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Model Name	USB-controlled Signal Tower	Transmitter/Receiver for Wireless Data Acquisition System		Network Monitoring Signal Tower with MP3	
Model	LR6-USB	WD-LR-Z2	WD-Z2	NH-FV2	
				NHP	NHL
Product Image					
Ethernet		○ (WDR-LE-Z2)	○ (WDR-LE-Z2)	○	○
USB control	○				
RS-232C					
Size (mm)	φ 60			φ 40	φ 60
IP	65			20	20
Audible sound pressure in dB (at a distance of 1m)	80			88	88
Body	Polycarbonate				
Globe	Polycarbonate			Polycarbonate	Polycarbonate
Light Source	LED			LED	LED
Digital output		1 (WDR-LE-Z2)	1 (WDR-LE-Z2)	1	1
Digital input				4	4
SNMP v1/v2/v3				v1/v2 *	v1/v2 *
RSH				○	○
PING				24	24

* Transmission is with v2c only

Page number	Page 45	Page 48	Page 49
Model Name	Signal Tower	Interface Converter with Signal Tower	Interface Converter
Model	LA6-POE	PHE-3FB3	NBM-D88NN
Product Image			
Ethernet	○		○
USB control		○	
RS-232C		○	
Size (mm)	φ 60	φ 40	
IP	54 (20 for SN)	20	20
Audible sound pressure in dB (at a distance of 1m)	85	80	
Body	ABS		
Globe	Polycarbonate	cap	
Light Source	LED	LED	
Digital output			8
Digital input			8
SNMP v1/v2/v3			v1/v2 *
RSH			○
PING			24

* Transmission is with v2c only

Page number	Page 42		Page 51
Model Name	Network Monitoring Signal Tower		Interface Converter
Model	NH-FB2		PHC-D08N
	NHP	NHL	
Product Image			
Ethernet	○	○	
USB control			○
RS-232C			○
Size (mm)	φ 40	φ 60	
IP	20	20	20
Audible sound pressure in dB (at a distance of 1m)	80	80	
Body			
Globe	cap	cap	
Light Source	LED	LED	
Digital output			8
Digital input			
SNMP v1/v2/v3	v1/v2 *	v1/v2 *	
RSH	○	○	
PING	24	24	

* Transmission is with v2c only

* For specifications, see the product page.

LR6-USB



LR6-3USBW-RYG
LR6-3USBK-RYG
(pre-assembled product)



LR6-USBW
LR6-USBK
(body unit)

- PC or HMI controlled
- Custom programming made easy with our free software library (.DLL)
- Open architecture makes it possible to control the device with other operating systems such as Linux
- Supports HID class. No exclusive drivers necessary
- Supports solid color, clear-globe, and 7-in-1 multi-color LED units
- IP65 protection rating - High water and dust protection



(Sold separately) (Sold separately)

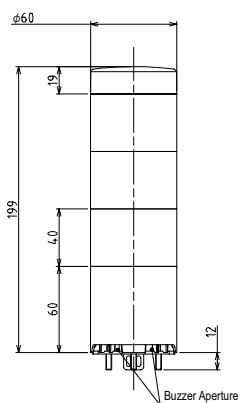
Specifications

Model	LR6-3USBW-RYG LR6-3USBK-RYG (pre-assembled product)	LR6-USBW LR6-USBK (body unit)
Rated Voltage	5V DC (USB bus power)	
Operating Voltage Range	Rated voltage $\pm 5\%$ (Compliant with USB2.0 standard)	
Rated Current Consumption	Maximum	500mA
Ambient Operating Temperature	-20°C to $+50^{\circ}\text{C}$	
Ambient Operating Humidity	90% RH or less, no condensation	
Mounting Location / Direction	Indoors, Upright	
Protection Rating	IP65 (IEC 60529)/ NEMA TYPE 4X, 13*	
Mass (Tolerance: $\pm 10\%$)	320g	140g
LED unit control	Lighting, light off, pattern on (4 types)	
Audible control	Buzzer on, buzzer off, sound pattern 4 types / select from 13 pitches	
Audible sound pressure	Typ. 80dB (approximately 10dB with sound reduction) (at a distance of 1m in front of the buzzer aperture) Frequency 2349.3Hz	
Communication method	USB 2.0 Full Speed	
Software Library (DLL) supported operating systems	Windows® 7, Windows® 8 (except RT), Windows® 8.1 (except Windows® 8.1RT), Windows® 10	

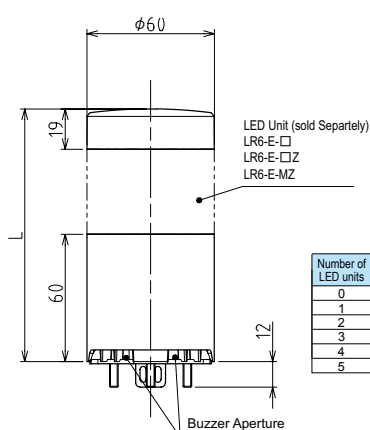
* Except when using pole bracket or wall bracket.

Dimensions (mm)

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



LR6-USBW LR6-USBK



Number of LED units	L (mm)
0	79
1	119
2	159
3	199
4	239
5	279

■ Communication Specifications

※ For details, please see the Instruction Manual, which you can download from our website.

Development language and supported software (DLL)

Development language	C, C++, C#, VB
Compatible software	Visual Studio 2008, 2012, 2013



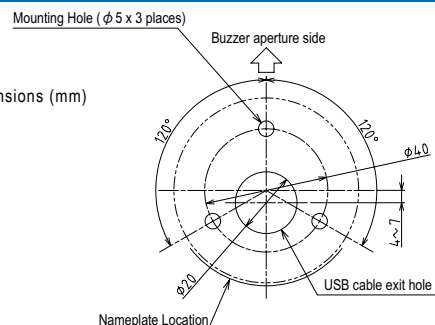
API list (Software library (DLL))

Starting USB communication	Ending USB communication	Controlling LED unit with the selected color (lighting/off)
Controlling multiple LED units	Controlling the buzzer with selected buzzer pattern (play sound)	Controlling the buzzer with selected buzzer pattern and pitch
Turning off all LED units and stopping the buzzer	Getting the firmware version with communication in progress	Getting the DLL version

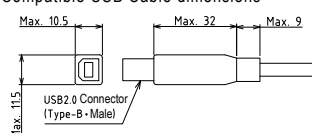
Communication Data Format (protocol specifications)

Byte 1		Byte 2		Byte 3		Byte 4	
Command version		Command ID		Buzzer control		Buzzer pitch	
"If you emit sound (continuous) with red lighting, buzzer pattern 1 (Sound A:D7, Sound B:off)"							
0x00		0x00		0x02		0x60	
Byte 5		Byte 6		Byte 7		Byte 8	
LED control						Empty	
R	Y	G	B	C	Static		
"If you emit sound (continuous) with red lighting, buzzer pattern 1 (Sound A:D7, Sound B:off)"							
0x10		0x00		0x00		0x00	

■ Mounting Dimensions (mm)



■ Compatible USB Cable dimensions



* This product does not include an USB cable. Please provide your own.

Model Code

LR6-□USBW-RYG

Number of tiers		Body Color		LED Unit Colors	
Blank	Body Unit only	W	Off-white	Blank	Body Unit only
3	3 tiers	K	Black	RYG	From top; red, yellow, and green

Optional Parts

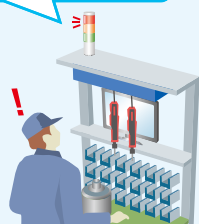
For details, see pages 182 to 187.

Optional Parts	Model
Pole Bracket	SZP-004W/SZP-004K
Wallmount Bracket	SZK-003W/SZK-003K
Circular Mounting Bracket	SZ-016A
Circular Mounting Bracket1	SZ-010
Pole (100mm)	POLE-100A21(K)
Pole (300mm)	POLE-300A21(K)
Pole (800mm)	POLE-800A21(K)

Ideal for Factory Automation, Unique Solutions for USB Connections

Production line

An error was made



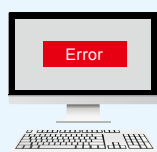
With this easy-to-use and understand signal tower, you can alert and notify users about what is happening on the production lines.

The signal tower connects to a production line PC with a single USB cable. Working with a program to notify of situations such as where an error has occurred, or when a button on the touch panel is pressed, you can control flashing LED units or sound the buzzer.

With DLL support (for Windows®), you can easily build programs.

Control is possible with other operating systems as well.

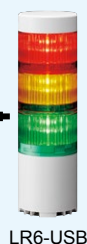
Use for a variety of purposes, such as notifying a manager.



USB Cable

Supports DLL

PC, panel computer, and so on.



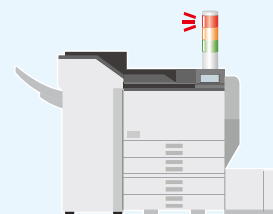
LR6-USB

Production office



Visualize the production site status.

Installed on equipment



Works with PC controlled equipment, such as a printer.
Alerts for out-of-paper or other errors.

Supports both, DLL control and protocol control

By using DLLs, you can build your programs more easily. Possible for control on other operating systems based on the protocol specifications.

As it is a HID class device, it does not require a proprietary driver.



◆ LED Unit

Lighting, light off, pattern on (4 types)

◆ Buzzer

Buzzer on, buzzer off, and 4 types of sound pattern
Select 2 from 13 pitches

Compatible LED Units



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



LR6-E
-R/Z/YZ/GZ/BZ



LR6-E-MZ

- Maximum 5 LED units (LR6-E-□, LR6-E-□Z) can be installed in total.
- Cannot be used with non-compatible LED units
- Multiple LED units of the same color (LR6-E-□, LR6-E-□Z) cannot be used.
- When LR6-E-MZ is connected, cannot connect other units.
- When LR6-E-MZ is connected, there are 2 types of patterns.

Demo Software



Confirm actual operation of the LED unit and buzzer. For details, please see our website.

Supports wall mount and pole mount

We also have wallmount brackets and optional mounting poles.



Example