PATLITE®

Model Code Lineup

LR5-502WEBW-RYGBC

① ② ③ ④ ⑤ ⑥

①Tiers	②Rated Voltage	③Mounting / Communication Specification	⑥LED Color
= 0 tiers	**02 =** 24V DC	**WE =** Direct mounting / Ethernet Control	**R =** Red
1 = 1 tier		**LE =** Pole Mounting with L-bracket / Ethernet Control	**Y =** Amber
2 = 2 tiers			**G =** Green
3 = 3 tiers		④Buzzer ⑤Body Color	**B =** Blue
4 = 4 tiers		**B =** With Buzzer **W =** Off-White	**C =** White
5 = 5 tiers		**N =** No Buzzer	

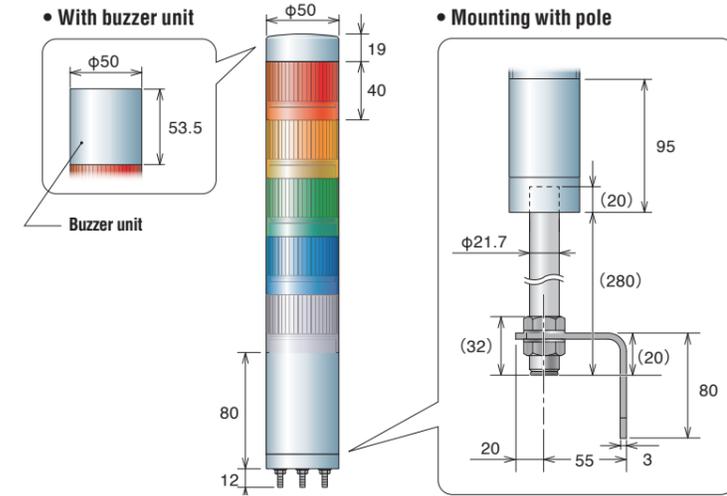|	Direct Mounting with 3-point screw		Pole Mounting with L-bracket	
Tiers	**No Buzzer**	**With Buzzer**	**No Buzzer**	**With Buzzer**
0 tiers	LR5-02WENW	-	LR5-02LENW	-
1 tier	LR5-102WENW-R/Y/G	LR5-102WEBW-R/Y/G	LR5-102LENW-R/Y/G	LR5-102LEBW-R/Y/G
2 tiers	LR5-202WENW-RY/RG	LR5-202WEBW-RY/RG	LR5-202LENW-RY/RG	LR5-202LEBW-RY/RG
3 tiers	LR5-302WENW-RYG	LR5-302WEBW-RYG	LR5-302LENW-RYG	LR5-302LEBW-RYG
4 tiers	LR5-402WENW-RYGB	LR5-402WEBW-RYGB	LR5-402LENW-RYGB	LR5-402LEBW-RYGB
5 tiers	LR5-502WENW-RYGBC	LR5-502WEBW-RYGBC	LR5-502LENW-RYGBC	LR5-502LEBW-RYGBC

Note:
• Custom color configurations available. (Configurations using the same color LED modules cannot be controlled separately)
• Poles are not sold separately.

Option	Direct Mount	Pole Mount
LR5-E-□	✔	✔
LR5-BW	✔	✔
WDT-5LR-Z2	✔	✔
SZK-002W	✔	-
SZW-001W	✔	-
SZW-002W	✔	-
SZK-001U	-	✔
SZ-010	-	✔
SZL-001	-	✔
ADP-001C	✔	✔

Please check the instruction manual for details.

Simple Settings for Easy Control

Specifications & External Dimensions (Unit: mm)

■ LR5-□02WE / LR5-□02LE Series

• With buzzer unit

φ50 / φ50

53.5

Buzzer unit

19 / 40

• Mounting with pole

95
(20)
φ21.7
(280)
(32)
(20)
80
20 / 55 / 3
80
12

■ Mounting dimensions

Product Front

120° / 120°
φ30
Mounting hole × 3 (φ4)
Wire entry hole (φ20)
Nameplate Location

L-bracket Outline
2-φ11
φ9
30
20*1
35*2
80
32
Screw / Nut
*1: M8 × 2
*2: M10 × 2
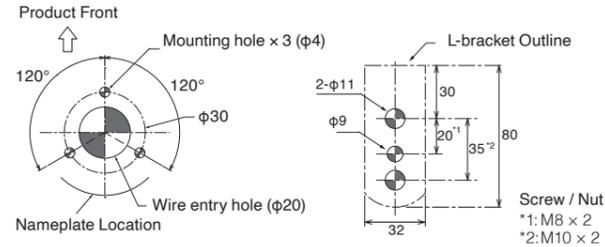
■ LAN Cable RJ-45 Connector Recommended Size

Wire entry hole* (φ20)
RJ-45 connector

* When using the wall-mount bracket SZK-002W or SZK-001U you have use a LAN cable with a diameter of 15 mm or less.

40mm or less

Inner diameter of pole (φ15.5)
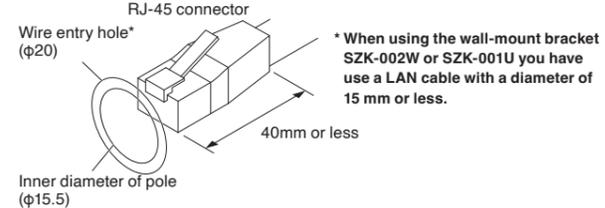
Model Code	LR5-□02WE□W (Direct Three-point Screw Mount)	LR5-□02LE□W (Pole Mount with L-bracket)
Rated Voltage	24V DC (Polarized)	
Operating Voltage Range	Rated Voltage ± 10%	
Ambient Temperature / Ambient Humidity	-20℃～+50℃ / 90% RH or less, no freezing, no condensation	
Protection Rating	IP65 (IEC 60529)	IP54 (IEC 60529)
Mass (Tolerance: ±10%)	0.1kg + (0.04kg)×Tiers + [0.05kg] (Using the Buzzer)	0.39kg + (0.04kg)×Tiers + [0.05kg] (Using the Buzzer)
Network Communication Format	Ethernet (IEEE802.3 Conformity) 10BASE-T/100BASE-TX (Auto-MDI/MDI-X)	
Communication Protocol	HTTP(S), Modbus/TCP, SOCKET	

Control with Universal Protocols

Easily operated using HTTP(S) and Modbus/TCP protocols

PATLITE Corporation

PATLITE (U.S.A.) Corporation
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PATLITE Europe GmbH
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PATLITE KOREA CO., LTD.
PATLITE TAIWAN CO., LTD.
PATLITE (THAILAND) CO., LTD.
PATLITE (SINGAPORE) PTE LTD
PT. PATLITE INDONESIA

⚠ 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.

RoHS 10 / CE / cULus / KC / UKCA

www.patlite.com

Direct LAN Control from Industrial PCs/PLCs Makes Configurating & Signaling Easy

Before

In an industrial PC-controlled system, a contact output board was being used, leading to an increase in component count and complications in inventory and delivery management.

After

With direct control of signal towers via HTTP(S) or Modbus/TCP, the need for a contact output board has been eliminated.

Industrial PC

PLC

Communication Protocol
- Modbus/TCP
- HTTP(S)
- SOCKET
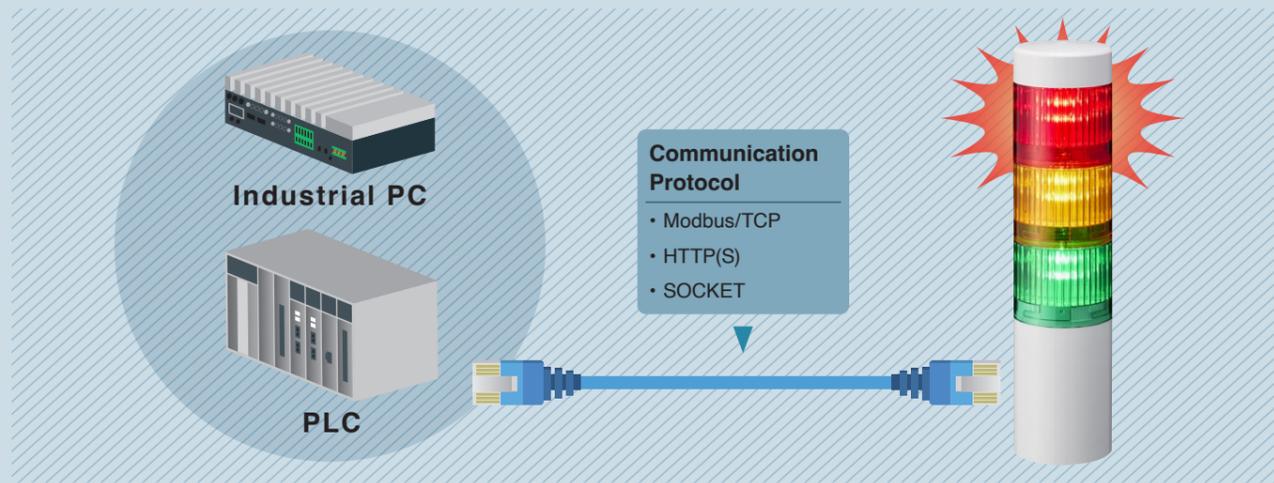
Control with Industrial PC/PLC

Command control directly from Industrial PCs or PLCs. Eliminate the need for contact output boards and reduce the number of required contact points.

Semiconductor Manufacturing Equipment

Machine Tools

Notification from Higher-Level Systems

SCADA and production management systems can display status and alerts using standard protocols. By visualizing alerts not only on monitors, but also through signal towers (which are common in manufacturing environments), the operators can quickly grasp information and prevent oversights.

Notification from SCADA and Other Systems

Simple Software Design
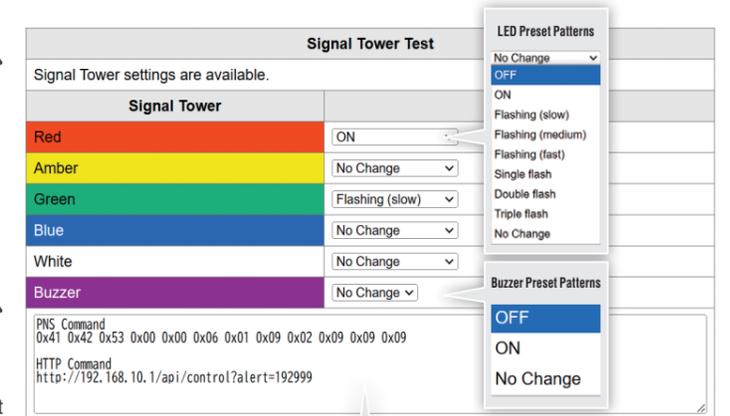
Command Generation Feature

After logging into the LR5-LAN via a web browser, select the desired operation from the setting screen to display the corresponding command. This allows for easy command verification without the need to read the user manual, reducing time spent on software development.

Sample Source Code

Sample source code for operating the LR5-LAN is available on the product's web page. Various programming languages are provided for Windows® and Linux, allowing you to quickly test it using your preferred or project-specific language.

Comprehensive Flashing Presets

Seven preset patterns for LED control are available. Since Flashing operations can be executed through command control alone, it reduces the effort required for setting clock pulses in PLCs.

Signal Tower Test

Signal Tower settings are available.

Signal Tower	
Red	ON
Amber	No Change
Green	Flashing (slow)
Blue	No Change
White	No Change
Buzzer	No Change

```
PNS Command
0x41 0x42 0x53 0x00 0x00 0x06 0x01 0x09 0x02 0x09 0x09 0x09
HTTP Command
http://192.168.10.1/api/control?alert=192999
```

LED Preset Patterns
- No Change
- OFF
- ON
- Flashing (slow)
- Flashing (medium)
- Flashing (fast)
- Single flash
- Double flash
- Triple flash
- No Change

Buzzer Preset Patterns
- OFF
- ON
- No Change

For example, if you select "Red ON" and "Green Flashing" on the screen, a command will be generated as shown below:

■ **PNS Command (SOCKET)**
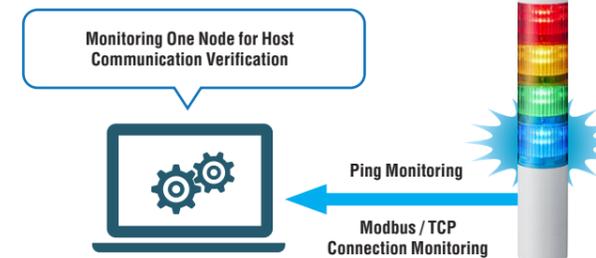0x41 0x42 0x53 0x00 0x00 0x06 0x01 0x09 0x02 0x09 0x09 0x09

■ **HTTP Command**
http://192.168.10.1/api/control?alert=192999
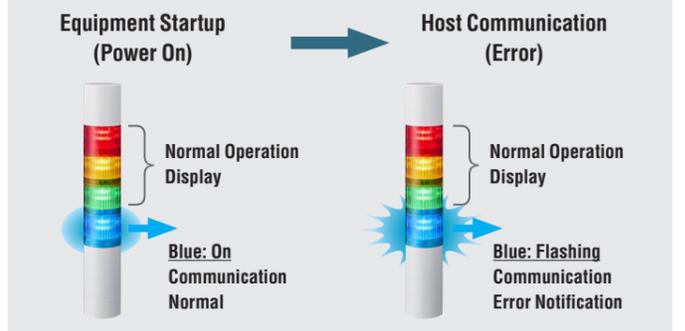
Check Actual Operation ▼

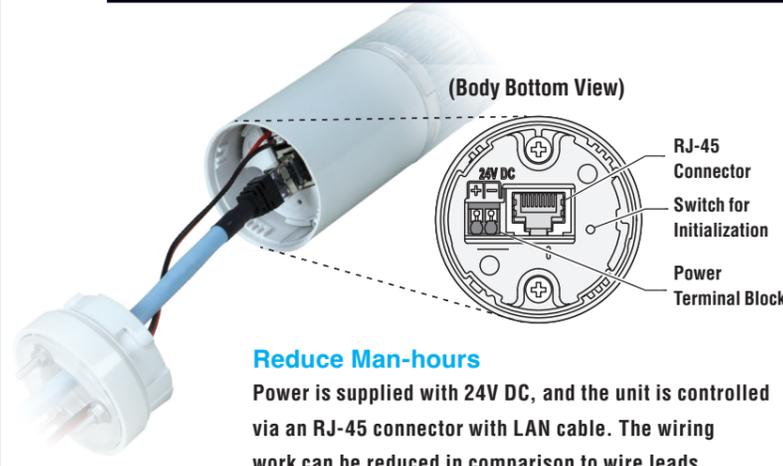## Host Device Connection Verification Function

The connection with the device can be checked. If the connection is lost, the LED unit provides a notification, enabling host-to-host Ping monitoring.

Monitoring One Node for Host Communication Verification

Ping Monitoring

Modbus / TCP Connection Monitoring

Monitoring Example

Equipment Startup (Power On) → **Host Communication (Error)**

Normal Operation Display

Blue: On Communication Normal

Normal Operation Display

Blue: Flashing Communication Error Notification

Reduce Wiring Labor

(Body Bottom View)

24V DC

RJ-45 Connector

Switch for Initialization

Power Terminal Block

Reduce Man-hours

Power is supplied with 24V DC, and the unit is controlled via an RJ-45 connector with LAN cable. The wiring work can be reduced in comparison to wire leads.

Easy Setup

By using the optional ADP-001C, power can be supplied from an AC outlet. Even if 24V DC is not available, the ADP-001C can easily be implemented without construction.