



Color
Change



Level Meter
Monitoring



Status
Condition



Cycle
Time



Remote
Monitoring



Ethernet
PoE

The first PC programmable Signal Tower with unlimited possibilities

60mm Smart Signal Tower

■ DC24V/ 5 Tier Type

■ AC 100-240V/ 5 Tier Type

LA6



11 Sounds	Open Collector	LED 21 Colors
IP65	IP54 (Buzzer)	85 dB at 1 m



Silver
Lighting Type



Off-white
Flashing
/Buzzer Type

60mm Smart Signal Towers with PoE

Direct Mount Type

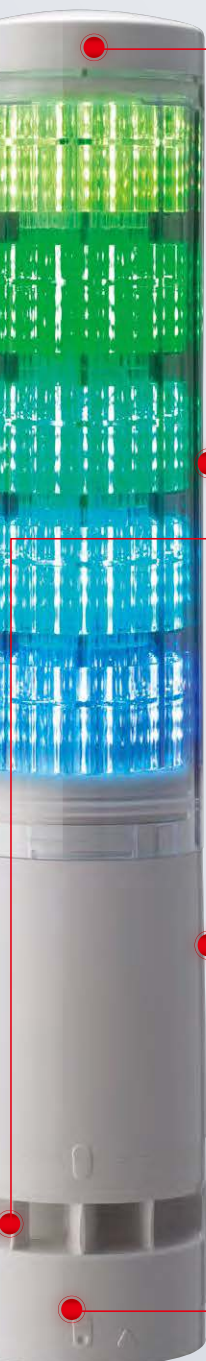
LA6-5DTNWB-POE

Stationary Type w/"Clear" Switch

LA6-5DSNWB-POE



Easy WEB	PoE	Mirroring	Modbus/ TCP
Socket	LAN	85 dB at 1 m	11 sounds
LED 21 Colors	IP54 (Direct Mount)	HTTP	



Multi-function Switch for various setups

Audible Alarm SOUND SETUP

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

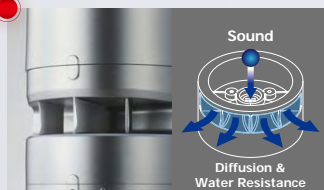
COLOR SETUP

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



A new lens design optimizes visibility.

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



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

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



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

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

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



Detachable Terminal Block

Equipped with 8 inputs for connecting wires or a PLC. I/O data can be recorded and stored over the network. DC power can also be supplied through the terminal block.



Conveniently connects to an existing network with PoE support.

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

LA6-POE Communications Protocols

SOCKET Communication

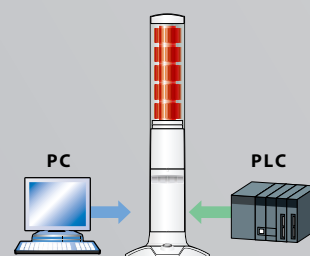
An application-level protocol called PNS (developed by PATLITE) can be used to establish connection between client and server and to control visual and audible alert functions.

HTTP (Hypertext Transfer Protocol)

HTTP commands sent through a web browser or PLC can trigger visual and audible alert functions.

Modbus TCP/UDP --remove images

Modbus, a vendor-neutral protocol, can be used to control visual and audible alert functions through a PLC.



Network Monitoring Signal Tower with MP3

NHL-3FV2 NHP-3FV2

- Audible Alarm and MP3 voice alert functions
- Built-in digital output and contact inputs
- Monitor network device status using SNMP protocol
- Able to send email alerts



Lights Off



Wall-mount Bracket
NH-WST2

Easy WEB	PING	EMAIL
SNMP v1 / v2c	RSH	SLMP
Socket	LAN	MP3
88 dB at 1 m	10 Sounds	60 Messages
4 Inputs	1 Output	Line out
NHL $\phi 60mm$	NHP $\phi 40mm$	HTTP



Network Monitoring Signal Tower

NHL-3FB2 NHP-3FB2

- Designed to compliment office spaces
- Up to 5 LED units with 2 types of flashing patterns
- 4 audible alarm sound types



Lights Off



Wall-mount Bracket
NH-WST



Partition-mount Bracket
NH-PST

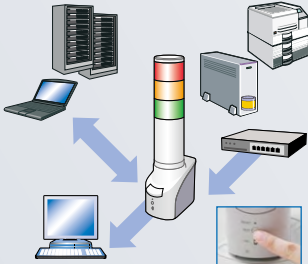
Easy WEB	PING	EMAIL
SNMP v1 / v2c	RSH	SLMP
Socket	LAN	80 dB at 1 m
4 Sounds	NHL $\phi 60mm$	NHP $\phi 40mm$
HTTP		



Monitoring Functions

PING Monitoring

A maximum of 24 nodes is possible when monitoring critical status information. When an abnormality occurrence in the monitored equipment network isn't obtained, the detected abnormality warns the administrator promptly with light and sound.



TRAP Monitoring

With the TRAP Monitoring function, the NHL alerts administrators to any equipment abnormalities within the IP network that uses SNMP.

- It can distinguish the variable-bindings.
- Registration of 16 groups (4 nodes per group) is possible.



Application Monitoring

Monitor important background applications and signal the administrator upon any detected abnormalities.

Self-diagnosis Function

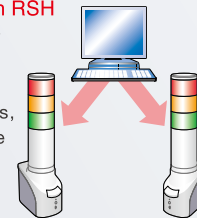
For peace of mind, manually test operation functions with the conveniently located test button.

Communication Commands

RSH

Controllable with RSH

The NHL is easily controllable by Remote Shell (RSH) commands, which is a flexible protocol.



NHL-FB / NH-FV Series

Event Occurrence: Command Execution, (Red/Amber/Green Lighting, Buzzer sounds)

RSH:

rsh 192.168.10.1 -l root alert 111001

NH-FV Series

Event Occurrence: Command Execution, (Ch10 Message Playback)

RSH:

rsh 192.168.10.1 -l patlite sound 10

SOCKET Transmission

PHN Command Compatibility

Controlled with 2 bit commands.

* Some functions are limited.

Event Occurrence: Command Execution, (Red/Amber/Green lighting, Buzzer sounds)
PHN Command: 57H, 17H

PNS Command Compatibility

* The PNS command is a unique command from PATLITE.

Control all pattern information by using the PNS commands.

NHL-FB / NH-FV Series

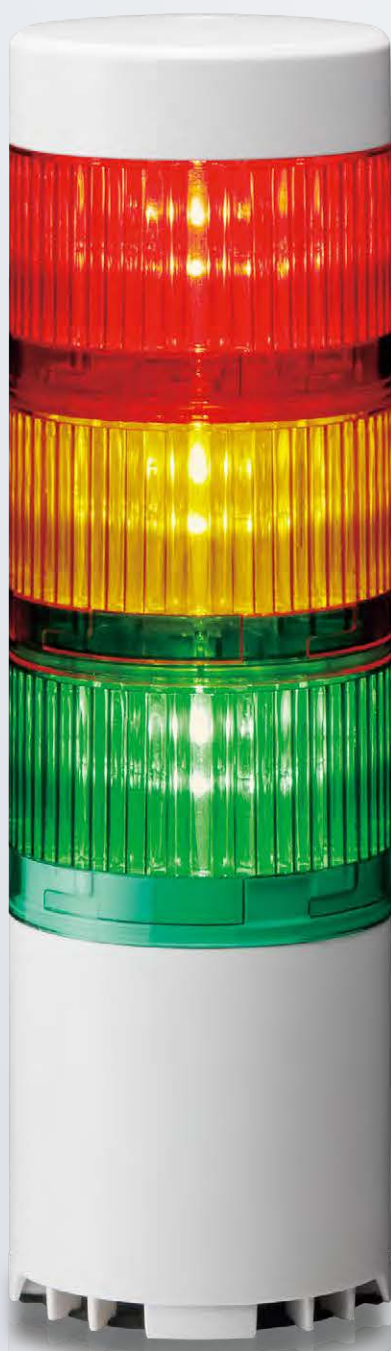
Event Occurrence: Command Execution, (Red/Amber/Green lighting, Buzzer sounds)

PNS Command: 58H, 58H, 53H, 00H, 00H, 06H, 01H, 01H, 01H, 00H, 00H, 01H

NH-FV Series

Event Occurrence: Command Execution, (Ch10 Message Playback)

PNS Command: 58H, 58H, 56H, 00H, 00H, 04H, 01H, 00H, 00H, 10H



DIRECTLY TRIGGERED AND POWERED VIA USB INTERFACE

PC and HMI controlled

Powered over USB for single cord installation

Open architecture for custom programming

Compatible with Windows® and Linux

Single Cable Installation

USB cable* transmits
power and data



* USB cable is not
included with this
product.

Downloadable* Software Library

Simple to Program



* Download from our website.

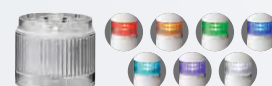
Compatible LED Units



LR6-E-R/Y/G/B/C



LR6-E-RZ/YZ/GZ/BZ



LR6-E-MZ

*Supports up to 5 LED units total

*LR6-E-MZ can be used with any other LED unit types



LR6-3USBW-RYG
LR6-3USBK-RYG



LR6-USBW
LR6-USBK

Mounting Options



SZK-003W/K



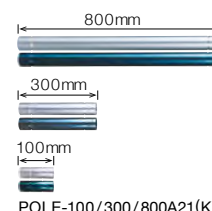
SZ-016A



SZP-004W/K



SZ-010

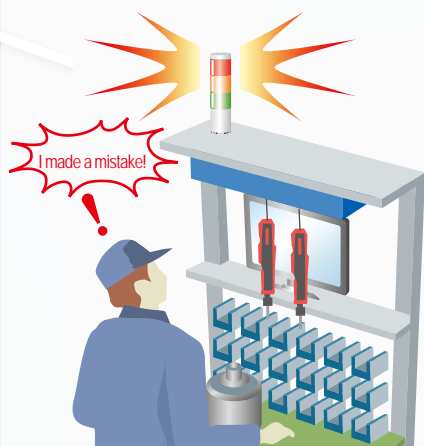


POLE-100/300/800A21(K)

example



Ideal for Factory Automation, Unique Solutions for USB Connections



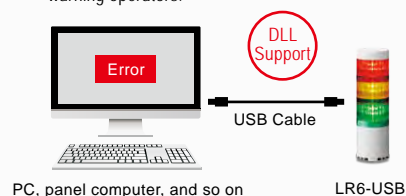
Production line

With this easy-to-use and understand signal tower, you can alert and notify users about what is happening on the production lines.

The signal tower connects to a production line PC with a single USB cable. Working with a program to determine OK or not good, or situations where material is out or a button on the touch panel is pressed, you can control flashing LED units or sound the buzzer.

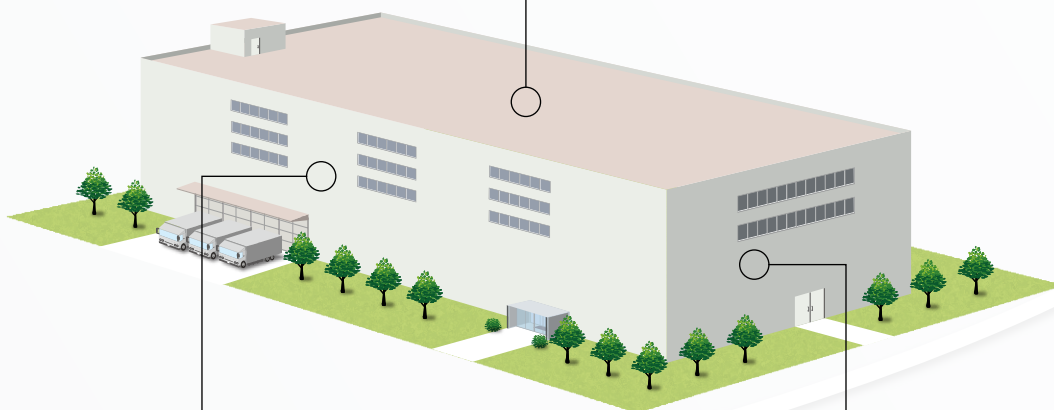
A software library (for Windows®) is available, enabling easy construction of programs. Even on other operating systems, possible for control based on protocol specifications.

The signal tower can be used for various purposes, such as notifying managers or warning operators.



PC, panel computer, and so on

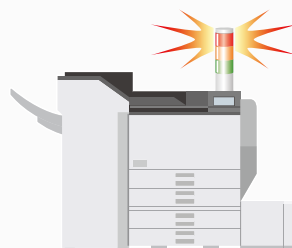
LR6-USB



Work with PC in an office Site visualization solution



Installed on equipment Work with PC-controlled equipment



Make Smarter, Data-Driven Decisions

Any manufacturer

Any year/model

Wireless communication means wiring is unnecessary



1

Acquire real-time machine data regardless of machine brand or age

2

Easy installation and setup



Receiver
WDR-LE-Z2



Wirelessly transmit critical equipment data

LAN

3

Export data to CSV file for detailed analysis



Transmitter
WDT-6LR/5LR-Z2

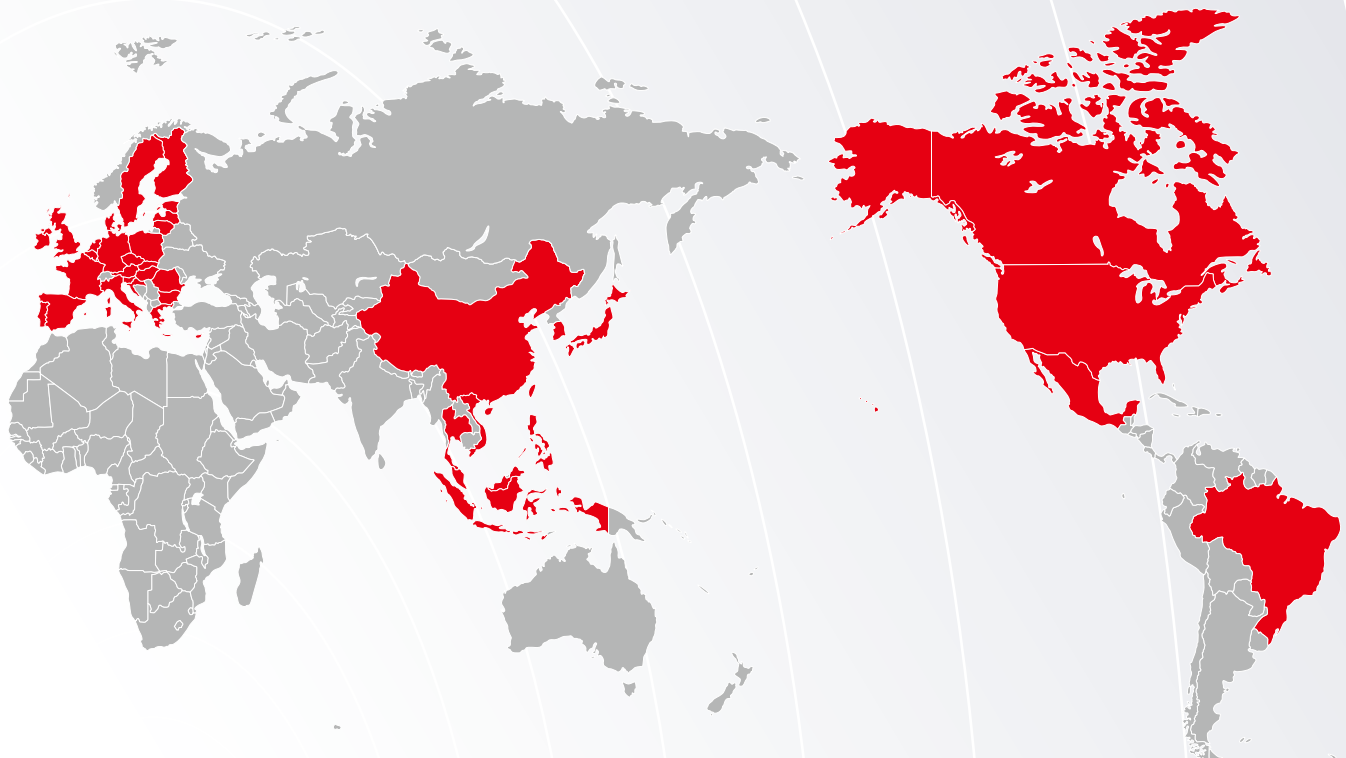
Red: Abnormal Stop Amber: Operator Call Green: Normal Operation

Facility name	11					12					13					14					15								
	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Device1																													
Device2																													
Device3																													
Device4																													
Device5																													

Centralize
operations
management

Monitor
performance
across multiple
locations

Increase
plant-wide
visibility



Installed in
**Over 1,000
facilities**

Supported in
**Over 10
countries**

Transmitter



Signal Tower
LR6 Transmitter
WDT-6LR-Z2



Signal Tower
LR5 Transmitter
WDT-5LR-Z2



Signal Tower
LME Transmitter
WDT-6M-Z2



Signal Tower
LE Transmitter
WDT-5E-Z2

Receiver



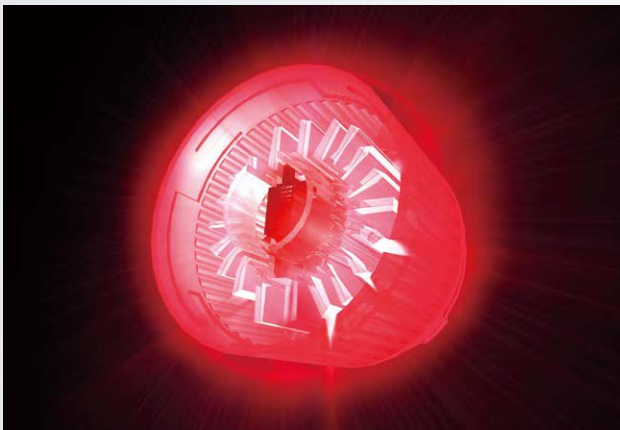
Stationary Receiver
WDR-LE-Z2

For details, see page 35

Next Evolution of Signal Towers



Visibility



A uniform 360° Light-Emitting Design

The new LED color module features a 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 farther distances.



LCE-A Series (φ 40)

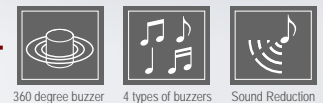


LR4 Series (φ 40)

More than twice the light output * Based on the φ 40 Red LED Model

The LR Series lenses distribute light more efficiently, more than doubling the luminous intensity of previous models.

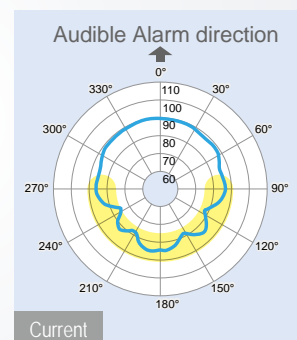
Audibility



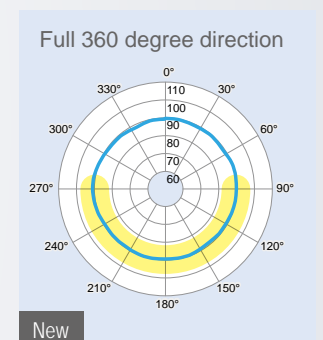
Unique, Fully-enclosed Sound Module

Inspired by the structure of a drum, the new sound module is completely enclosed. This allows the sound waves to be distributed more efficiently, producing an even, 360° sound resonance. The enclosed design also improves the resistance to water and dust.

* According to our research, December 2018



LHE Series (φ 70)

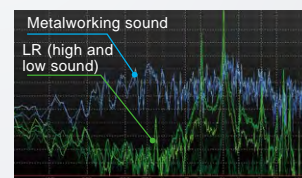


LR7 Series (φ 70)

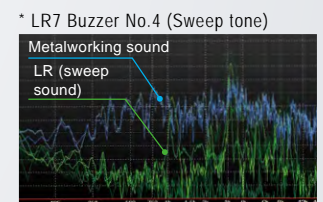
Maximum 90dB※ output

* LR7 Series Buzzer #4 Sweep sound

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



[Buzzer #3] High pitch (fast alternating intermittent)
2016Hz/3012Hz



[Buzzer #4] Sweep sound
1000Hz - 4032Hz (variable)

New Sounds Heard Above the Noise

Four Audible Alarm sounds* are built into the module. Audible Alarm sound No. 3 and No. 4 are newly developed with a higher variable frequency to be heard above the noise of surrounding machinery. A sound reduction function is also built-in to reduce the buzzer volume by approximately 10dB to suit the environment.

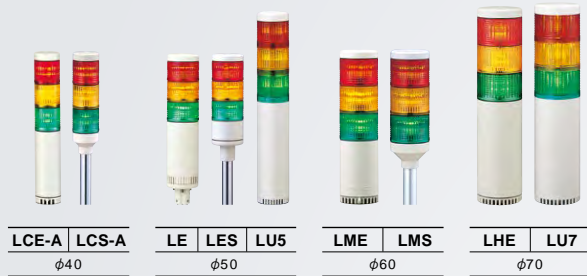
* Four Audible Alarm Sounds

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

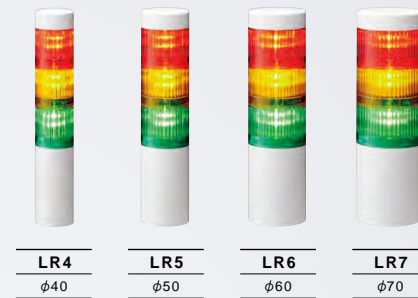
LR Series Model Conversion

As of September 2017, production of legacy models have completed.

Previous product



New product



Simplicity

Durability



Reorganizing modules is effortless

Traditional stack lights typically require additional threaded shafts or tools to reconfigure light modules. The LR Series makes it easier than ever to change the number of light tiers or to add a sound module.

LED/Buzzer Unit Removal



LED Unit Attachment



Modular System Design

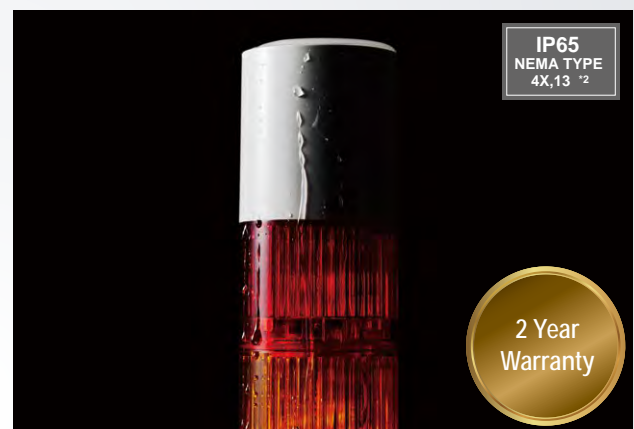
The fully modular allows the flexibility to change the LR to match any changes in the application. Also, in case a module is damaged, it can quickly be replaced.



Easy assembly/disassembly



Scan to see this in action



Smooth surface

The modules and body unit all line up flush, creating a smooth surface for improved water run off and easy cleaning.



Environmental Performance

The LR Series is built resistant to water and dust, carrying IP65 (NEMA Type 4X, 13*) protection ratings.



Cable wire included

*[Type 4X] Protection against damage from corrosion, rain, foreign matter, water spray, water injection, and ice formation to the outer housing.
[Type 13] Housing for indoor use. Protection from dust, water spray, oil and non-corrosive coolant.