - Instruction Manual
 - Power Supply

CB: Complete Kit (excluding Power Supply)

PS: Power Supply Only

Specifications

Rated Voltage	Operating Voltage	Operating Temperature Range	Mounting Location	Mass (±10%)
DC 24V (Non-polar)	DC 21.6 -26.4V	0°C - +40°C (RH less than 90%)	Indoor Only	1,11kg (Switch Box)

HSST

Manual Indicating Light



Complete HSST-312 Kit



Control Box



12 in.
Mounting Pole
& Bracket



LED

The HSST includes a 3-tiered LED Signal Tower kit as a low- cost complete turn-key solution for manual assembly factories where lean manufacturing practices are dependent upon the overall operation efficiency.

APPLICATIONS

- Assembly workstations
- Safety and security applications
- Call centers
- Retail check stands
- Hospitals
- Airports

FEATURES

- Complete kit includes a 50mm diameter red, amber, green 3-tier LED Signal Tower with 4-foot Cable, poles, three-button control box, AC power adaptor and mounting brackets that can fit onto standard cubicle partitions.
- AC power adaptor (UL Listed) rated at 120VAC with 6 ft. cable length is included to allow easy set-up in any location.
- LED light illumination offers maintenance-free operation.
- Optional Extention Cable (Part No. DT-HSST-10) available in 10 ft. segments.
- Mounting screws included with the three-button control box.
- Choice of 3 in. (80mm) or 12 in. (300mm) pole included in set.

How to Order

HSST-312

Package Description

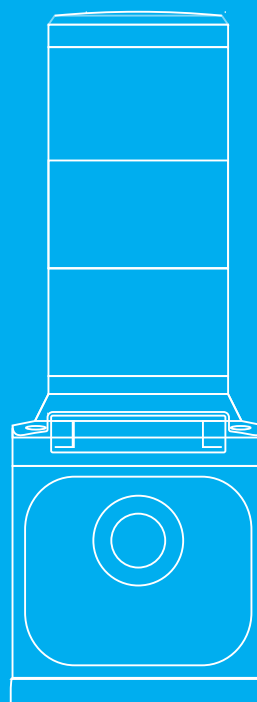
- 312: Complete Kit including
- 3 button Control Box
 - Control Box mounting screws
 - 3 tiered Signal Tower (Red, Amber, Green)
 - AC 120V Power Adaptor
 - 4 ft. cable for Signal Tower
 - 3" Pole (80mm)
 - 12" Pole (300mm)
 - Pole Mounting Brackets
 - Instruction Manual

Specifications

Model	Rated Voltage	Tiers	Power Supply
HSST-312	DC 24V	3 Tiers (R,Y,G)	AC120V / DC24V (Center Negative)



Hybrid Products



LKEH



MP3 Voice Annunciator & LED Signal Tower



LED



32 Alarm Sounds

105dB at 1m

IP53

(LED) Ø100

NPN
Open-collector



Get the attention you need with the PATLITE field-programmable LKEH Series Hybrid Signal Tower with audible alarm.

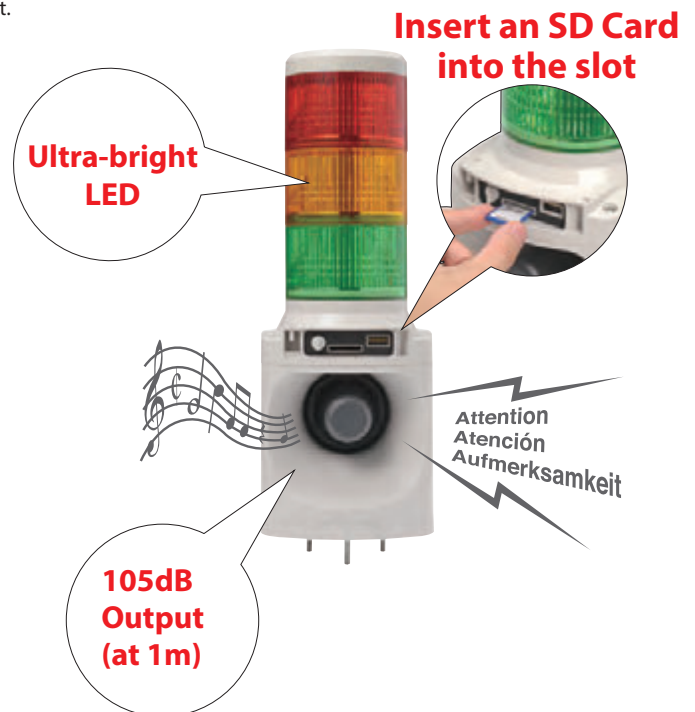
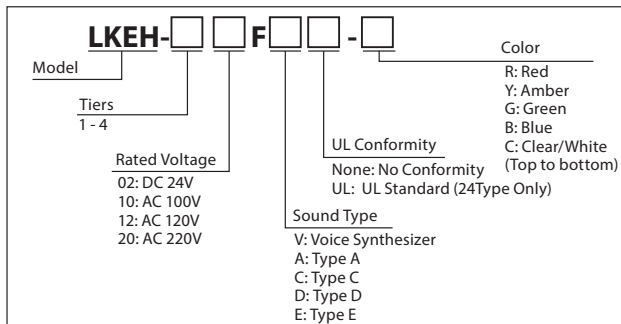
FEATURES

- The pre-recorded type offers 32 sounds in one unit with 8 bit input and 32 binary input channel capability.
- The message capacity for the LKEH-FV is 63 seconds (64kbit/s) with 5 bit input and 31 binary input channel capability.
- The LKEH-FV is field-programmable with an SD Card (sold separately).
- Visible from great distance with ultra-bright LEDs and 100 diameter lens.
- A 2G vibration resistant design allows safe use in a high-vibration environment.
- One common wire makes it easy to control both the audio and LED inputs.
- Volume is adjustable from 0 to 105dB (at 1m) to fit various environments.
- Compliance with the RoHS Directives makes it environmentally friendly.
- Complies with EU directives and includes the CE mark (for 24V type).

AVAILABLE BY SPECIAL ORDER

- PNP open collector transistor type.
- AC 120V type
- UL Listed (File No. E215660, for 24V type only).

How to Order



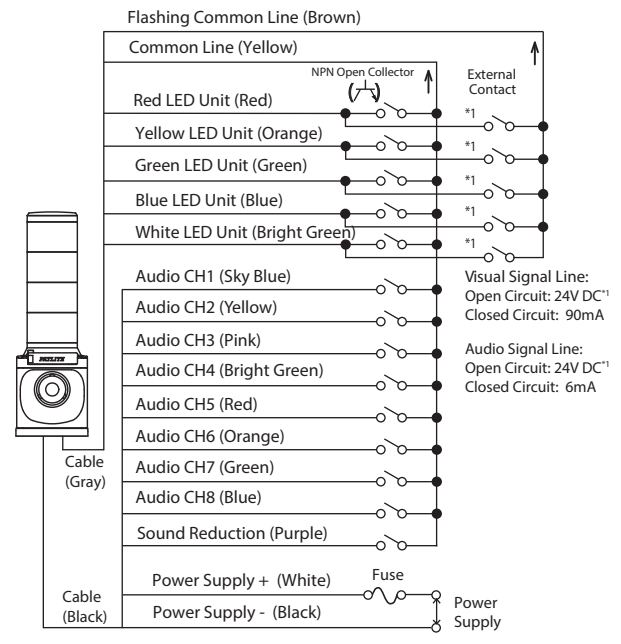
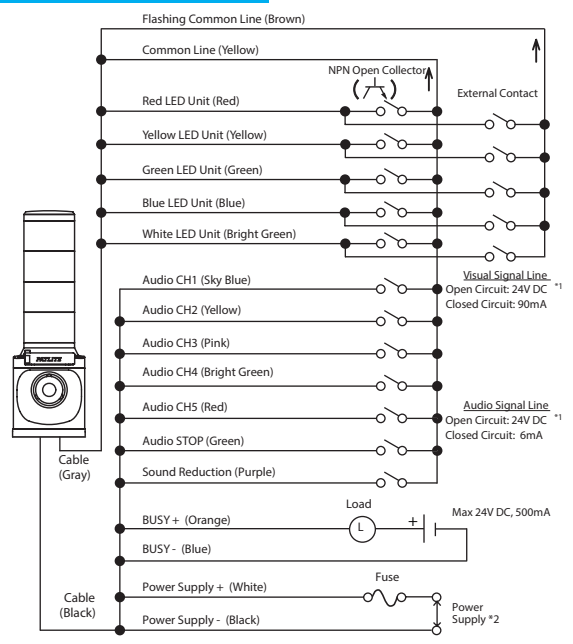
Use of Copyrighted Material

PATLITE Corporation has not applied for permission to use certain copyrighted music or songs recorded for Type-A, Type-C and Type-D melody charts outside of Japan. Therefore, please contact the local copyright association for permission before using the product in case this product is used outside of Japan. Melody chart Type-E is recommended for use outside of Japan as this playlist does not include copyrighted music or songs, and permission is not required.

Sound Charts

Refer to Page 201 for "Melody Charts".

Wiring



Options

Wall-mount Bracket SZ-023
 Bracket Material: Steel
 Cover Material: ABS Resin



Options

PATLITE Playlist Editor 2 (Free Download)

(OS: Windows® 2000/XP/Vista/Windows 7/Windows 8)

- > The new PATLITE Playlist Editor 2 is required to change the audio message data for this product.
- > The SD Card does not contain any data.

SD Card (2 GB) SDV-2GP

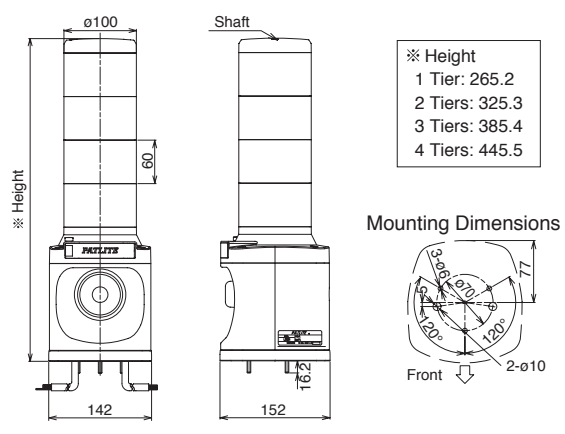
Specifications

Model	Rated Voltage	Operating Voltage Range	Number of Tiers	Power Consumption	Mass
LKEH- 102F	DC 24V	DC 24V ±10%	1	10.6W	1.4kg
LKEH- 202F			2	12.4W	1.6kg
LKEH- 302F			3	14.2W	1.8kg
LKEH- 402F			4	16.0W	2.0kg
LKEH- 110F	AC 100V	AC 100V ±10%	1	17.0W	2.1kg
LKEH- 210F			2	20.0W	2.3kg
LKEH- 310F			3	23.0W	2.5kg
LKEH- 410F			4	26.0W	2.7kg
LKEH- 112F	AC 120V	AC 120V ±10%	1	17.0W	2.1kg
LKEH- 212F			2	20.0W	2.3kg
LKEH- 312F			3	23.0W	2.5kg
LKEH- 412F			4	26.0W	2.7kg
LKEH- 120F	AC 220V	AC 220V ±10%	1	17.0W	2.1kg
LKEH- 220F			2	20.0W	2.3kg
LKEH- 320F			3	23.0W	2.5kg
LKEH- 420F			4	26.0W	2.7kg

Notes:

- The sound pressure level is based on measurements under controlled conditions (voice-synthesized 1 kHz sine wave played back from a distance of 1 meter), therefore the surrounding environmental conditions and message content will result in different values for the sound pressure level.
- Even when starting two or more units simultaneously, a lag will occur during message playback.
- MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thompson Licensing

Dimensions (Unit: mm)



PATLITE[®]
New Frontiers in Safety, Security and Comfort.

sensormatic
SPECIALIST&SOLUTIONS

Sensormatic srl - Via della Beverara 13 - 40131 Bologna - Italia
Tel. +39 051 6353 511 - Fax +39 051 6345 925 - www.sensormatic.it

Signal Tower

LA6 Series

Sleek Design. Fully Customizable.
Endless Possibilities.



Cycle Time



**Level Meter
Monitoring**



**Status
Condition**



LA6-POE

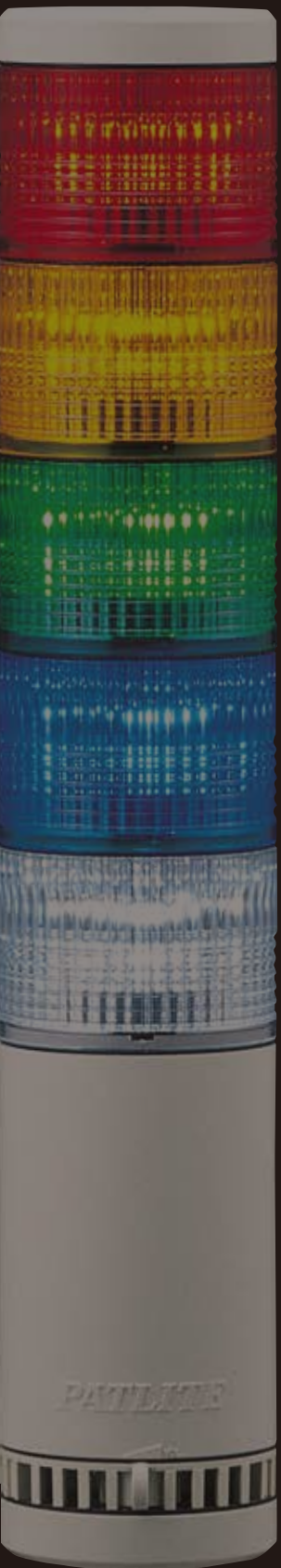
**Remote
Monitoring**
(for Power over Ethernet)



LA6-POE

Ethernet PoE
(Power over Ethernet)
for single cable installation

A SIGNAL TOWER DESIGNED TO SHOW MORE SO YOU CAN DO MORE



COMMON ON-SITE OCCURRENCES

OUR PROCESSES HAVE CHANGED.

We now need to reconfigure the color modules on our Signal Towers.

OUR MACHINE LINE IS EXPERIENCING TOO MANY STOPPAGES.

We need to make our workers better aware of machine status, so they can take quicker corrective measures.

WE ARE EXPERIENCING DOWN TIME DUE TO MATERIAL MANAGEMENT.

We need earlier notifications prior to materials completely depleting to avoid delays.

PRODUCTION STOPPAGES ARE OCCURRING AS A RESULT OF UNEVEN WORKFLOW.

Variations in work output is creating bottlenecks that can be smoothed out with a Takt system.

WE NEED TO IMPLEMENT REMOTE MONITORING TO MINIMIZE OUR LABOR COSTS.

We need to monitor the operating status of equipment with long processing time, as well as abnormal stoppages or delays as they occur.

LA6 SOLUTION



Color Change

The LA6 doesn't require any hardware or wiring changes to reconfigure colors. The LA6 can be easily programmed anywhere without tools.



Cycle Time

The LA6 is able to create better, more dynamic visual signals to elicit a quicker response by workers.



Level Meter Monitoring

The LA6 can be programmed to act as a visual level meter to help manage materials and material levels.



Status Condition

The LA6 has an internal timer function, allowing you to create visual timers for a streamlined Takt system.



Remote Monitoring

The LA6 is able to send information to other LA6 devices in remote locations via its mirroring function.



ADVANCED OPTIONS TO SOLVE ANY APPLICATION



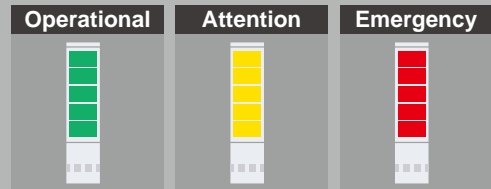
Color
Change

IMPROVE VISIBILITY WITHOUT RECONFIGURING HARDWARE



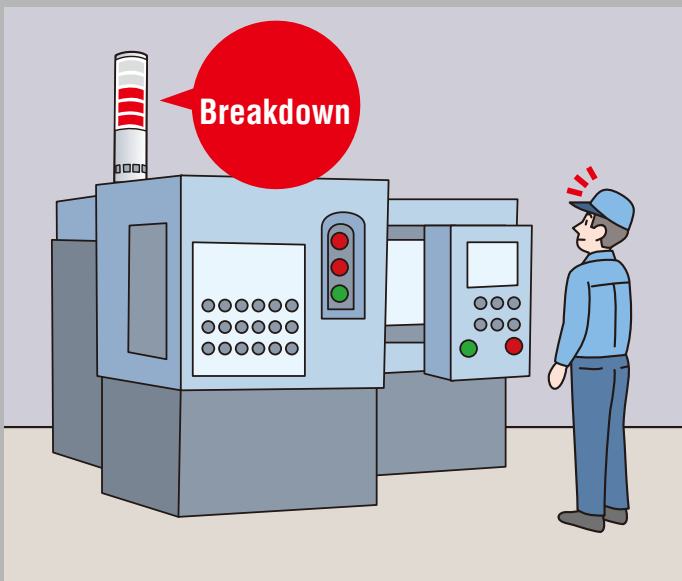
By programming the LA6 to a single, all-tier color arrangement, the equipment status can now be seen at a greater distance, improving awareness and response time.

■ Display up to 21 different colors for different equipment statuses



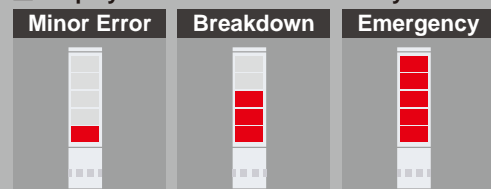
Status
Condition

INCREASE EFFICIENCY WITH MORE DYNAMIC VISUAL WARNINGS



The LA6 is able to display more detailed information, such as the status severity level, or specific abnormality conditions, that workers normally would have to look for on an equipment panel or HMI.

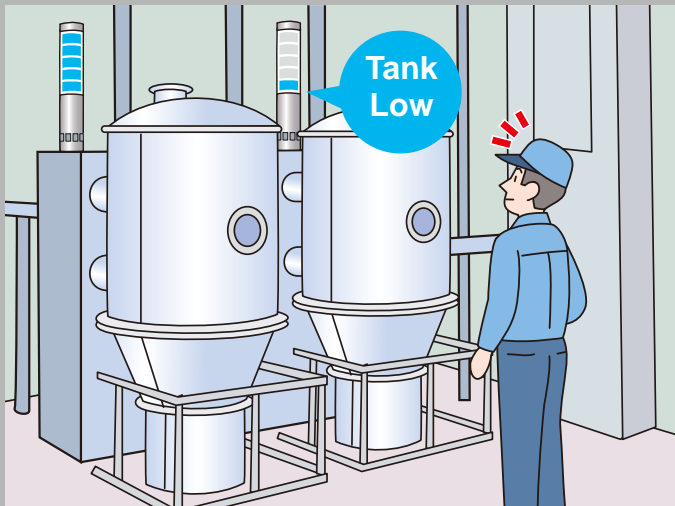
■ Display the level of status severity





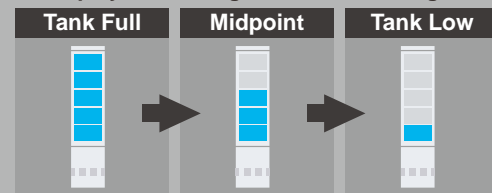
Level Meter Monitoring

REDUCE DOWNTIME WITH LEVEL MONITORING



By displaying current material levels, workers can more accurately respond to changes, reducing downtime. As material levels reach certain thresholds, the LA6 can provide earlier visual and audible notifications.

■ Display Remaining tank levels in stages

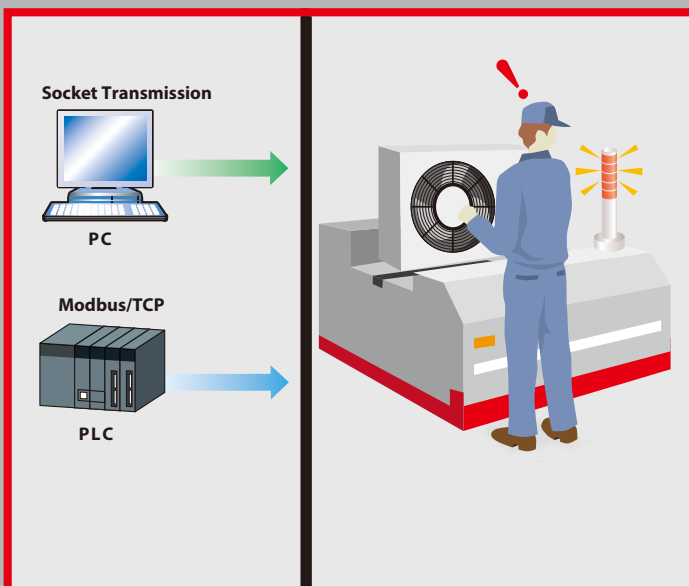


Remote Monitoring

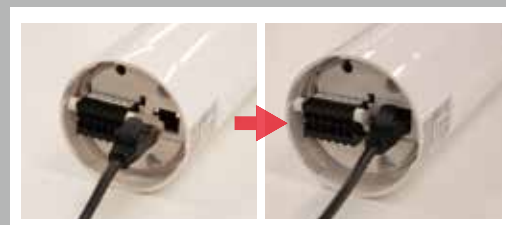
WIRING MADE EASY WITH LAN CONNECTIVITY



Ethernet PoE



The LA6 conveniently integrates into your facilities' existing LAN infrastructure. By connecting to a PoE (Power over Internet) compliant HUB, the LA6 can be controlled and powered through a single cable.



REDUCE BOTTLENECKS WITH A VISUAL TAKT SYSTEM

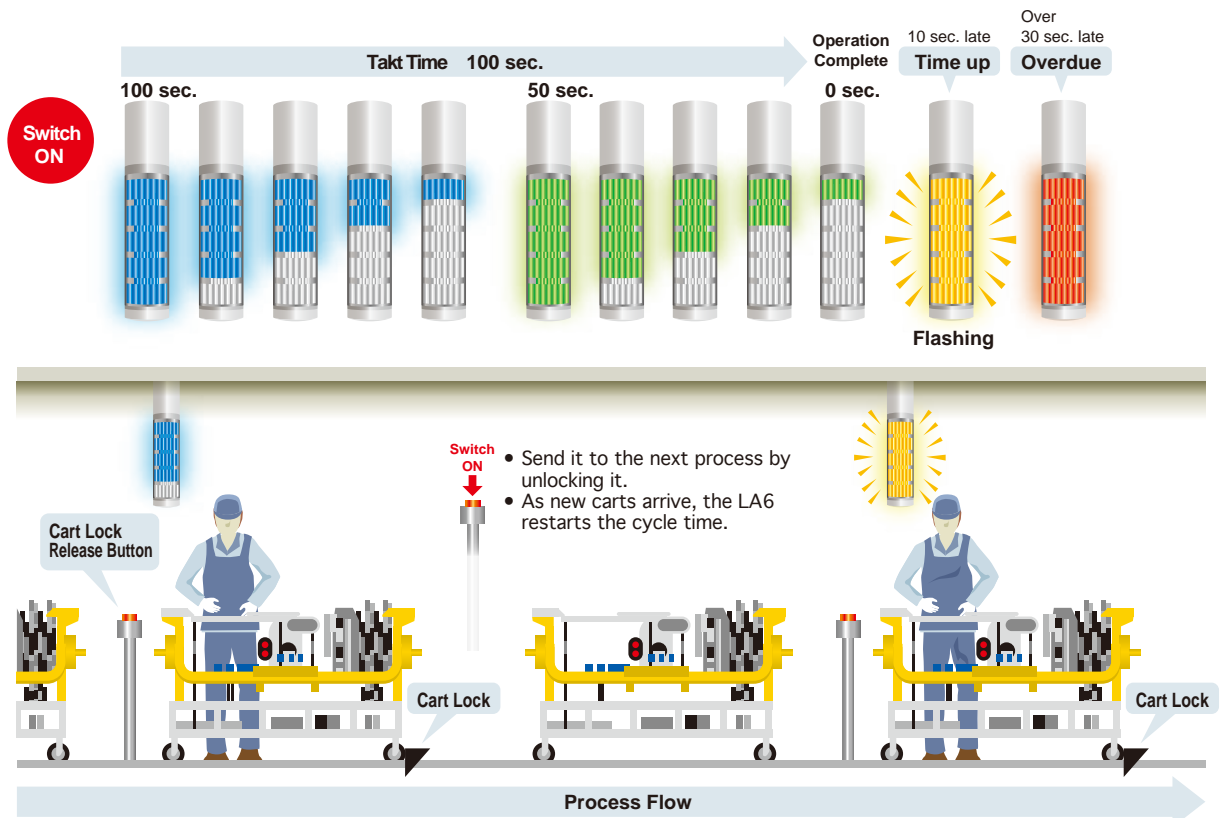


PROBLEM

Idle time or delays on the production assembly line is sometimes caused by variations in the rate of worker output.

IMPLEMENTATION MERIT

With the LA6 visual Takt system, workers will be more aware of the progress of the entire line, minimizing delays, and resulting in a smoother work flow.



Balance the assembly line with a Takt system



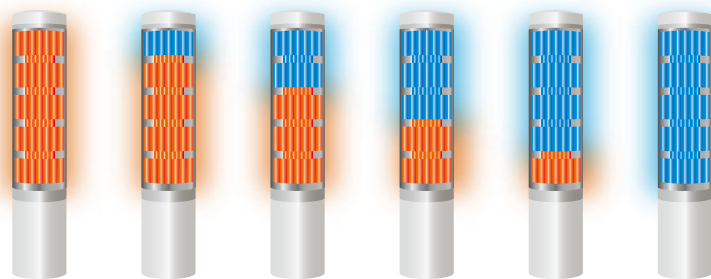
Cycle Time

PROBLEM

Due to high volumes of products to inspect, some defective products may be overlooked and pass inspection.

IMPLEMENTATION MERIT

With the LA6 internal timer function, inspectors are allotted proper time for each inspection, resulting in an improved yield rate by accurately detecting inferior goods.



Start

Counting by the minute

Finish

Inspection Time = 5 minutes

Inspection



Sensors detect inspectors as they enter the process line, triggering the LA6 to begin the count and the inspectors carry out inspection until the LA6 turns all blue.

Prevent defective product outflow during inspection

OBTAIN EQUIPMENT INFORMATION FROM REMOTE LOCATIONS

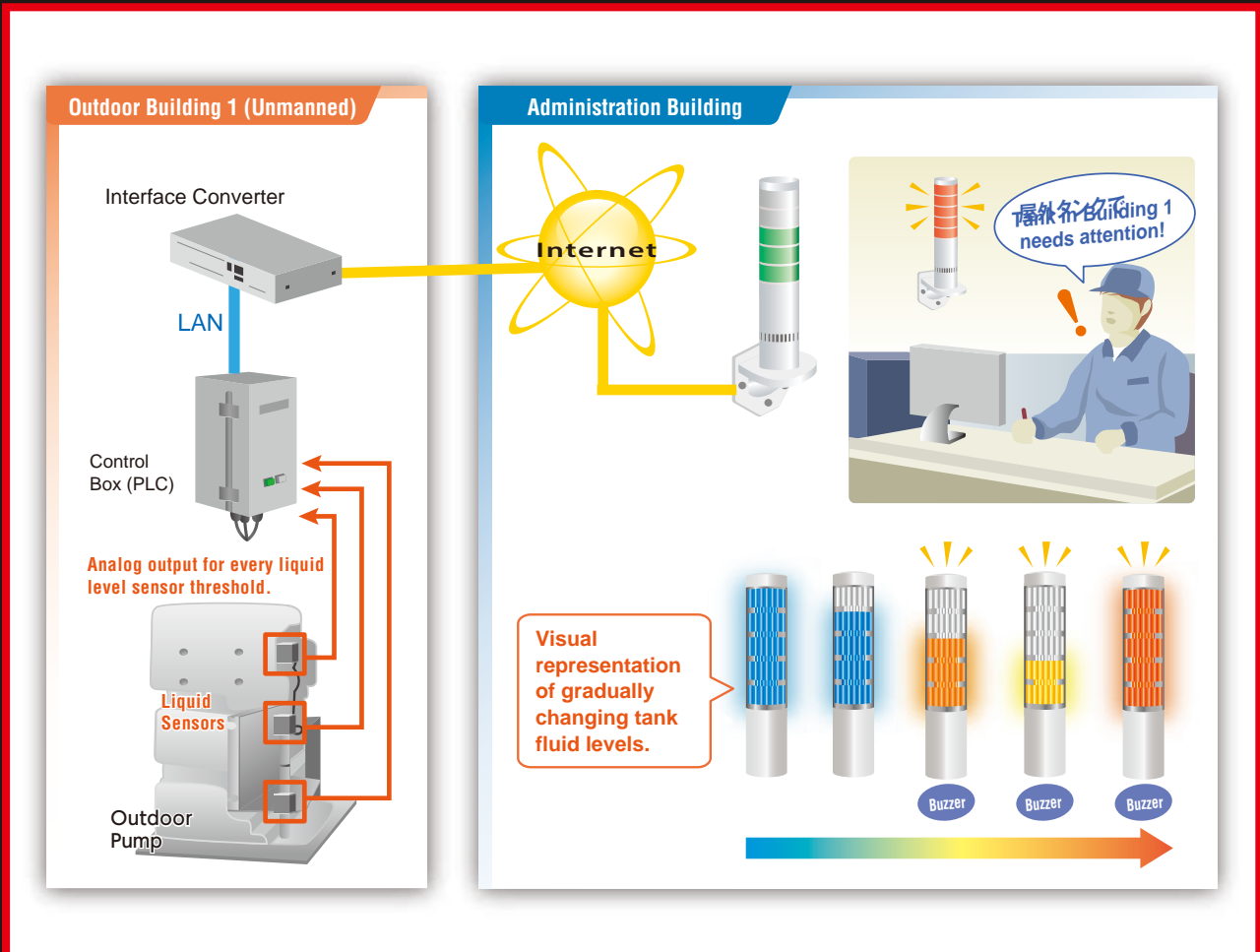


PROBLEM

Tanks located in remote buildings tend to be overlooked until the tanks are completely depleted.

IMPLEMENTATION MERIT

The LA6 can be used as an economical level meter system, capable of alerting remote personnel of equipment changes in real-time.



Quicker response with remote monitoring



Remote
Monitoring



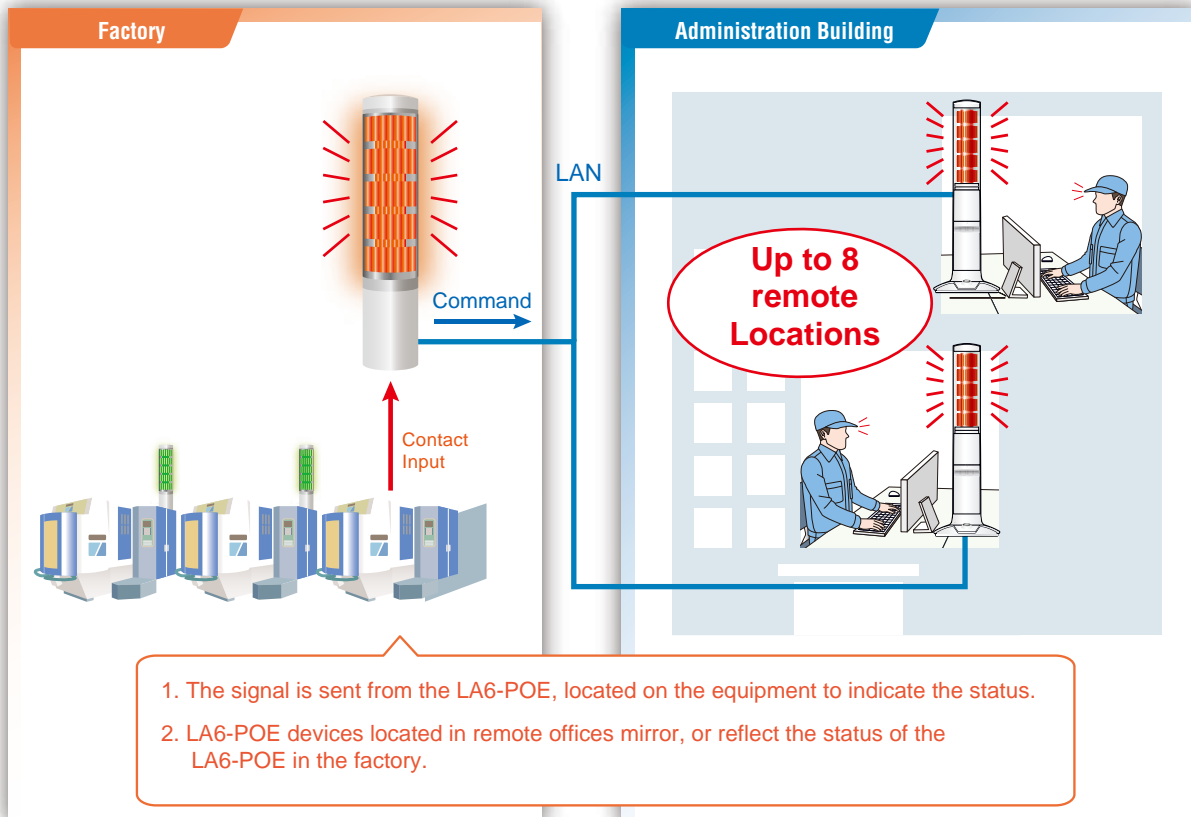
Ethernet
PoE

PROBLEM

Managers in remote offices need to monitor machinery statuses on the factory floor in real-time.

IMPLEMENTATION MERIT

With the LA6-POE's built-in mirroring function, equipment status, Takt time, etc., can be communicated to other LA6-POE devices in remote locations via a LAN connection. This data can also be sent to a third-party software through the LAN connection for data analysis or Andon monitoring.



See equipment status from multiple locations

LA6 SIGNAL TOWER



Multi-function Switch for various setups

BUZZER SOUND SETUP

The built-in switch has four selectable settings for "Loud" (about 85dB) -> "Middle" (about 80dB) -> "Low" (about 75dB) -> "Off".

COLOR SETUP

The built-in switch can also allow a manual selection of 9 colors to be set for each tier.



A new lens design optimizes visibility.

The newly developed lens design efficiently diffuses LED light so that it is unmistakably visible, even from great distances.



The alarm has a total of 11 sounds to match various applications.

A newly developed compact loudspeaker not only can transmit a clear sound of 85 dB (at 1m), but also has added water resistance. A different alarm sound can be set up with each display pattern when in the Smart mode. (Only three of the 11 alarm patterns are selectable in the Signal Tower mode)



Use the free editing software to freely change the LA6 colors and patterns.

Upload colors and patterns to the signal tower via a USB cable.*

*The USB cable is sold separately (USB microB type with Charging/ Data Transfer capability).



Detachable Terminal Block

Has eight inputs available for connecting a PLC, or discrete I/O. Data through these inputs can be transferred to a server over the Ethernet. DC power can also be wired if a PoE supporting LAN is not available.



Conveniently connects to an existing network with PoE support.

PoE (Power over Ethernet) is a technology which lets network cables carry electrical power. PoE can bring many advantages, such as reducing costs of installing electrical cabling, by connecting it with a HUB supporting PoE, or have the flexibility of not having to be tethered to an electrical outlet.

LA6 24V DC / 3 and 5 Tier Types

LA6 100 - 240V AC 5 Tier Types

The LA6 alarm features a total of 11 sounds to match various applications.

Voltage: 24V DC
Direct Mount/Terminal (TN)
Steel Pole with L-bracket/Cable (LJ)

Voltage: 100-240V AC
Direct Mount/Cable (LJ)

24V DC 100 - 240V AC

85dB (at 1m) Buzzer 11 Sound

IP65* Φ60 RoHS

* Alarm Type: IP54

O⁻ -white Flashing/Buzzer Silver Lighting Steel Pole Type (LJ) O⁻ -white Flashing/Buzzer

LA6-POE Direct Mount / Stationary type

NEW

PoE 85dB (at 1m) Buzzer 11 Sounds Ethernet Modbus /TCP EASY WEB Setup

24V DC 48V DC (PoE) HTTP INPUTS IP54* Φ60 RoHS

* Direct Mount Type

PNS Command
 By using a PNS Command, the LED unit colors for tiers 1-5 can be controlled.

HTTP Command
 Access and control all LA6-POE functions remotely in various network environments with this flexible protocol.

Modbus / TCP

3rd Party Software: LA6-POE can send machine status data over Ethernet to centralized software for remote Andon monitoring or data analysis.

Direct Mount type Stationary Type with "Clear" switch

LA6 / LA6-POE Optional Parts

For LA6/LA6-POE



□ Stationary Bracket: SZK-003W Direct Mount type

For LA6



□ Mounting Pole with L-Bracket: SZ-70L



□ Circular Bracket: SZ-010



□ Circular Bracket: SZ-016A

For LA6-POE



□ Stationary Bracket: (Magnetic Mount) Model: SZW-060W Direct Mount type

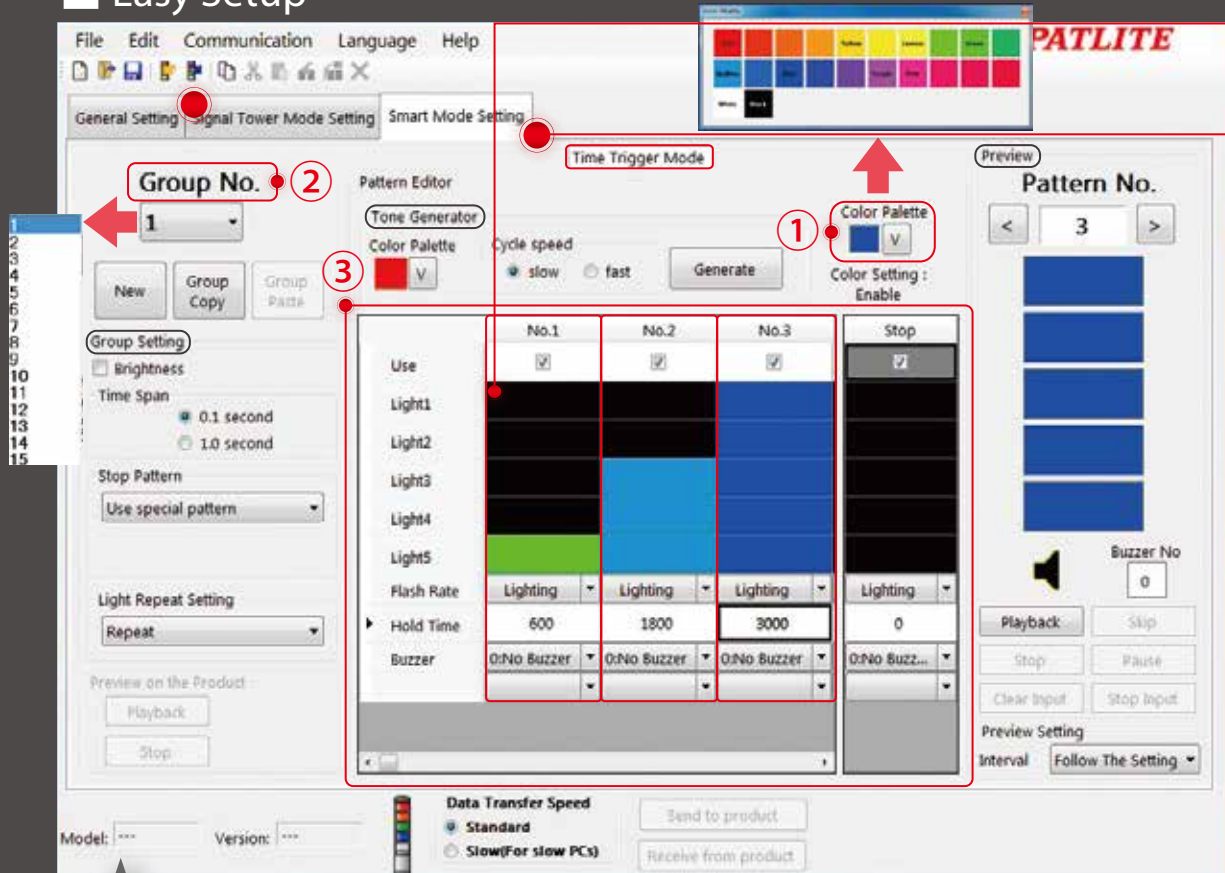


□ Wall Mount Bracket: Model: NH-WST2 Stationary type

Editing Software
Free

Simple program software! Download and easily set up PATLITE's exclusive editing software.

Easy Setup



* The screen above is only an image (conditions may vary with setup parameters).

① Color Setup (Maximum of 21)

21 different colors can be selected as part of a program.

② Signal Tower Setup Features

With a maximum of 15 groups*, 63 series of operations can be registered to perform an operation setup as one group.

* A single display type can register a maximum of 31 groups.

③ Operations (Maximum of 63)

Select the desired color, flashing period and the active duration of the light and alarm* (maximum of 3,600 seconds, and 11 sounds).

* Limited to Time Trigger and Pulse Trigger modes

● Various Setups

- Group setup (Detailed Settings)
 - Flash Reduction Setup
 - Time Span (0.1 sec./1.0 sec.)
 - Repetitive Lighting Setup
- Sign pattern generation (9 colors)
 - Generate colors as gradations or chaser lights.
 - Color select: Cycle Speed (Low/High)
- Simulation
 - Check the light pattern by previewing it before transmitting data into the unit.
- System Transmit and Receive*
 - Data can be written into the unit and also read from it, so that patterns can be easily copied into other units.

* Data transfer is also possible when the main unit is OFF and the system's power source is the USB bus power.

<http://www.patlite.com>

patlite Search

Editing software and pre-set data patterns are downloadable for free from our website.

Smart Mode



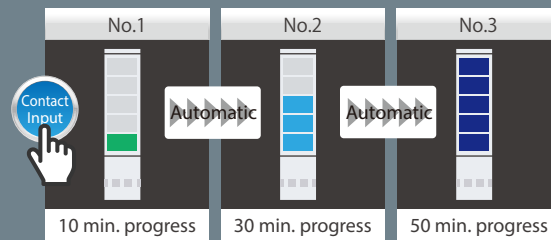
Elapsed Time / Countdown / Cycle Time

1. Time-trigger Type

Setups for the individual group operation can be executed. Pattern change timing can be setup with the editing software.

Maximum pattern display	63 Patterns
Maximum group number	15 Groups

Setup timing in pattern changes with the editing software.



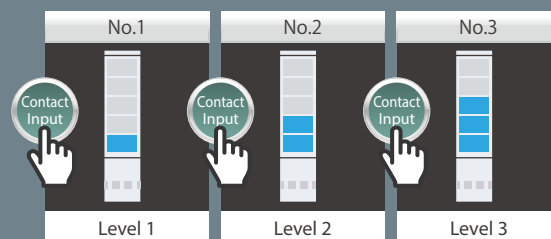
Determine thresholds for pressure / temperature, etc.

2. Pulse-trigger Type

Transitions from one pattern to another can be triggered by setting elapsed time or by individual discrete inputs.

Maximum pattern display	63 Patterns
Maximum group number	15 Groups

Pattern transition timing can be controlled by individual discrete inputs.



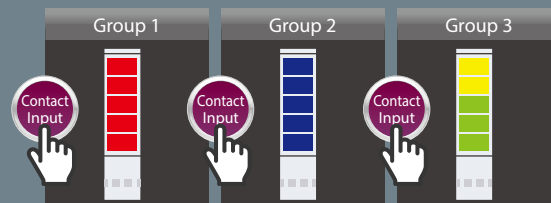
Error level / Request Priority / Status Display, etc.

3. Single-display Type

The product memory operates for the individual group functions.

Maximum pattern display	—
Maximum group number	31 Groups

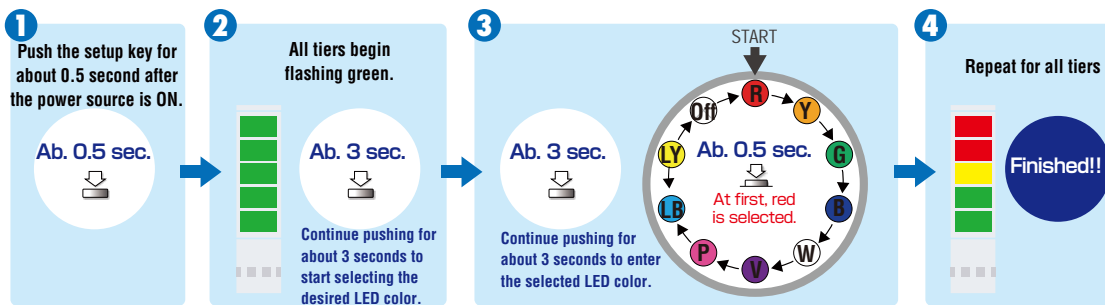
Inputs 1-5, with ON/OFF signal combinations, is made to operate.



Signal Tower Mode



Colors can be configured manually with the push button, without the need to edit the software.

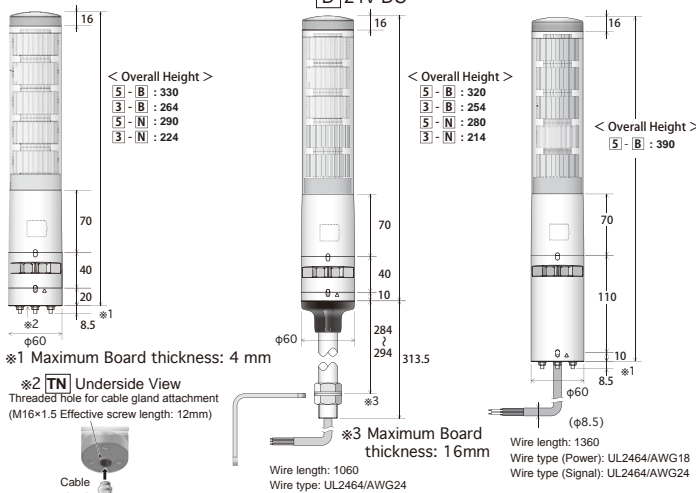


DIMENSIONS AND WIRING

Outer Dimensional Drawings

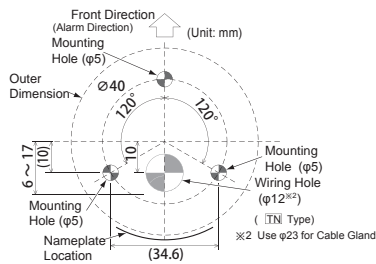
LA6

- **TN** Direct mount/Terminal D 24V DC
- **LJ** Steel Pole with L-bracket/Cable D 24V DC
- **WJ** Direct mount/Cable A 100-240V AC

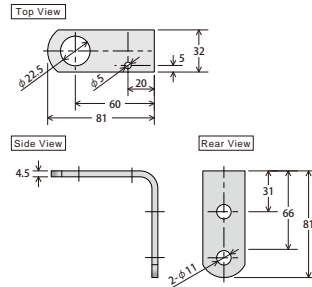


<Note> The cable gland is not included with this product.

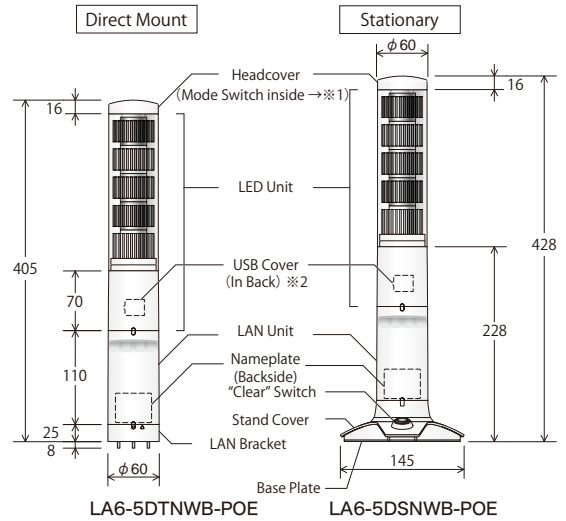
Mounting Dimensional Drawing



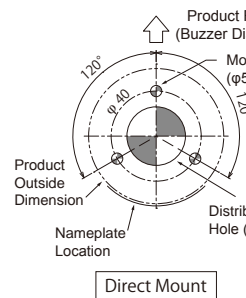
Dimensional Drawing for Steel Pole with L-bracket



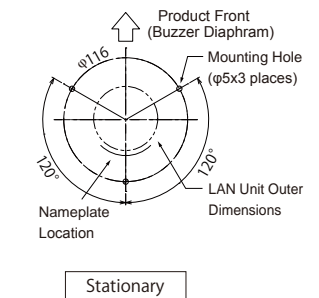
LA6-POE



Mounting Dimensional Drawing



Mounting Dimensional Drawing

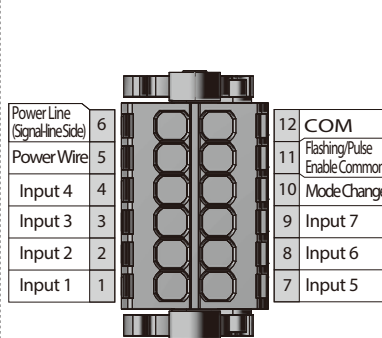


Connector Inputs

LA6 (Terminal Type)



LA6-POE



Smart Mode Inputs (for Mode Change)

	① Time-trigger Type	② Pulse-trigger Type	③ Single-display Type
Input1 Red			
Input2 Amber	Display Input (Binary Input Maximum 15)	Display Input (Binary Input Maximum 15)	Display Input (Binary Input Maximum 31)
Input3 Green			
Input4 Blue			
Input5 White	STOP	Trigger	
Input6 Purple	Mute	Mute	Mute
Input7 Sky Blue	Clear	Clear	Clear
Mode Change Pink	At Input		

It can be used for the smart mode when a signal is applied to the mode change line.

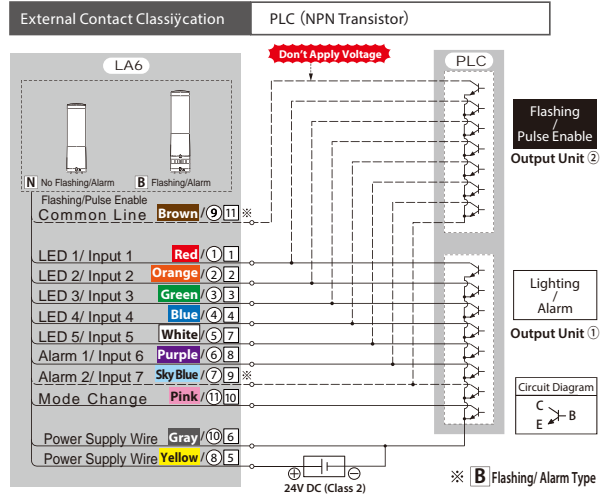
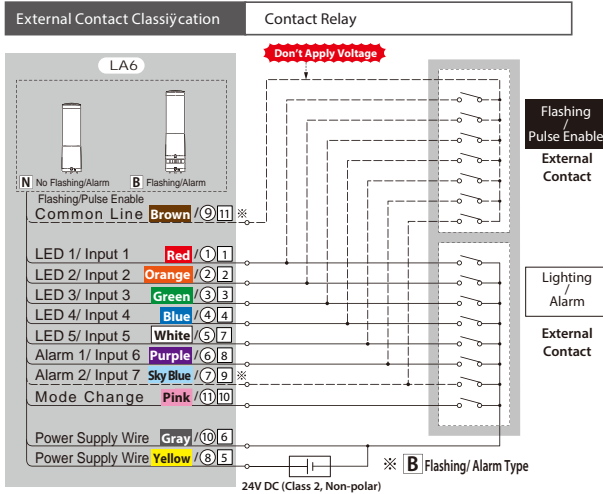
※ For connector inputs, mode change is terminal 11 **purple** and terminal 10 for the PoE type.

Wiring

Red indicates the lead wire color (for Cable type models) ※ The lead wire color does not indicate the LED luminescence color.

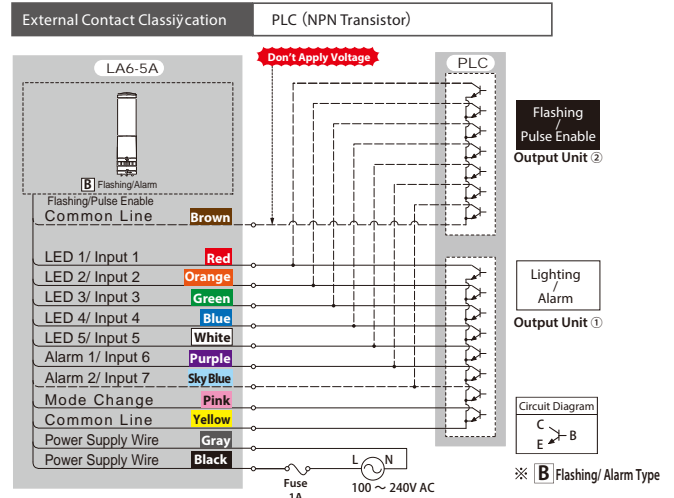
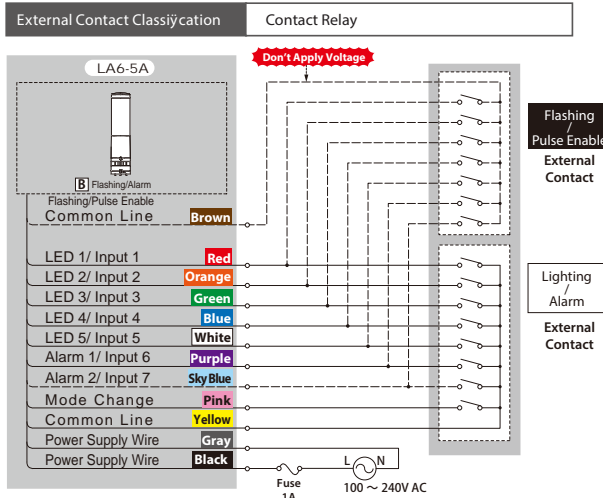
24V DC Wiring (LA6/LA6-POE)

※ Be sure to check the wiring diagram of the PNP type transistor by visiting our website and viewing the comprehensive operation manual, etc.

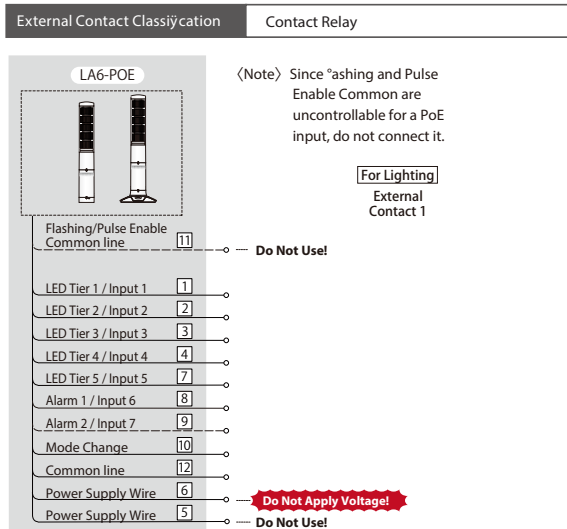


100 - 240V AC Wiring (LA6)

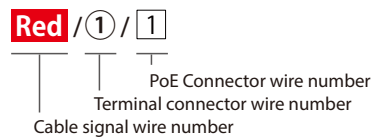
※ Be sure to visit our website and viewing the comprehensive operation manual, etc. for further details.



POE Wiring (LA6-POE)



Wiring Diagram color and number indication



LAN Cable Connection

The LAN cable should be rated for category 5e or higher. A straight or cross cable can be used.

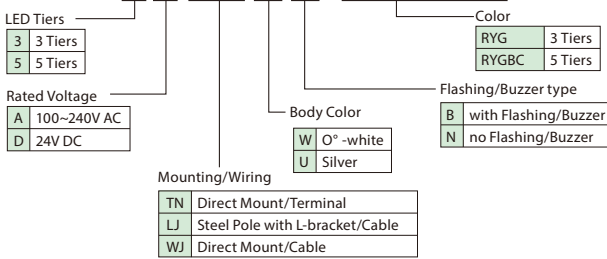
MEMO

- Be sure to use the IEEE802.3af compliant products for the PoE power feeder systems.
- Priority is given to the 24V DC power supply when both the 24V DC power source and PoE power feeder systems are connected simultaneously.
- If both power sources are simultaneously connected, when disconnecting the 24V DC source, this product may reboot.

LA6

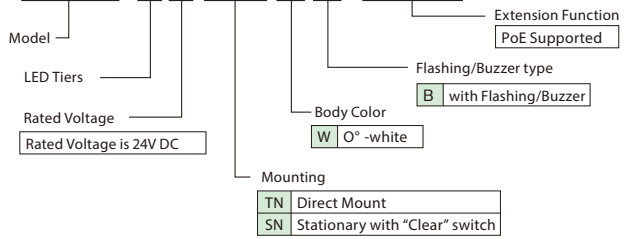
※ There is no Silver (U) body color selection for the LJ type.
 ※ 100V - 240V AC type is only available for LA6-5AWJWB-RYGBC.

LA6-5DLJWB-RYGBC



LA6-POE

LA6-5DTNWB-POE



Specifications

Model	LA6				LA6-POE	
Rated Voltage	24V DC/100-240V AC (50Hz/60Hz)				24V DC/48V DC (PoE)	
Operating Voltage Range	24V DC ±10%/90-250V AC (50Hz/60Hz)				24V DC ±10%/36-57V DC (PoE)	
Rated Power Consumption	Standard	LA6-5D□□N-RYGBC	5W	LA6-5D□□B-RYGBC	6.5W	
		LA6-3D□□N-RYG	3.5W	LA6-3D□□B-RYG	4.5W	
		LA6-5AWJWB-RYGBC	6.5W			
	Maximum	LA6-5D□□N-YYYY	7W	LA6-5D□□B-YYYY	8W	
		LA6-3D□□N-YYY	4.5W	LA6-3D□□B-YYY	5.5W	
	LA6-5AWJWB-YYYY	7.5W				
Signal Line Current	Max.70mA (at 24V DC)/Max.20mA (at AC100-240V)				Max. 420mA (at 26.4V DC)/10mA (for PoE)	
Operating Temperature Range	-25°C to +60°C				-10°C to +50°C	
Operating Humidity Range	Less than 90% RH, no condensation				Less than 90% RH, no freezing or condensation	
Mounting Direction	Upright/Inverted				Upright	
Protection Rating	IP65 (with Buzzer: IP54) (IEC 60529)				IP54 (Stationary type: IP20) (IEC 60529)	
Environmental Conditions	Tested while mounted in the upright position					
Mounting Location	Indoors Only					
Insulation Resistance	More than 1M ^Ω at 500V DC between the power input lead and chassis.					
Withstand Voltage	(500V AC at 24V DC/1500V AC at 100 - 240V AC) for 1 minute between terminals and chassis without breaking insulation.					
Display Color Variations	Signal Mode: 9 colors/Smart Mode: 21 colors					
Buzzer Sounds	11 Sounds					
Sound Level	Maximum 85dB					
Environmental Conditions	Buzzer Sound No.1, in an upright position with a distance from Buzzer opening at 1 meter					
Operation Method	Signal Control				Signal/Command Control	
Standard Compliances	<ul style="list-style-type: none"> 24V DC EMC Directive (EN 61000-6-4, EN 61000-6-2), RoHS Directive (EN 50581), UL508, CSA-C22.2 No. 14, FCC Part 15, Subpart B Class A, KC (KN 61000-6-4, KN 61000-6-2) 100-240V AC EMC Directive (EN 61000-6-4, EN 61000-6-3), RoHS Directive (EN 50581), Low-voltage Directive (IEC/EN 60947-5-1, EN 62471) 				<ul style="list-style-type: none"> EMC Directive (EN 61000-6-4, EN 61000-6-2, EN55032 Class A, EN 55024, RoHS Directive (EN 50581), FCC Part 15, Subpart B Class A, KC (KN 61000-6-4, KN 61000-6-2), UL 60950-1, CAN/CSA-C22.2 No. UL 60950-1-07, Recognized Component (File No. E480103), *The 24V DC Direct Mount type conforms to the following conformities: UL508, CAN/CSA C22.2 No. 14 Recognized Component (File No. E215660) 	

Lineup

Model	Tiers	Voltage	Body Color	Type	
LA6-3DTNWB-RYG	3 Tiers	24V DC	Off-white	Direct Mount/Terminal/Buzzer	
LA6-3DTNWN-RYG				Direct Mount/Terminal/No Buzzer	
LA6-3DWJWB-RYG				Direct Mount/Cable/Buzzer	
LA6-3DWJWN-RYG				Direct Mount/Cable/No Buzzer	
LA6-3DTNUB-RYG				Direct Mount/Terminal/Buzzer	
LA6-3DTNUN-RYG				Direct Mount/Terminal/No Buzzer	
LA6-3DWJUB-RYG			Silver	Direct Mount/Cable/Buzzer	
LA6-3DWJUN-RYG				Direct Mount/Cable/No Buzzer	
LA6-3DLJWB-RYG				Off-white	L-Bracket with Pole/Cable/Buzzer
LA6-3DLJWN-RYG					L-Bracket with Pole/Cable/No Buzzer

Model	Tiers	Voltage	Body Color	Type	
LA6-5DTNWB-RYGBC	5 Tiers	24V DC	Off-white	Direct Mount/Cable/Buzzer	
LA6-5DTNWN-RYGBC				Direct Mount/Cable/No Buzzer	
LA6-5DWJWB-RYGBC				Direct Mount/Terminal/Buzzer	
LA6-5DWJWN-RYGBC				Direct Mount/Terminal/No Buzzer	
LA6-5DTNUB-RYGBC				Direct Mount/Cable/Buzzer	
LA6-5DTNUN-RYGBC				Direct Mount/Cable/No Buzzer	
LA6-5DWJUB-RYGBC			Silver	L-Bracket with Pole/Cable/Buzzer	
LA6-5DWJUN-RYGBC				L-Bracket with Pole/Cable/No Buzzer	
LA6-5DLJWB-RYGBC				Off-white	Direct Mount/Cable/Buzzer
LA6-5DLJWN-RYGBC					Direct Mount/Terminal/Ethernet/Buzzer
LA6-5AWJWB-RYGBC					Stationary/Terminal/Ethernet/Buzzer
LA6-5DTNWB-POE					100 - 240V AC
LA6-5DSNWB-POE		24V DC or PoE (48V DC)	Direct Mount/Terminal/Ethernet/Buzzer		

PATLITE Corporation

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<http://www.patlite.com>

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CAUTION

To ensure correct use of these products, read the "Instruction Manual" prior to use. Failure to follow all safeguards can result in fire, electric shock, or other accidents. Specifications are subject to change without notice.



PATLITE ECO PROJECT

For the benefit of mankind and the earth, Patlite is committed to developing environmentally friendly products.

O-AG06A | EN | 1710 A

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Signal Tower LR Series

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NEMA
Type 4X, 13



360° Buzzer



Easy-build

www.patlite.com

**Free
2 year
Service**

Signal Tower

LR Series

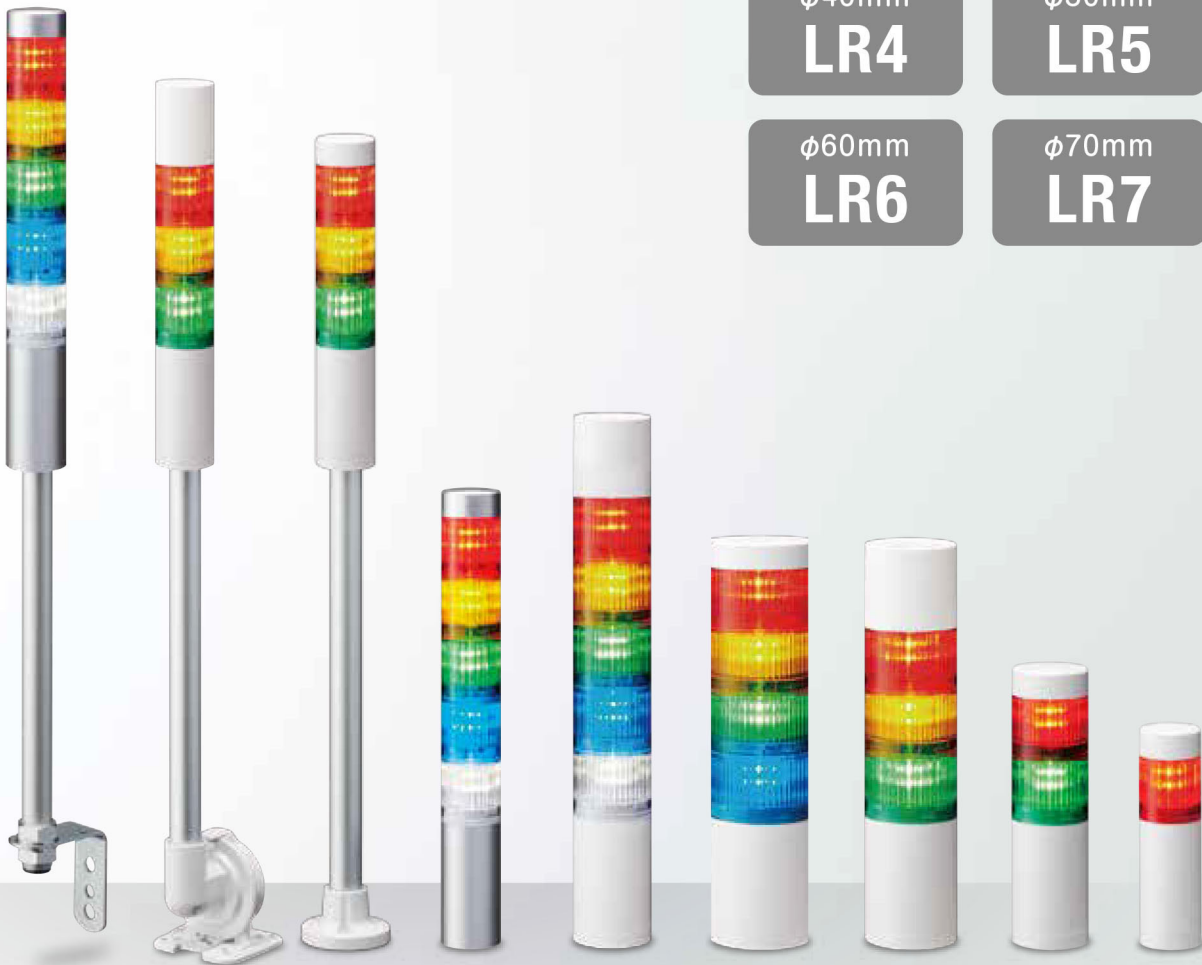
Modular LED Signal Tower

φ40mm
LR4

φ50mm
LR5

φ60mm
LR6

φ70mm
LR7



Modular Varieties



Body Units



Buzzer Units



LED Units

Optional Parts



SZW-001W



SZK-002W/U



SZK-003W/U



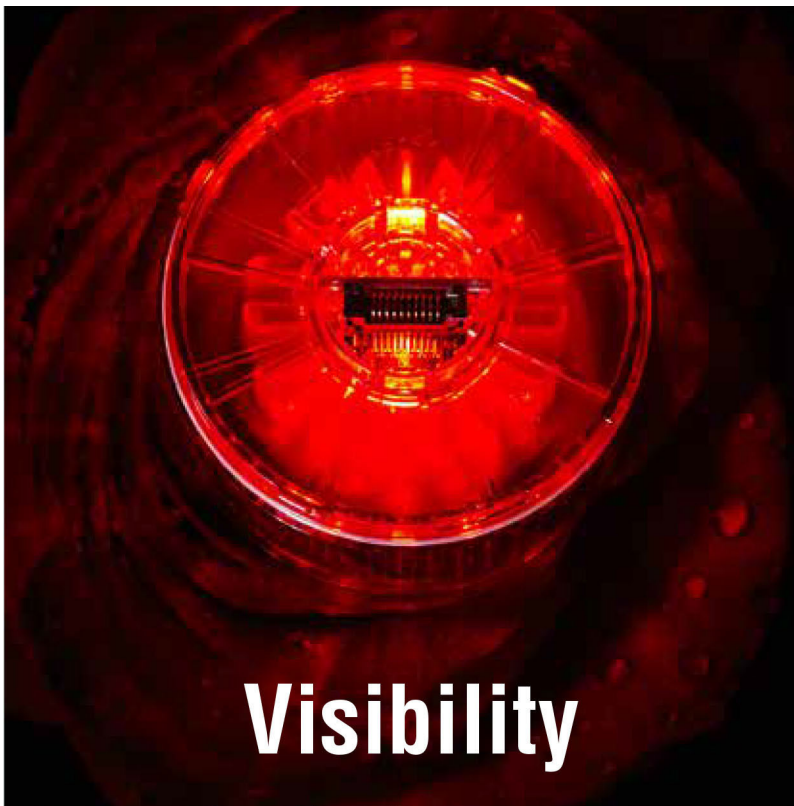
SZP-001W



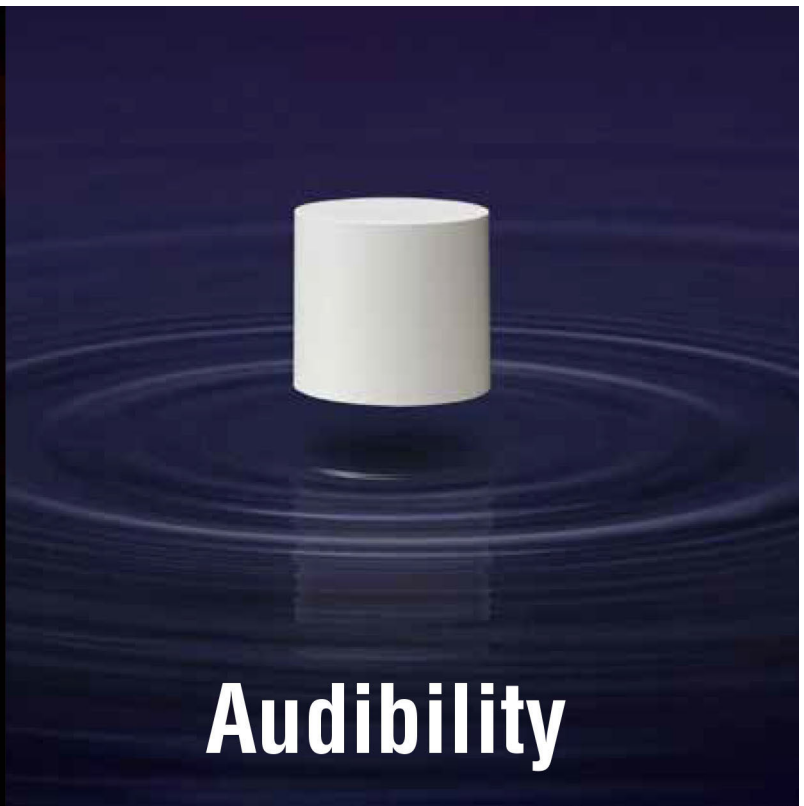
SZK-001U



SZP-002U



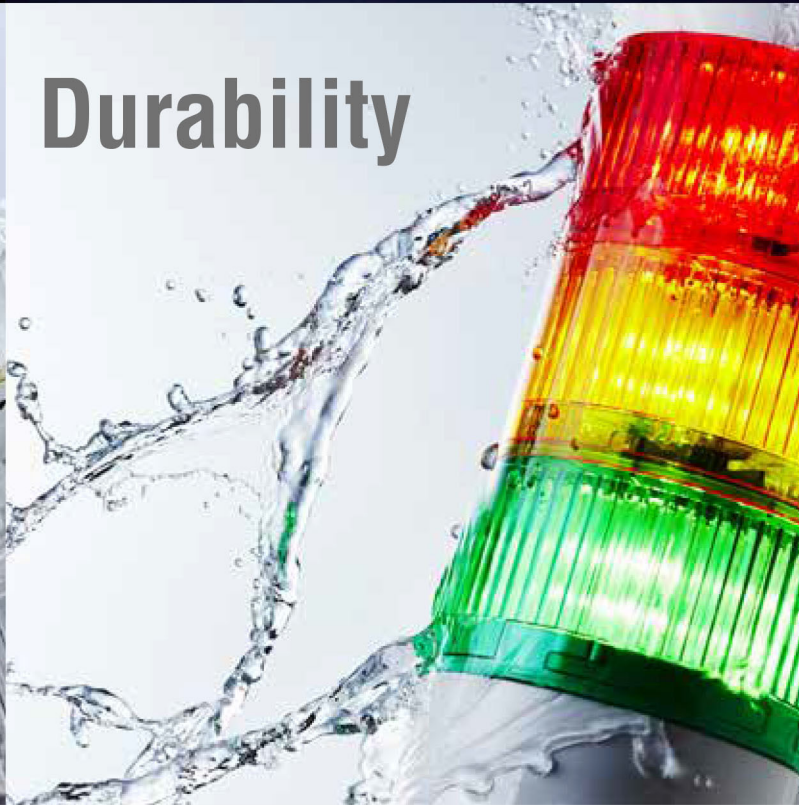
Visibility



Audibility



Simplicity



Durability



Sensormatic srl - Via della Beverara 13 - 40131 Bologna
Tel. 0516353511 - Fax 6345925
smbox@sensormatic.it - www.sensormatic.it

Configurator

Convert from existing models,
available on the website

Visibility

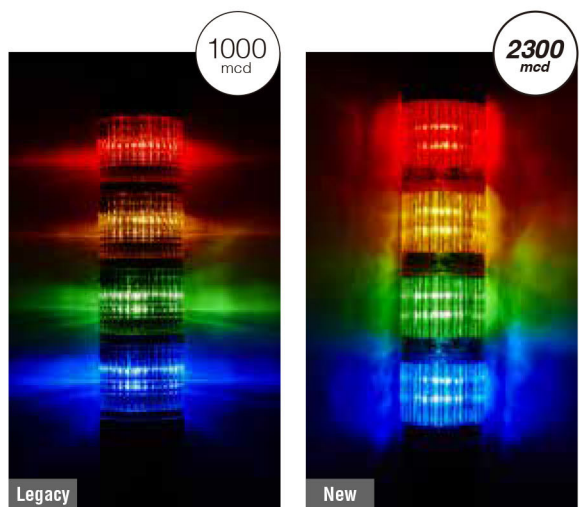
Exceptional Light Brilliance

With an improved lens design and light module construction, the LR Series delivers brilliant, even light so you will never miss another signal.



A uniform 360° Light-emitting Design

A new construction design has shaped the inner lens as a petal, which achieves a fuller 360 degree uniform light emission of the LED center of the light source efficiently and effectively. Light is emitted even more brightly with a former, and more equal emission area, which makes it easier to notice on the spot, even from a distance away.



Legacy
LCE-A Series (φ40)

New
LR4 Series (φ40)

2 times more than the older models*

Due to the lens efficiency, lumous intensity doubled. With it's uniform light emittance covering a large area, the light intensity can immediately be seen.

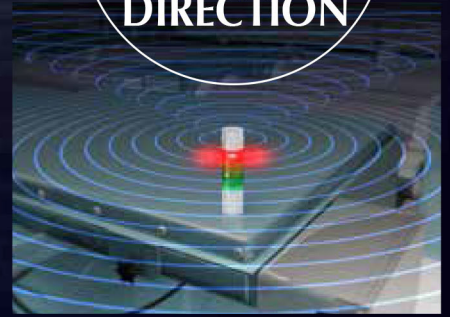
* Based on the φ40 Red LED Model

Audibility

No Holes, No Compromises

The sound module has been redesigned to produce loud, clear, even sound with no holes for maximum interior protection.

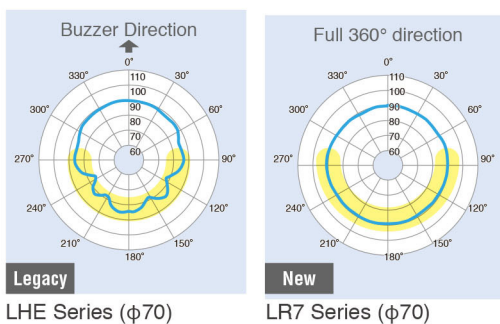
FULL
360°
DIRECTION



IP65 (IEC 60524) / NEMA TYPE 4X, 13

The first hole-free buzzer in the industry

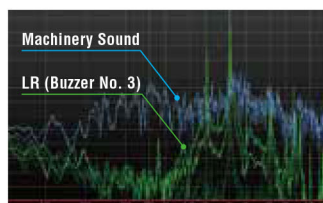
The sound of a drum was the inspiration for a 360 degree omnidirectional sound pressure resonance, by losing a hole for sound conduction. It also increased the performance of environmental protection from dust, water, and dirt by losing a hole.



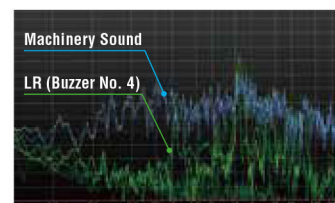
Maximum 90dB* output

Although it is a hole-free buzzer, it was able to produce a sound pressure of 90dB. *From another way of thinking, the idea of “losing a hole, gaining sound pressure”, it raises a question of alarm design in the field.

* LR7 Series buzzer No.4 (Sweep)



(Buzzer No.3) Rapid Hi-low Sound
2016Hz/3012Hz



(Buzzer No.4) Sweep Sound
1000Hz - 4032Hz (changing)

New Buzzer Sound

“It can alert people under various environments”

Two buzzer sounds were added, totalling four buzzer* sounds. To emit sound in a wide range, the varied buzzer sound would be heard above the noise of the surrounding machines. In addition, a sound reduction function of about -10dB was included to suit the on-site environment.

* Four Buzzer Sounds

No.1 Rapid Intermittent sound No.2 Continuous sound No.3 Rapid Hi-low No.4 Sweep sound

Simplicity

Easy Modular Assembly

The entire LR Series features a modular LED unit system for easy customization



Stackable Construction

The stackable construction makes color recombination easy with the new construction design. When recombining the LED Unit; by rotating simultaneously, it assures the contacts have a more reliable connection, reducing poor connections for electricity to flow.

LED/Buzzer Unit Removal



LED Unit Attachment



Ease of increase/decrease, or recombining

Just by turning the LED Unit in one touch, color recombination and increasing or decreasing the number of tiers is easy. With the older models, additional threaded shafts had to be purchased, or a tool was required; Now, with the LR Series, it can reduce labor costs and no tools, etc., are needed. Even the buzzer unit is easily attachable.



See our Movie!!

Durability

Rugged Never Looked Better

The LR Series is built rugged so it can be installed in more environments.



Smooth Surface

The lens slit is placed inside, and the buzzer is hole-free, which allows a smooth surface. The adhesion of water and dust is also reduced.



Environmental Performance

IP65 / NEMA TYPE 4X,13 complies to various environments for water-proof and dust-proof performance.



Upgraded Materials

All materials used were reconsidered. From ABS resin, to Polycarbonate (PC), the tradeoff was more lightweight and stronger against shocks. And, the O rings were changed silicone rubber, to enhance.

Signal Tower

LR Series Modular Models

Select a Buzzer Unit (for Flashing / Buzzer function)



Size	Color	Model	Power Consumption	Mass
φ40		LR4-B□	1.0W	0.035kg
φ50		LR5-B□	1.0W	0.045kg
φ60		LR6-B□	1.0W	0.060kg
φ70		LR7-B□	1.0W	0.070kg

□••W: Off-white U: Silver K: Black

Select a LED Unit



Size	Color	Model	Power Consumption	Mass
φ40		LR4-E-R/Y/G/B/C	1.0W	0.035kg
φ50		LR5-E-R/Y/G/B/C	1.0W	0.043kg
φ60		LR6-E-R/Y/G/B/C	1.0W	0.060kg
φ70		LR7-E-R/Y/G/B/C	1.0W	0.065kg

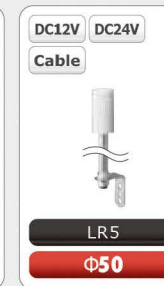
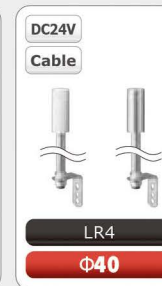
Select a Body Unit



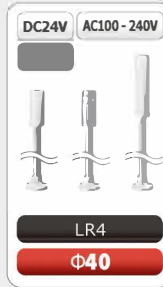
Direct Mount Models (WJ, WT)



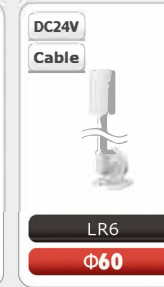
'L' Bracket Models (LJ)



Circular Bracket Mount Models (PJ)



Angle Bracket Models (QJ)



Color Units ordered outside the Standard Stock can be delivered in a short time.

Prompt Delivery

EASY Assembly

Body Unit Model Code

(Ex.) **LR6-02WJNW**

Model ① ② ③ ④ ⑤

(1) Size
4 = Φ40
5 = Φ50
6 = Φ60
7 = Φ70

(2) Rated Voltage
01 = DC12V*1
02 = DC24V
M2 = AC100 - 240V*2

(3) Mounting/Wiring
WJ = Direct w/Cable
WT = Direct w/Terminal*3
LJ = Pole/ 'L' Bracket w/Cable*4
PJ = Pole/ Circular Bracket w/Cable*4
QJ = Pole/ Angle Bracket w/Cable*5

(4) Flashing/Buzzer
N = No Flashing/Buzzer

(5) Body Color
W = Offwhite
U = Silver
K = Black*6

*1 For LR5 models only
*2 For WJ and PJ mounting with LR4 and LR6 models
*3 For LR5, LR7 DC24V models only
*4 For LR4, LR5 and LR6 models
*5 With LR4 and LR6 DC24V Off-white models only
*6 For LR5, LR7 models only

3 Easy Steps

1 Remove the headcover to setup the body unit



2 Attach one LED unit at a time to the body unit



3 Replace the headcover, or attach the buzzer unit



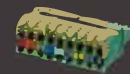
See the Movie!!

Watch the movie to learn how easy it is to assemble!



Mounting Type	Rated Voltage	Size	Wiring	Model	
Direct Mount	DC12V	Φ50	Cable	LR5-01WJNW	
		Φ40		LR4-02WJNW/U	
	DC24V	Φ50		LR5-02WJNW	
		Φ60		LR6-02WJNW/U	
		Φ70		LR7-02WJNW	
		Φ50		Screwless Terminal	LR5-02WTNW/U/K
AC100 - 240V	Φ70	LR7-02WTNW/U/K			
	Φ40	Cable	LR4-M2WJNW		
Pole Mount w/ Circular Bracket	DC12V	Φ50	Cable	LR5-01PJNW	
		Φ40		LR4-02PJNW/U	
	DC24V	Φ50		LR5-02PJNW	
		Φ60		LR6-02PJNW/U	
		AC100 - 240V		Φ40	LR4-M2PJNW
				Φ60	LR6-M2PJNW
Pole Mount w/ 'L' Bracket	DC12V	Φ50	Cable	LR5-01LJNW	
		Φ40		LR4-02LJNW/U	
	DC24V	Φ50		LR5-02LJNW	
Pole Mount w/ Angle Bracket	DC24V	Φ40	Cable	LR4-02QJNW	
		Φ60		LR6-02QJNW	

Removable Screwless Terminal



A new removable terminal For easier wiring.

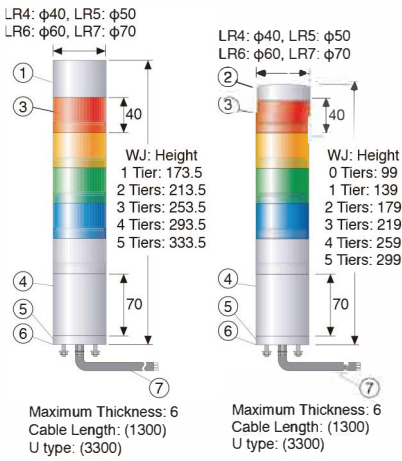


The terminal can be pulled out



Outer Dimensional Drawing (Unit:mm)

Mount A [WJ] Direct Mount/Cable
(01: DC12V / 02: DC24V)

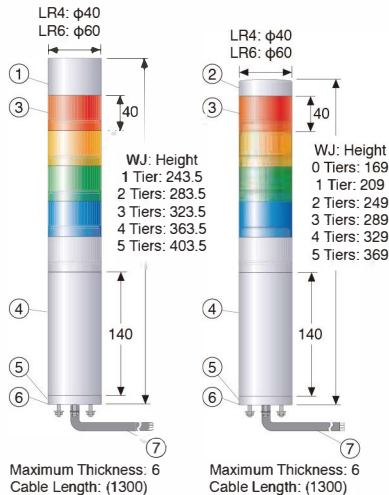


Mount A

**[WT] Direct Mount/
Screwless Terminal
(Body Unit)**

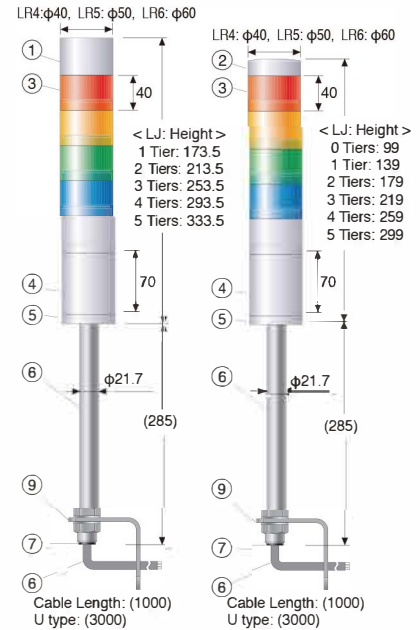


Mount A [WJ] Direct Mount/Cable
(M2: AC100V - 240V)



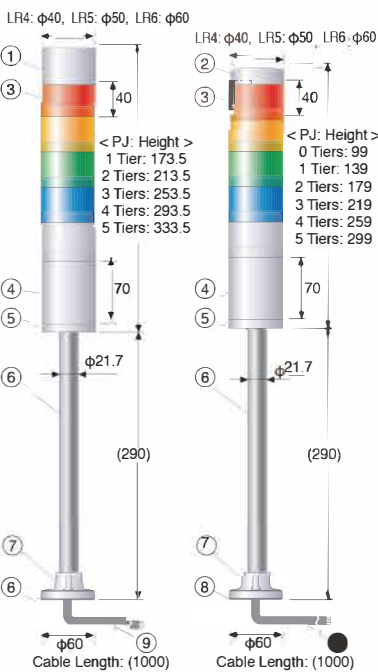
Number	Description	Material
①	Buzzer Assembly Unit	PC
●	Headcover	PC
●	LED Assembly Unit	Globe: PC
④	Body	PC
⑤	Direct-mount Bracket	PC
⑥	Waterproof Packing	Silicon Rubber
●	Cable	PVC

**Mount B [LJ] Pole Mount w/'L' Bracket
& Cable (02: DC24V)**



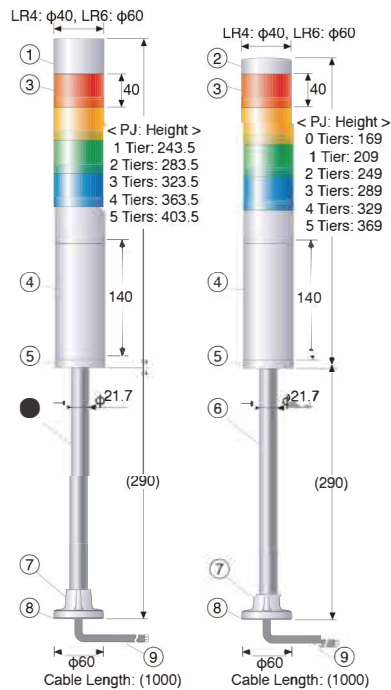
Number	Description	Material
①	Buzzer Assembly Unit	PC
●	Headcover	PC
●	LED Assembly Unit	Globe: PC
④	Body	PC
⑤	Bracket	PC
⑥	Pole	AL
●	Rubber Bushing	EPR Rubber
⑧	Cable	PVC
⑨	'L' Angle	Steel

**Mount A [PJ] Pole Mount w/Circular Bracket
& Cable**
(01: DC12V / 02: DC24V)



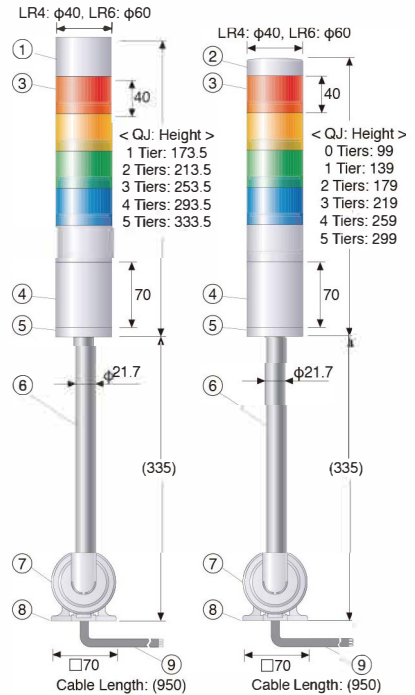
Number	Description	Material
①	Buzzer Assembly Unit	PC
●	Headcover	PC
●	LED Assembly Unit	Globe: PC
④	Body	PC
⑤	Bracket	PC
⑥	Pole	AL
●	Circular Bracket	PC
⑧	Waterproof Packing	Silicon Rubber
⑨	Cable	PVC

**Mount A [PJ] Pole Mount w/Circular Bracket
& Cable**
(M2: AC100V - 240V)



Number	Description	Material
①	Buzzer Assembly Unit	PC
●	Headcover	PC
●	LED Assembly Unit	Globe: PC
④	Body	PC
⑤	Bracket	PC
⑥	Pole	AL
●	Circular Bracket	PC
⑧	Waterproof Packing	Silicon Rubber
⑨	Cable	PVC

**Mount C [QJ] Pole Mount w/Angle Bracket
& Cable**
(02: DC24V)



Number	Description	Material
①	Buzzer Assembly Unit	PC
●	Headcover	PC
●	LED Assembly Unit	Globe: PC
④	Body	PC
⑤	Pole Bracket	PC
⑥	Pole	AL
●	Angle Bracket	PC
⑧	Waterproof Packing	CR
⑨	Cable	PVC

Wiring Diagrams

Product Type [01] DC 12V [02] DC 24V
Model LR□-□02□/LR5-□01□□W

External Contact Type
 Contact Relay Type

LR4 - LR7

Flashing Common Line	Brown
LED Red	Red
LED Amber	Orange
LED Green	Green
LED Blue	Blue
LED White	White
Buzzer	Purple
Power Source Line	Gray
Power Source Line	Yellow

Fuse 1A DC 12 V (LR5 included) (Class 2) (Non-polar)
 DC 24 V (Class 2) (Non-polar)

※ Used when buzzer unit is attached.

External Contact Type
 PLC (NPN Transistor Type)

LR4 - LR7

Flashing Common Line	Brown
LED Red	Red
LED Amber	Orange
LED Green	Green
LED Blue	Blue
LED White	White
Buzzer	Purple
Power Source Line	Gray
Power Source Line	Yellow

Fuse 1A DC 12 V (LR5 included) (Class 2) (Non-polar)
 DC 24 V (Class 2) (Non-polar)

※ Used when buzzer unit is attached.

External Contact Type
 PLC (PNP Transistor Type)

LR4 - LR7

Flashing Common Line	Brown
LED Red	Red
LED Amber	Orange
LED Green	Green
LED Blue	Blue
LED White	White
Buzzer	Purple
Power Source Line	Gray
Power Source Line	Yellow

Fuse 1A DC 12 V (LR5 included) (Class 2) (Non-polar)
 DC 24 V (Class 2) (Non-polar)

※ Used when buzzer unit is attached.

Product Type [M2] AC 100 - 240V
Model LR□-□M2□□W

External Contact Type
 Contact Relay Type

LR4, LR6

Flashing Common Line	Brown
LED Red	Red
LED Amber	Orange
LED Green	Green
LED Blue	Blue
LED White	White
Buzzer	Purple
Common Line	Yellow
Power Source Line	Gray
Power Source Line	Black

Fuse 1A AC 100 - 240 V

※ Used when buzzer unit is attached.

External Contact Type
 PLC (NPN Transistor Type)

LR4, LR6

Flashing Common Line	Brown
LED Red	Red
LED Amber	Orange
LED Green	Green
LED Blue	Blue
LED White	White
Buzzer	Purple
Common Line	Yellow
Power Source Line	Gray
Power Source Line	Black

Fuse 1A AC 100 - 240 V

※ Used when buzzer unit is attached.

[WT] Terminal Type
 Wiring Method

A minus driver, etc., is used to pry the Terminal Block open by pushing straight onto the lever slot.

The stripped lead wire is inserted into the slot.

Removing the driver releases the lever.

Terminal Block

9 Black	Power (Signal)
8 Gray	Flashing Common
7 Yellow	Power (Common)
6 Gray	Buzzer
5 White	LED White
4 Blue	LED Blue
3 Green	LED Green
2 Orange	LED Red
1 Red	LED Red

Recommended Wire Gauges

Wire Type	Wire (Solid)	Wire (Frayed)
UL1007 / UL1430	0.14 - 1.5mm	AWG30 - 14

Temperature rating should be above 75°C, and the conductor material should be of copper wire.

Mounting Dimensions (Unit: mm)

Mount A WJ/PJ/WT Mounting Diagram

Mounting Holes x3	Nut/ Screw	LR4/5-WJ	LR5-WT	LR4/5/6-PJ	LR6/7-WJ	LR7-WT
φ4	M3	φ30				
φ5	M4			φ40		

Recommended Torque 0.6 N/m

Mount B LJ Mounting Diagram

For M8 bolt and nut size

Mounting Hole (φ9)

Mounting Angle

Mounting Surface

20 20

For M10 bolt and nut size

Mounting Hole (φ11)

Mounting Angle

Mounting Surface

35 35

Recommended Bolt Torque 12.2 N/m

1 Make holes for the mounting and wire-distribution. Refer to the suitable attachment or mounting dimension figure for the model.

2 Run wiring through the mounting hole.

3 Secure the product with the bolts, nuts and screws. Required nuts and bolts (for LJ) are not included.

Mount C QJ Mounting Diagram

Mounting φ6x4

90°

Wire Hole φ15

Mounting Hole φ6x4

Nut/Screw M5x4

18.5

φ54 - φ56

φ73

From Pole center 36.9

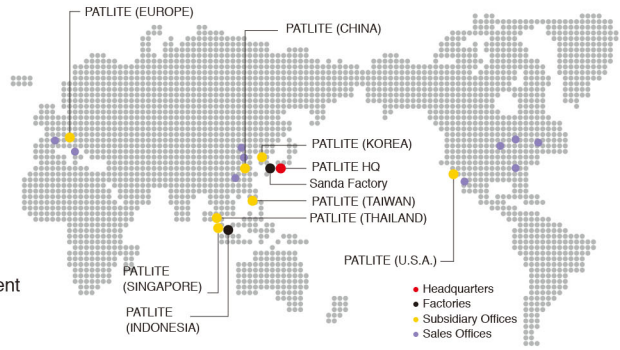
Bracket Shape

Nameplate

Recommended Torque 1.4 N/m

Because we are a global company, we can offer support and stable purchases all over the world.

The LR Series has acquired international standards, such as UL and EN. And, the PATLITE group has built a sales network all over the world, so that the goods and service is optimally sent to every customer in the world, from both factories in Japan and Indonesia.



LR Series Fully-assembled Product General Specifications	
Operating Ambient Temperature	-20°C - +50°C
Operating Humidity Range	90% RH or less, no condensation
Storage Temperature Range	-30°C - +60°C
Storage Humidity Range	90% RH or less, no condensation
Mounting Location	Indoor Use
Mounting Direction	Upright Position
Protection Rating*1	IP65 (IEC 60529) / NEMA TYPE 4X, 13
Environmental Conditions	Upright Position
Insulation Resistance	More than 1MΩ at DC500V between the power input lead and chassis
Withstand Voltage	AC500V for 1 minute between terminals and chassis without breaking insulation (M2: AC1500V for 1 min.)
Flash Rate	60 ±2 flashes/ min
Sound Level	LR4 Typ. 85dB LR5 Typ. 85dB LR6 Typ. 88dB LR7 Typ. 90dB LR5 DC12V Typ. 80dB
Sound Reduction*2	ab. -10dB reduction
Environmental Conditions	Buzzer Sound No.4 (Sweep) from all directions at a 1m distance
Buzzer Sound	4 patterns*2 No.1 Rapid Intermittent sound No.2 Continuous sound No.3 Rapid Hi-low No.4 Sweep sound
Transistor Output	NPN / PNP (AC100 - 240V is NPN only)
Conformities	<ul style="list-style-type: none"> UL 508, CSA-C22.2 No.14 FCC Part 15 Subpart B Class A RoHS Directive (EN 50581) EMC Directive (EN 61000-6-4, EN 61000-6-2) KC (KN 61000-6-4, KN 61000-6-2) Low-voltage Directive (IEC/EN 60947-5-1, EN62471)*3

*1: L Type is IP54 *2: Dependent on DIP Switch Settings *3: M2 Type Only

External Contact Capacity		Is:Current Capacity	Vs:Saturated Voltage	Il:Leakage Current	Ta:Ambient Temperature
Rated Voltage	DC12V	DC24V	AC100 - 240V		
LED Unit (Per Tier)	Signal Line Current	90mA	40mA	40mA	
	Contact Capacity	Is ≥ 100mA Vs ≥ DC35V	Is ≥ 100mA Vs ≥ DC35V	Is ≥ 100mA Vs ≥ DC35V	
Buzzer	Signal Line Current	90mA	40mA	40mA	
	Contact Capacity	Is ≥ 300mA Vs ≥ DC35V*1	Is ≥ 300mA Vs ≥ DC35V*1	Is ≥ 300mA Vs ≥ DC35V	
Power	Consumption Current	500mA	250mA	150mA	
	Contact Capacity	Is ≥ 700mA Vs ≥ DC35V	Is ≥ 700mA Vs ≥ DC35V	Current rating higher than inrush current	
Inrush Current	Signal Line	None*1	None*1	None	
	Power Line	0.7A at 15ms or less	0.7A at 0.5ms or less	25A (Ta=25°C), 50A (Ta=50°C) at 2.0ms or less	
Contact Leakage Current	Il ≤ 0.1 mA				

*1: An inrush current of 0.7A flows through the signal line when the Gray power source line is disconnected. Be sure to select an external contact which can withstand the capacity. [Recommended Fuse] Rated Current: 250V / 1A 5x20mm Fast-blow Glass Fuse

LED Unit General Specifications						
Color	Red	Amber	Green	Blue	White	
Rated Voltage	DC24V					
Consumption Current/Power	Typ.	0.04A/1W	0.04A/1W	0.04A/1W	0.04A/1W	0.04A/1W
	Max.	0.045A/1.3W	0.045A/1.3W	0.045A/1.3W	0.045A/1.3W	0.045A/1.3W
Standards/Conformities	<ul style="list-style-type: none"> UL 508, CSA-C22.2 No.14 EMC Directive (EN 61000-6-4, EN 61000-6-2) RoHS Directive (EN 50581) 					

Buzzer Unit General Specifications		
Rated Voltage	DC24V	
Consumption Current/Consumption Power	Typ.	0.04A/1W
	Max.	0.3A/1.3W
Standards/Conformities	<ul style="list-style-type: none"> UL 508, CSA-C22.2 No.14 EMC Directive (EN 61000-6-4, EN 61000-6-2) RoHS Directive (EN 50581) 	



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 smbox@sensormatic.it - www.sensormatic.it

CAUTION

To ensure correct use of these products, read the "Instruction Manual" prior to use. Failure to follow all safeguards can result in fire, electric shock, or other accidents. Specifications are subject to change without notice.

PATLITE ECO PROJECT

For the benefit of mankind and the earth, Patlite is committed to developing environmentally friendly products.