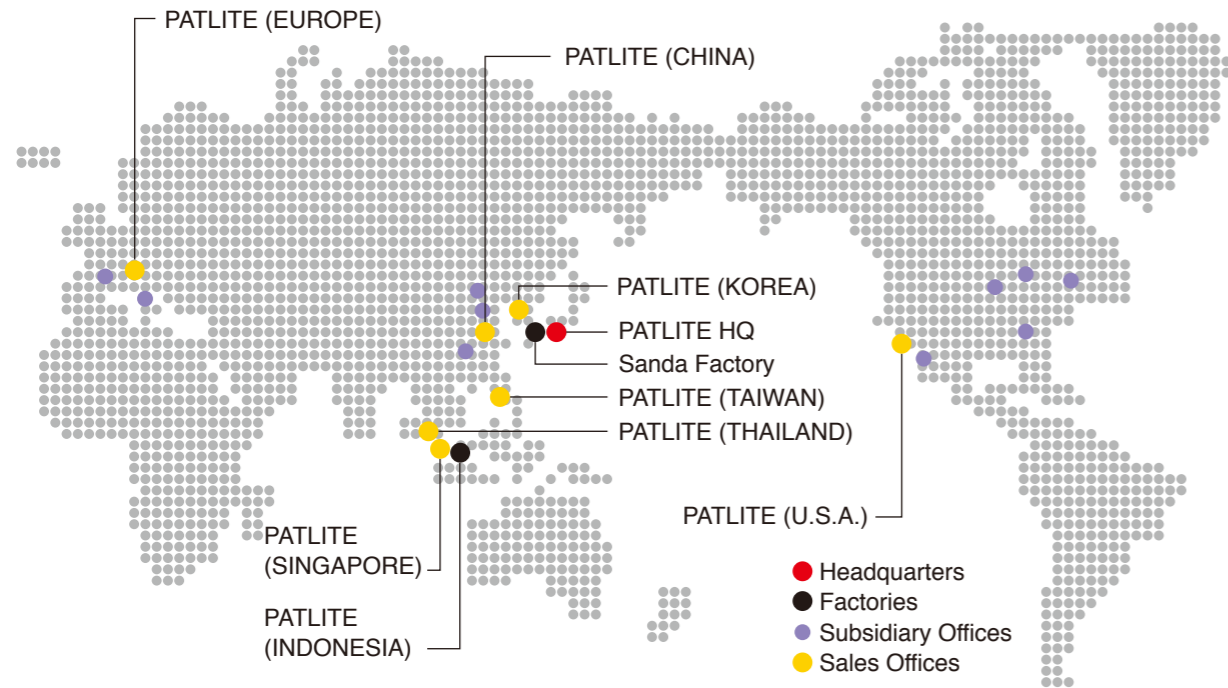


As a global company, we offer our products and support worldwide.

The LR Series conforms to international standards. The PATLITE group has built a global sales network to effectively provide goods and services to customers anywhere.



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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.

0-AF08A EN 1610 A

**PATLITE®**  
New Frontiers in Safety, Security and Comfort.

Signal Tower  
**LR Series**



NEMA Type 4X, 13

<http://www.patlite.com>

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www.patlite.com

**2 year  
Warranty**

## Signal Tower

# LR Series

Modular LED Signal Tower

- φ40mm  
**LR4**
- φ50mm  
**LR5**
- φ60mm  
**LR6**
- φ70mm  
**LR7**



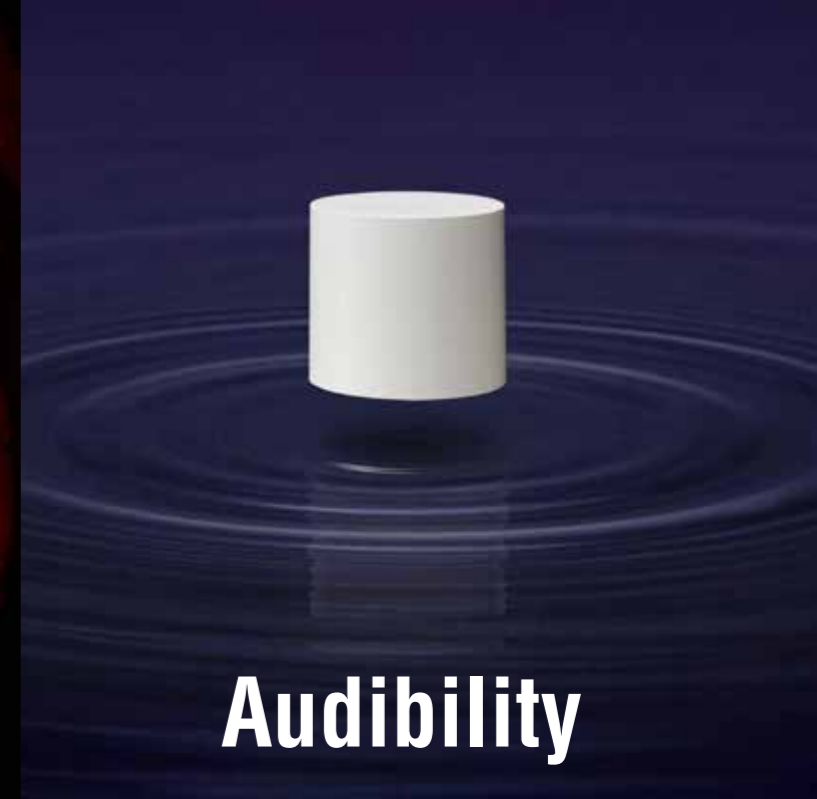
### Modular Components



### Optional Parts



**Visibility**



**Audibility**



**Simplicity**



**Durability**

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### Configurator

Scan the QR code to build an LR model



[http://www.patlite.com/LR\\_config/](http://www.patlite.com/LR_config/)

# Visibility

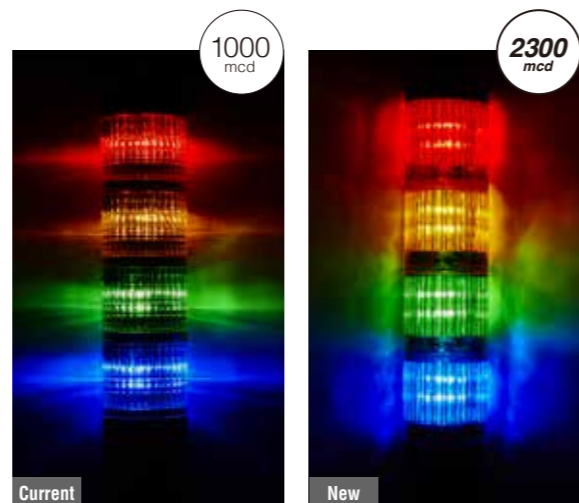
## Exceptional Light Brilliance

With a new re-designed lens and improved light module construction, the LR series provides a brilliant, even light for visibility at further distances.



### 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

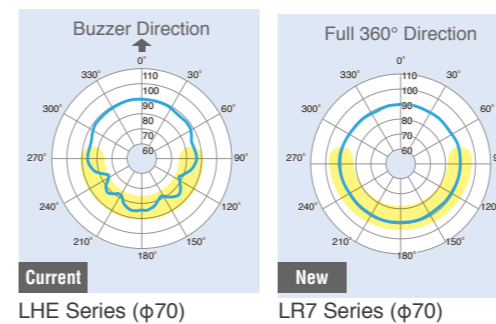
# Audibility

## No Holes, No Compromises

A re-engineered, completely enclosed sound module maintains substantial water and dust protection while producing loud, omnidirectional sound.

### 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.



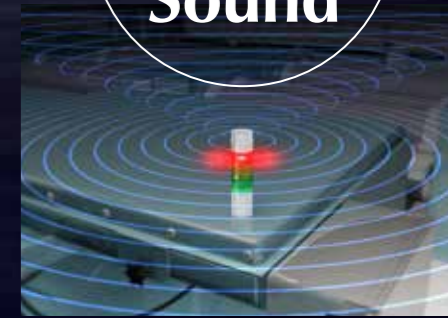
### Maximum 90dB\* output

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

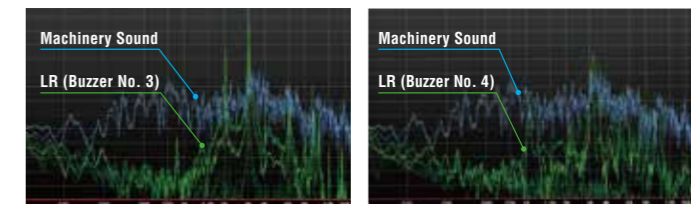
\*LR7 buzzer No.4 (Sweep tone)



360°  
Sound



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



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

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

### New Sounds Heard Above the Noise

Four buzzer sounds\* are built in. The two new buzzer sounds 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 to suit the environment.

\* Four Buzzer Sounds

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



# Simplicity

## Convenient Modular Assembly

Simple "Twist and Lock" system makes it easy to customize and reconfigure light and sound modules.

# Durability

## Rugged Never Looked Better

A sleek, smooth form factor and an enhanced body construction, makes the LR well-suited for harsher environments.



## Modular System Design

The modular LED unit system makes reorganizing the color configuration easy. Furthermore, if an LED light module ever becomes damaged, ordering and replacing modules are easier than ever.



## Reorganizing modules is effortless

Traditional stack lights typically require additional threaded shafts or tools to reconfigure light modules. With the LR Series, color reorganization, changing the number of light tiers and/or adding a sound module is easier than ever.



## Smooth Surface

The LED light buzzer modules flushes together, creating a smooth surface for improved water run off and easy cleaning.



## Environmental Performance

Built rugged with a water and dust resistant IP65 housing. IP65 / NEMA Type 4X, 13 withstands various environmental conditions, such as water and dust.



## Upgraded Materials

All materials used were upgraded from previous models. Changing the base from ABS to Polycarbonate, and O-rings to silicone resin result in a more lightweight, shock resistant product.



# Signal Tower

## LR Series Pre-assembled Models

### φ40mm Model Code

(Ex.) LR4-502WJBW-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 = DC24V  
M2 = AC100 - 240V \*1
- ③ Mounting/Wiring  
WJ = Direct/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 = 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

\*1 For WJ and PJ type only \*2 For DC24V and Off-white type only \*3 For DC24V type WJ, LJ and PJ type only

### φ50mm Model Code

(Ex.) LR5-502WJBW-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  
01 = DC12V  
02 = DC24V
- ③ Mounting/Wiring  
WJ = Direct/Cable  
LJ = Pole Mount with/L-bracket/Cable  
PJ = Pole Mount with/Circular Bracket/Cable
- ④ Flashing/Buzzer  
B = 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

### φ60mm Model Code

(Ex.) LR6-502WJBW-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 = DC24V  
M2 = AC100 - 240V \*1
- ③ Mounting/Wiring  
WJ = Direct/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 = 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

\*1 For WJ and PJ type only \*2 For DC24V and Off-white type only \*3 For DC24V 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 = DC24V
- ③ Mounting/Wiring  
WJ = Direct/Cable
- ④ Flashing/Buzzer  
B = 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	
Direct Mount	DC12V	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	
Direct Mount	DC24V	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/0.425kg	
				4	LR4-402WJNW/U	4.0W	0.310kg/0.460kg	
				5	LR4-502WJNW/U	5.0W	0.345kg/0.495kg	
			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	
				4	LR4-402WJBW/U	5.0W	0.345kg/0.495kg	
				5	LR4-502WJBW/U	6.0W	0.380kg/0.530kg	
	Direct Mount	DC24V	φ50	-	1	LR5-102WJNW	1.0W	0.240kg
					2	LR5-202WJNW	2.0W	0.280kg
					3	LR5-302WJNW	3.0W	0.320kg
					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
Direct Mount	AC100 - 240V	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	
				4	LR6-402WJNW/U	4.0W	0.460kg/0.590kg	
				5	LR6-502WJNW/U	5.0W	0.520kg/0.650kg	
			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	
				4	LR6-402WJBW/U	5.0W	0.520kg/0.650kg	
				5	LR6-502WJBW/U	6.0W	0.580kg/0.710kg	
Direct Mount	AC100 - 240V	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	
Pole Mount with/Folding Bracket	DC24V	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				

# Signal Tower

## LR Series Pre-assembled Models

Mounting Type	Rated Voltage	Size	Flash/Buzzer	Tiers	Model	Power Consumption	Mass
	DC12V	φ50	-	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
	DC24V	φ40	-	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
φ50		-	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	
φ60	-	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		
		4	LR6-402PJNW/U	4.0W	0.640kg/0.770kg		
		5	LR6-502PJNW/U	5.0W	0.700kg/0.830kg		
	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		
		4	LR6-402PJBW/U	5.0W	0.700kg/0.830kg		
		5	LR6-502PJBW/U	6.0W	0.760kg/0.890kg		
AC100 - 240V	φ40	-	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		
φ60	-	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			
DC12V	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	

Mounting Type	Rated Voltage	Size	Flash/Buzzer	Tiers	Model	Power Consumption	Mass
	DC24V	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
				4	LR4-402LJNW/U	4.0W	0.600kg/0.750kg
				5	LR4-502LJNW/U	5.0W	0.635kg/0.785kg
			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
		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
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		
		4	LR6-402LJNW/U	4.0W	0.740kg/0.880kg		
		5	LR6-502LJNW/U	5.0W	0.800kg/0.940kg		
	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		
		4	LR6-402LJBW/U	5.0W	0.800kg/0.940kg		
		5	LR6-502LJBW/U	6.0W	0.860kg/1.000kg		

LED Units \* All LED units can be used with all voltage types. Up to 5 LED units can be mounted and used.

Size	Color	Model	Power Consumption	Mass
φ40	Red	LR4-E-R	1.0W	0.035kg
	Amber	LR4-E-Y	1.0W	0.035kg
	Green	LR4-E-G	1.0W	0.035kg
	Blue	LR4-E-B	1.0W	0.035kg
	White	LR4-E-C	1.0W	0.035kg
φ50	Red	LR5-E-R	1.0W	0.040kg
	Amber	LR5-E-Y	1.0W	0.040kg
	Green	LR5-E-G	1.0W	0.040kg
	Blue	LR5-E-B	1.0W	0.040kg
	White	LR5-E-C	1.0W	0.040kg
φ60	Red	LR6-E-R	1.0W	0.060kg
	Amber	LR6-E-Y	1.0W	0.060kg
	Green	LR6-E-G	1.0W	0.060kg
	Blue	LR6-E-B	1.0W	0.060kg
	White	LR6-E-C	1.0W	0.060kg
φ70	Red	LR7-E-R	1.0W	0.065kg
	Amber	LR7-E-Y	1.0W	0.065kg
	Green	LR7-E-G	1.0W	0.065kg
	Blue	LR7-E-B	1.0W	0.065kg
	White	LR7-E-C	1.0W	0.065kg

Buzzer Units \* Buzzer unit can be used with all voltage types. Possibility to add buzzer function afterward.

Size	Model	Power Consumption	Mass
φ40	LR4-B□	1.0W	0.035kg
φ50	LR5-BW	1.0W	0.050kg
φ60	LR6-B□	1.0W	0.060kg
φ70	LR7-BW	1.0W	0.070kg

**LED Unit Model Code**

LR□-E-□

Model ① LED Unit ②

① Size  
4 = φ40  
5 = φ50  
6 = φ60  
7 = φ70

② Color  
R = Red  
Y = Amber  
G = Green  
B = Blue  
C = White

**Buzzer Unit Model Code**

LR□-B□

Model ① Buzzer Unit ②

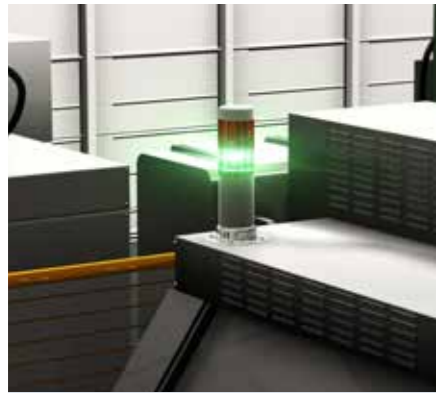
① Size  
4 = φ40  
5 = φ50  
6 = φ60  
7 = φ70

② Color  
W = Off-white  
U = Silver\*1  
\*1 LR4 / LR6 only

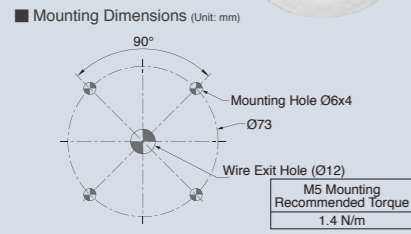
# Signal Tower

## LR Series Optional Parts

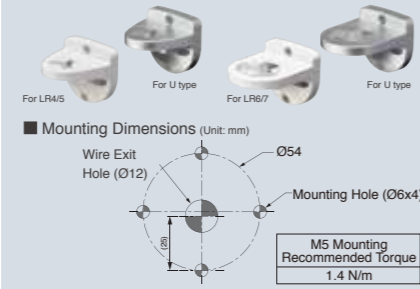
### Direct Mount Brackets



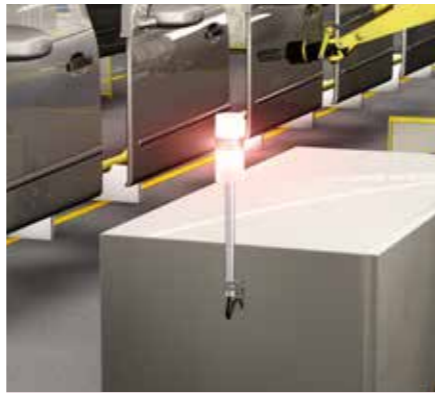
**Circular Bracket**  
Model: SZW-001W



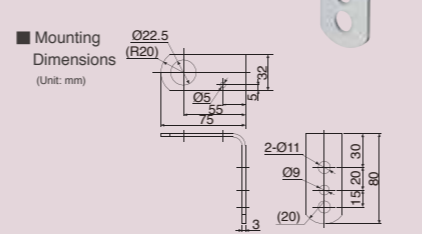
**Wall-mount Bracket**  
Model: SZK-002W(U) SZK-003W(U)



### T Type Aluminum Pole Brackets



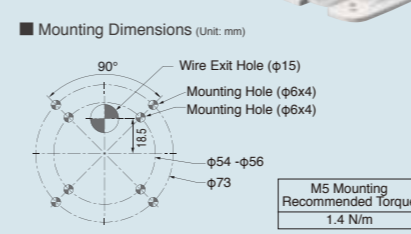
**L-bracket**  
Model: SZL-001



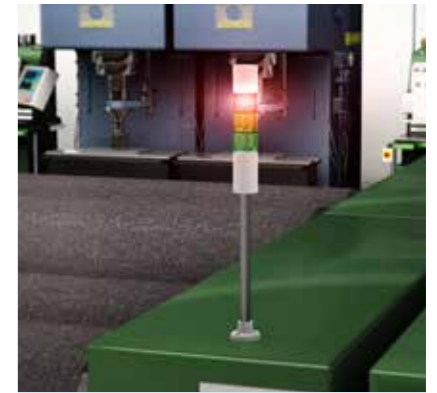
### N Type Aluminum Pole Brackets



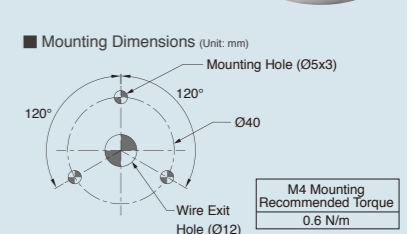
**Folding Bracket**  
Model: SZQ-001W



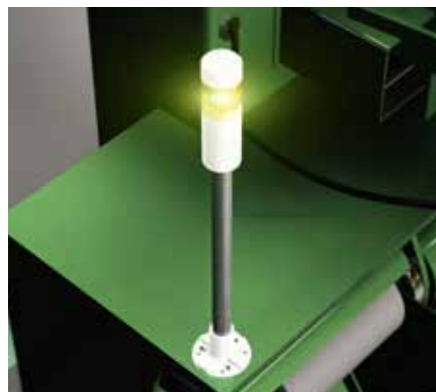
- Depressing a locking lever on the left side of the folding bracket releases it to be lowered.
- Press the folding bracket forward and push about 15° in the clockwise direction.
- The folding bracket is pushed down to the right (clockwise) until it locks in place with a "Click" sound.



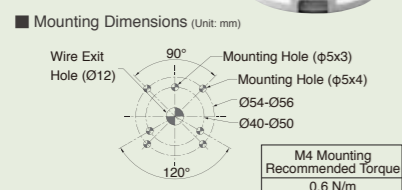
**Circular Bracket**  
Model: SZP-003W



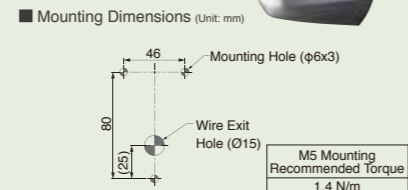
### N Type Aluminum Pole Brackets



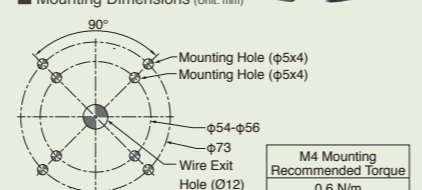
**Circular Multiple-mount Bracket**  
Model: SZP-001W



**Wall-mount Bracket**  
Model: SZK-001U



**Circular Bracket**  
Model: SZP-002U



### Aluminum Poles (Waterproof Ring/Screw Accessories included)

N Type			T Type		
100mm	300mm	800mm	300mm	500mm	1000mm
Model: POLE22-0100AN	Model: POLE22-0300AN	Model: POLE22-0800AN	Model: POLE22-0300AT	Model: POLE22-0500AT	Model: POLE22-1000AT

### Replacement Parts

#### O-ring/Headcover

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

#### Base Unit

• Adaptor for Aluminum Pole

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

#### Terminal Block

Model: Z69544511-F1	
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#### Filter Sheet

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

# 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	0.050kg
φ60		LR6-B□	1.0W	0.060kg
φ70		LR7-B□	1.0W	0.070kg

□···W: Off-white U: Silver K: Black

## Select an 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	0.040kg
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)

Power	Mounting	Size	Model
DC24V	Cable	φ40	LR4
		φ50	LR5
AC100-240V	Cable	φ60	LR6
		φ70	LR7
DC12V	Terminal	φ40	LR4
		φ50	LR5
DC24V	Terminal	φ60	LR6
		φ70	LR7

### L-bracket Models (LJ)

Power	Mounting	Size	Model
DC24V	Cable	φ40	LR4
		φ50	LR5
DC12V	Terminal	φ60	LR6
		φ70	LR7

### Circular Bracket Mount Models (PJ)

Power	Mounting	Size	Model
DC24V	Cable	φ40	LR4
		φ50	LR5
AC100-240V	Cable	φ60	LR6
		φ70	LR7

### Folding Bracket Models (QJ)

Power	Mounting	Size	Model
DC24V	Cable	φ40	LR4
		φ60	LR6

## 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<sup>\*1</sup>, 02 = DC24V, M2 = AC100-240V<sup>\*2</sup>
  - (3) Mounting/Wiring: WJ = Direct with/Cable, WT = Direct with/Terminal<sup>\*3</sup>, LJ = Pole/L-bracket with/Cable<sup>\*4</sup>, PJ = Pole/Circular Bracket with/Cable<sup>\*4</sup>, QJ = Pole/Folding Bracket with/Cable<sup>\*5</sup>
  - (4) Flashing/Buzzer: N = No Flashing/Buzzer
  - (5) Body Color: W = Off-white, U = Silver, K = Black<sup>\*6</sup>
- \*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

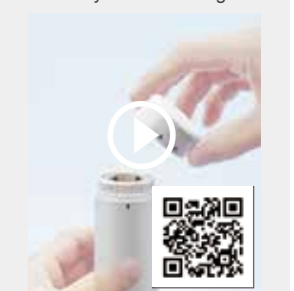


**3** Replace the headcover, or attach the buzzer unit



## See the Movie!!

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



Mounting Type	Rated Voltage	Size	Wiring	Model
Direct Mount	DC12V	φ50	Cable	LR5-01WJNW
		φ40		LR4-02WJNW/U
		φ50		LR5-02WJNW
	DC24V	φ60		LR6-02WJNW/U
		φ70		LR7-02WJNW
		φ50		Screwless Terminal
Pole Mount with/Circular Bracket	AC100-240V	φ60	Cable	LR7-02WTNW/U/K
		φ40		LR4-M2WJNW
		φ60		LR6-M2WJNW
	DC12V	φ50		LR5-01PJNW
		φ40		LR4-02PJNW/U
		φ50		LR5-02PJNW
DC24V	φ60	LR6-02PJNW/U		
	AC100-240V	φ40	LR4-M2PJNW	
		φ60	LR6-M2PJNW	
Pole Mount with/L-bracket		DC12V	φ50	Cable
	φ40		LR4-02LJNW/U	
	DC24V	φ50	LR5-02LJNW	
		φ60	LR6-02LJNW/U	
Pole Mount with/Folding 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



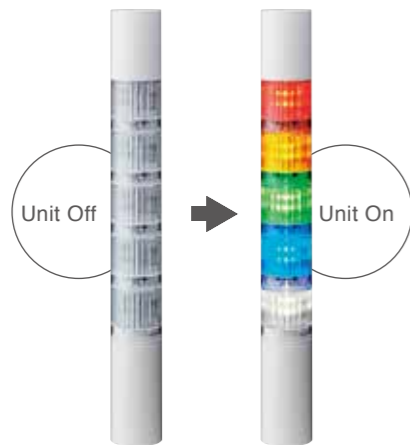


# LR Series Upcoming Products

## LR Series 2<sup>nd</sup> Phase

Available in 2017

### Clear Lens LED Unit LR4/LR6



### Multi-color LED Unit LR6



### Accessories & Options

**M12 Connector**

LR6

**NPT Adaptor**

LR4-LR7

**Wall Mount Bracket (Uncovered Cable)**

LR6/LR7

**Signal Tower with Switch Box**

LR5

### Wireless Data Acquisition System WD Series and LR Series

The WD Series is a system for retrieving data from PATLITE Signal Towers remotely and in real-time. The WD system can be used for a variety of applications, such as collecting data to identify production bottlenecks.

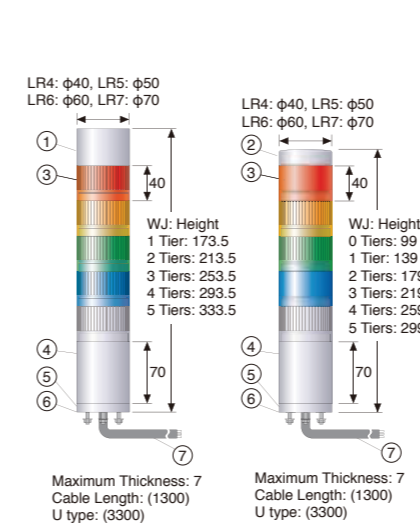


**WD Series**  
**PRO 2.4GHz**  
WIRELESS SYSTEM

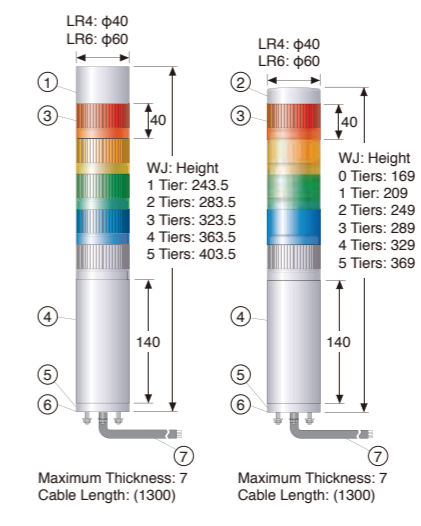


## Outer Dimensional Drawing (Unit: mm)

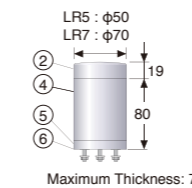
Mount A [WJ] Direct Mount/Cable (01: DC12V / 02: DC24V)



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

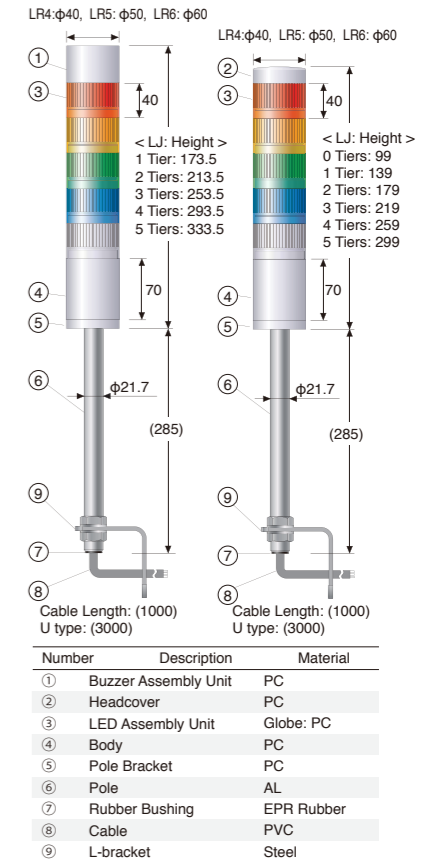


Mount A [WT] Direct Mount/Screwless Terminal (Body Unit)

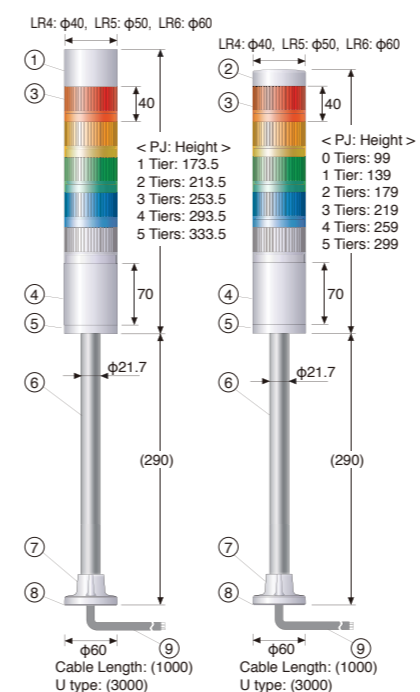


Number	Description	Material
①	Buzzer Assembly Unit	PC
②	Headcover	PC
③	LED Assembly Unit	Globe: PC
④	Body	PC
⑤	Direct-mount Bracket	PC
⑥	Waterproof Packing	Silicon Rubber
⑦	Cable	PVC

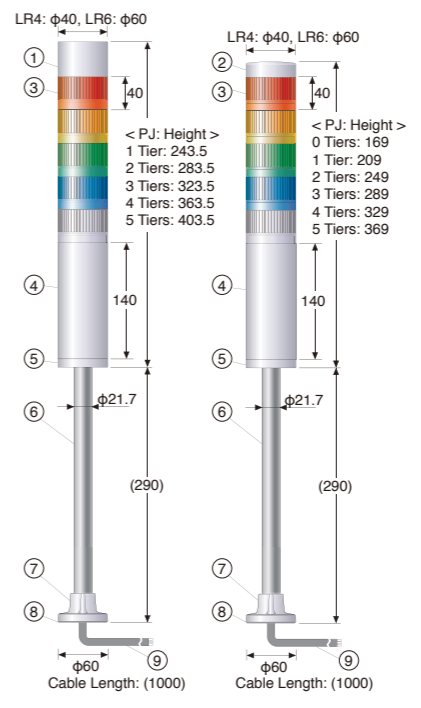
Mount B [LJ] Pole Mount with/L-bracket & Cable (01: DC12V / 02: DC24V)



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



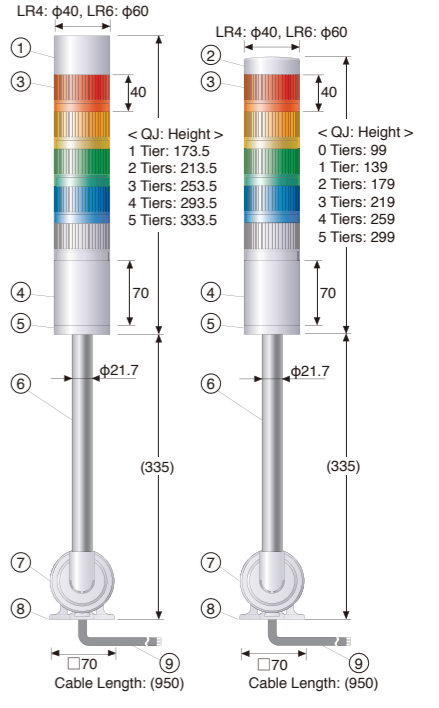
Mount A [PJ] Pole Mount with/Circular Bracket & Cable (M2: AC100V - 240V)



Number	Description	Material
①	Buzzer Assembly Unit	PC
②	Headcover	PC
③	LED Assembly Unit	Globe: PC
④	Body	PC
⑤	Pole Bracket	PC
⑥	Pole	AL
⑦	Circular Bracket	PC
⑧	Waterproof Packing	Silicon Rubber
⑨	Cable	PVC

Number	Description	Material
①	Buzzer Assembly Unit	PC
②	Headcover	PC
③	LED Assembly Unit	Globe: PC
④	Body	PC
⑤	Pole Bracket	PC
⑥	Pole	AL
⑦	Circular Bracket	PC
⑧	Waterproof Packing	Silicon Rubber
⑨	Cable	PVC

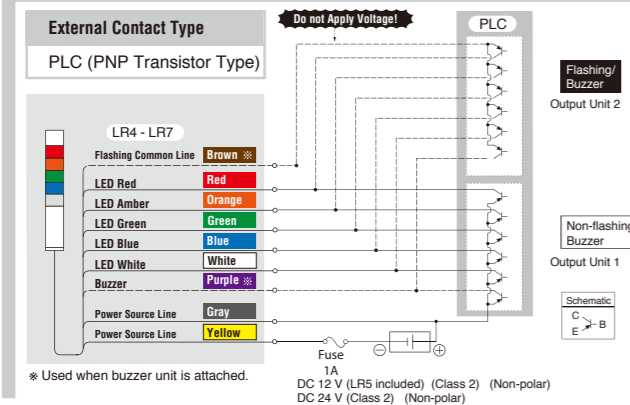
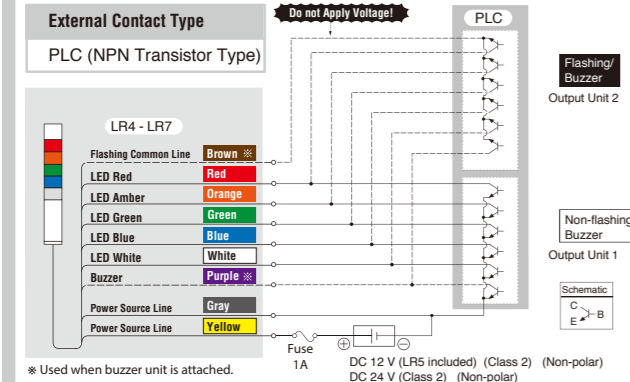
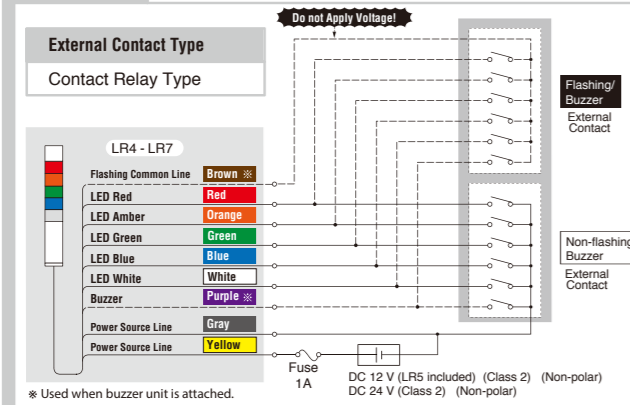
Mount C [QJ] Pole Mount with/Folding Bracket & Cable (02: DC24V)



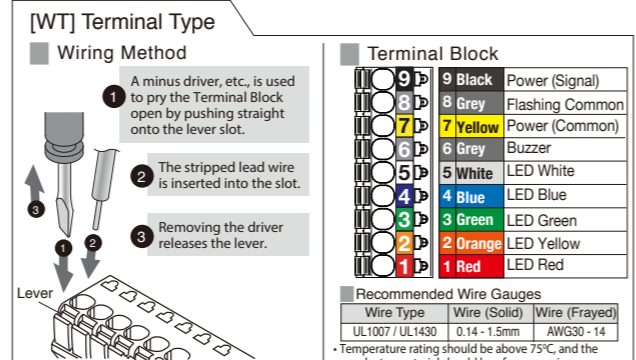
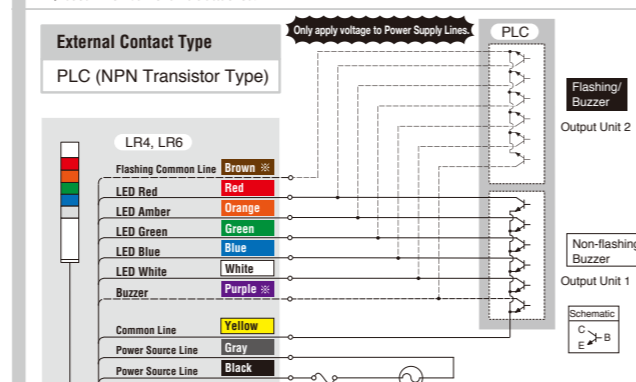
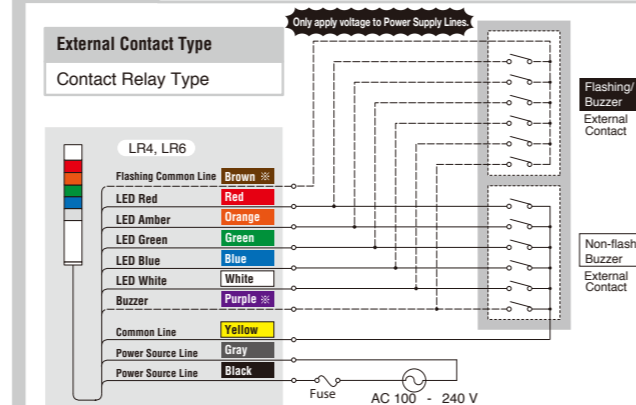
Number	Description	Material
①	Buzzer Assembly Unit	PC
②	Headcover	PC
③	LED Assembly Unit	Globe: PC
④	Body	PC
⑤	Pole Bracket	PC
⑥	Pole	AL
⑦	Folding Bracket	PC
⑧	Waterproof Packing	CR
⑨	Cable	PVC

# Wiring Diagrams

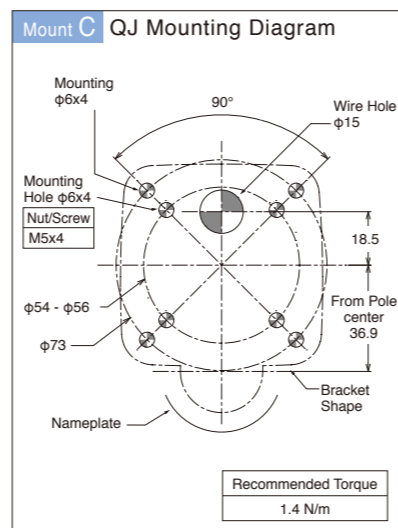
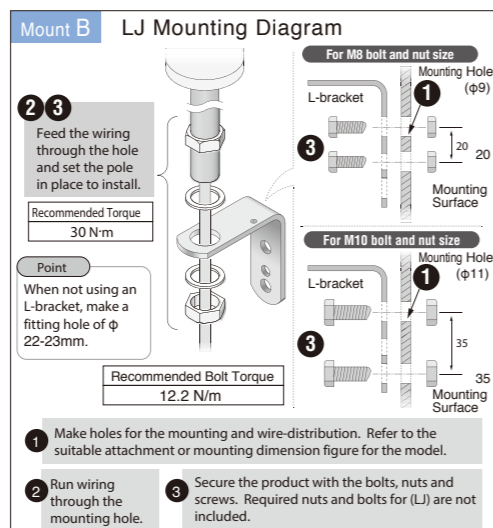
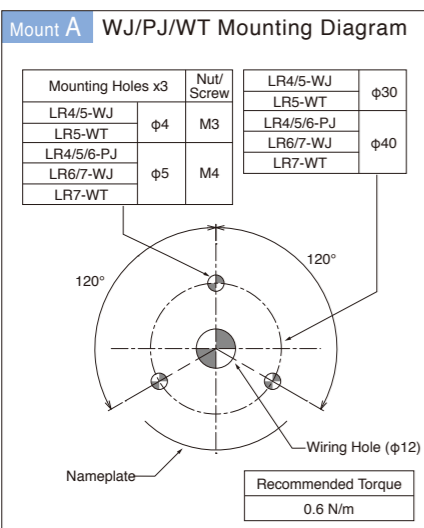
Product Type [01] DC 12V [02] DC 24V  
 Model LR □ - □ 02 □ / LR5- □ 01 □ □ W



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



# Mounting Dimensions (Unit: mm)



# Specification

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 <sup>1</sup>	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 <sup>2</sup>	ab. -10dB reduction
Environmental Conditions	Buzzer Sound No.4 (Sweep) from all directions at a 1m distance
Buzzer Sound	4 patterns <sup>2</sup> 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)
Conformity Standards	<ul style="list-style-type: none"> <li>UL 508, CSA-C22.2 No.14</li> <li>FCC Part 15 Subpart B Class A</li> <li>RoHS Directive (EN 50581)</li> <li>EMC Directive (EN 61000-6-4, EN 61000-6-2)</li> <li>KC (KN 61000-6-4, KN 61000-6-2)</li> <li>Low-voltage Directive (IEC/EN 60947-5-1, EN62471)<sup>3</sup></li> </ul>

<sup>1</sup>: LJ Type is IP54 <sup>2</sup>: Dependent on DIP Switch Settings <sup>3</sup>: M2 Type Only

External Contact Capacity				Is:Current Capacity	Vs:Saturated Voltage	Il:Leakage Current	Ta:Ambient Temperature
Rated Voltage		DC12V <sup>1</sup>	DC24V	AC100 - 240V <sup>2</sup>			
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 <sup>3</sup>	Is ≥ 300mA Vs ≥ DC35V <sup>3</sup>	Is ≥ 300mA Vs ≥ DC35V			
Power	Current Consumption	500mA	250mA	150mA			
	Contact Capacity	Is ≥ 700mA Vs ≥ DC35V	Is ≥ 700mA Vs ≥ DC35V	Current rating higher than inrush current			
Inrush Current	Signal Line	None <sup>3</sup>	None <sup>3</sup>	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			
Leakage Contact Current			Il ≤ 0.1 mA				

<sup>1</sup>: LR5 Only <sup>2</sup>: LR4/LR6 Only <sup>3</sup>: 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 Specifications						
Color	Red	Amber	Green	Blue	White	
Rated Voltage	DC24V					
Current Consumption/Power Consumption	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
Conformity Standards	<ul style="list-style-type: none"> <li>UL 508, CSA-C22.2 No.14</li> <li>EMC Directive (EN 61000-6-4, EN 61000-6-2)</li> <li>RoHS Directive (EN 50581)</li> </ul>					

Buzzer Unit Specifications		
Rated Voltage	DC24V	
Current Consumption/Power Consumption	Typ.	0.04A/1W
	Max.	0.3A/1.3W
Conformity Standards	<ul style="list-style-type: none"> <li>UL 508, CSA-C22.2 No.14</li> <li>EMC Directive (EN 61000-6-4, EN 61000-6-2)</li> <li>FCC Part 15 Subpart B Class A</li> <li>RoHS Directive (EN 50581)</li> </ul>	