

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

Signal Tower LR Series



NEMA
Type 4X, 13

360° Buzzer

Modular



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Signal Tower

LR Series

Modular LED Signal Tower

φ40mm

LR4

φ50mm

LR5

φ60mm

LR6

φ70mm

LR7



A Uniform 360° Light-Emitting Design

The new LED color module features a new, unique interior lens construction that achieves a fuller, more uniform 360° degree light output. Light color is vibrant with more emission area for reliable indication from further distances.



Current LCE-A Series (φ40)



New LR4 Series (φ40)

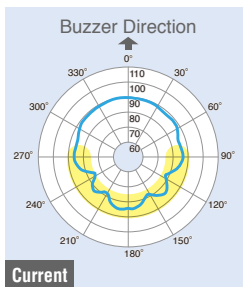
More than Twice the Light Output*

The LR Series lens distributes light more efficiently, increasing luminous intensity by more than double that of our current models.

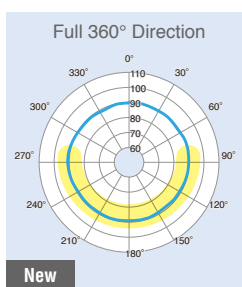
* Based on the φ40 Red LED Model

Unique Method of Fully Enclosed Sound Module

Inspired by a drum percussion instrument, the fully enclosed sound module is able to more efficiently vibrate sound waves, producing even 360° omnidirectional sound resonance. Resistance to water and dust is also increased.



Current LHE Series (φ70)

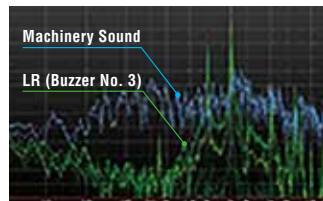


New LR7 Series (φ70)

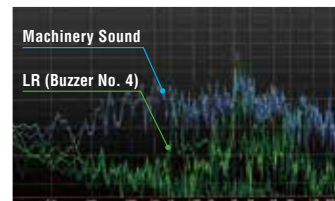
Maximum 90dB* Output

The fully enclosed buzzer module produces more efficient sound, up to 90dB, at 1 meter.

*LR7 buzzer No.4 (Sweep tone)



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



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

New Sounds Heard Above the Noise

4 built-in buzzer sounds. Buzzer sounds No. 3 and No. 4 are designed at a higher variable frequency to be heard above the noise of surrounding machinery. Alternatively, a sound reduction function of approx. -10dB is included for use in quieter environments.

* Four Buzzer Sounds

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

Modular Components Example



Body Units



Buzzer Units



LED Units



Clear-globe LED Units



Multi-color LED Units

Optional Parts Example



Circular Bracket



L-bracket



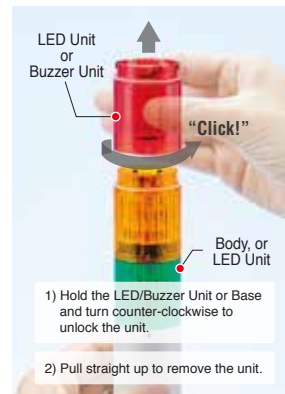
Wall-mount Bracket



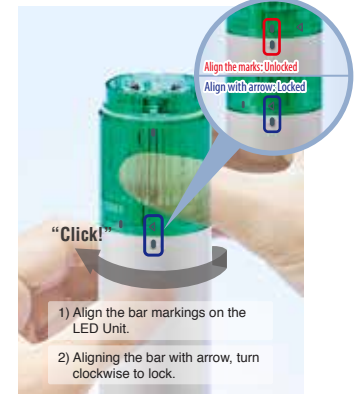
Modular System Design

Traditional stack lights typically require additional threaded shafts or tools to reconfigure LED units. The LR modular system design redefines signal tower assembly by making customization and repair seamless.

LED/Buzzer Unit Removal



LED Unit Attachment



Reorganizing Modules is Effortless

The LR modular system makes reconfiguring the color order simple with its twist-and-lock design. Replacing and reconfiguring LED units or adding a buzzer module is easier than ever.

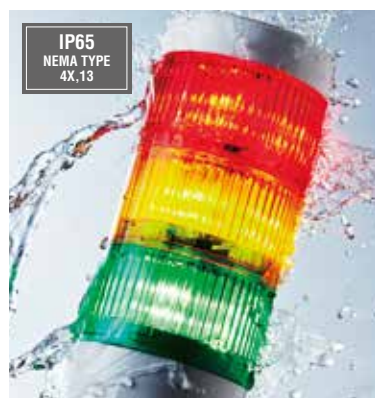


Scan to see this in action



Smooth Surface

The LR base, LED units and buzzer modules secure together tight and flush, creating a smooth surface, ideal for easy cleaning and water run off.



Environmental Performance

Features a rugged structure with the following ratings: IP65 / NEMA Type 4x, 13 withstands various environmental conditions, such as water and dust.



Upgraded Materials

Upgrading from an ABS to Polycarbonate material, and silicon resin O-rings, results in a more lightweight, shock and water resistant product.



Cable wire included



New Lineup

Clear-globe LED Unit

LR4-E-RZ

4 (Ø40) R (Red)
5 (Ø50) Y (Amber)
6 (Ø60) G (Green)
B (Blue)



LR4 LR5 LR6

Clear globes for R,Y,G,B

Individual Unit

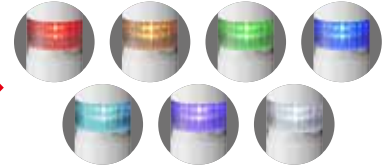
Pre-assembled*

* LR4, LR6 Only

Multi-color LED Unit

LR6-E-MZ

7 colors



LR6

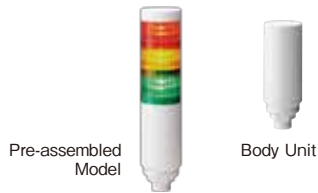
Individual Unit

It displays 7 colors in one unit.
(Red/Green/Blue/Amber/
Cyan/Purple/White)

By connecting (red, green, blue) wires, the colors light up.

Wire Color	Red	Red/ Green	Blue	Green	Blue/ Green	Red/ Blue	Red/ Green/ Blue
LED Color	Red	Amber	Blue	Green	Cyan	Purple	White

Direct Mount with M12 Connector



Model	Tiers	Rated Voltage	Mounting/Wiring	Buzzer	Body Color	LED Unit Color	
Assembly Model	LR 6 - -	3	02	WC	N	W - -	RYG
Unit Model (Body Unit)	LR 6 - -	02	WC	N	W		
6	Ø60	1	5 Tiers	02	24V DC	B Buzzer	W Off-white
				N No Buzzer			LED Color: R (Red) / Y (Amber) / G (Green) / B (Blue) / C (White) (From top to bottom)
				WC Direct Mount / M12 Connector			

• Direct Mount Installation

Direct Mount

Easy Wiring

The M12 connection type provides a convenient, single cable mating point.



Easy direct-mount installation

If one hole is placed in the mounting position, it can easily be attached. It can easily be secured with an M30 nut.

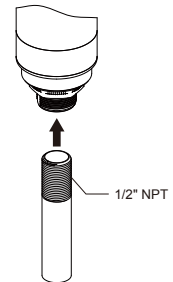
* The M12 Connector & Cable (SZ-120) is sold separately.

• Installation Method 2

Pole Mount

1/2" NPT Support

Bracket is designed to fit a 1/2 inch NPT threaded pipe.



Manual Control Signal Tower

HSST-3M2-RYG



Clear-globe Type



Mounting Image

Assembly Process



What is HSST?

It is a kit featuring an LR5 Signal Tower, a switch box, AC/DC adaptor, and mounting hardware. This system can be used for a wide range of applications such as, improving efficiency of production assembly lines and discreet communications in call centers.

Assembly Line Lighting Display

- Problem Occurred
- Low Material Stock
- Need Assistance

Customer Support / Call Center



Call Status Display

- Need a Manager
- On Hold
- On Call

Rated Voltage	Size	Operating Specifications	Tiers	Model	Color
100V - 240V AC	φ50	Switch ON/OFF Lighting Control	3	HSST-3M2-RYG Clear	Red/Amber/Green

Wireless Data Acquisition System

Transmitters



**Signal Tower LR6 Transmitter
WDT-6LR-Z2**

Corresponding Model: **LR6 Series**

Current Consumption: **max. 55mA**

Transmission Distance: **20m^{*2}**



**Signal Tower LR5 Transmitter
WDT-5LR-Z2**

Corresponding Model: **LR5 Series**

Current Consumption: **max. 55mA**

Transmission Distance: **20m^{*2}**

Receiver



**Receiver
WDR-LE-Z2**

Number of Transmitter: **20 Units^{*1}
MAX 30 Units**

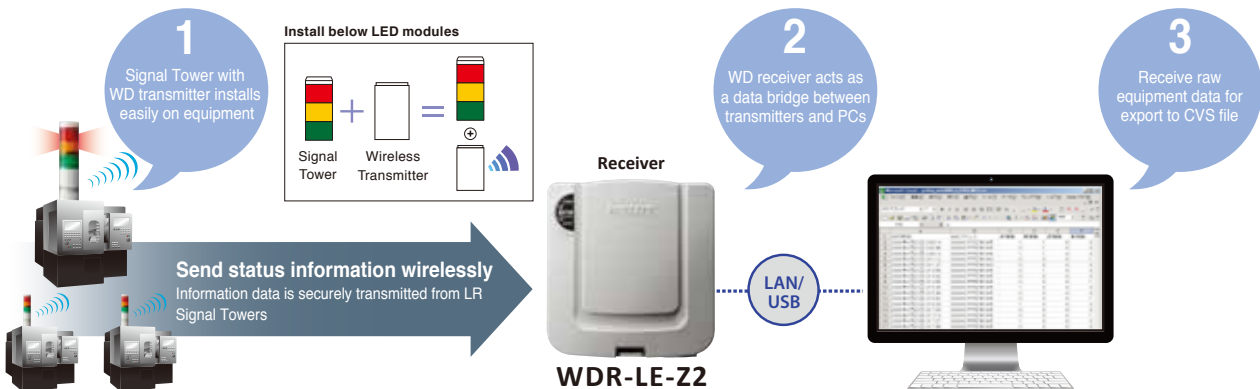
Connection Type: **LAN/USB**

Transmission Distance: **typ. 65mA^{*3}**

Multiple Units^{*3}

- *1 Radio signal quality will depend on the environment, device location and number of connections.
- *2 Due to the characteristic of radio waves, the connection distances are reference values.
- *3 Two or more receiver units can operate simultaneously with LAN connections.
(Ask your PATLITE Sales Representative for details.)

Monitor and acquire critical equipment data



LR5/LR7 Screwless Terminal Knock-out Mount

Dual mount base unit allows for direct or pole mounting



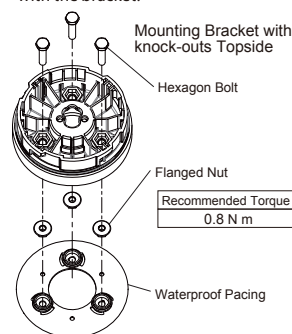
Screw and nut accessories included.

Accessory			
LR5 - KT	Hexagon Bolt (M3 x 20)	Hexagon Nut with Flange (M3)	
	3 pcs.	6 pcs.	
LR7 - KT	Hexagon Bolt (M4 x 20)	Hexagon Nut with Flange (M4)	
	3 pcs.	6 pcs.	

Installation Method 1

Direct Mount (Using accessories)

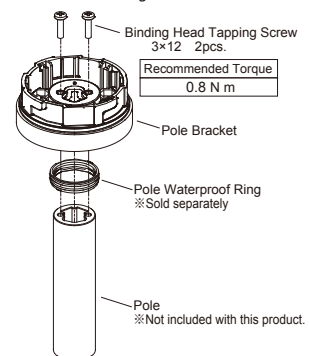
Mount on pole bracket by knocking out holes with the tapping screws included with the bracket.



Installation Method 2

Pole Mount (Not Using accessories)

Mount directly by knocking out holes in the bracket and securing with nuts and bolts.



*Please refer to the Complete Operation Manual for details of installation.

Signal Tower

LR Series Pre-assembled Models

**φ40mm
Model Code**

(Ex.) **LR4-502WJBW-RYGBCZ**

Model ① ② ③ ④ ⑤ ⑥ ⑦

- | | | | | | | |
|---|---|--|---|--|--|--|
| ① Tiers
1 = 1 Tier
2 = 2 Tiers
3 = 3 Tiers
4 = 4 Tiers
5 = 5 Tiers | ② Rated Voltage
02 = 24V DC
M2 = 100 - 240V AC *1 | ③ Mounting/Wiring
WJ = Direct Mount/Cable
LJ = Pole Mount with L-bracket/Cable
PJ = Pole Mount with Circular Bracket/Cable
QJ = Pole Mount with Folding Bracket/Cable *2 | ④ Flashing/Buzzer
B = With Flashing/Buzzer
N = No Flashing/Buzzer | ⑤ Body Color
W = Off-white
U = Silver *3 | ⑥ LED Module Color
R = Red
Y = Amber
G = Green
B = Blue
C = White | ⑦ Globe Type
Blank = Color Globe
Z = Clear Globe |
|---|---|--|---|--|--|--|

*1 For WJ, LJ and PJ type only *2 For 24V DC and Off-white type only *3 For 24V DC type WJ, LJ and PJ type only

**φ50mm
Model Code**

(Ex.) **LR5-502WJBW-RYGBCZ**

Model ① ② ③ ④ ⑤ ⑥ ⑦

- | | | | | | | |
|---|---|---|---|-------------------------------|--|--|
| ① Tiers
1 = 1 Tier
2 = 2 Tiers
3 = 3 Tiers
4 = 4 Tiers
5 = 5 Tiers | ② Rated Voltage
01 = 12V DC
02 = 24V DC | ③ Mounting/Wiring
WJ = Direct Mount/Cable
LJ = Pole Mount with L-bracket/Cable
PJ = Pole Mount with Circular Bracket/Cable | ④ Flashing/Buzzer
B = With Flashing/Buzzer
N = No Flashing/Buzzer | ⑤ Body Color
W = Off-white | ⑥ LED Module Color
R = Red
Y = Amber
G = Green
B = Blue
C = White | ⑦ Globe Type
Blank = Color Globe
Z = Clear Globe |
|---|---|---|---|-------------------------------|--|--|

**φ60mm
Model Code**

(Ex.) **LR6-502WJBW-RYGBCZ**

Model ① ② ③ ④ ⑤ ⑥ ⑦

- | | | | | | | |
|---|---|--|---|--|---|--|
| ① Tiers
1 = 1 Tier
2 = 2 Tiers
3 = 3 Tiers
4 = 4 Tiers
5 = 5 Tiers | ② Rated Voltage
02 = 24V DC
M2 = 100 - 240V AC *1 | ③ Mounting/Wiring
WJ = Direct Mount/Cable
LJ = Pole Mount with L-bracket/Cable
PJ = Pole Mount with Circular Bracket/Cable
QJ = Pole Mount with Folding Bracket/Cable *2
WC = Direct Mount/M12 Connector *2 | ④ Flashing/Buzzer
B = With Flashing/Buzzer
N = No Flashing/Buzzer | ⑤ Body Color
W = Off-white
U = Silver *3 | ⑥ LED Module Color
R = Red
Y = Amber
G = Green
B = Blue
C = White
M = Multi Color | ⑦ Globe Type
Blank = Color Globe
Z = Clear Globe |
|---|---|--|---|--|---|--|


*1 For WJ, LJ and PJ type only *2 For 24V DC and Off-white type only *3 For 24V DC type WJ, LJ and PJ type only



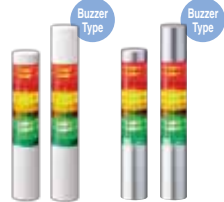





**φ70mm
Model Code**

(Ex.) **LR7-502WJBW-RYGBC**

Model ① ② ③ ④ ⑤ ⑥



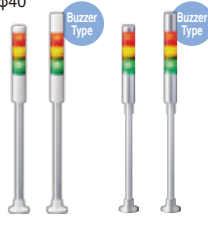

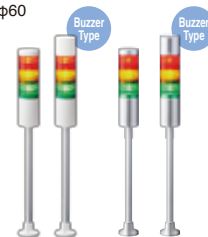

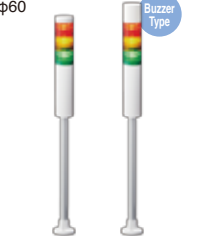
- | | | | | | |
|---|--------------------------------|--|---|-------------------------------|--|
| ① Tiers
1 = 1 Tier
2 = 2 Tiers
3 = 3 Tiers
4 = 4 Tiers
5 = 5 Tiers | ② Rated Voltage
02 = 24V DC | ③ Mounting/Wiring
WJ = Direct Mount/Cable | ④ Flashing/Buzzer
B = With Flashing/Buzzer
N = No Flashing/Buzzer | ⑤ Body Color
W = Off-white | ⑥ LED Module Color
R = Red
Y = Amber
G = Green
B = Blue
C = White |
|---|--------------------------------|--|---|-------------------------------|--|


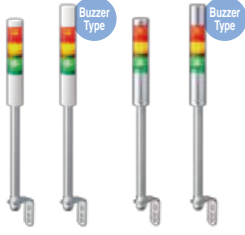

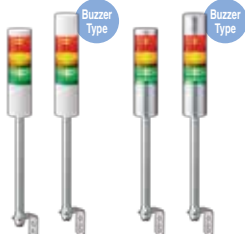



Mounting Type	Rated Voltage	Size	Flash/Buzzer	Tiers	Model	Power Consumption	Mass
 Pole Mount with Folding Bracket	24V DC	φ40	-	1	LR4-102QJNW	1.0W	0.455kg
				2	LR4-202QJNW	2.0W	0.490kg
				3	LR4-302QJNW	3.0W	0.525kg
				4	LR4-402QJNW	4.0W	0.560kg
				5	LR4-502QJNW	5.0W	0.595kg
			O	1	LR4-102QJBW	2.0W	0.490kg
				2	LR4-202QJBW	3.0W	0.525kg
				3	LR4-302QJBW	4.0W	0.560kg
				4	LR4-402QJBW	5.0W	0.595kg
				5	LR4-502QJBW	6.0W	0.630kg
		φ60	-	1	LR6-102QJNW	1.0W	0.520kg
				2	LR6-202QJNW	2.0W	0.580kg
				3	LR6-302QJNW	3.0W	0.640kg
				4	LR6-402QJNW	4.0W	0.700kg
				5	LR6-502QJNW	5.0W	0.760kg
O	1		LR6-102QJBW	2.0W	0.580kg		
	2		LR6-202QJBW	3.0W	0.640kg		
	3		LR6-302QJBW	4.0W	0.700kg		
	4		LR6-402QJBW	5.0W	0.760kg		
	5		LR6-502QJBW	6.0W	0.820kg		

Mounting Type	Rated Voltage	Size	Flash/Buzzer	Tiers	Model	Power Consumption	Mass	
 Direct Mount	12V DC	φ50 	-	1	LR5-101WJNW	1.0W	0.240kg	
				2	LR5-201WJNW	2.0W	0.280kg	
				3	LR5-301WJNW	3.0W	0.320kg	
				4	LR5-401WJNW	4.0W	0.360kg	
				5	LR5-501WJNW	5.0W	0.400kg	
			O	1	LR5-101WJBW	2.1W	0.290kg	
				2	LR5-201WJBW	3.1W	0.330kg	
				3	LR5-301WJBW	4.1W	0.370kg	
				4	LR5-401WJBW	5.1W	0.410kg	
				5	LR5-501WJBW	6.1W	0.450kg	
	24V DC	φ40		-	1	LR4-102WJNW[U]	1.0W	0.205kg/0.355kg
					2	LR4-202WJNW[U]	2.0W	0.240kg/0.390kg
					3	LR4-302WJNW[U]	3.0W	0.275kg
					3	LR4-302WJNW-□Z CLEAR	3.0W	0.275kg/0.425kg
					4	LR4-402WJNW[U]	4.0W	0.310kg/0.460kg
				O	1	LR4-102WJBW[U]	2.0W	0.240kg/0.390kg
					2	LR4-202WJBW[U]	3.0W	0.275kg/0.425kg
					3	LR4-302WJBW[U]	4.0W	0.310kg/0.460kg
					3	LR4-302WJBW-□Z CLEAR	4.0W	0.310kg
					4	LR4-402WJBW[U]	5.0W	0.345kg/0.495kg
φ50			-	1	LR5-102WJNW	1.0W	0.240kg	
				2	LR5-202WJNW	2.0W	0.280kg	
				3	LR5-302WJNW	3.0W	0.360kg	
				4	LR5-402WJNW	4.0W	0.360kg	
				5	LR5-502WJNW	5.0W	0.400kg	
			O	1	LR5-102WJBW	2.0W	0.290kg	
				2	LR5-202WJBW	3.0W	0.330kg	
				3	LR5-302WJBW	4.0W	0.370kg	
				4	LR5-402WJBW	5.0W	0.410kg	
				5	LR5-502WJBW	6.0W	0.450kg	
φ60		-	1	LR6-102WJNW[U]	1.0W	0.280kg/0.410kg		
			2	LR6-202WJNW[U]	2.0W	0.340kg/0.470kg		
			3	LR6-302WJNW[U]	3.0W	0.400kg/0.530kg		
			3	LR6-302WJNW-□Z CLEAR	3.0W	0.400kg		
			4	LR6-402WJNW[U]	4.0W	0.460kg/0.590kg		
		O	1	LR6-102WJBW[U]	2.0W	0.340kg/0.470kg		
			2	LR6-202WJBW[U]	3.0W	0.400kg/0.530kg		
			3	LR6-302WJBW[U]	4.0W	0.460kg/0.590kg		
			3	LR6-302WJBW-□Z CLEAR	4.0W	0.460kg		
			4	LR6-402WJBW[U]	5.0W	0.520kg/0.650kg		
φ70		-	1	LR7-102WJNW	1.0W	0.305kg		
			2	LR7-202WJNW	2.0W	0.370kg		
			3	LR7-302WJNW	3.0W	0.435kg		
			4	LR7-402WJNW	4.0W	0.500kg		
			5	LR7-502WJNW	5.0W	0.565kg		
		O	1	LR7-102WJBW	2.0W	0.375kg		
			2	LR7-202WJBW	3.0W	0.440kg		
			3	LR7-302WJBW	4.0W	0.505kg		
			4	LR7-402WJBW	5.0W	0.570kg		
			5	LR7-502WJBW	6.0W	0.635kg		
100 - 240V AC	φ40		-	1	LR4-1M2WJNW	1.5W	0.285kg	
				2	LR4-2M2WJNW	3.0W	0.320kg	
				3	LR4-3M2WJNW	4.5W	0.355kg	
				4	LR4-4M2WJNW	6.0W	0.390kg	
				5	LR4-5M2WJNW	7.5W	0.425kg	
	O		1	LR4-1M2WJBW	3.0W	0.320kg		
			2	LR4-2M2WJBW	4.5W	0.355kg		
			3	LR4-3M2WJBW	6.0W	0.390kg		
			4	LR4-4M2WJBW	7.5W	0.425kg		
			5	LR4-5M2WJBW	9.0W	0.460kg		
	φ60		-	1	LR6-1M2WJNW	1.5W	0.380kg	
				2	LR6-2M2WJNW	3.0W	0.440kg	
				3	LR6-3M2WJNW	4.5W	0.500kg	
				4	LR6-4M2WJNW	6.0W	0.560kg	
				5	LR6-5M2WJNW	7.5W	0.620kg	
O	1		LR6-1M2WJBW	3.0W	0.440kg			
	2		LR6-2M2WJBW	4.5W	0.500kg			
	3		LR6-3M2WJBW	6.0W	0.560kg			
	4		LR6-4M2WJBW	7.5W	0.620kg			
	5		LR6-5M2WJBW	9.0W	0.680kg			

Signal Tower

LR Series Pre-assembled Models

Mounting Type	Rated Voltage	Size	Flash/Buzzer	Tiers	Model	Power Consumption	Mass
 <p>Pole Mount with Circular Bracket</p>	12V DC	$\phi 50$ 	-	1	LR5-101PJNW	1.0W	0.420kg
				2	LR5-201PJNW	2.0W	0.460kg
				3	LR5-301PJNW	3.0W	0.500kg
				4	LR5-401PJNW	4.0W	0.540kg
				5	LR5-501PJNW	5.0W	0.580kg
			O	1	LR5-101PJBW	2.1W	0.470kg
				2	LR5-201PJBW	3.1W	0.510kg
				3	LR5-301PJBW	4.4W	0.550kg
				4	LR5-401PJBW	5.1W	0.590kg
				5	LR5-501PJBW	6.1W	0.630kg
	24V DC	$\phi 40$ 	-	1	LR4-102PJNW[U]	1.0W	0.395kg/0.545kg
				2	LR4-202PJNW[U]	2.0W	0.430kg/0.580kg
				3	LR4-302PJNW[U]	3.0W	0.465kg/0.615kg
				4	LR4-402PJNW[U]	4.0W	0.500kg/0.650kg
				5	LR4-502PJNW[U]	5.0W	0.535kg/0.685kg
			O	1	LR4-102PJBW[U]	2.0W	0.430kg/0.580kg
				2	LR4-202PJBW[U]	3.0W	0.465kg/0.615kg
				3	LR4-302PJBW[U]	4.0W	0.500kg/0.650kg
				4	LR4-402PJBW[U]	5.0W	0.535kg/0.685kg
				5	LR4-502PJBW[U]	6.0W	0.570kg/0.720kg
$\phi 50$ 		-	1	LR5-102PJNW	1.0W	0.420kg	
			2	LR5-202PJNW	2.0W	0.460kg	
			3	LR5-302PJNW	3.0W	0.500kg	
			4	LR5-402PJNW	4.0W	0.540kg	
			5	LR5-502PJNW	5.0W	0.580kg	
		O	1	LR5-102PJBW	2.0W	0.470kg	
			2	LR5-202PJBW	3.0W	0.510kg	
			3	LR5-302PJBW	4.0W	0.550kg	
			4	LR5-402PJBW	5.0W	0.590kg	
			5	LR5-502PJBW	6.0W	0.630kg	
$\phi 60$ 	-	1	LR6-102PJNW[U]	1.0W	0.460kg/0.590kg		
		2	LR6-202PJNW[U]	2.0W	0.520kg/0.650kg		
		3	LR6-302PJNW[U]	3.0W	0.580kg/0.710kg		
		3	LR6-302PJNW-□Z CLEAR	3.0W	0.580kg		
		4	LR6-402PJNW[U]	4.0W	0.640kg/0.770kg		
	O	1	LR6-102PJBW[U]	2.0W	0.520kg/0.650kg		
		2	LR6-202PJBW[U]	3.0W	0.580kg/0.710kg		
		3	LR6-302PJBW[U]	4.0W	0.640kg/0.770kg		
		3	LR6-302PJBW-□Z CLEAR	4.0W	0.640kg		
		4	LR6-402PJBW[U]	5.0W	0.700kg/0.830kg		
100 - 240V AC	$\phi 40$ 	-	1	LR4-1M2PJNW	1.5W	0.475kg	
			2	LR4-2M2PJNW	3.0W	0.510kg	
			3	LR4-3M2PJNW	4.5W	0.545kg	
			4	LR4-4M2PJNW	6.0W	0.580kg	
			5	LR4-5M2PJNW	7.5W	0.615kg	
		O	1	LR4-1M2PJBW	3.0W	0.510kg	
			2	LR4-2M2PJBW	4.5W	0.545kg	
			3	LR4-3M2PJBW	6.0W	0.580kg	
			4	LR4-4M2PJBW	7.5W	0.615kg	
			5	LR4-5M2PJBW	9.0W	0.650kg	
	$\phi 60$ 	-	1	LR6-1M2PJNW	1.5W	0.560kg	
			2	LR6-2M2PJNW	3.0W	0.620kg	
			3	LR6-3M2PJNW	4.5W	0.680kg	
			4	LR6-4M2PJNW	6.0W	0.740kg	
			5	LR6-5M2PJNW	7.5W	0.800kg	
		O	1	LR6-1M2PJBW	3.0W	0.620kg	
			2	LR6-2M2PJBW	4.5W	0.680kg	
			3	LR6-3M2PJBW	6.0W	0.740kg	
			4	LR6-4M2PJBW	7.5W	0.800kg	
			5	LR6-5M2PJBW	9.0W	0.860kg	

Mounting Type	Rated Voltage	Size	Flash/Buzzer	Tiers	Model	Power Consumption	Mass
	12V DC	φ50 	—	1	LR5-101LJNW	1.0W	0.530kg
				2	LR5-201LJNW	2.0W	0.570kg
				3	LR5-301LJNW	3.0W	0.610kg
				4	LR5-401LJNW	4.0W	0.650kg
				5	LR5-501LJNW	5.0W	0.690kg
			O	1	LR5-101LJBW	2.1W	0.580kg
				2	LR5-201LJBW	3.1W	0.620kg
				3	LR5-301LJBW	4.1W	0.660kg
				4	LR5-401LJBW	5.1W	0.700kg
				5	LR5-501LJBW	6.1W	0.740kg
	24V DC	φ40 	—	1	LR4-102LJNW[U]	1.0W	0.495kg/0.645kg
				2	LR4-202LJNW[U]	2.0W	0.530kg/0.680kg
				3	LR4-302LJNW[U]	3.0W	0.565kg/0.715kg
				3	LR4-302LJNW-□Z CLEAR	3.0W	0.565kg
				4	LR4-402LJNW[U]	4.0W	0.600kg/0.750kg
			O	1	LR4-102LJBW[U]	2.0W	0.530kg/0.680kg
				2	LR4-202LJBW[U]	3.0W	0.565kg/0.715kg
				3	LR4-302LJBW[U]	4.0W	0.600kg/0.750kg
				4	LR4-402LJBW[U]	5.0W	0.635kg/0.785kg
				5	LR4-502LJBW[U]	6.0W	0.670kg/0.820kg
	24V DC	φ50 	—	1	LR5-102LJNW	1.0W	0.530kg
				2	LR5-202LJNW	2.0W	0.570kg
				3	LR5-302LJNW	3.0W	0.610kg
				4	LR5-402LJNW	4.0W	0.650kg
				5	LR5-502LJNW	5.0W	0.690kg
			O	1	LR5-102LJBW	2.0W	0.580kg
				2	LR5-202LJBW	3.0W	0.620kg
				3	LR5-302LJBW	4.0W	0.660kg
				4	LR5-402LJBW	5.0W	0.700kg
				5	LR5-502LJBW	6.0W	0.740kg
	24V DC	φ60 	—	1	LR6-102LJNW[U]	1.0W	0.560kg/0.700kg
				2	LR6-202LJNW[U]	2.0W	0.620kg/0.760kg
				3	LR6-302LJNW[U]	3.0W	0.680kg/0.820kg
				3	LR6-302LJNW-□Z CLEAR	3.0W	0.610kg
				4	LR6-402LJNW[U]	4.0W	0.740kg/0.880kg
			O	1	LR6-102LJBW[U]	2.0W	0.620kg/0.760kg
				2	LR6-202LJBW[U]	3.0W	0.680kg/0.820kg
				3	LR6-302LJBW[U]	4.0W	0.740kg/0.880kg
				3	LR6-302LJBW-□Z CLEAR	4.0W	0.610kg
				4	LR6-402LJBW[U]	5.0W	0.800kg/0.940kg
	100-240V AC*	φ40 	—	1	LR4-1M2LJNW	1.5W	0.575kg
				2	LR4-2M2LJNW	3.0W	0.610kg
				3	LR4-3M2LJNW	4.5W	0.645kg
				4	LR4-4M2LJNW	6.0W	0.680kg
				5	LR4-5M2LJNW	7.5W	0.715kg
			O	1	LR4-1M2LJBW	3.0W	0.610kg
				2	LR4-2M2LJBW	4.5W	0.645kg
				3	LR4-3M2LJBW	6.0W	0.680kg
				4	LR4-4M2LJBW	7.5W	0.715kg
				5	LR4-5M2LJBW	9.0W	0.750kg
	100-240V AC*	φ60 	—	1	LR6-1M2LJNW	1.5W	0.660kg
				2	LR6-2M2LJNW	3.0W	0.720kg
				3	LR6-3M2LJNW	4.5W	0.780kg
				4	LR6-4M2LJNW	6.0W	0.840kg
				5	LR6-5M2LJNW	7.5W	0.900kg
			O	1	LR6-1M2LJBW	3.0W	0.720kg
				2	LR6-2M2LJBW	4.5W	0.780kg
				3	LR6-3M2LJBW	6.0W	0.840kg
				4	LR6-4M2LJBW	7.5W	0.900kg
				5	LR6-5M2LJBW	9.0W	0.960kg
	24V DC	φ60 	—	3	LR6-302WCNW	3.0W	0.350kg



* Not suitable for KC (KN 61000-6-4, KN 61000-6-2) and Low Voltage Directive (TEC / EN 60947-5-1, EN 62471).

Signal Tower

LR Series Modular Models

Select a Buzzer Unit (for Flashing / Buzzer function)



Size	Color	Model
φ40		LR4-B□
φ50		LR5-B□
φ60		LR6-B□
φ70		LR7-B□

□•••W: Off-white U: Silver K: Black

Select an LED Unit



Size	Color	Model
φ40		LR4-E-R/Y/G/B/C
		LR4-E-RZ/YZ/GZ/BZ CLEAR
φ50		LR5-E-R/Y/G/B/C
		LR4-E-RZ/YZ/GZ/BZ CLEAR
φ60		LR6-E-R/Y/G/B/C
		LR6-E-RZ/YZ/GZ/BZ CLEAR
φ70		LR7-E-R/Y/G/B/C
φ60		LR6-E-MZ Multi-color

Select a Body Unit

Mounting Type	Rated Voltage	Size	Model
 Direct Mount/Cable	12V DC	φ50	LR5-01WJNW
		24V DC	φ40
	φ50		LR5-02WJNW
	φ60		LR6-02WJNW[U]
	φ70		LR7-02WJNW
	100 - 240V AC	φ40	LR4-M2WJNW
φ60		LR6-M2WJNW	
 Direct Mount/Screwless Terminal	24V DC	φ50	LR5-02WTNW[U][K]
		φ70	LR7-02WTNW[U][K]
 Knock-out Mount/Screwless Terminal	24V DC	φ50	LR5-02KTNW[U][K]
		φ70	LR7-02KTNW[U][K]
 Direct Mount/M12 Connector	24V DC	φ60	LR6-02WCNW

Body Unit Model Code

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

Model ① ② ③ ④ ⑤

- | | | | | |
|--|---|--|---|--|
| ① Size
4 = Ø40
5 = Ø50
6 = Ø60
7 = Ø70 | ② Rated Voltage
01 = 12V DC* ¹
02 = 24V DC
M2 = 100 - 240V AC* ² | ③ Mounting/Wiring
WJ = Direct Mount/Cable
WT = Direct Mount/Terminal* ³
KT = Knock-outs Mount/Terminal* ³
WC = Direct Mount/M12 Connector* ⁴
LJ = Pole Mount with L-bracket/Cable* ⁵
PJ = Pole Mount with Circular Bracket/Cable* ⁵
QJ = Pole Mount with Folding Bracket/Cable* ⁶ | ④ Flashing/Buzzer
N = No Flashing/Buzzer | ⑤ Body Color
W = Off-white
U = Silver
K = Black* ⁷ |
|--|---|--|---|--|
- *1 For LR5 models only
*2 For WJ, LJ and PJ mounting with LR4 and LR6 models
*3 For LR5, LR7 DC24V models only
*4 For LR6 DC24V models only
*5 For LR4, LR5 and LR6 models
*6 With LR4 and LR6 DC24V Off-white models only
*7 For LR5, LR7 models only

3 Easy Steps

1 Remove the headcover to setup the body unit



2 Attach from bottom to top, one LED unit at a time to the body unit






3 Replace the headcover, or attach the buzzer unit



See the Movie!!

Scan the QR code to see how easy the LR is to configure.



Mounting Type	Rated Voltage	Size	Model
 Pole Mount with Circular Bracket/Cable	12V DC	φ50	LR5-01PJNW
	24V DC	φ40	LR4-02PJNW[U]
		φ50	LR5-02PJNW
	100 - 240V AC	φ60	LR6-02PJNW[U]
φ40		LR4-M2PJNW	
 Pole Mount with L-bracket/Cable	12V DC	φ50	LR5-01LJNW
	24V DC	φ40	LR4-02LJNW[U]
		φ50	LR5-02LJNW
	100 - 240V AC	φ60	LR6-02LJNW[U]
		φ40	LR4-M2LJNW
	φ60	LR6-M2LJNW	
 Pole Mount with Folding Bracket/Cable	24V DC	φ40	LR4-02QJNW
		φ60	LR6-02QJNW

Removable Screwless Terminal



A new removable terminal for easier wiring.



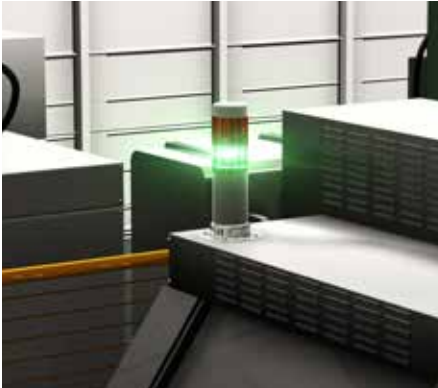
The terminal can be pulled out



Signal Tower

LR Series Optional Parts

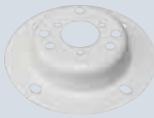
Direct Mount Brackets



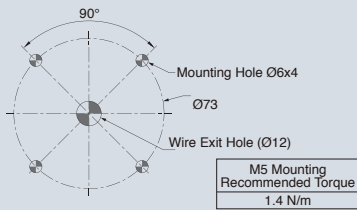
Circular Bracket

Model: SZW-001W

Material: SPCE



■ Mounting Dimensions (Unit: mm)



M5 Mounting Recommended Torque 1.4 N/m

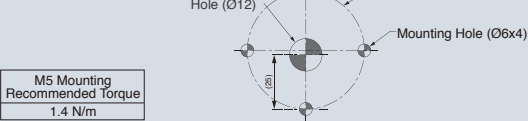
Wall-mount Bracket

Model: SZK-002W/U/K

Material: PC



■ Mounting Dimensions (Unit: mm)



M5 Mounting Recommended Torque 1.4 N/m

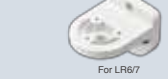
Model: SZK-003W/U/K

Material: PC



Model: SZK-004W

Material: PC



※ The wiring can exit through the bracket.

※ An M16xP1.5 cable gland attachment needs to be purchased additionally



N Type Aluminum Pole Brackets

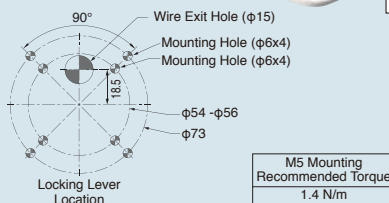


Folding Bracket

Model: SZQ-001W

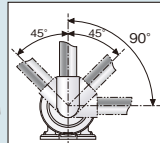
Accessories: Pole Waterproof Ring
Binding Head Tapping Screw (2 pcs.)
Material: PC

■ Mounting Dimensions (Unit: mm)



M5 Mounting Recommended Torque 1.4 N/m

■ Folding Range

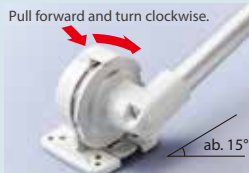


See the Movie!

- 1 Depressing a locking lever on the left side of the folding bracket releases it to be lowered.



- 2 Press the folding bracket forward and push about 15° in the clockwise direction.



- 3 The folding bracket is pushed down to the right (clockwise) until it locks in place with a "Click" sound.



T Type Aluminum Pole Brackets

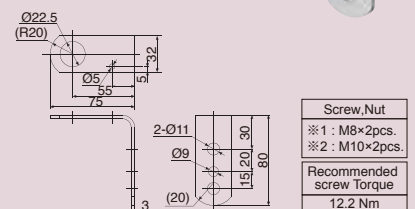


L-bracket

Model: SZL-001

Material: SPHC-P

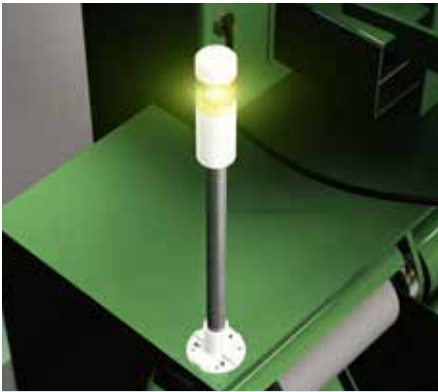
■ Mounting Dimensions (Unit: mm)



Screw, Nut
※1 : M8×2pcs.
※2 : M10×2pcs.
Recommended screw Torque 12.2 Nm



N Type Aluminum Pole Brackets



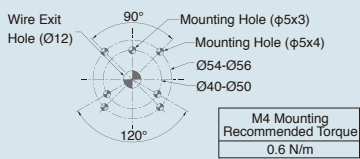
Circular Multiple-mount Bracket

Model: **SZP-001W**

Accessories: Waterproof Packing
Pole Waterproof Ring
Binding Head Tapping Screw (2 pcs.)

Material: PC

■ Mounting Dimensions (Unit: mm)



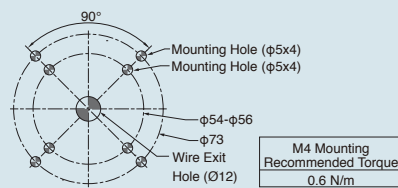
Circular Bracket

Model: **SZP-002U**

Accessories: Pole Waterproof Ring
Binding Head Tapping Screw (2 pcs.)

Material: ADC12

■ Mounting Dimensions (Unit: mm)



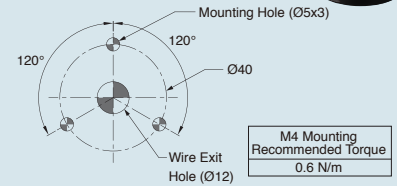
Circular Bracket

Model: **SZP-003W/U/K**

Accessories: Waterproof Packing
Pole Waterproof Ring
Binding Head Tapping Screw (2 pcs.)

Material: PC

■ Mounting Dimensions (Unit: mm)



N & T Aluminum Pole Brackets



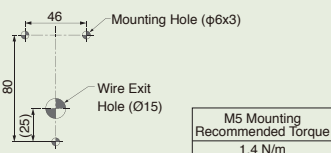
Wall-mount Bracket

Model: **SZK-001U**

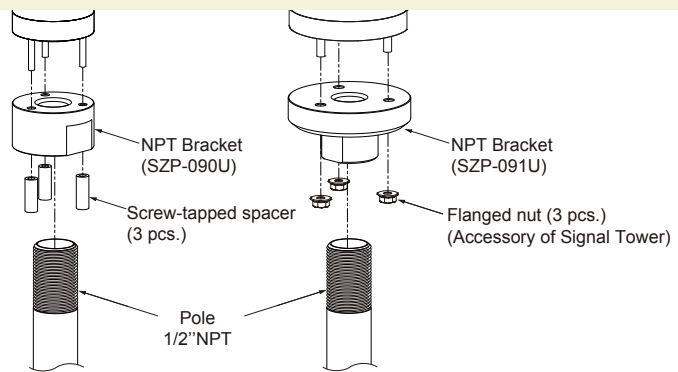
Accessories: Hexagon Socket Set Screw (2 pcs.)

Material: ADC12

■ Mounting Dimensions (Unit: mm)



1/2" Type Pole Brackets



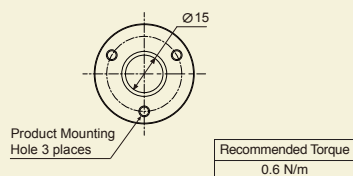
NPT Bracket

Model: **SZP-090U**

Accessories: Screw-tapped spacer (3 pcs.)

Material: AL

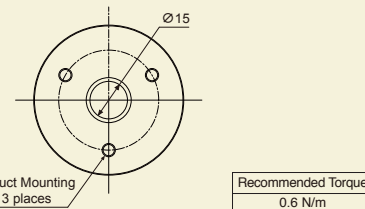
■ Mounting Dimensions (Unit: mm)



Model: **SZP-091U**

Material: AL


■ Mounting Dimensions (Unit: mm)



Signal Tower

Corresponding Model · Pole List

Each Bracket Compatible Model

Model	Model Name	LR4	LR5	LR6	LR7
	SZP-001W	PJ, QJ	PJ, KT *1	PJ, QJ	KT *1
	SZP-002U	PJ, QJ	PJ, KT *1	PJ, QJ	KT *1
	SZP-003W[U][K]	PJ, QJ	PJ, KT *1	PJ, QJ	KT *1
	SZP-090U	WJ	WJ, WT, KT *2	-	-
	SZP-091U	-	-	WJ	WJ, WT, KT *2
	SZL-001	LJ	LJ, KT *1	LJ	LJ, KT *1
	SZQ-001W	PJ, QJ	PJ, KT *1	PJ, QJ	KT *1
	SZK-001U	PJ, QJ	PJ, KT *1	PJ, QJ	KT *1
	SZK-002W[U][K]	WJ	WJ, WT, KT *2	-	-
	SZK-003W[U][K]	-	-	WJ	WJ, WT, KT *2
	SZK-004W	-	-	WJ	WJ, WT, KT *2
	SZW-001W	WJ	WJ, WT, KT *2	WJ	-



*1 Required pole and pole waterproof ring are not included with KT. *2 KT Direct Mount (Using accessory)

Aluminum Poles

Aluminum Poles (Binding Head Tapping Screw (2pcs.) included.)

*If the pole is to be cut by the customer, it cannot be cut with a pole cutter. Please use a band saw, jigsaw, or sawing machine, etc.

*To convert from direct mount to pole mount, be sure to purchase the appropriate bracket and pole combination to make the change.

Model Type	Model Name	SZP-001W	SZP-002U	SZP-003W	SZQ-001W	SZK-001U	SZL-001
 N Type NK Type	POLE22-0100AN[K] 100mm	○	○	○	○	○	×
	POLE22-0300AN[K] 300mm	○	○	○	○	○	×
	POLE22-0500AN 500mm	×	○	×	×	○	×
	POLE22-0800AN[K] 800mm	×	○	×	×	○	×
	POLE22-1000AN 1000mm	×	○	×	×	○	×
 T Type	POLE22-0100AT 100mm	×	×	×	×	○	○
	POLE22-0300AT 300mm	×	×	×	×	○	○
	POLE22-0500AT 500mm	×	×	×	×	○	○
	POLE22-0800AT 800mm	×	×	×	×	○	○
	POLE22-1000AT 1000mm	×	×	×	×	○	○

LR Series 3rd Phase

Available in 2018

Compatible Direct Mount Bracket

The required holes to pass through the wires for the current units and the LR units are different, so a hole positioning attachment will become available in Q1, 2018. This attachment will make it easier to pass through the wires from the signal tower through the installation surface.



Outline

Model Name	SZW-940U	SZW-950U	SZW-960U	SZW-970U
Signal Tower Size	φ40mm	φ50mm	φ60mm	φ70mm
Product Conversion	LCE-AW → LR4-WJ	LE-W/LES-AW/LU5 → LR5-WJ	LME-W → LR6-WJ	LHE/LU7 → LR7-WJ

Current Products

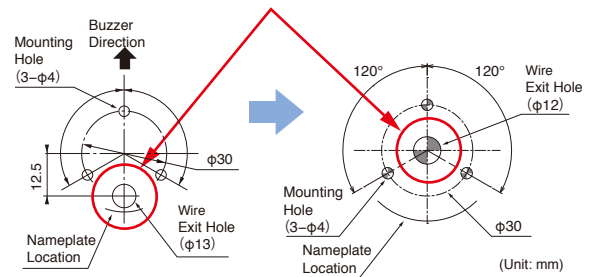
LE φ50

New Product

LR4 φ40

LR5 φ50

Note : Cable exit hole for current products and New products is different



Pole-compatible Adaptor

The LCE, LE, and LES series use a 17.3mm pole and the LR series use a 21.7mm pole. The adaptor will allow users to attach pole to the place used at the diameter of 17.3mm.



Outline

Model Name	SZP-917U
Pole diameter compatibility	21.7mm → 17.3mm

	Model	Material	Compatible with LR Pole?
Current Product	LCE, LCS	Iron	No
	LE, LES	Iron	No
	LU5	-	-
	LME, LMS	L:Iron P:Aluminum	Yes
	LHE	-	-
New Product	LU7	-	-
	LR	Aluminum	Yes

Replacement Parts

■ O-ring (5 per pack)/Headcover

O-ring 40 Model: B25110065-F1	Headcover 40 Model: [W] B32310070-7F1 [U] B32310070-9F1	O-ring 50 Model: B25110066-F1	Headcover 50 Model: [W] B32310071-7F1 [K] B32310071-8F1 [U] B32310071-9F1	O-ring 60 Model: B25110067-F1	Headcover 60 Model: [W] B32310072-7F1 [U] B32310072-9F1	O-ring 70 Model: B25110068-F1	Headcover 70 Model: [W] B32310073-7F1 [K] B32310073-8F1 [U] B32310073-9F1

■ Base Unit

• Adaptor for Aluminum Pole
O-ring, Binding Head Tapping Screw for pole fixing and Pole Waterproof Ring are included.

LR4 Model: [W] B22210159-7F1 [U] B22210159-9F1	LR5 Model: [W] B22210160-8F1 [K] B22210160-8F1 [U] B22210160-9F1	LR6 Model: [W] B22210161-7F1 [U] B22210161-9F1	LR7 Model: [W] B22210178-7F1 [K] B22210178-8F1 [U] B22210178-9F1

■ Terminal Block (LR5 & LR7 only)

Model: Z69544511-F1

■ Filter Sheet (5 per pack)

LR4 LED Unit Sheet Model: B25310067-4F1	LR5 LED Unit Sheet Model: B25310067-5F1	LR6 LED Unit Sheet Model: B25310067-6F1	LR7 LED Unit Sheet Model: B25310067-7F1

Wiring Diagrams

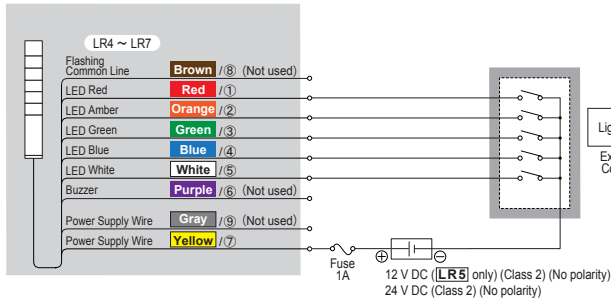
Wire Type & Wire Gauge
 Wire Type.....UL2464
 Wire Gauge...[01] 12V DC [02] 24V DC
 Signal Wire : AWG24
 Power Supply Wire : AWG24

Wiring Example Index	LED Red	RED / ①	PIN No. WT Direct Mount with Terminal Block, KT Mounting Bracket with knock-outs Terminal Block
	Function Name	Lead Wire Color (Cable type)	Refer to pg. 16 "Terminal Block Array"

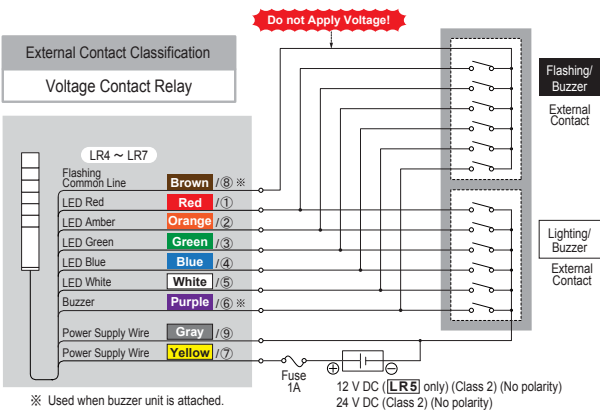
<Note> The lead wire color does not indicate the LED fluorescence color.

Product Specifications **01** 12V DC **02** 24V DC

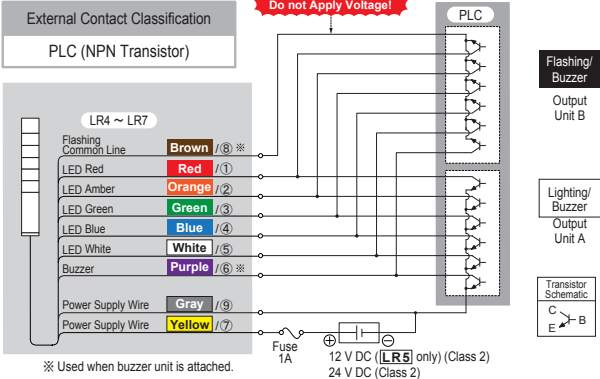
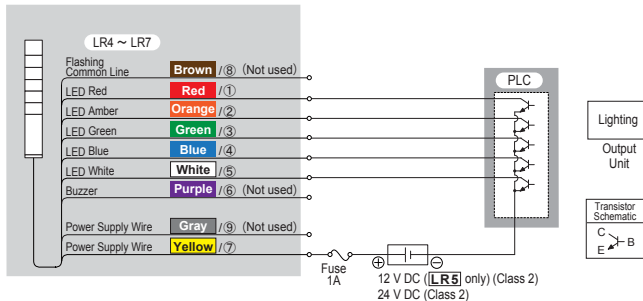
External Contact Classification
Voltage Contact Relay



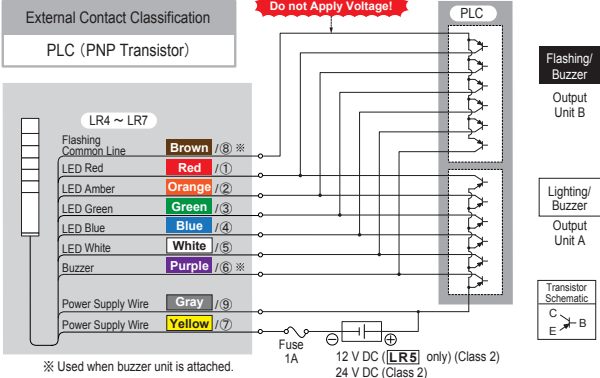
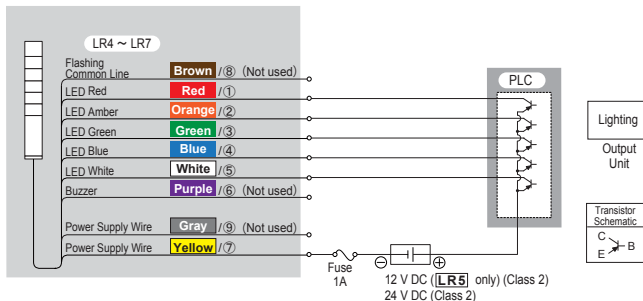
Product Specifications **01** 12V DC **02** 24V DC



External Contact Classification
PLC (NPN Transistor)

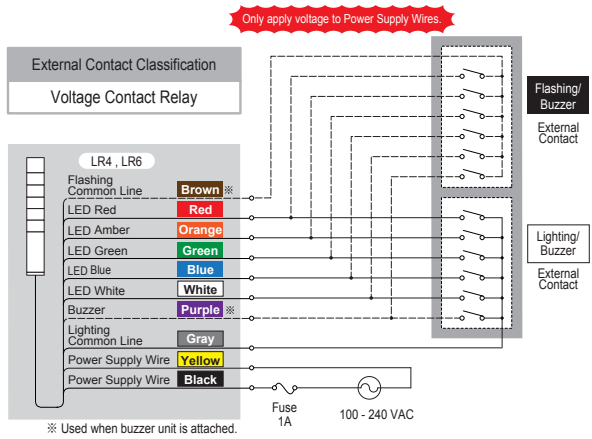


External Contact Classification
PLC (PNP Transistor)

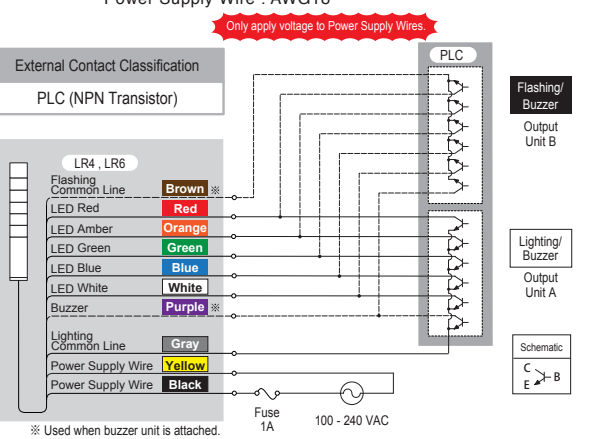


《LR Series 2-Buzzer Operation Method》
 Connecting the Buzzer wire (Purple) with the Flashing Common wire (Brown) will control the selection of two different buzzer sounds.

Product Specifications **M2** 100 - 240 V AC



Wire Type & Wire Gauge
 Wire Type.....UL2464
 Wire Gauge...[M2] 100~240V AC
 Signal Wire : AWG24
 Power Supply Wire : AWG18



Multi-color Wiring Diagrams

Multi-color LED Unit wire colors are **RED** / ①; **Green** / ③; **Blue** / ④. Wire colors **Orange** / ② and **White** / ⑤ are not used.

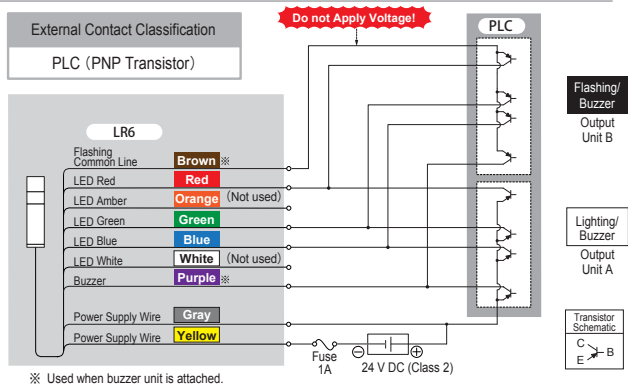
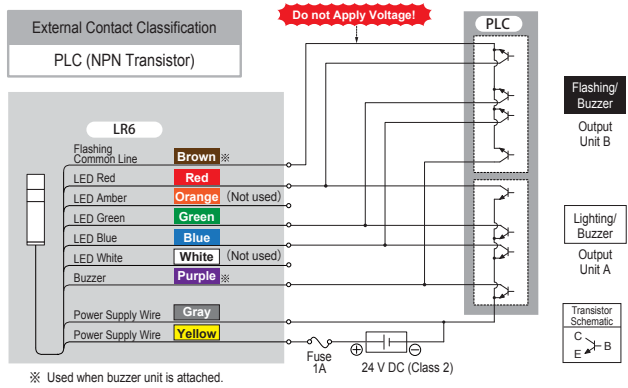
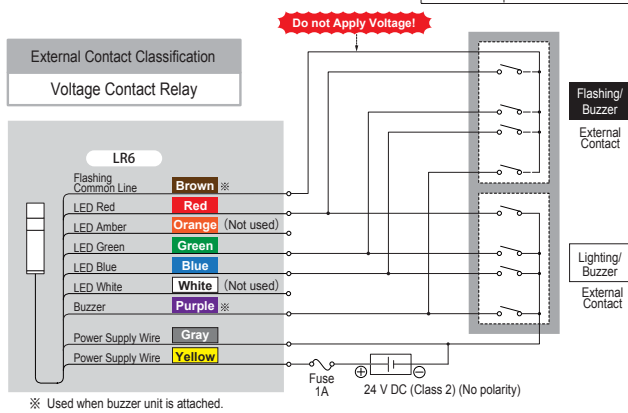
Refer to the Complete User's Manual for details.

LR6-E-MZ Lighting

LED Color	Wire Color
Red	Red
Green	Green
Blue	Blue
Amber	Red + Green
Purple	Red + Blue
Cyan	Green + Blue
White	Red + Green + Blue

Lighting / Flashing / Buzzer (LR6-E-MZ)

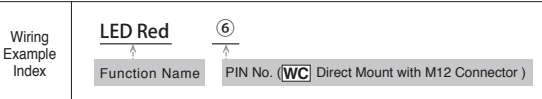
Product Specifications **02** 24V DC



Point

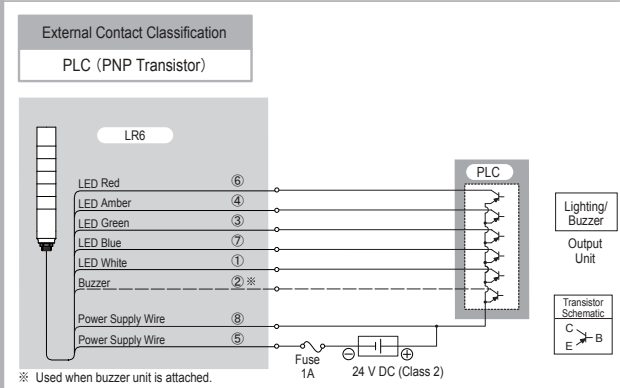
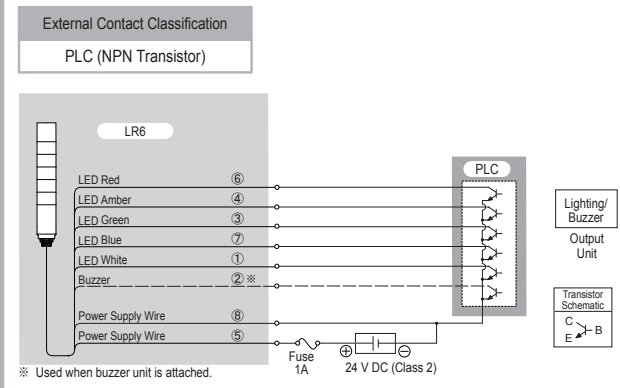
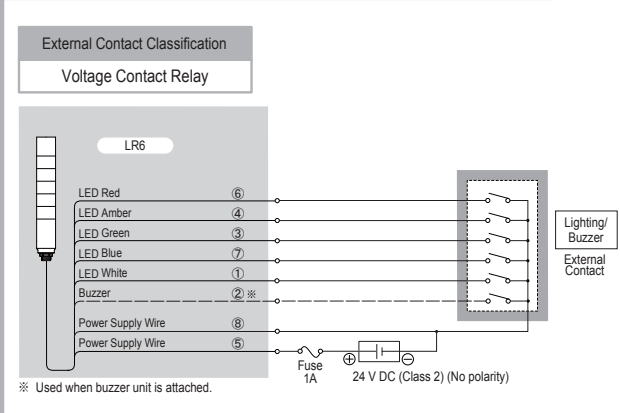
- When flashing the LR6-E-MZ simultaneously with the LR6-E-R(Z)/Y(Z)/G(Z)/B(Z)/C, the flashing cycle of the LR6-E-MZ may shift from the other LED units.

M12 (LA6-WC)Wiring Diagrams



Lighting / Buzzer (LR6-WC)

Product Specifications **02** **WC** 24V DC

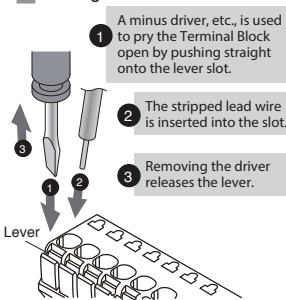


Point

- The flashing function cannot be used.

[WT],[KT] Terminal Type

Wiring Method



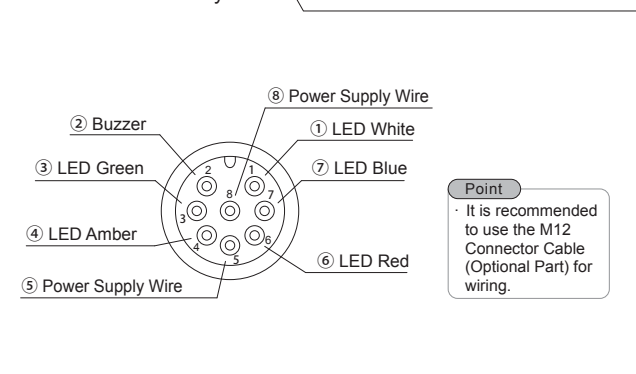
Terminal Block Array

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

Recommended lead wire specification		
Wire Type	Wire (Solid)	Wire (Frayed)
UL1007 / UL1430	0.14 - 1.5mm	AWG30 - 14

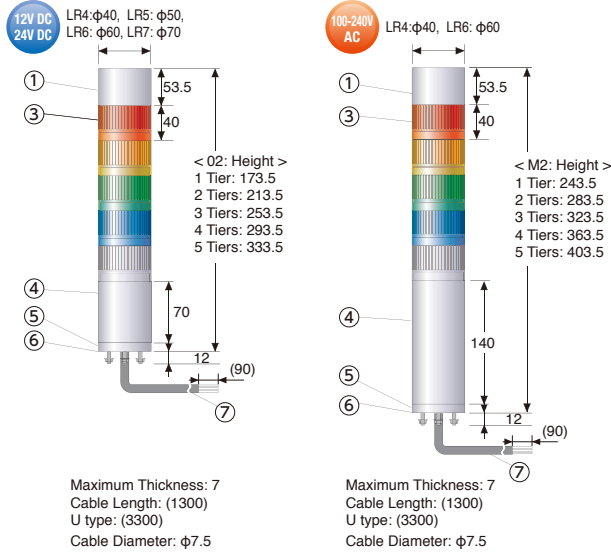
* Temperature rating should be above 75°C, and the conductor material should be of copper wire.

M12 Connector Pin Layout



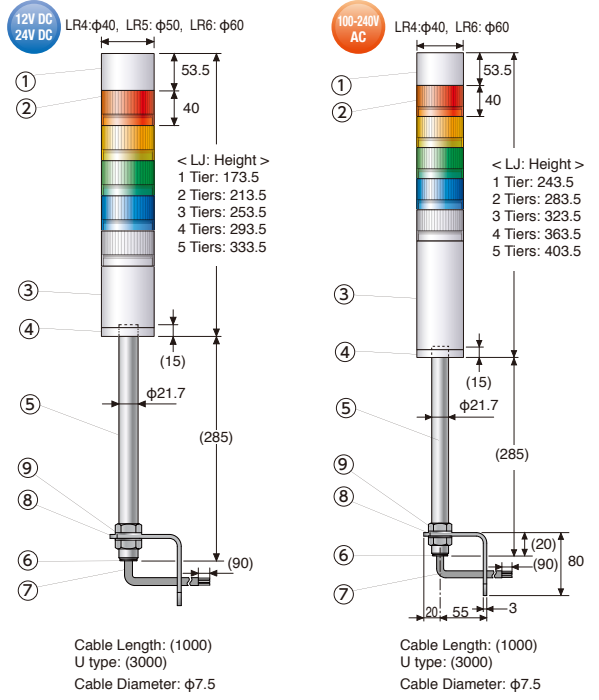
Outer Dimensional Drawing (Unit: mm)

Mount A [WJ] Direct Mount/Cable
(01: 12V DC / 02: 24V DC) (M2: 100-240V AC)



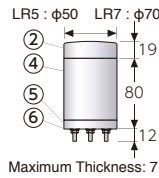
No.	Description	Material
①	Buzzer Unit	PC
②	Head Cover	PC
③	LED Unit	Globe: PC
④	Body	PC
⑤	Direct Mount Bracket	PC
⑥	Waterproof Packing	Silicon Rubber
⑦	Cable	PVC

Mount B [LJ] Pole Mount with L-bracket & Cable
(01: 12V DC / 02: 24V DC) (M2: 100-240V AC)

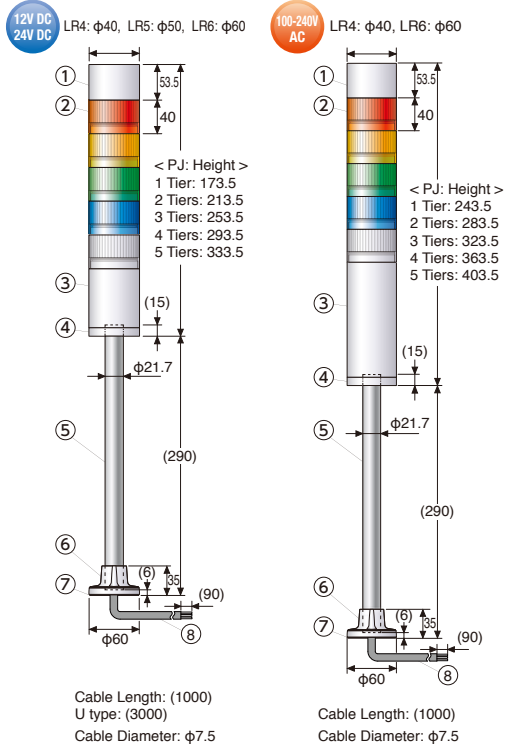


No.	Description	Material
①	Buzzer Unit	PC
②	LED Unit	Globe: PC
③	Body	PC
④	Pole Bracket	PC
⑤	Pole	AL
⑥	Rubber Bushing	EPR Rubber
⑦	Cable	PVC
⑧	L-bracket	Steel
⑨	Hexagon Nut M22	SUM

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

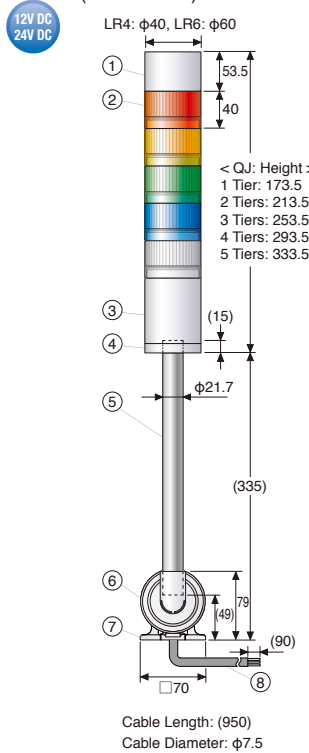


Mount A [PJ] Pole Mount with/Circular Bracket & Cable
(01: 12V DC / 02: 24V DC)
(M2: 100-240V AC)



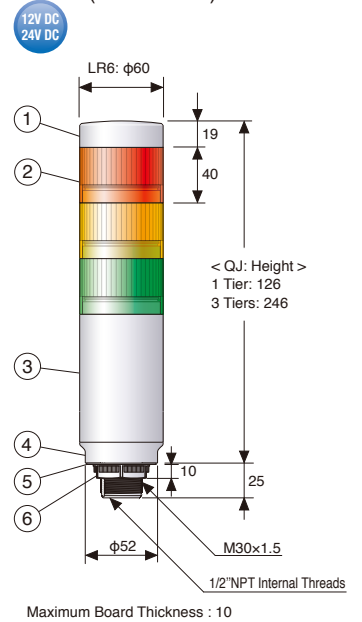
No.	Description	Material
①	Buzzer Unit	PC
②	LED Unit	Globe: PC
③	Body	PC
④	Pole Bracket	PC
⑤	Pole	AL
⑥	Circular Bracket	PC
⑦	Waterproof Packing	Silicon Rubber
⑧	Cable	PVC

**Mount C [QJ] Pole Mount with/Folding
Bracket & Cable**
(02: 24V DC)



No.	Description	Material
①	Buzzer Unit	PC
②	LED Unit	Globe: PC
③	Body	PC
④	Pole Bracket	PC
⑤	Pole	AL
⑥	Folding Bracket	PC
⑦	Waterproof Packing	CR
⑧	Cable	PVC

**Mount C [WC] Direct Mount with
M12 Connector**
(02: 24V DC)



No.	Description	Material
①	Head Cover	PC
②	LED Unit	Globe: PC
③	Body	PC
④	Direct Mount Bracket	PC
⑤	Waterproof Packing (t=1)	Silicone Rubber
⑥	M30 Nut	PC

Mounting Dimensions (Unit: mm)

Mount A Mounting Diagram [WJ] / [PJ] / [WT] / [KT]

Mounting Holes x3	Nut/Screw	(*) [KT] Direct Mount when using accessory)
LR4/5-WJ	φ4	M3
LR5-WT/KT*		φ30
LR4/5/6-PJ		
LR6/7-WJ	φ5	M4
LR7-WT/KT*		φ40

Recommended Torque: 0.6 N/m

Mount B Mounting Diagram [LJ]

For M8 bolt and nut size
Recommended Torque: 30 N/m

For M10 bolt and nut size
Recommended Bolt Torque: 12.2 N/m

Point: When not using an L-bracket, make a fitting hole of φ 22-23mm.

- Make holes for the mounting and wire-distribution. Refer to the suitable attachment or mounting dimension figure for the model. (Select among the two mounting options for the [KT] model.)
- Run wiring through the mounting hole.
- Secure the product with the bolts, nuts and screws. Required nuts and bolts for [LJ] are not included.

Mount C Mounting Diagram [QJ]

Recommended Torque: 1.4 N/m

Specifications

Operating Ambient Temperature	-20 - +50°C
Operating Ambient Humidity	Less than 90% RH (No Condensation)
Storage Ambient Temperature	-30 - +60°C
Storage Ambient Humidity	Less than 90% RH (No Condensation)
Mounting Location	Indoor Only
Mounting Direction	Upright
Protection Rating*1	IP65 (IEC 60529) / NEMA TYPE 4X, 13
Environmental Conditions	Upright
Insulation Resistance	More than 1MΩ at DC500V between live part and non-current carrying metallic part
Withstand Voltage	500V AC applied for 1 minute between live part and non-current carrying metallic part without breaking insulation (M2: 1500V AC for 1 min.)
Flash Rate	60 ±2 Flashes Per Minute
Sound Pressure Level	LR4 Typ. 85dB LR5 Typ. 85dB LR6 Typ. 88dB LR7 Typ. 90dB LR5 DC12V Typ. 80dB
Sound Reduction*2	Approx. -10dB
Environmental Conditions	Buzzer Sound No.4 was measured from the total circumference of the Buzzer Unit at 1m
Buzzer Sound	4 patterns*2 No.1 Rapid Intermittent beep No.2 Continuous beep sound No.3 Rapid Hi-low No.4 Sweep sound
Transistor Output	NPN / PNP (100 - 240V AC is NPN only)
Conformity Standards	<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)*3 Low-voltage Directive (IEC/EN 60947-5-1, EN62471)*4

*1: LJ Type is IP54 *2: Dependent on DIP Switch Settings *3: Except KT and M2 LJ Type *4: M2 Type Only (Except LJ Type)

External Contact Capacity

Is:Current Capacity Vs:Withstand Voltage Il:Leakage Current Ta:Ambient Temperature

Rated Load Voltage		[01] 12V DC	[02] 24V DC	[M2] 100 - 240V AC
LED Unit (1 Tier)	Signal Wire Current (Max.) / Voltage	100mA / Power Supply Voltage	45mA / Power Supply Voltage	45mA / 24V DC
	Recommended Contact Capacity	Is ≥ 100mA Vs ≥ 20V DC*1	Is ≥ 100mA Vs ≥ 35V DC	Is ≥ 100mA Vs ≥ 35V DC
Buzzer	Signal Wire Current (Max.) / Voltage	250mA / Power Supply Voltage	250mA / Power Supply Voltage	250mA / 24V DC
	Recommended Contact Capacity	Is ≥ 300mA Vs ≥ 20V DC*1	Is ≥ 300mA Vs ≥ 35V DC	Is ≥ 300mA Vs ≥ 35V DC
Power Supply	Current Consumption (Max.)	500mA	250mA	150mA
	Recommended Contact Capacity	Is ≥ 700mA Vs ≥ 20VDC	Is ≥ 500mA Vs ≥ 35V DC	Inrush current or more contacts
Inrush Current	Signal Wire	LED None*1 / Buzzer None	LED None / Buzzer None	None
	Power Supply Wire	0.7A / Less than 15ms	None	Ta=25°C : 25A / Less than 2ms (Cold-start) Ta=50°C : 50A / Less than 2ms (Cold-start)
Leakage Current		Il ≤ 0.1 mA		

*1: When the [Gray] for [WJ] [LJ] [PJ] [QJ], Black / ⊙ for [WT] [KT], ⊕ for [WC] power supply wire is not connected, inrush current of 0.7A will flow through the signal wire.
Recommended Contact Capacity : ≥ 700mA Vs ≥ 20VDC













LED Unit Specifications

Color	Red	Amber	Green	Blue	White	Multi-color
Rated Voltage	24V DC					
Current Consumption	Typ.	0.04A				
	Max.	0.045A				
Power Consumption	Typ.	1W				
	Max.	1.3W				
Conformity Standards	<ul style="list-style-type: none"> UL 508, CSA-C22.2 No.14 RoHS Directive (EN 50581) EMC Directive (EN 61000-6-4, EN 61000-6-2) 					










Buzzer Unit Specifications

Rated Voltage	24V DC	
Current Consumption	Typ.	0.04A
	Max.	0.3A
Power Consumption	Typ.	1W
	Max.	1.3W
Conformity Standards	<ul style="list-style-type: none"> UL 508, CSA-C22.2 No.14 RoHS Directive (EN 50581) EMC Directive (EN 61000-6-4, EN 61000-6-2) FCC Part 15 Subpart B Class A 	

LR Series Compatibility Chart (φ40 - φ50)

Current Models					Succeeding Models					
Series	Voltage	Installation Type	Buzzer	Model	Model	Comment	Installation Pitch	Fixed Wiring Hole		
LCE-(A) φ40	24V AC/DC	 Direct Mount	○	LCE-102(A)FBW	LR4-102WJBW		○	×		
				LCE-202(A)FBW	LR4-202WJBW		○	×		
				LCE-302(A)FBW	LR4-302WJBW		○	×		
				LCE-402(A)FBW	LR4-402WJBW		○	×		
				LCE-502(A)FBW	LR4-502WJBW		○	×		
		 Pole Mount (L-bracket)	○	LCE-102(A)W	LR4-102WJNW		○	×		
				LCE-202(A)W	LR4-202WJNW		○	×		
				LCE-302(A)W	LR4-302WJNW		○	×		
				LCE-402(A)W	LR4-402WJNW		○	×		
				LCE-502(A)W	LR4-502WJNW		○	×		
		 Pole Mount (Wall-mount Bracket)	○	LCE-102(A)FB	LR4-102LJBW		○	○		
				LCE-202(A)FB	LR4-202LJBW		○	○		
				LCE-302(A)FB	LR4-302LJBW		○	○		
				LCE-402(A)FB	LR4-402LJBW		○	○		
				LCE-502(A)FB	LR4-502LJBW		○	○		
	90 - 250V AC	 Direct Mount	○	LCE-102(A)	LR4-102LJNW		○	○		
				LCE-202(A)	LR4-202LJNW		○	○		
				LCE-302(A)	LR4-302LJNW		○	○		
				LCE-402(A)	LR4-402LJNW		○	○		
				LCE-502(A)	LR4-502LJNW		○	○		
		 Pole Mount (L-bracket)	○	LCE-102(A)FBK	LR4-102PJNBW	 Purchase SZK-001U option bracket additionally.	×	×		
				LCE-202(A)FBK	LR4-202PJNBW		×	×		
				LCE-302(A)FBK	LR4-302PJNBW		×	×		
				LCE-402(A)FBK	LR4-402PJNBW		×	×		
				LCE-502(A)FBK	LR4-502PJNBW		×	×		
		 Direct Mount	○	LCE-1M2(A)FBW	LR4-1M2WJBW		○	×		
				LCE-2M2(A)FBW	LR4-2M2WJBW		○	×		
				LCE-3M2(A)FBW	LR4-3M2WJBW		○	×		
				LCE-4M2(A)FBW	LR4-4M2WJBW		○	×		
				LCE-5M2(A)FBW	LR4-5M2WJBW		○	×		
LCS-(A) φ40	24V AC/DC	 Pole Mount (L-bracket)	×	LCS-102(A)	LR4-102LJNW	Does not comply with Low-voltage Directive (IEC/EN 60947-5-1, EN62471).	○	○		
				LCS-202(A)	LR4-202LJNW		○	○		
				LCS-302(A)	LR4-302LJNW		○	○		
				LCS-402(A)	LR4-402LJNW		○	○		
				LCS-502(A)	LR4-502LJNW		○	○		
	 Wall-mount Bracket	×	LCS-102(A)K	LR4-102PJNBW	×		×			
			LCS-202(A)K	LR4-202PJNBW	×		×			
			LCS-302(A)K	LR4-302PJNBW	×		×			
			LCS-402(A)K	LR4-402PJNBW	×		×			
			LCS-502(A)K	LR4-502PJNBW	×		×			
LE φ50	12V AC/DC	 Direct Mount	○	LE-101FBW	LR5-101WJBW		○	×		
				LE-201FBW	LR5-201WJBW		○	×		
				LE-301FBW	LR5-301WJBW		○	×		
				LE-401FBW	LR5-401WJBW		○	×		
				LE-501FBW	LR5-501WJBW		○	×		
				 Pole Mount (L-bracket)	○	LE-101W	LR5-101WJNW		○	×
						LE-201W	LR5-201WJNW		○	×
						LE-301W	LR5-301WJNW		○	×
						LE-401W	LR5-401WJNW		○	×
						LE-501W	LR5-501WJNW		○	×
		 Pole Mount (L-bracket)	○			LE-101FBP	LR5-101LJBW		○	○
						LE-201FBP	LR5-201LJBW		○	○
						LE-301FBP	LR5-301LJBW		○	○
						LE-401FBP	LR5-401LJBW		○	○
						LE-501FBP	LR5-501LJBW		○	○
			×	LE-101P	LR5-101LJNW		○	○		
				LE-201P	LR5-201LJNW		○	○		
				LE-301P	LR5-301LJNW		○	○		
				LE-401P	LR5-401LJNW		○	○		
				LE-501P	LR5-501LJNW		○	○		

LR Series Compatibility Chart (φ50 - φ60)

Current Models					Succeeding Models								
Series	Voltage	Installation Type	Buzzer	Model	Model	Comment	Installation Pitch	Fixed Wiring Hole					
LE φ50	24V AC/DC	 Direct Mount	○	LE-102FBW	LR5-102WJJBW		○	×					
				LE-202FBW	LR5-202WJJBW		○	×					
				LE-302FBW	LR5-302WJJBW		○	×					
				LE-402FBW	LR5-402WJJBW		○	×					
				LE-502FBW	LR5-502WJJBW		○	×					
				LE-102W	LR5-102WJNWW		○	×					
				LE-202W	LR5-202WJNWW		○	×					
		 Pole Mount (L-bracket)	×	LE-302W	LR5-302WJNWW		○	×					
				LE-402W	LR5-402WJNWW		○	×					
				LE-502W	LR5-502WJNWW		○	×					
				LE-102FBP	LR5-102LJBW		○	○					
				LE-202FBP	LR5-202LJBW		○	○					
				LE-302FBP	LR5-302LJBW		○	○					
				LE-402FBP	LR5-402LJBW		○	○					
	100V AC / 220V AC	 Direct Mount	○	LE-110FBW / LE-120FBW	LR4-1M2WJJBW	Available for φ40 only.	○	×					
				LE-210FBW / LE-220FBW	LR4-2M2WJJBW		○	×					
				LE-310FBW / LE-320FBW	LR4-3M2WJJBW		○	×					
				LE-410FBW / LE-420FBW	LR4-4M2WJJBW		○	×					
				LE-510FBW / LE-520FBW	LR4-5M2WJJBW		○	×					
				LE-110W / LE-120W	LR4-1M2WJNWW		○	×					
				LE-210W / LE-220W	LR4-2M2WJNWW		○	×					
		 Pole Mount (L-bracket)	×	LE-310W / LE-320W	LR4-3M2WJNWW		○	×					
				LE-410W / LE-420W	LR4-4M2WJNWW		○	×					
				LE-510W / LE-520W	LR4-5M2WJNWW		○	×					
				LE-110FBP / LE-120FBP	LR4-1M2LJBW		Does not comply with Low-voltage Directive (IEC/EN 60947-5-1, EN62471). Available for φ40 only.	○	○				
				LE-210FBP / LE-220FBP	LR4-2M2LJBW			○	○				
				LE-310FBP / LE-320FBP	LR4-3M2LJBW			○	○				
				LE-410FBP / LE-420FBP	LR4-4M2LJBW			○	○				
LE-510FBP / LE-520FBP	LR4-5M2LJBW	○	○										
LE-110P / LE-120P	LR4-1M2LJNWW	○	○										
LE-210P / LE-220P	LR4-2M2LJNWW	○	○										
LES-A φ50	24V AC/DC	 Direct Mount	×	LES-102AW	LR5-102WJNWW			×	×				
				LES-202AW	LR5-202WJNWW			×	×				
				LES-302AW	LR5-302WJNWW			×	×				
				LES-402AW	LR5-402WJNWW			×	×				
				LES-502AW	LR5-502WJNWW			×	×				
		 Pole Mount (L-bracket)	×	LES-102A	LR5-102LJNWW			○	○				
				LES-202A	LR5-202LJNWW			○	○				
LU5 φ50	24V DC	 Direct Mount	○	LU5-02FB	LR5-02WTNWW		○	×					
				×	LU5-02	LR5-02WTNWW		○	×				
					LME φ60	24V AC/DC	 Direct Mount	○	LME-102FBW	LR6-102WJJBW		○	×
									LME-202FBW	LR6-202WJJBW		○	×
									LME-302FBW	LR6-302WJJBW		○	×
LME-402FBW	LR6-402WJJBW		○	×									
LME-502FBW	LR6-502WJJBW		○	×									
LME-102W	LR6-102WJNWW		○	×									
LME-202W	LR6-202WJNWW		○	×									
 Pole Mount (Circular-mount Bracket)	×	LME-302W	LR6-302WJNWW		○		×						
		LME-402W	LR6-402WJNWW		○		×						
		LME-502W	LR6-502WJNWW		○		×						
		○	LME-102FB	LR6-102PJJBW			○	×					
			LME-202FB	LR6-202PJJBW			○	×					
			LME-302FB	LR6-302PJJBW			○	×					
			LME-402FB	LR6-402PJJBW			○	×					
LME-502FB	LR6-502PJJBW			○	×								
×	LME-102	LR6-102PJNWW		○	×								
	LME-202	LR6-202PJNWW		○	×								
	LME-302	LR6-302PJNWW		○	×								
	LME-402	LR6-402PJNWW		○	×								
	LME-502	LR6-502PJNWW		○	×								

LR Series Compatibility Chart (φ60 - φ70)

Current Models					Succeeding Models			
Series	Voltage	Installation Type	Buzzer	Model	Model	Comment	Installation Pitch	Fixed Wiring Hole
LME φ60	24V AC/DC	 Pole Mount (L-bracket)	○	LME-102FBL	LR6-102LJBW		○	○
				LME-202FBL	LR6-202LJBW		○	○
				LME-302FBL	LR6-302LJBW		○	○
				LME-402FBL	LR6-402LJBW		○	○
				LME-502FBL	LR6-502LJBW		○	○
		 Pole Mount (Wall-mount Bracket)	○	LME-102L	LR6-102LJNW		○	○
				LME-202L	LR6-202LJNW		○	○
				LME-302L	LR6-302LJNW		○	○
				LME-402L	LR6-402LJNW		○	○
				LME-502L	LR6-502LJNW		○	○
	100V AC / 120V AC	 Direct Mount	○	LME-110FBW / LME-112FBW	LR6-1M2WJBW		○	×
				LME-210FBW / LME-212FBW	LR6-2M2WJBW		○	×
				LME-310FBW / LME-312FBW	LR6-3M2WJBW		○	×
				LME-410FBW / LME-412FBW	LR6-4M2WJBW		○	×
				LME-510FBW / LME-512FBW	LR6-5M2WJBW		○	×
		 Pole Mount (Circular-mount Bracket)	○	LME-110W / LME-112W	LR6-1M2WJNW		○	×
				LME-210W / LME-212W	LR6-2M2WJNW		○	×
				LME-310W / LME-312W	LR6-3M2WJNW		○	×
				LME-410W / LME-412W	LR6-4M2WJNW		○	×
				LME-510W / LME-512W	LR6-5M2WJNW		○	×
	 Pole Mount (Circular-mount Bracket)	○	LME-110FB / LME-112FB	LR6-1M2PJBW		○	×	
			LME-210FB / LME-212FB	LR6-2M2PJBW		○	×	
			LME-310FB / LME-312FB	LR6-3M2PJBW		○	×	
			LME-410FB / LME-412FB	LR6-4M2PJBW		○	×	
			LME-510FB / LME-512FB	LR6-5M2PJBW		○	×	
		 Pole Mount (L-bracket)	○	LME-110 / LME-112	LR6-1M2PJNW		○	×
				LME-210 / LME-212	LR6-2M2PJNW		○	×
				LME-310 / LME-312	LR6-3M2PJNW		○	×
				LME-410 / LME-412	LR6-4M2PJNW		○	×
				LME-510 / LME-512	LR6-5M2PJNW		○	×
	 Pole Mount (L-bracket)	○	LME-110FBL / LME-112FBL	LR6-1M2LJBW	Does not comply with Low-voltage Directive (IEC/EN 60947-5-1, EN62471).	○	○	
			LME-210FBL / LME-212FBL	LR6-2M2LJBW		○	○	
			LME-310FBL / LME-312FBL	LR6-3M2LJBW		○	○	
			LME-410FBL / LME-412FBL	LR6-4M2LJBW		○	○	
			LME-510FBL / LME-512FBL	LR6-5M2LJBW		○	○	
		 Pole Mount (L-bracket)	○	LME-110L / LME-112L		LR6-1M2LJNW	○	○
				LME-210L / LME-212L		LR6-2M2LJNW	○	○
				LME-310L / LME-312L		LR6-3M2LJNW	○	○
				LME-410L / LME-412L		LR6-4M2LJNW	○	○
				LME-510L / LME-512L		LR6-5M2LJNW	○	○
	220V AC / 230V AC	 Direct Mount	○	LME-120FBW / LME-123FBW	LR6-1M2WJBW		○	×
				LME-220FBW / LME-223FBW	LR6-2M2WJBW		○	×
				LME-320FBW / LME-323FBW	LR6-3M2WJBW		○	×
				LME-420FBW / LME-423FBW	LR6-4M2WJBW		○	×
				LME-520FBW / LME-523FBW	LR6-5M2WJBW		○	×
		 Pole Mount (Circular-mount Bracket)	○	LME-120W / LME-123W	LR6-1M2WJNW		○	×
				LME-220W / LME-223W	LR6-2M2WJNW		○	×
				LME-320W / LME-323W	LR6-3M2WJNW		○	×
				LME-420W / LME-423W	LR6-4M2WJNW		○	×
				LME-520W / LME-523W	LR6-5M2WJNW		○	×
	 Pole Mount (Circular-mount Bracket)	○	LME-120FB / LME-123FB	LR6-1M2PJBW		○	○	
			LME-220FB / LME-223FB	LR6-2M2PJBW		○	○	
			LME-320FB / LME-323FB	LR6-3M2PJBW		○	○	
			LME-420FB / LME-423FB	LR6-4M2PJBW		○	○	
			LME-520FB / LME-523FB	LR6-5M2PJBW		○	○	
		 Pole Mount (L-bracket)	○	LME-120 / LME-123	LR6-1M2PJNW		○	○
				LME-220 / LME-223	LR6-2M2PJNW		○	○
				LME-320 / LME-323	LR6-3M2PJNW		○	○
				LME-420 / LME-423	LR6-4M2PJNW		○	○
				LME-520 / LME-523	LR6-5M2PJNW		○	○
	 Pole Mount (L-bracket)	○	LME-120FBL / LME-123FBL	LR6-1M2LJBW	Does not comply with Low-voltage Directive (IEC/EN 60947-5-1, EN62471).	○	○	
			LME-220FBL / LME-223FBL	LR6-2M2LJBW		○	○	
			LME-320FBL / LME-323FBL	LR6-3M2LJBW		○	○	
			LME-420FBL / LME-423FBL	LR6-4M2LJBW		○	○	
			LME-520FBL / LME-523FBL	LR6-5M2LJBW		○	○	
		 Pole Mount (L-bracket)	○	LME-120L / LME-123L		LR6-1M2LJNW	○	○
				LME-220L / LME-223L		LR6-2M2LJNW	○	○
				LME-320L / LME-323L		LR6-3M2LJNW	○	○
				LME-420L / LME-423L		LR6-4M2LJNW	○	○
				LME-520L / LME-523L		LR6-5M2LJNW	○	○

LR Series Compatibility Chart (φ60 - φ70)

Current Models					Succeeding Models					
Series	Voltage	Installation Type	Buzzer	Model	Model	Comment	Installation Pitch	Fixed Wiring Hole		
LMS φ60	24V AC/DC	Pole Mount (Circular-mount Bracket)	×	LMS-102	LR6-102PJNW		○	×		
				LMS-202	LR6-202PJNW		○	×		
				LMS-302	LR6-302PJNW		○	×		
				LMS-402	LR6-402PJNW		○	×		
				LMS-502	LR6-502PJNW		○	×		
		Pole Mount (L-bracket)	×	LMS-102L	LR6-102LJNW		○	○		
				LMS-202L	LR6-202LJNW		○	○		
				LMS-302L	LR6-302LJNW		○	○		
				LMS-402L	LR6-402LJNW		○	○		
				LMS-502L	LR6-502LJNW		○	○		
		Pole Mount (Wall-mount Bracket)	×	LMS-102K	LR6-102PJNW	Purchase the SZK-001U option bracket additionally.	×	×		
				LMS-202K	LR6-202PJNW		×	×		
				LMS-302K	LR6-302PJNW		×	×		
				LMS-402K	LR6-402PJNW		×	×		
				LMS-502K	LR6-502PJNW		×	×		
LHE-A φ70	24V AC/DC	○	LHE-102AFB	LR7-102WJBW		○	×			
			LHE-202AFB	LR7-202WJBW		○	×			
			LHE-302AFB	LR7-302WJBW		○	×			
			LHE-402AFB	LR7-402WJBW		○	×			
			LHE-502AFB	LR7-502WJBW		○	×			
			×	LHE-102A	LR7-102WJNW		○	×		
				LHE-202A	LR7-202WJNW		○	×		
				LHE-302A	LR7-302WJNW		○	×		
				LHE-402A	LR7-402WJNW		○	×		
	LHE-502A	LR7-502WJNW			○	×				
	○	LHE-110AFB / LHE-112AFB		LR6-1M2WJBW		○	×			
		LHE-210AFB / LHE-212AFB	LR6-2M2WJBW		○	×				
		LHE-310AFB / LHE-312AFB	LR6-3M2WJBW		○	×				
		LHE-410AFB / LHE-412AFB	LR6-4M2WJBW		○	×				
		LHE-510AFB / LHE-512AFB	LR6-5M2WJBW		○	×				
		LHE-110A / LHE-112A	LR6-1M2WJNW		○	×				
	220V AC	○	LHE-120AFB	LR6-1M2WJBW	Available for φ60 only.	○	×			
			LHE-220AFB	LR6-2M2WJBW		○	×			
			LHE-320AFB	LR6-3M2WJBW		○	×			
			LHE-420AFB	LR6-4M2WJBW		○	×			
			LHE-520AFB	LR6-5M2WJBW		○	×			
LHE-120A			LR6-1M2WJNW	○		×				
×		LHE-220A	LR6-2M2WJNW	○		×				
		LHE-320A	LR6-3M2WJNW	○		×				
		LHE-420A	LR6-4M2WJNW	○		×				
		LHE-520A	LR6-5M2WJNW	○		×				
		LU7 φ70	24V DC	○		LU7-02FB	LR7-02WTNW	Purchase LR7-BW additionally.	○	×
						×	LU7-02		○	×
○	LU7-M2FB				○	×				
90 - 250V AC	×	○	LU7-M2	LR6-M2WJNW	Purchase LR6-BW additionally for φ60 size. Available for φ60 only.	○	×			
			○	LU7-M2		○	×			

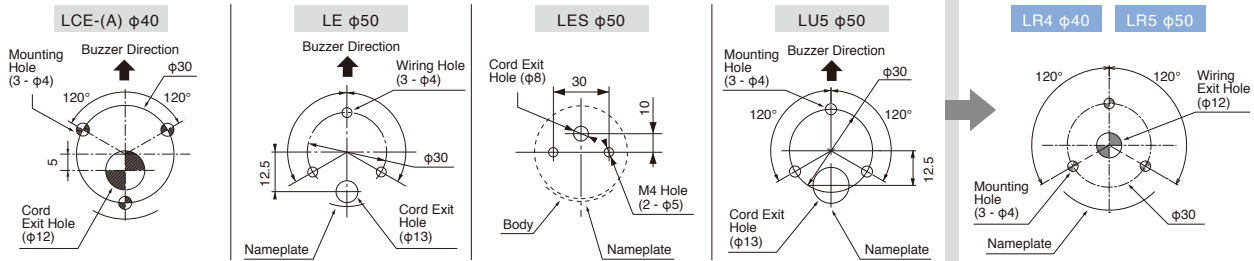
Direct-mount Models

Mounting Pitch and Wiring Hole Position

Current Products

New Products

LR4 φ40 LR5 φ50



Current Products

New Products

LR6 φ60 LR7 φ70

