LU7

Signal Tower

LED

2 Alarm Sounds (FB Type)

90dB at 1m (FB Type)

IP65

Φ70

NPN/PNP
Open-collector

Versatile modular Signal Tower featuring easy assembly and wiring designed for every need.

FEATURES

- PATLITE's exclusive hybrid prism-cut lens designed for enhanced visibility from any direction and distance.
- Two built-in alarms (FB type)
- Adjustable volume of up to 90dB (at 1m).
- Direct mount installation is standard; pole-mount is available with the optional mounting pole.
- Color-coordinated Terminal block corresponding to the lens colors for quick wiring and verification.
- Interchangeable LED Modules requires no re-wiring, even after installation.
- Lens is made of superior impact and heat resistant polycarbonate resin for superior durability and light transmission.
- Available Module Colors are in Red, Amber, Green, Blue, and Clear/White.
- Available Base colors are in Black, Silver and Ivory White.
- Conforms to the CE requirements (for 24V type).
- Is a UL Recognized Component (File No. E215660).
- Product Shipped in a modular style for customer's customized assembly.

How to Order

LED Module

LU7-E-R

- Model
- Unit
  - E : LED Unit
  - EX: Strobe Unit
- Color
  - R: Red
  - Y: Amber
  - G: Green
  - B: Blue
  - C: White/Clear

Base Unit

LU7-02SUFB

- Model
- Rated Voltage
  - 02: DC 24V
  - M2: AC 100 - 240V
- Body Size
  - Blank: Standard
  - S : Short
- Base Color
  - Blank: Ivory White
  - U : Silver
  - K : Black
- Type
  - Blank: Continuous light
  - FB: Flashing/ Alarm

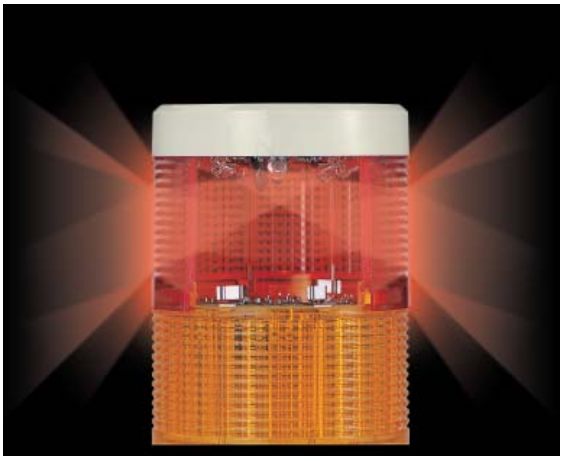
THE LU7 Series Advantage

70mm diameter

Innovative LED Modular Style Signal Tower

Ultra-bright LEDs combined with an Innovative prism-cut lens design

With the innovative prism-cut lens, a small diameter can emit enough light to be seen from great distances while reducing costs of the Signal Tower.



Ultra-bright LED

Two selectable alarms integrated in the Base Module

Adding sound to a visual signal enhances the critical nature of the status, bringing more attention to certain conditions while still allowing up to five LED modules to be used because the alarms are built into the base.

Delivers Sound of up to 90 dB (at 1m)

Alarm can be easily heard over ambient noises.

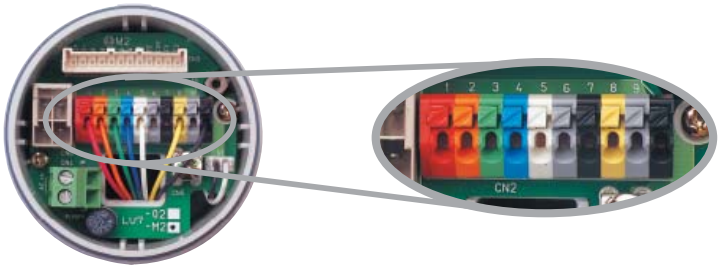
Modular Design

With a modular design, freely configuring and assembling a Signal Tower is easy and the modules can be put away for when the machine has to be shipped to reduce shipping costs and shipping crate material.

Modular Construction

Color-coded & spring-loaded Terminal Block

Easier wiring and more reliable in comparison to screw-type connections with each terminal block color corresponding to the LED module color.



Wiring Terminals

O-rings

The O-rings seal the tower from liquids so that an IP-65 rating can be achieved to allow the tower to be used in wet environments.

IP65 Protection

IP65 & IP66 with Optional Cable Gland

The new LU7 is designed to add a cable gland so that a rating of IP-65 can be achieved to be used in harsher environments. (Cable Gland is to be supplied by the user.)

Specifications (Base)

LU7 Base Units

Model	LU7-02S	LU7-02	LU7-02FB		LU7-02M2	LU7-02M2FB	
Rated Voltage	DC 24V				AC 100 to 240V (50/60Hz)		
Operating Voltage Range	DC 21.6 - 26.4V				AC 90 to 250V (50/60Hz)		
Alarm	—		Buzzer 1*	Buzzer 2**	—	Buzzer 1*	Buzzer 2**
Current Consumption	—		50±10mA	24±10mA	—	50±10mA	24±10mA
Power Consumption	—		1.2±0.25W	0.58±0.25W	—	1.8±0.25W	1.3±0.25W
Sound Level	—		Max: 90±5dB (at 1m) Min: 70dB or less (at 1m)		—	Max: 90±5dB (at 1m) Min: 70dB or less (at 1m)	
Flash Cycle	—		60±12 flashes per minute		—	60±12 flashes per minute	
Operating Temperature Range	-30°C to +60°C				-25°C to +55°C		
Mounting Direction	Upright, Indoor Only						
Protection Rating	IP65 (IP66 with Cable Gland***)						
Mass (±10%)	150g	250g	280g		310g	340g	
Open Collector	PNP/NPN				NPN		

*Buzzer 1: Continuous **Buzzer 2: Intermittent ***Cable Gland to be supplied by user

Unit Color Variation

Short Body

Ivory White	Silver	Black
LU7-02S	LU7-02SU	LU7-02SK

Standard Body

LU7-02/M2	LU7-02U/M2U	LU7-02K/M2K

Specifications (Module)

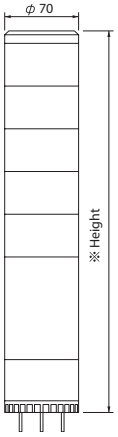
LU7 LED Units*

Model	LU7-E-R	LU7-E-Y	LU7-E-G	LU7-E-B	LU7-E-C
Unit /LED Color	LED Unit Red	LED Unit Amber	LED Unit Green	LED Unit Blue	LED Unit White/Clear
Rated Voltage	DC 24V				
Operating Voltage Range	DC 21.6 - 26.4V				
Current/Power Consumption	52mA/1.25W		42mA/1.0W		
Operating Temperature Range	-30°C to +60°C				
Mass (±10%)	60g				

*Operates on LU7-02, LU7-02FB, LU7-M2 and LU7-M2FB Base Units

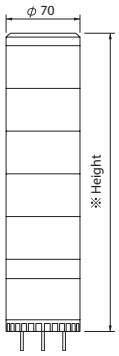
Dimensions

LU7
Standard Body



※ Height
1 Tier : 211
2 Tiers : 252
3 Tiers : 293
4 Tiers : 334
5 Tiers : 375

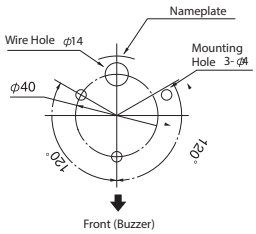
LU7-02S
Short Body



(Unit: mm)

※ Height
1 Tier : 118
2 Tiers : 159
3 Tiers : 200
4 Tiers : 241
5 Tiers : 282

Mounting Dimensions



Wiring

External Contact Capacity

Specifications		DC 24V	AC 100 - 240V
LED Unit (1 Unit)	Current Consumption	Red,Amber: 52mA Green,Blue,White/Clear: 42mA	
	Contact Capacity	Is≥100mA, Vs≥AC 35V	
Alarm	Current Consumption	50mA	
	Inrush Current	100mA	
	Contact Capacity	Is≥100mA, Vs≥AC 35V	
Power Supply	Current Consumption	360mA	40mA (250VAC) - 110mA (90VAC)
	Contact Capacity	Is≥500mA Vs≥AC 35V	9A (90V) - 25A (250V) Vs≥AC 250V

External Contact Fuse

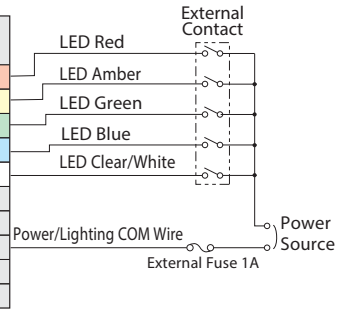
Voltage	Fuse Amperage Rating
All Models	250V, 1A

Wiring (cont.)

- AC/DC 24V Lighting Type

[CN2]

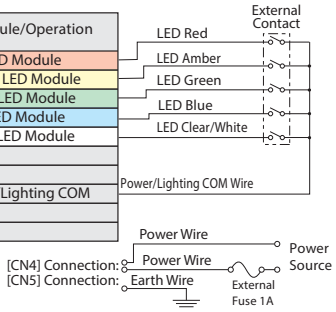
Terminal No.	Terminal Color	Module/Operation
1	Red	Red LED Module
2	Amber	Amber LED Module
3	Green	Green LED Module
4	Blue	Blue LED Module
5	White	White LED Module
6	Gray	
7	Black	
8	Yellow	Power/Lighting COM
9	Grey	
10	Black	



- AC Power Lighting Type

[CN2]

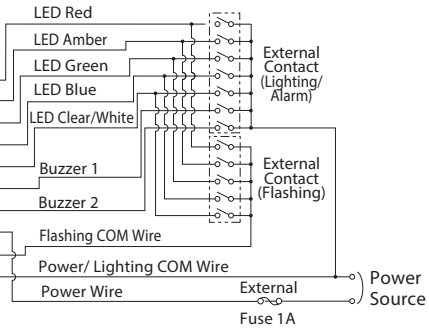
Terminal No.	Terminal Color	Module/Operation
1	Red	Red LED Module
2	Amber	Amber LED Module
3	Green	Green LED Module
4	Blue	Blue LED Module
5	White	White LED Module
6	Gray	
7	Black	
8	Yellow	Power/Lighting COM
9	Grey	
10	Black	



- AC/DC 24V Lighting/Flashing Type

[CN2]

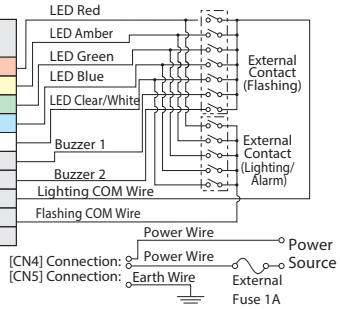
Terminal No.	Terminal Color	Module/Operation
1	Red	Red LED Module
2	Amber	Amber LED Module
3	Green	Green LED Module
4	Blue	Blue LED Module
5	White	White LED Module
6	Gray	Buzzer 1
7	Black	Buzzer 2
8	Yellow	Power
9	Grey	Flashing COM
10	Black	Power/ Lighting COM



- AC Power Lighting/Flashing Type

[CN2]

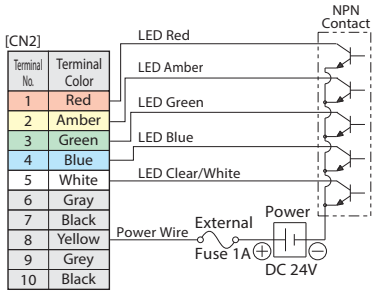
Terminal No.	Terminal Color	Module/Operation
1	Red	Red LED Module
2	Amber	Amber LED Module
3	Green	Green LED Module
4	Blue	Blue LED Module
5	White	White LED Module
6	Gray	Buzzer 1
7	Black	Buzzer 2
8	Yellow	Lighting COM
9	Grey	Flashing COM
10	Black	



- DC 24V NPN Type

[CN2]

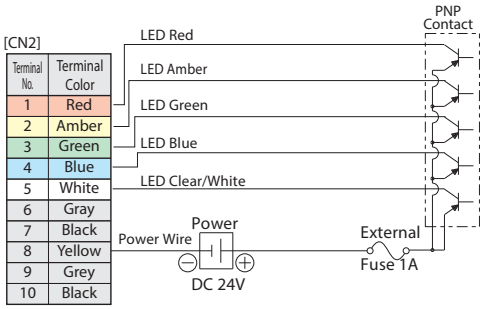
Terminal No.	Terminal Color
1	Red
2	Amber
3	Green
4	Blue
5	White
6	Gray
7	Black
8	Yellow
9	Grey
10	Black



- DC 24V PNP Type

[CN2]

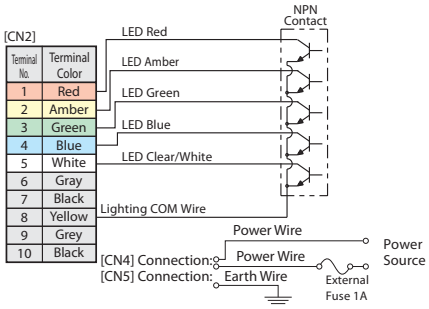
Terminal No.	Terminal Color
1	Red
2	Amber
3	Green
4	Blue
5	White
6	Gray
7	Black
8	Yellow
9	Grey
10	Black



- AC Power NPN Type

[CN2]

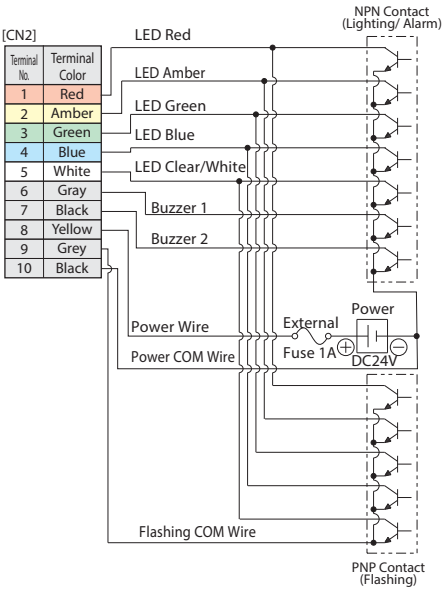
Terminal No.	Terminal Color
1	Red
2	Amber
3	Green
4	Blue
5	White
6	Gray
7	Black
8	Yellow
9	Grey
10	Black



- DC 24V NPN FB Type

[CN2]

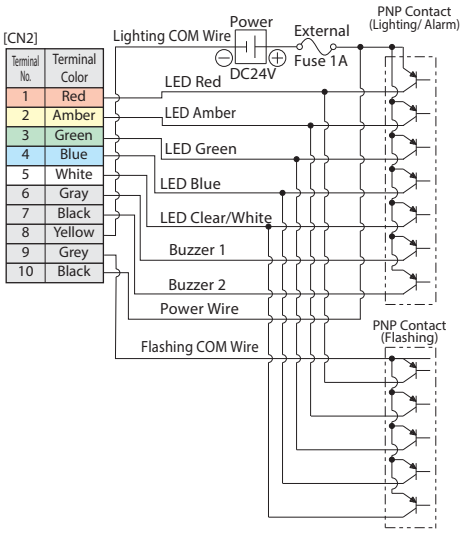
Terminal No.	Terminal Color
1	Red
2	Amber
3	Green
4	Blue
5	White
6	Gray
7	Black
8	Yellow
9	Grey
10	Black



- DC 24V PNP FB Type

[CN2]

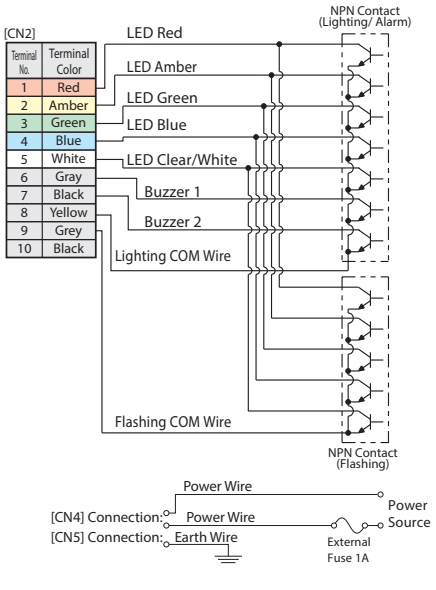
Terminal No.	Terminal Color
1	Red
2	Amber
3	Green
4	Blue
5	White
6	Gray
7	Black
8	Yellow
9	Grey
10	Black

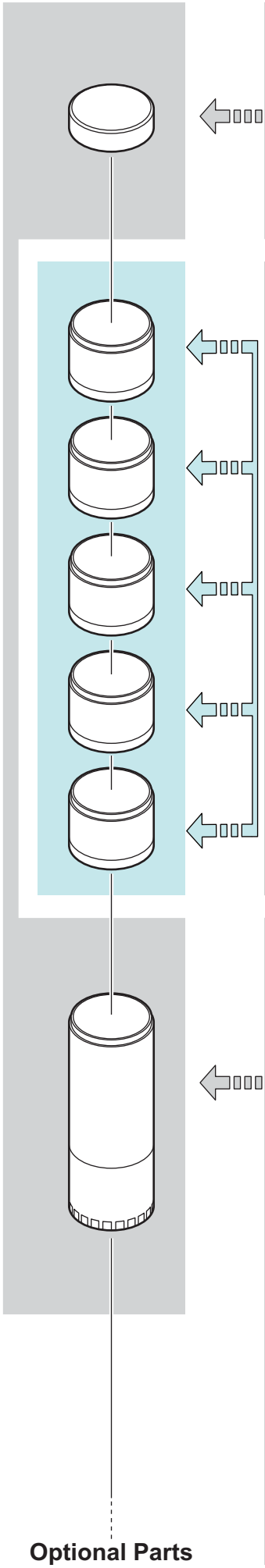


- AC Power NPN FB Type

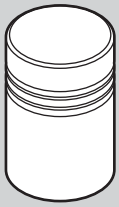
[CN2]

Terminal No.	Terminal Color
1	Red
2	Amber
3	Green
4	Blue
5	White
6	Gray
7	Black
8	Yellow
9	Grey
10	Black





Voice and Sound Module



Model	LU7-V1
Type	Voice Synthesizer
Rated Voltage	DC 24V
Power Consumption	3.5W
Mass (±10%)	170g

LED Units

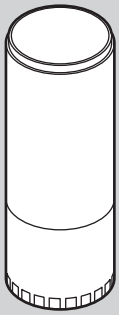
Model	LU7-E-R	LU7-E-Y	LU7-E-G	LU7-E-B	LU7-E-C
Unit Color	●	●	●	●	○
Rated Voltage	DC 24V				
Operating Voltage Range	DC 21.6 ~ 26.4V				
Current/Power Consumption	52mA/1.25W		42mA/1.0W		
Operating Temperature Range	-30℃ ~ +60℃				
Mass (±10%)	60g				

LED Strobe Module

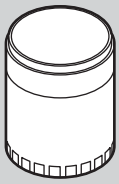
Model	LU7-XE-R	LU7-XE-Y	LU7-XE-G	LU7-XE-B	LU7-XE-C
Unit Color	●	●	●	●	○
Rated Voltage	DC 24V				
Power Consumption	290mA	290mA	140mA	270mA	280mA
Mass (±10%)	70g				

● RED ● AMBER ● GREEN ● BLUE ○ CLEAR/WHITE

BASE Units



Standard Body



Short Body

Model	LU7-02S	LU7-02	LU7-02FB	LU7-M2	LU7-M2FB
Color	○ ● ●				
Standard Body/Short Body	Short	Standard		Standard	
Rated Voltage	DC 24V			AC 100～240V (50/60Hz)	
Operating Voltage Range	DC 21.6 ~ 26.4V			AC 90～250V (50/60Hz)	
Alarm	-	*Buzzer 1	*Buzzer 2	-	*Buzzer 1 / *Buzzer 2
Current Consumption	-	50±10mA	24±10mA	-	50±10mA / 24±10mA
Power Consumption	-	1.2±0.25W	0.58±0.25W	-	1.8±0.25W / 1.3±0.25W
Sound Level	-	Max:90±5dB (at 1m)		-	Max:90±5dB (at 1m)
		Min:70dB or Less (at 1m)			Min:70dB or Less (at 1m)
Flashing Cycle	-	60±12 flashes per minute		-	60±12 flashes per minute
Operating Temperature Range	-30℃ ~ +60℃			-25℃ ~ +55℃	
Mounting Direction	Upright, Indoor only			Upright, Indoor only	
Protection Rating	IP65 (IP66 with Cable Gland supplied by user)				
Mass (±10%)	150g	250g	280g	310g	340g
Open Collector Type	PNP/NPN			NPN	

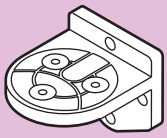
* Buzzer 1 : Continuous Sound **Buzzer 2 : Intermittent Sound

○ Ivoly White ● Silver Color (U) ● Black (K)

Optional Parts

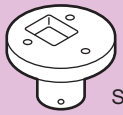
Optional Parts

Wall Mount Bracket



Model	SZ-018	SZ-018U	SZ-018K
Color	Ivory White	Silver (U)	Black (K)

Upper Bracket

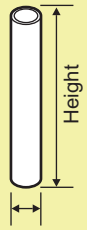


SZ-50NPT(For 1/2" NPT Pole)

Upper Bracket

Model	SZ-50-U	SZ-50U-U	SZ-50K-U
Color	Ivory White	Silver (U)	Black (K)

Pole



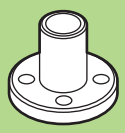
Steel Pole

Model	POLE-800S21	POLE-300S21	POLE-100S21
Height	800mm	300mm	100mm

Aluminum Pole

Model	POLE-800A21	POLE-300A21	POLE-100A21
Height	800mm	300mm	100mm

Mounting Bracket



SZ-016A
(For φ21.7mm Pole)

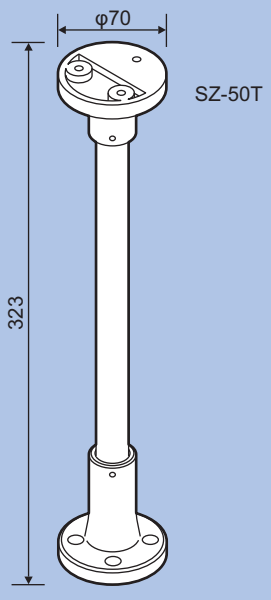
SZ-70-B
(For φ21.7mm Aliminium Pole Only)

Wall Mount Bracket

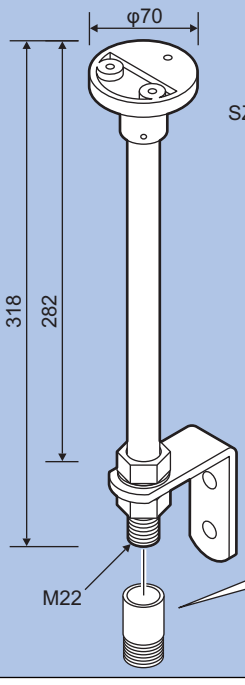
SZ-020
(For φ21.7mm Pole)

SZ-017
(For φ21.7mm Pole)

Pre-assembled

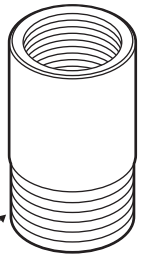


SZ-50T



SZ-50L

Adaptor



SZ-904
For 3/4" NPT