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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.

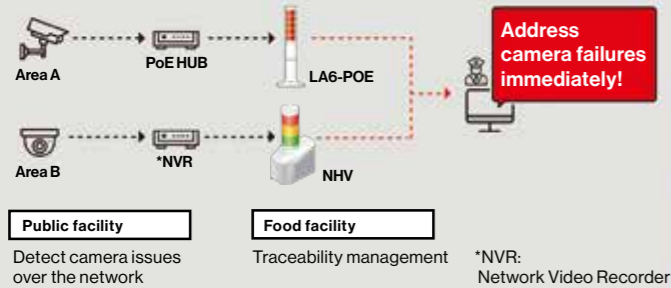
Network Catalog



IoT Solution from the Factory

Surveillance system monitoring

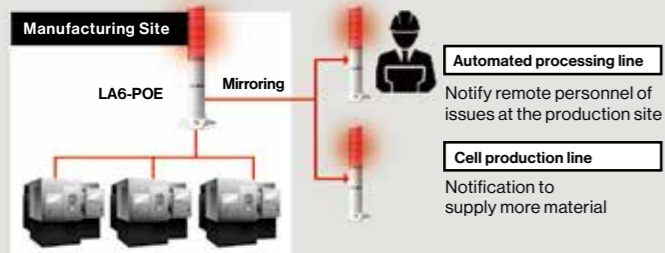
The LA6-POE and NHV are able to detect network events and notify remote personnel over the network.



Surveillance System

Mirroring display of production facility

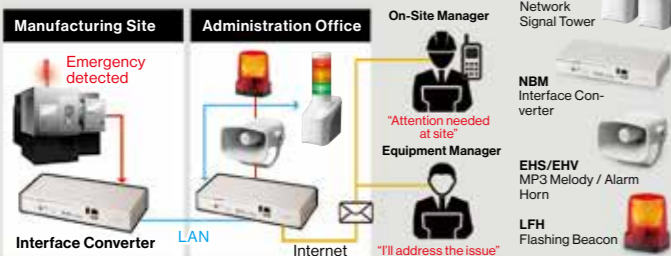
A master LA6-POE located at the production site is able to mirror status to up to 8 LA6-POE devices, notifying personnel of production issues located in remote locations.



Production Line

Network existing equipment

Improve response time by converting your existing equipment to network-enabled devices capable of notifying remote personnel via e-mail.

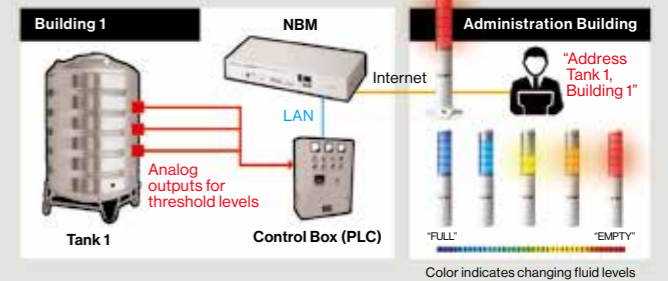


Factory Operation

to the Office

Remote tank level monitoring

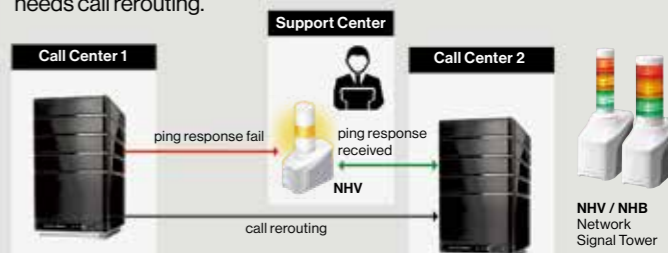
Remotely located tanks can run dry without proper monitoring, leading to extended downtime. The LA6 can be used as a visual level meter able to notify remote personnel of level status in real-time.



Manufacturing Facility

Monitor nodes on network in real-time

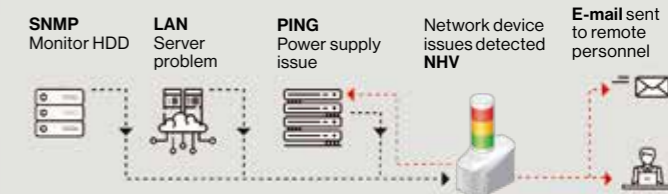
The NHV/NHB monitors nodes on multiple call center networks. If ping responses fail from certain nodes, the NHV/NHB will notify an administrator by visual or voice alert indicating which call center has gone down and needs call rerouting.



Customer Support

Remote monitoring of server and network peripheral devices

The NHV supports various protocols to communicate with network devices and is able to notify local personnel of issues on the network via visual and audible signals and remote personnel via email.



Server Room

Network Signal Tower

with Voice Annunciator

NHV Network Signal Tower with Voice Annunciator

- Compatible with various protocols
- Suitable for messages or melodies
- Diverse lineup



Software Features

- HTTPS, HTTP
- SNMP V3/v2c/v1
- SSH RSH
- OAuth 2.0
- SOCKET
- PING 24
- Web Browser Settings
- Send E-mail
- Detect E-mail
- Text to Speech
- IP v6/v4
- Azure
- AWS

Hardware Features

- RJ-45
- Φ40 (NHV4)
- Φ60 (NHV6)
- Digital Contacts 4 Inputs 2 Outputs
- PoE
- 88dB

(* Use Google Chrome/Microsoft Edge when setting up browsers.)

How to Order

NHV4-3DN-RYG

① 4 = Signal Tower Φ40
6 = Signal Tower Φ60

② 0 or 3-tiers*

③ None = Standard specification; no contact input/output
D = Standard specification; contact input/output
M = E-mail detection; no contact input/output

④ N = No AC Adapter
P = PoE power supply (No AC adapter)

⑤ 3-tiers = RYG (Red, Yellow, Green)

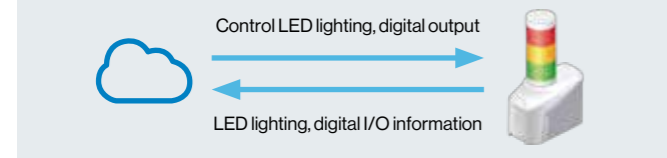
*LED units can be added up to 5 tiers.

Cloud Communication

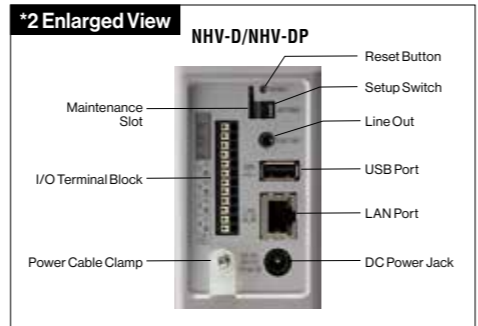
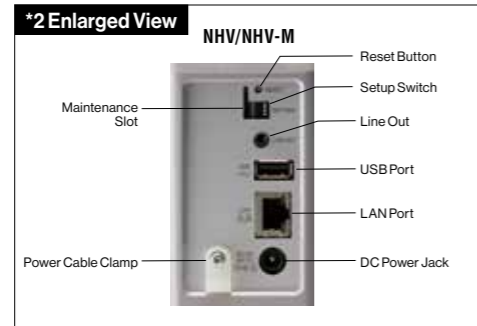
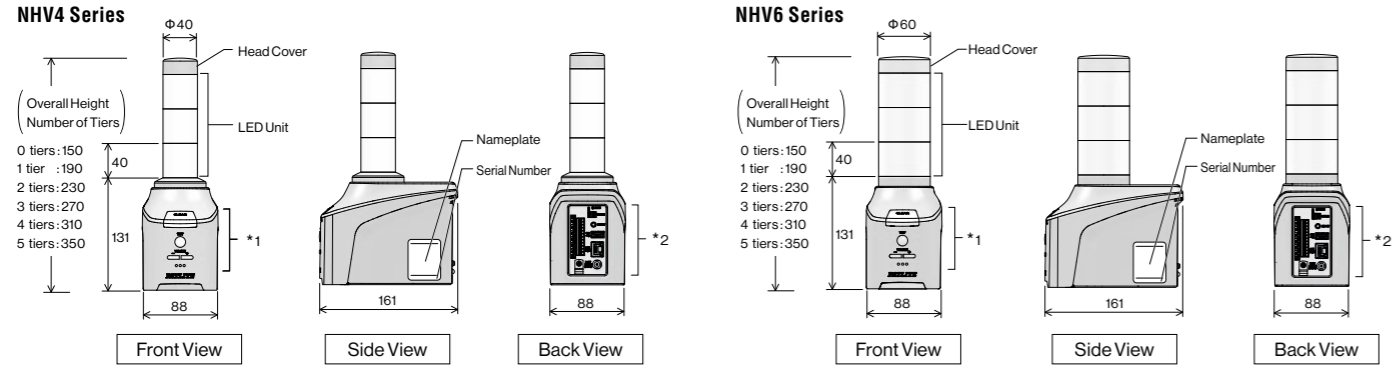
Supported Cloud Platforms: AWS, Microsoft Azure

- [AWS: Connect to AWS IoT Core](#)
- [Azure: Connect to Azure IoT Hub/Azure IoT Central](#)

Control LEDs and audio directly from the connected cloud service.



Dimensions (Unit: mm)



Voice Function – MP3 Playback Function –

The MP3 playback function enables notification with voice messages. Detailed emergency information and voice guidance can be played back.

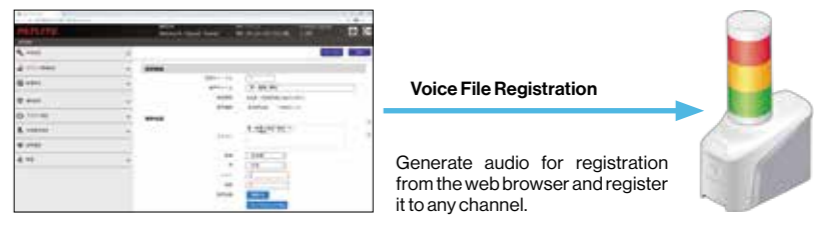
Text To Speech TTS (Text to Speech)

This unit is equipped with a "Text to Speech (TTS)" function that converts text data to voice. This makes it easy for customers to create voice messages, or text can be automatically read aloud by typing text in the command. In addition, since the voice synthesis engine is built into the main unit, voice conversion can occur even when offline (not connected to the internet).

Generate Voice File for Registration

Generate audio from text, register it to an audio channel, and play it back with a command. Compared to traditional recording methods, we have succeeded in dramatically reducing the time and effort required.

(Custom recording service is also available depending on customer's convenience, application and preference.)

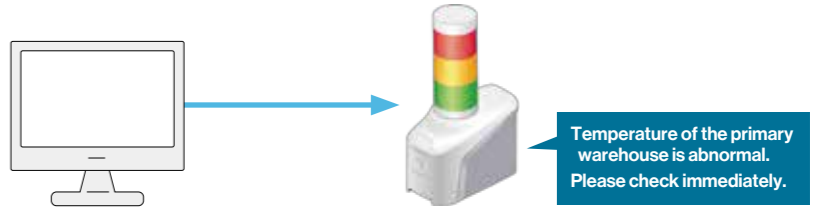


Voice File Generation from Command

Characters you want spoken can be entered directly in the command and when a command is received the NHV will convert the text to voice and play it.

Command Example

`http://192.168.10.1/api/control?speech=Hello&lang=en`



88dB Loud, Clear Audio

In spite of its compact size, the unique horn structure achieves a sound pressure of more than 88dB (at 1m). The clear audio makes it easier to distinguish the information.

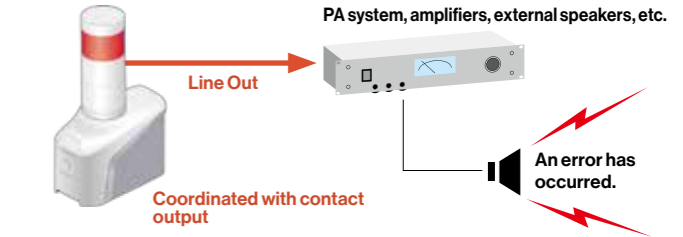
Various settings and MP3 files can be uploaded from a web browser.

* Use Google Chrome / Microsoft Edge when setting up browsers.

LINE OUT Connection to Existing Broadcasting Equipment

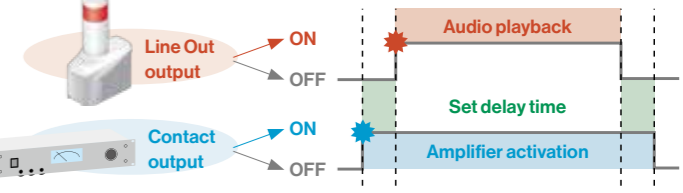
Voice messages can be broadcast by connecting the digital output of the unit to an external amplifier.

* Built-in sounds cannot be output from LINE OUT.



Coordinate Audio Playback and Contact Output

Digital contacts can be output during audio playback. Voice output can be delayed to prevent it from starting before the amplifier starts.



Set 16 volume settings using the VOLUME buttons. Volume change can be disabled in the software (in the browser settings) to prevent unintended changes in volume.

Error detected on the network

Standard Sound Various Built-in Sounds

There is a total of 11 built-in audio data (5 alarms, 3 chimes, and 3 voice messages). These are available from the time of shipment for network error notification. Select alarms or messages according to monitoring requirements.

Built-in Sounds

Alarm Sounds	Chime Sounds	Voice Messages
♪ (Beep, Beep, Beep); ♪ (Be-beep, Be-beep);	♪ Chime 1 ♪ Chime 3	🗨 An error was detected in the network. 🗨 The error has been cleared.
♪ (Slower Beep); ♪ (Beeee) (continuous sound)	♪ Chime 2	🗨 An error occurred.

NHV (Voice-enabled)

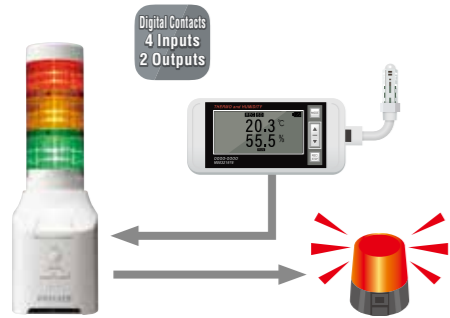


Error detected on the network

Standard model with high network security.

Product List	Φ 40 Signal Tower	Φ 60 Signal Tower
No AC Adapter	NHV4-0N	NHV6-0N
	NHV4-3N-RYG	NHV6-3N-RYG

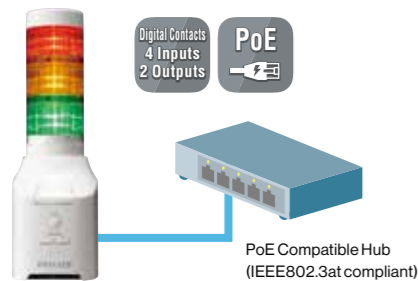
NHV-D (Voice-enabled, Digital I/O)



Standard NHV model plus 4 digital inputs and 2 digital outputs. Compatible with a wide range of applications, such as receiving outputs from sensors or controlling another device when the NHV is lit by sending digital contact outputs.

Product List	Φ 40 Signal Tower	Φ 60 Signal Tower
No AC Adapter	NHV4-0DN	NHV6-0DN
	NHV4-3DN-RYG	NHV6-3DN-RYG

NHV-DP (Voice-enabled, Digital I/O, PoE Power)



NHV-D plus PoE power capability. It can be used in areas where it is difficult to secure power supply or to facilitate network camera connection. (IEEE802.3at compliant) Can also be used with optional ADP-001 power adapter.

Product List	Φ 40 Signal Tower	Φ 60 Signal Tower
PoE power supply (No AC Adapter)	NHV4-0DP	NHV6-0DP
	NHV4-3DP-RYG	NHV6-3DP-RYG

NHV-M (Voice-enabled, Mail Detection)



The NHV-M unit accesses the mail server and will light up or play a message when emails that meet preset conditions are received.

Product List	Φ 40 Signal Tower	Φ 60 Signal Tower
No AC Adapter	NHV4-0MN	NHV6-0MN
	NHV4-3MN-RYG	NHV6-3MN-RYG

Model Number	NHV	NHV-D	NHV-DP	NHV-M
Dimming Function	✓	✓	✓	✓
Cloud Control	✓	✓	✓	✓
Send HTTP	✓	✓	✓	✓
Audio Playback (MP3)	✓	✓	✓	✓
TTS (Text to Speech)	✓	✓	✓	✓
Digital I/O (4 inputs/2 outputs)	x	✓	✓	x
PoE-powered IEEE802.3at Compliant	x	x	✓	x
Mail Detection Function	x	x	x	✓

Network Signal Tower

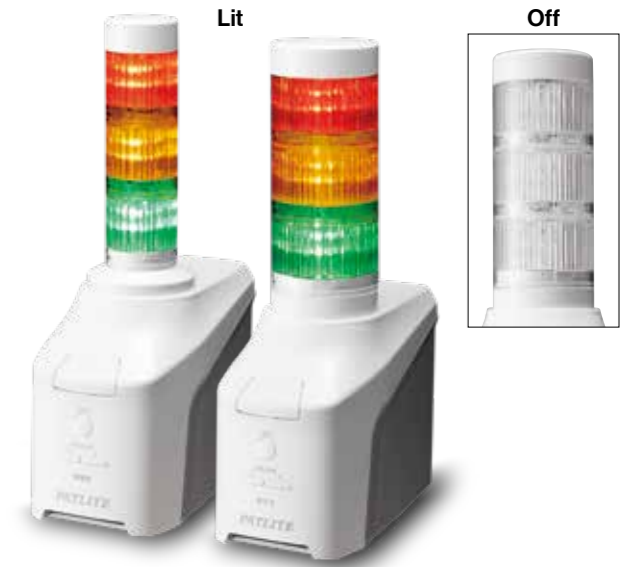
NHB Network Signal Tower

- Compatible with various protocols
- Light and alarm notification

Software Features	HTTPS HTTP	SNMP V3/v2c/v1	SSH RSR	OAuth 2.0	SOCKET	PING 24
	Web Browser Settings	Send E-mail	IP v6/v4	Azure	AWS	

Hardware Features	RJ-45	Φ40 (NHB4)	Φ60 (NHB6)	80dB
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(* Use Google Chrome/Microsoft Edge when setting up browsers.)



Alarm

Get notification not only with light but also with sound. Alarms: 5 patterns

Alarm Patterns



How to Order

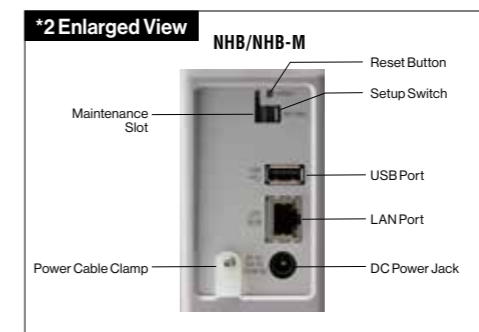
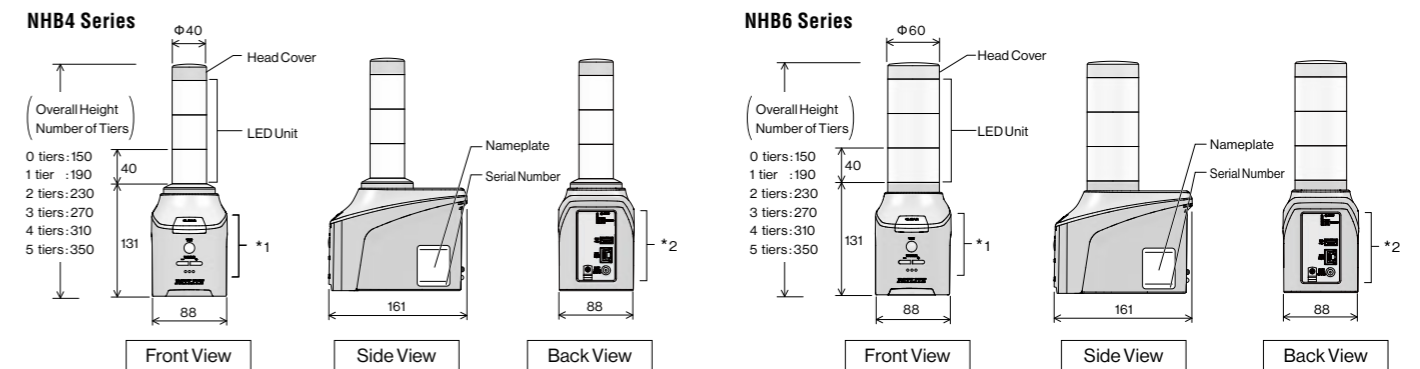
NHB4-3N-RYG

- ① 4 = Signal Tower Φ40
- ② 0 or 3-tiers*
- ③ N = No AC Adapter
- ④ 3-tiers = RYG

*LED units can be added up to 5 tiers.

Product List	Φ 40 Signal Tower	Φ 60 Signal Tower
No AC Adapter	NHB4-0N	NHB6-0N
	NHB4-3N-RYG	NHB6-3N-RYG

Dimensions (Unit: mm)

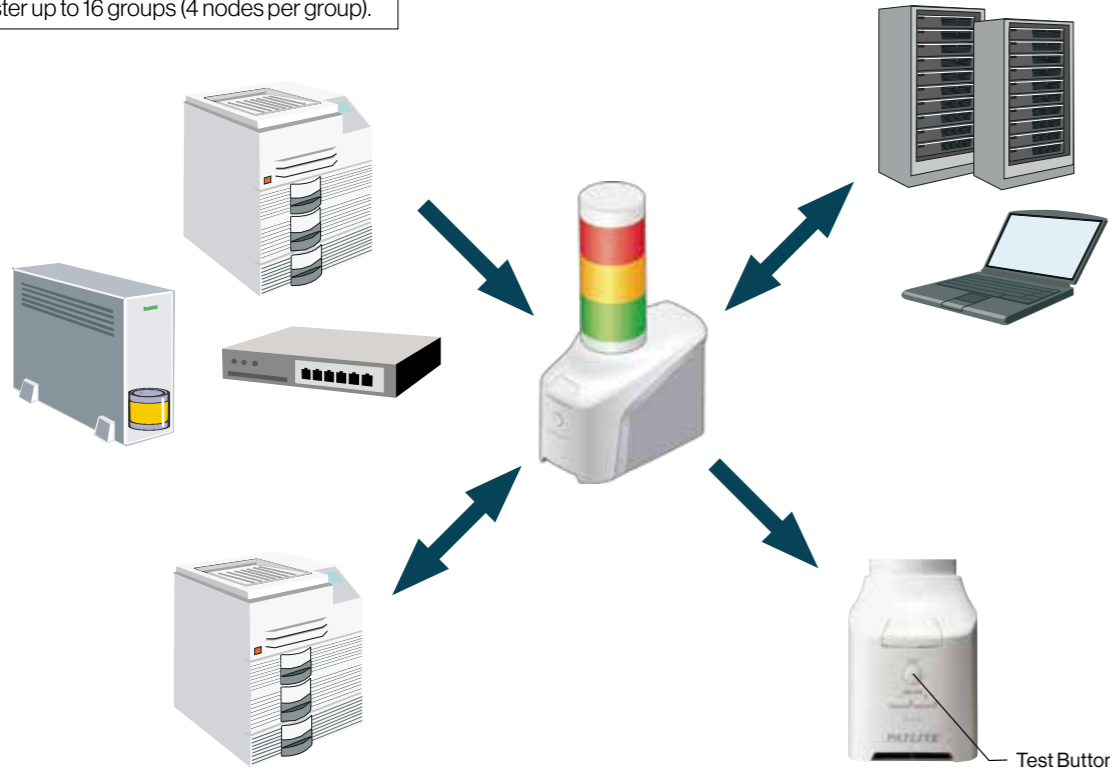


Basic Common Functions

SNMP TRAP Receive Function

SNMP TRAP from network-compatible devices (such as UPSs, printers, routers, and switches) are received to promptly notify the administrator of errors and faults with light and sound.

- Determine variable-bindings.
- Register up to 16 groups (4 nodes per group).



PING Monitoring

Each NHV/NHB unit can PING up to 24 devices. If a line failure to a node or a response from a monitored device cannot be obtained, the NHV/NHB considers it as an error and notifies the administrator quickly with light and sound.

SNMP Status Monitoring

Equipped with an SNMP device monitoring function in addition to dead/alive monitoring by PING monitoring.

When the MIB information of the network device is actively acquired and the set conditions are met, the administrator is notified immediately by light and sound.

Self-diagnosis Function

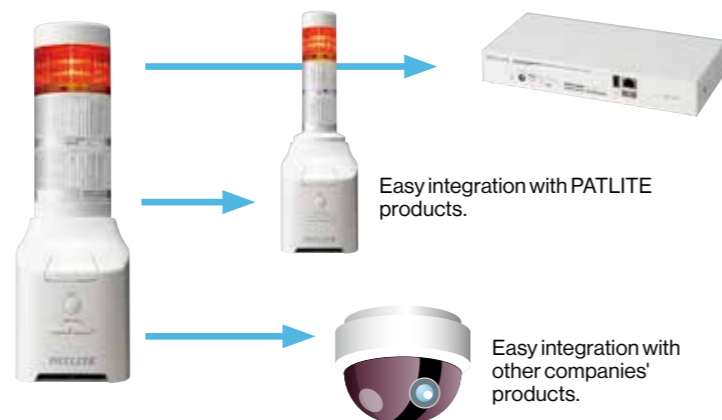
The test button on the front of the unit can be used to easily check the operation of the indicator light and alarm functions without control from the network.

Send HTTPS/HTTP Commands

Easier to control in conjunction with other products

HTTPS / HTTP commands can be sent from NHV/NHB. Controlling another NHV/NHB or a separate PATLITE product is possible. It is also possible to link with products that can receive HTTPS / HTTP commands, such as cameras from other companies.

Number of registrations : 8
Number of command characters : Up to 128 characters per command



Extensive Communication Commands

HTTPS/HTTP

All notification patterns can be controlled by HTTPS/ HTTP communication commands.

Receive Command Example

(Red continuous on / Amber flashing 1 • CH 10 message is played once)

`https://192.168.10.1/api/control?led=12000&sound=10`

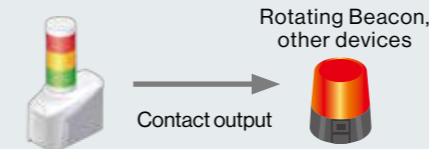
Receive Command Example (Clear operation)

`http://192.168.10.1/api/control?clear=1`

Receive Command Example (Digital output ON)

`http://192.168.10.1/api/control?output=1`

* Digital outputs are for D / DP models only



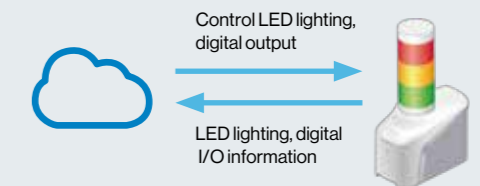
Cloud Communication

Supported Cloud Platforms: AWS, Microsoft Azure

AWS: Connect to AWS IoT Core

Azure: Connect to Azure IoT Hub/Azure IoT Central

Control LEDs and audio directly from the connected cloud service.



SSH/RSH

Can be easily controlled by SSH/RSH, which is a general-purpose protocol. Event information from integrated network management software or various monitoring tools can be used as triggers to turn on/ flash lights and sounds.

SSH Command

Receive Command Example
(Red, Amber, Green continuous on; Alarm sounds)
`ssh 192.168.10.1-l root alert 111001`

RSH Command

Receive Command Example
(Red, Amber, Green continuous on; Alarm sounds)
`rsh 192.168.10.1-l root alert 111001`

SOCKET Communication

Controlled by PATLITE's proprietary SOCKET communication commands, PNS and PHN commands. These commands can be used directly on existing systems.

PNS Command

All notification patterns can be controlled.
Receive Command Example
(Red, Amber, Green continuous on; Alarm sounds)
`58H,58H,53H,00H,00H,06H,01H,01H,01H,00H,00H,01H`

PHN Command

Simple command control with 2 bytes.
* Some functions are restricted.
Receive Command Example
(Red, Amber, Green continuous on; Alarm sounds)
`57H,17H (W) (00010111)`

Detailed Notification Settings



Send e-mail

Send up to 8 e-mails per event

Customize subject and message for various events. Enhanced e-mail authentication features provide superior security.

Supports OAuth 2.0 authentication / password authentication (OAuth authentication only supports Gmail / Outlook)



Send SNMP TRAP/Inform

Send up to 8 locations.

- SNMP v1/v2c/v3

Dimming Function

4-level brightness adjustment function

Factories and other similar locations, require LEDs to be bright so they can be seen from a distance.

However, in offices or places where people are close to the unit, the LEDs need to be dimmer.

The NHV/NHB series offer four brightness settings so the appropriate light intensity can be set for your situation.



* The maximum luminous intensity is displayed when the Multi-color LED Unit or WDT unit is mounted and cannot be changed. (Dimming function cannot be selected.)

WD Series Data Collection

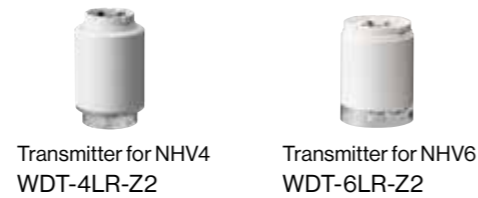


The WD series, a part of PATLITE's IoT offering, can be used.

The LED status is transmitted wirelessly from the transmitter mounted on the NHV to a dedicated receiver, and data is stored.

Nothing needs to be added to the existing system.

* The maximum luminous intensity is displayed when the Multi-color LED Unit or WDT Unit is mounted and cannot be changed. (Dimming function cannot be selected.)



Options



Wall Mount Bracket
NH-001



Partition Mounting Bracket
NH-002



AC Adapter
ADP-001

Installation



Adding/Reconfiguring LED Unit

Easily add, remove or reconfigure LED Units by simply turning them by hand. No tools are required.

Compatible with LR4 / LR6 series LED Units. Clear lens and colored lens available. NHV6/NHB6 also support a multi-color LED Unit.

Φ60 LED Unit for NHV6/NHB6



Clear lens
Model Number : LR6-E-□
□ : RZ/YZ/GZ/BZ
Red / Amber / Green / Blue



Colored lens
Model Number : LR6-E-□
□ : R/Y/G/B/C
Red / Amber / Green / Blue / White

Φ40 LED Unit for NHV4/NHB4



Clear lens
Model Number : LR4-E-□
□ : RZ/YZ/GZ/BZ
Red / Amber / Green / Blue



Colored lens
Model Number : LR4-E-□
□ : R/Y/G/B/C
Red / Amber / Green / Blue / White

- A maximum of 5 LED Units (LR□-E-□) can be installed.
- Units other than supported LED Units cannot be connected.
- Multiple LED Units (LR□-E-□) of the same color cannot be connected.

Φ60 Multi-color LED Unit for NHV6/NHB6

Display seven colors with a 1-tier Multi-color LED Unit.
Model Number : LR6-E-MZ

- * WDT-6LR-Z2 cannot be used when the multi-color LED Unit is used.
- * When the multi-color LED Unit is installed the dimming function cannot be selected and the maximum luminous intensity is displayed.



Programmable LED Signal Tower Series with PoE

LA6-POE 60mm Smart Signal Towers

- Programmable, multi-color signal towers designed to replace standard stack lights
- Features 21 LED colors and 11 alarm types, all in a single unit
- Ethernet connection with PoE (Power over Ethernet) support, enabling single cable installations

What is PoE (Power over Ethernet)?

A system that passes electric power along with data on twisted pair Ethernet cabling. This allows a single cable to provide both power and data to devices.



LA6-5DTNWB-POE
Direct mount type
LA6-5DSNWB-POE
Stationary type

Product Features

- Supports a range of communication protocols
- Built-in web interface for quick and easy configuration
- Mirroring function: Replicates signals on up to 8 slave devices in remote locations



Connects easily to an existing network



Alarm volume toggle switch



Water resistant alarm structure



Unique lens design for optimizing light emission

Options

for LA6-5DSNWB-POE for LA6-5DTNWB-POE

NH-WST2
Wall-mount
Bracket



SZK-003W+F0044
Wall-mount
Bracket



Assembly Type / Pole Mount Bracket

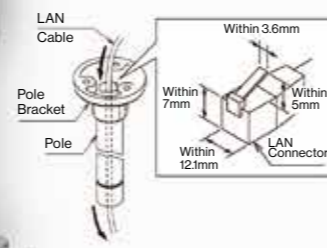
SZP-004W Upper Bracket
SZ-016A Mounting Bracket
SZ-010 Mounting Bracket



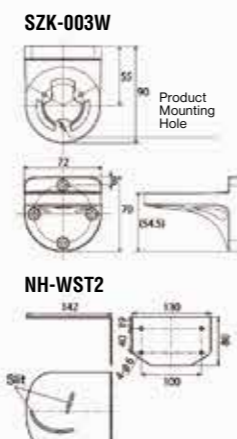
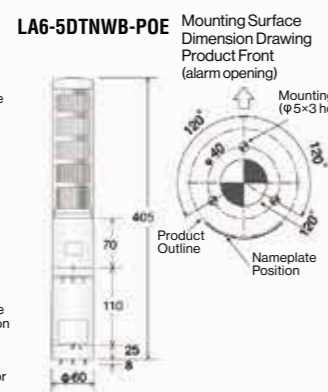
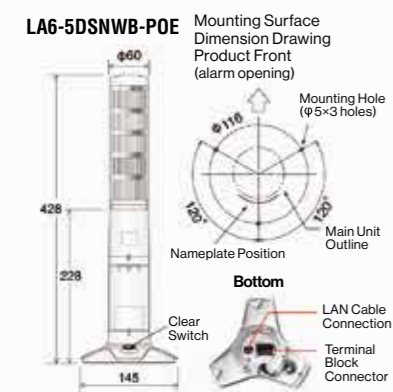
Mounting Pole - 100 / 300 / 800A21 Aluminum

Example

Wire Assembly



Dimensions (Unit: mm)



TERMINAL BLOCK CONNECTOR PIN POSITION

POWER LINE (Signal line side)	6	12	COM
POWER LINE	5	11	FLASHING / PULSE ENABLE COMMON
INPUT 4	4	10	MODE CHANGE
INPUT 3	3	9	INPUT 7
INPUT 2	2	8	INPUT 6
INPUT 1	1	7	INPUT 5

RECOMMENDED SPECIFICATION FOR LEAD WIRE

Wire Type	UL1007 / UL1430
Wire Diameter (solid wire)	0.2 - 1.5mm ²
Wire Diameter (stranded wire)	AWG24 - 16

Please use wire with temperature rating of 75°C or above that has a copper wire conductor.

Step 01

Select a Smart Mode type

The EDITOR software for the LA6-POE series allows you to quickly configure your LA6-POE Signal Tower. Each Smart Mode uses different methods to trigger animations* and patterns* allowing you to customize unique indication solutions.

- *Animations: Light color cycling resembling flashing, pulsing, running lights, etc.; can also include an audible alarm.
- *Patterns: Any combination of solid colors and/or audible alarm.

1. Time Trigger Mode

Display animations that transition at preset timings. Animations are triggered initially by an input or command and run based on set timings.

Common Applications:
Production cycle time, takt time system, running light

2. Pulse Trigger Mode

Display animations or patterns in fixed sequences. Sequences are triggered by inputs, commands or setting elapsed timings.

Common Applications:
Pressure or temperature display

3. Single Light Mode

Display a single pattern at a time and trigger pattern transitions by input or command.

Common Applications:
Status indication, level monitoring

Step 02

Select method(s) for triggering LA6-POE alert functions

The LA6-POE supports a variety of communication protocols and can be triggered through the terminal block.

HTTPS (Hyper Text Transfer Protocol Secure)

HTTPS is an application-layer protocol designed within the framework of the Internet protocol suite.

The LA6-POE accepts HTTPS commands sent through a web browser or PLC to trigger visual and audible alert functions.

SOCKET Communication

Socket(s) allows communication between PCs and is used in a client-server application framework.

The LA6-POE accepts an application-level protocol called PNS (developed by PATLITE) to establish connection between client and server and to control visual and audible alert functions.

Modbus TCP/UDP

Modbus TCP/UDP is a variant of the Modbus family of vendor-neutral communication protocols intended for control of automation devices.

The LA6-POE accepts Modbus TCP/UDP commands from a PLC to control visual and audible alert functions.

Real-time remote monitoring and control

USB Powered and Controlled LED Signal Tower Series

LR6-USB 60mm USB Signal Tower

- PC or HMI controlled
- Powered over USB for single cord installation
- Open architecture for custom programming
- Compatible with Windows® and Linux

Product Features

Simple to program

Use the included DLL software library to easily develop software to control the LR6-USB Series' various signaling functions.

No dedicated driver required

Dedicated driver is not required as it is USB HID class compatible.

Compatible LED units

The LR6-USB Series supports solid color, clear lens, and multi-color LED Units.

Color	Model
	LR6-E-R/Y/G/B/C
	LR6-E-RZ/YZ/GZ/BZ Clear lens
	LR6-E-MZ Clear lens Multi-color

Options Assembly Type / Pole Mount Bracket

SZK-003W+FO044 Wall-mount Bracket SZP-004K Upper Bracket SZP-004W Upper Bracket SZ-016A Mounting Bracket SZ-010 Mounting Bracket

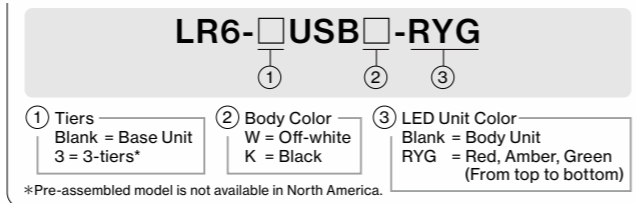


Specifications

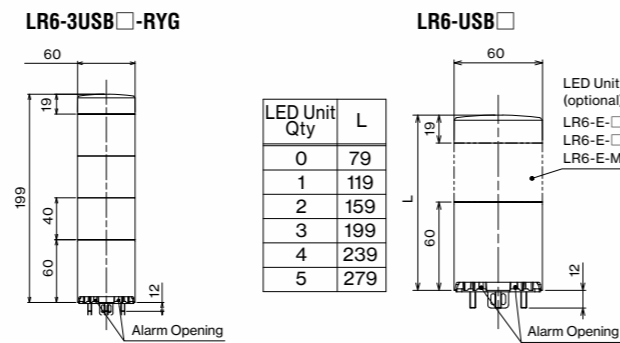
Model	LR6-3USBW/K-RYG (Assembled Product)	LR6-USBW/K (Body Unit)
Protection Rating	IP65 (IEC60529)/NEMA TYPE 4X, 13	
LED Unit Control	Light on/Light off/4 types of flashing patterns	
Audible Alarm Control	Select from play/stop 4 patterns/13-scale sound pattern	
Communication Method	USB 2.0 Full Speed	
Software	Windows® 7, Windows® 8 (excluding Windows® RT), Windows® 8.1 (excluding Windows® 8.1 RT), Windows® 10, Linux	



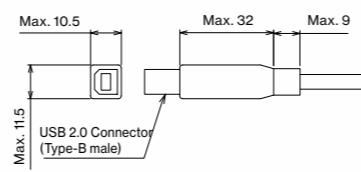
How to Order



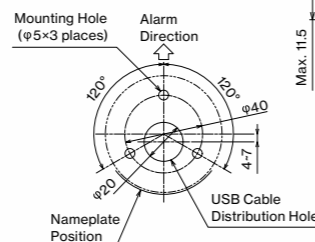
Dimensions (Unit: mm)



USB CABLE DIMENSIONS



MOUNTING DIMENSIONS



USB-controlled Multi-color Signal Beacon

NE-USB USB Signal Beacon

- PC or HMI controlled
- Powered over USB for single cord installation
- Open architecture for custom programming
- Compatible with Windows® and Linux

Product Features

Simple to program

Use the included DLL software library to easily develop software to control the NE-USB's various signaling functions.

No dedicated driver required

Dedicated driver is not required as it is USB HID class compatible.



Terminal Connection

Display status for self-checkout and similar systems

Built into Equipment

Status notification of PC controlled equipment like printers

PC Connection

Interlock software alarm

Specifications

Model	NE-SN-USB	NE-WN-USB
Rated voltage	5V DC (USB bus power)	
Operating Voltage Range	Rated voltage ±5% (conforms to USB 2.0 standard)	
Rated Current Consumption	Maximum	205mA / 170mA
	Conditions	Lighting Color: White Alarm Sound: Alarm pattern "No.1 continuous sound" Volume Level: Maximum
Operating Ambient Temperature	-20°C to +50°C	-25°C to +60°C
Operating Ambient Humidity	90% RH or less, non-condensing	
Mounting Location	Weather protected location	
Mounting Direction	All directions	All directions (Upright only when waterproofing is required)
Protection Rating	IP20	IP65
Sound Pressure	Typ. 65dB	Typ. 85dB
Environmental Conditions	Facing forward; 0.5m from front of unit Alarm pattern "No.2 sweep sound"	Facing forward; 1m from front of unit Alarm pattern "No.2 sweep sound"
	Luminous Color: Multi-color (7 colors) (Red, Green, Blue, Amber, Cyan, Purple, White)	



How to Order

NE- N-USB

Specifications

S : Stationary/Magnet mounting/1/4 inch screw mounting
W : 2-point hole screw mounting

Various Mounting Methods

NE-SN-USB

Magnet mounting



1/4-inch screw mounting

*Obtain tripod separately.



NE-WN-USB

Pole Bracket



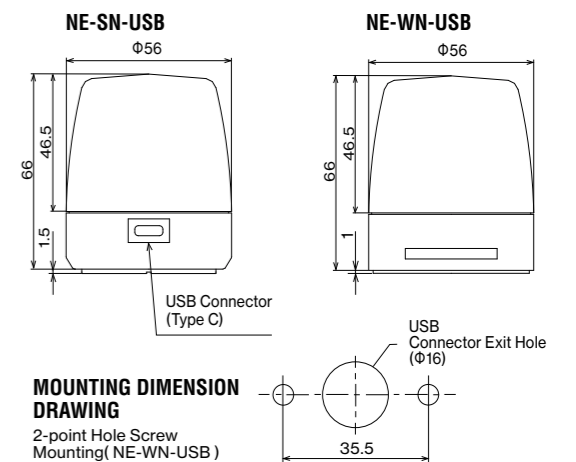
Wall Mounting Bracket



1/2" NPT Bracket

*Mounting example

Dimensions (Unit: mm)



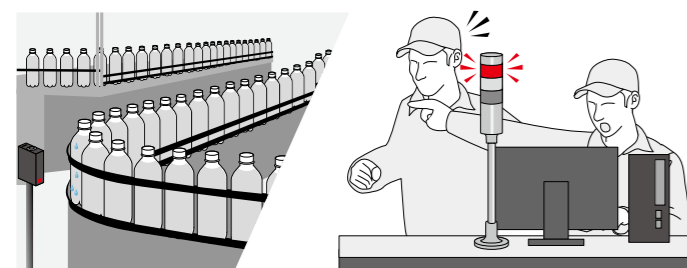
IO-Link Signal Tower

LR6-IL Signal Tower with IO-Link

- Seamlessly integrates with IO-Link masters.
- Built-in 5-pin M12 connector for quick and easy installations.
- Select any combination of solid colors, multi-color, and clear lens LED Units.
- Audible alarm and Wireless Data Acquisition System are available as options.

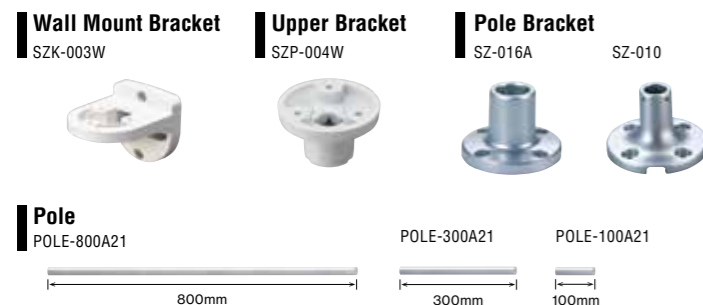


Example of Use



Digital input sensor

Options



Specifications

IO-Link Signal Tower LR6-IL			
Model	LR6-3ILWMNW-RYG	LR6-ILWMNW	LR6-ILWCNW
	Pre-assembled Model (Direct mount)	Body Unit (Direct mount)	Body Unit (1/2" NPT pipe or direct mount)
Size	φ60mm		
Rated Voltage	24V DC		
Mounting Location / Mounting Direction	Indoors, Upright		
Tier	LED Unit: Max. 5 tiers and one Buzzer Unit		
LED Color	Red / Amber / Green (Blue and White LED units also available)	N/A - LED units are sold separately	
LED Unit Modes	Continuous / Flashing		
Alarm Sound Pressure	Typ. 84 dB (Use LR6-BW)		
Alarm Sound Selection	4 sound types (selectable) (Use LR6-BW)		
Protection Rating	IP65 ; NEMA TYPE 4X, 13		
Conformity Standards	●EMC Directive (EN 61000-6-4, EN 61000-6-2) ●RoHS Directive (EN IEC 63000) ●UL 508, CSA-C22.2 No. 14 ●FCC Part 15 Subpart B Class A ●KC (KN 61000-6-4, KN 61000-6-2)		
Connection	M12 connector 5 pins A code		

IO-Link Signal Beacon

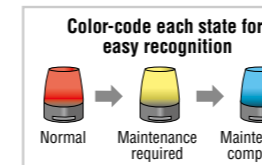
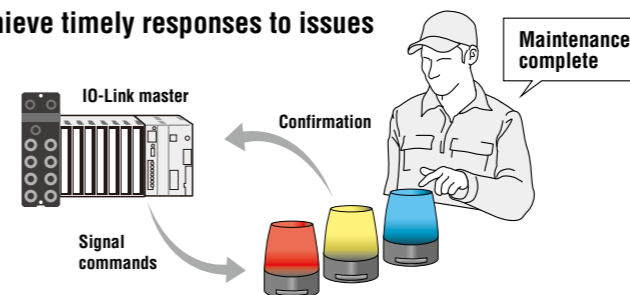
NE-IL Signal Beacon with IO-Link

- Equipped with a Digital/Analog input function for connecting devices not compatible with IO-Link. The NE-IL acts as an I/O hub, able to send data from sensors to the IO-Link master
- Capacitive touch sensor enables real-time status confirmations
- Features an M12 connection for quick and easy installations
- Up to 7 colors can be emitted to indicate different equipment conditions



Example of Use

Achieve timely responses to issues



It is possible to color-code multiple statuses with the 7 luminous colors available on the NE-IL signal beacon. The master sends commands to activate a specific NE-IL beacon to indicate which device / equipment requires maintenance. Touch the NE-IL to notify the master when maintenance is complete.

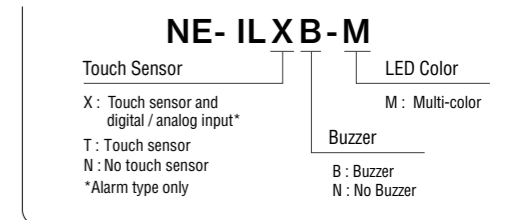
Options



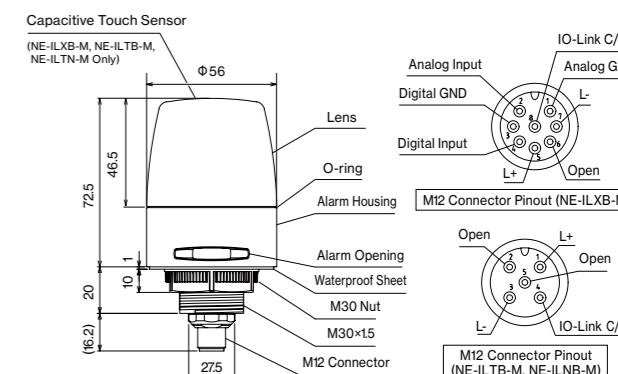
Specifications






IO-Link Signal Beacon NE-IL					
Model	NE-ILNB-M	NE-ILTB-M	NE-ILXB-M	NE-ILNN-M	NE-ILTN-M
	With alarm, no touch sensor	With alarm and touch sensor	With alarm, touch sensor, and digital / analog input	No touch sensor, no alarm	With touch sensor, no alarm
Size	φ56mm				
Rated Voltage	24V DC				
Mounting Location / Mounting Direction	Indoors, Upright				
Protection Rating	IP65 ; NEMA TYPE 4X, 13				
LED Color	Multi-color (Red, Amber, Green, Blue, White, Purple, Cyan)				
LED Unit Modes	Continuous / Flashing				
Sound Pressure	Typ. 88 dB [8 sound types (selectable)]				
Conformity Standards	●EMC Directive (EN 61000-6-4, EN 61000-6-2) ●RoHS Directive (EN IEC 63000) ●UL 508, CSA-C22.2 No. 14 ●FCC Part 15 Subpart B Class A ●KC (KN 61000-6-4, KN 61000-6-2)				
Connection	M12 connector 5 pins A code		M12 connector 8 pins A code	M12 connector 5 pins A code	







How to Order



Dimensions (Unit: mm)



Series		NHV	NHV-D	NHV-DP	NHV-M	NHB	
							
Product Name		Network Signal Tower with Voice Annunciator				Network Signal Tower with Alarm	
Detail Page		3 - 5 / 7 - 10				6 - 10	
Input Interface		Ethernet	Ethernet (PoE)	Ethernet	Ethernet		
Monitoring	PING	Monitoring Node Qty				24	
	SNMP	TRAP Reception				64	
		Status Monitoring				✓	
	Self-diagnosis Function				✓		
	Mail Reception Detection		x		✓	x	
Notification	EMAIL	Send to				8 addresses	
	HTTP	Send to				8 cases	
	SNMP	TRAP Transmission				8 cases	
	Lighting Function	Luminescence	Light On				✓
		Pattern	Flashing				✓
		Dimming Function				✓	
	Sound Function	LED Unit				0~5	
		Voice Function	TTS				✓
			MP3				✓
		Alarm				✓	
Playback Sound Qty		Maximum 71 types				5	
Volume		Max. 88dB or more				Max. 80dB or more	
Volume Adjustment		Set 16 volume settings using the VOLUME buttons on the unit / Volume change can be disabled in the software (in the browser settings)				Set 3 volume settings using the VOLUME buttons on the unit / Volume change can be disabled in the software (in the browser settings)	
Control	HTTPS		✓			✓	
	HTTP		✓			✓	
	Modbus/TCP		x			x	
	SNMP SET		(V3,V2c,V1)			(V3,V2c,V1)	
	SSH Command		✓			✓	
	RSH Command		✓			✓	
	SOCKET	PNS		✓			✓
		PHN		✓			✓
	PHU Command		x			x	
	Software Library (DLL)		x			x	
PRSH-WIN		✓			✓		
Contact Input & Output	Digital Input	x	4	x	x		
	Digital Output	x	2	x	x		
Mounting	Stationary		✓			✓	
	Wall Mounting		Use NH-001			Use NH-001	
	Partition Mounting		Use NH-002			Use NH-002	
	Tripod Mounting		✓			✓	
	VESA Mounting		Use NH-001			Use NH-001	
Pole Mounting		x			x		
Others	Configuration Setting	Reading		✓		✓	
		Writing		✓		✓	
	WEB Browser Setting		✓			✓	
	Utility Software		PNS Manager			PNS Manager	
Conformity Standards	RoHS		✓			✓	
	Conforms to CE Requirements		✓			✓	
	Conforms to UKCA Requirements		✓			✓	
	EMC		EN 55032 Class A, EN 55035			EN 55032 Class A, EN 55035	
	FCC Part 15 Subpart B		Class A			✓ (Class A)	
	UL		✓			✓	
KC		✓			✓		
Power Supply		AC Adapter		PoE+ (IEEE802.3af) /24V DC	AC Adapter	AC Adapter	
Rated Voltage		24V DC		POE: 48V DC Main Unit: 24V DC	24V DC	24V DC	

Series		LA6-POE	LR6-USB	NE-USB	LR6-IL	NE-IL	PHE		
									
Product Name		Network Multi-color Signal Tower with PoE	Signal Tower with USB	Signal Beacon with USB	Signal Tower with IO-Link	IO-Link Signal Beacon	Interface Converter Signal Tower		
Detail Page		11	13	14	15	16	21		
Input Interface		Ethernet (Compatible with PoE)	USB	USB	IO-Link	IO-Link	RS-232C/USB		
Monitoring	PING	Monitoring Node Qty		x	x	x	x		
	SNMP	TRAP Reception		x	x	x	x		
		Status Monitoring		x	x	x	x		
	Self-diagnosis Function		x		x	x	x		
	Mail Reception Detection		x		x	x	x		
Notification	EMAIL	Send to		x	x	x	x		
	HTTP	Send to		x	x	x	x		
	SNMP	TRAP Transmission		x	x	x	x		
	Lighting Function	Luminescence	Light On		✓	✓	✓	✓	
		Pattern	Flashing		✓	✓	✓	✓	
		Dimming Function		x		x	x	x	
	LED Unit		5		0, 3	1	0, 3	3	
	Sound Function	Voice Function	TTS		x	x	x	x	
			MP3		x	x	x	x	
		Alarm		✓		✓	✓	✓	
Playback Sound Qty		11		5	7	4 (Use LR6-BW)	8		
Volume		Max. 85 dB or more		Max. 80 dB Min. 70 dB	65dB (NE-SN-USB) 85dB (NE-WN-USB)	84dB (Use LR6-BW)	Typ. 88dB	Max. 80dB or more	
Volume Adjustment		Set from web browser (Loud, medium, soft, off)		Set with software (Loud, soft, off)	10 levels (off - max)	Reduce sound with DIP-switch when using LR6-BW	100 types	Dip Switch : On / Off, Loud / Soft Sound Reduction Sheet : Loud / Soft	
Control	HTTPS		✓		x	x	x	x	
	HTTP		✓		x	x	x	x	
	Modbus/TCP		✓		x	x	x	x	
	SNMP SET		x		x	x	x	x	
	SSH Command		x		x	x	x	x	
	RSH Command		x		x	x	x	x	
	SOCKET	PNS		✓		x	x	x	x
		PHN		✓		x	x	x	x
	PHU Command		x		x	x	x	✓	
	Software Library (DLL)		x		✓	✓	x	x	x
PRSH-WIN		x		x	x	x	x	x	
Contact Input & Output	Digital Input	4 (*2)		x	x	1 (NE-ILXB-M)	x		
	Digital Output	x		x	x	x	x		
Mounting	Stationary		✓		✓	NE-SN-USB	Use SZW-002W	x	✓
	Wall Mounting		Use SZK-003W or NH-WST2		Use SZP-004, POLE-100/300/800A 21, and SZ-010 or SZ-016A	Use NE-002D	Use SZK-001U, SZK-003	Use NE-002D	x
	Partition Mounting		x		x	x	x	x	x
	Tripod Mounting		x		x	✓	x	x	x
	VESA Mounting		x		x	x	x	x	x
Pole Mounting		x		✓	Use NE-001D, POLE-100/300/800A21+00109	Use SZP-004W, POLE-100/300/800A21	Use NE-001D	x	
Others	Configuration Setting	Reading		✓		x	x	x	x
		Writing		✓		x	x	x	x
	WEB Browser Setting		✓			x	x	x	
	Utility Software		EDITOR for LA Series		Demo application	Demo application	x	x	x
Conformity Standards	RoHS		✓		✓	✓	✓	✓	✓
	CE		✓		✓	✓	✓	✓	✓
	UKCA		✓		✓	✓	✓	✓	✓
	EMC		EN61000-6-4, EN61000-6-2, EN55032 ClassA, EN55024		EN 61000-6-3, EN 61000-6-2, EN55032 ClassB, EN55035	EN 55032, EN 55035	EN 61000-6-4, EN 61000-6-2	(EN 61000-6-4, EN 61000-6-2)	(EN61000-6-4, EN61000-6-2)
	FCC Part 15 Subpart B		Class A		Class B	Class B	Class A	✓ (Class A)	✓ (Class A)
	UL		✓		✓	✓	✓	✓	✓
KC		✓		✓	✓	✓	✓	✓	
Power Supply		PoE (IEEE802.3af) /24V DC		USB bus power 5V DC	USB bus power 5V DC	24V DC	24V DC	AC Adapter / USB bus power 5V DC	
Rated Voltage		48V DC (PoE) / 24V DC		5V DC (USB bus power)	5V DC (USB bus power)	24V DC	24V DC	Main Unit:24V DC USB bus power:5V DC	

Interface Converter for Networking PATLITE Signaling Devices

NBM-D88NN Interface Converter

- Add non-networking PATLITE signaling devices to networked equipment using 8 discrete input and output channels.
- Supports SNMP, HTTP, PNS (Developed by PATLITE), Socket Transmission command protocols.
- Email Alerts – Send emails to up to 8 addresses per alert notification.
- Use a web browser to send commands via the Hypertext Transfer Protocol (HTTP).
- Ping up to 24 nodes or devices on your network.
- Built-in “Clear” button to quickly return the NBM to its initial status once an alert is confirmed.

Easy to Setup/Update

Access the NBM setup interface by remotely logging into the device's IP address through a web browser.



Web Settings screen

Users can remotely setup a static IP address, automate digital outputs, update firmware, just to name a few.

Options

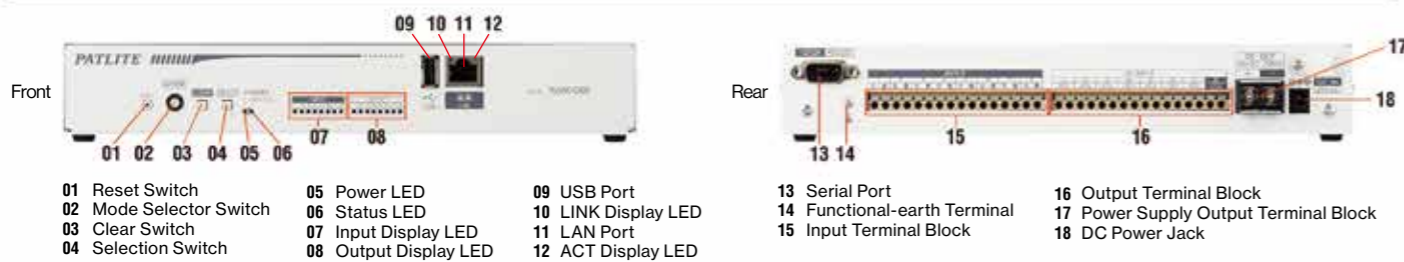
NBM-ANG

Angle Mounting Bracket for server racks



Mounts directly to server racks

Interface



Input and Output Setting Functions



DURATION

An output is triggered based on the length of time an input is triggered.



NUMBER

An output is triggered based on how many times an input is triggered within a time period.



AND

An output is triggered based on a combination of preset inputs being triggered.



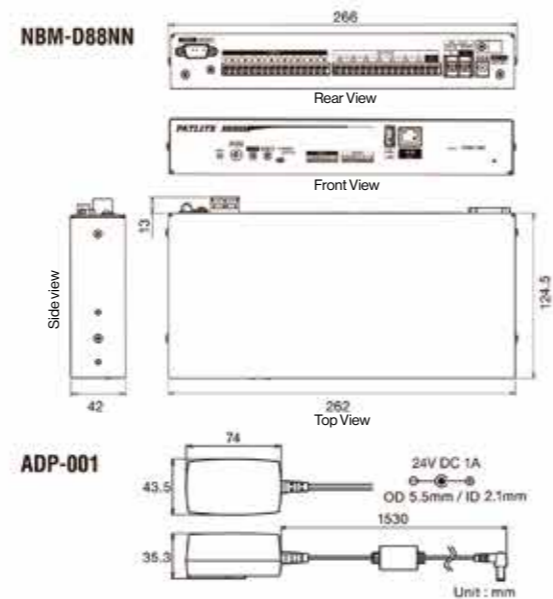
NBM-D88NN Interface Converter

Accessory (sold separately)

ADP-001 Universal AC Adapter



Dimensions (Unit: mm)



01

Monitoring Functions

PING Monitoring

Monitor up to 24 nodes on the network

TRAP Monitoring

- Equipped with an SNMP manager
- Can distinguish variable bindings
- Registers 16 groups (1 group, 4 nodes)

02

Command Protocols

Send RSH command (8 commands)

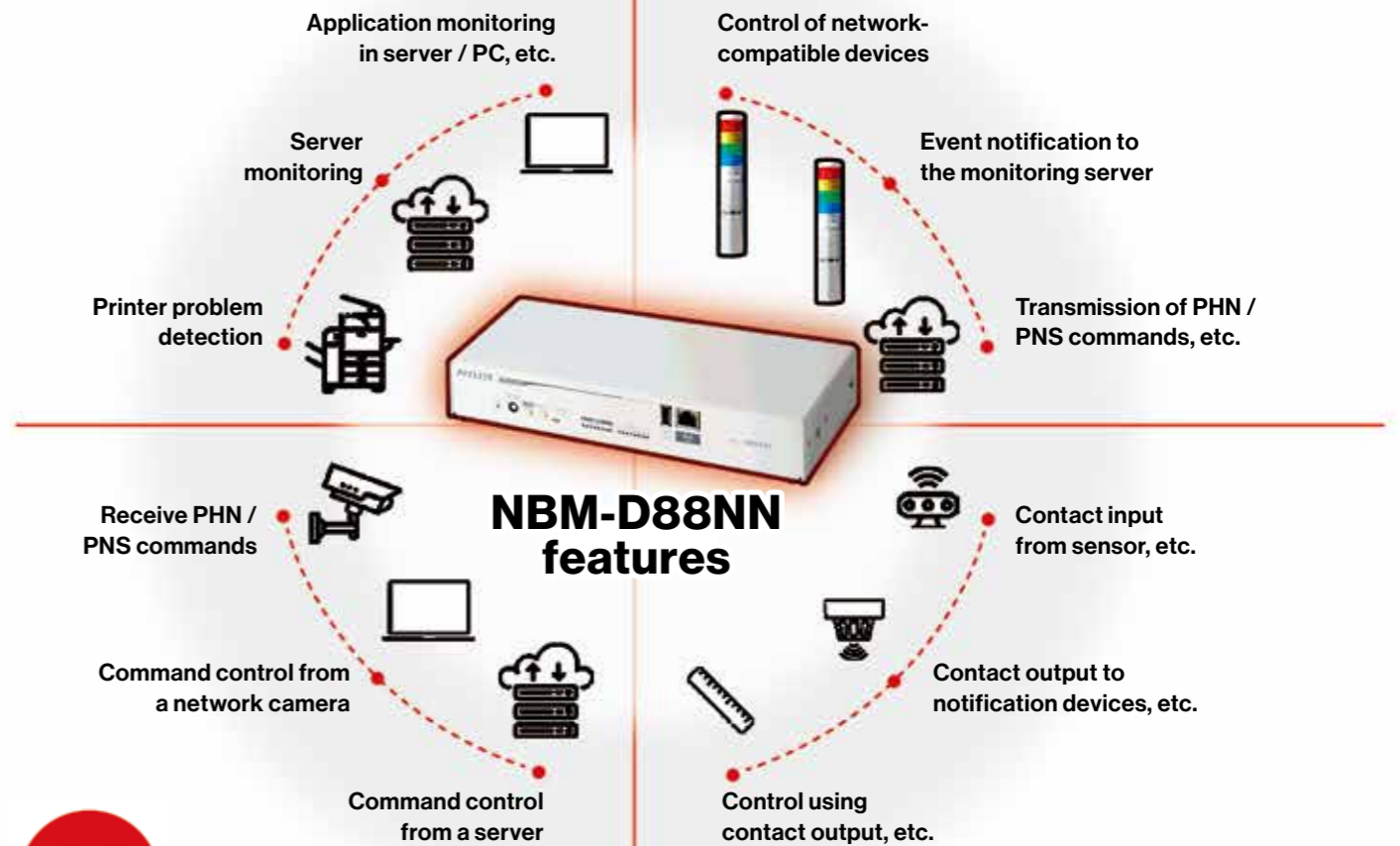
Create RSH commands for each event

SNMP TRAP transmission (8 transmissions)

Send an SNMP TRAP for each event

SOCKET transmission

Send a command of up to 30 bytes



03

Digital Outputs

Compatible with PHN command

Control digital output with a 2-byte command

Compatible with PNS command

Control digital output by using a PNS command

Compatible with HTTP command

Control digital output with HTTP commands.
Command example: (port 1: ON, port 3: OFF, Other: no operation)
<http://192.168.10.1/api/control/?alert=19099999>

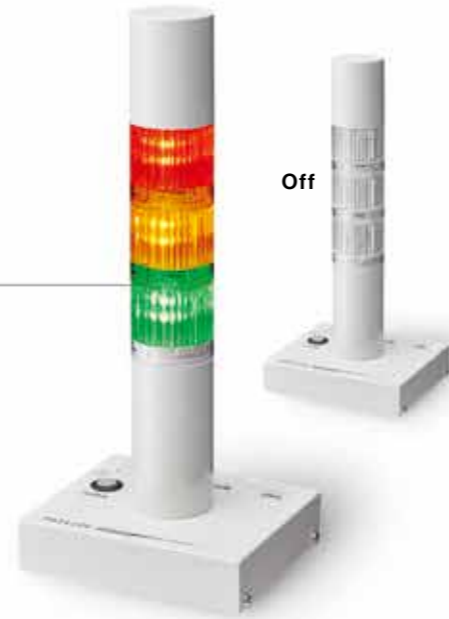
04

Command Protocols

- Control each device with an 8-input terminal block, 8-output terminal block, and contact inputs independently
- Equipped with one 24V DC output
- Contact diverse notification devices such as revolving warning lights and audio equipment
- Obtain logs with USB memory
- Obtain / reflect settings with USB memory

USB / RS-232C Controlled Signal Tower

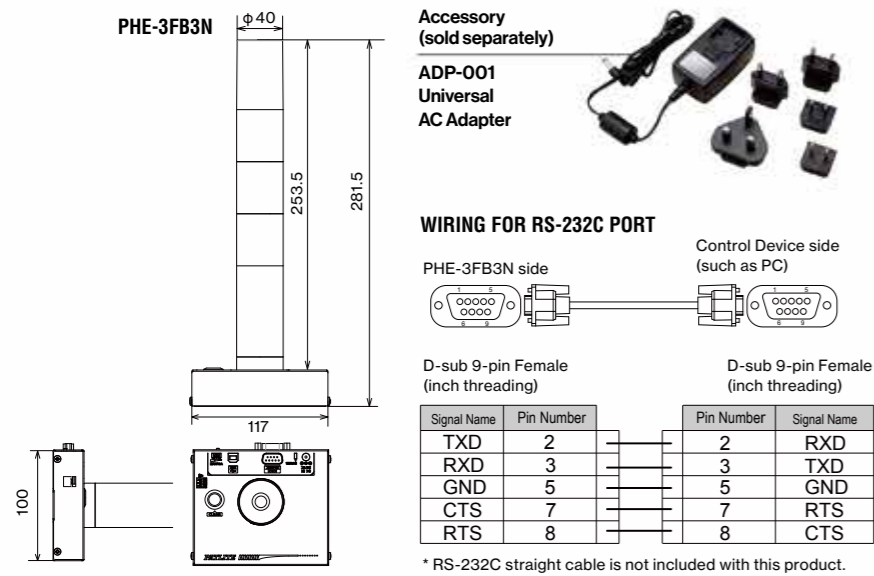
PHE-3FB3N-RYG



PHE-3FB3N-RYG 40mm Interface Converter Signal Tower

- Signal tower features 3 LED colors and 2 flashing patterns
- Send ASCII commands over USB or RS-232C to control built-in signal tower
- Receive power over USB or a 24V DC supply source
- 4 built-in alarm sounds with adjustable volume up to 80 dB
- Built-in Clear button to quickly return the PHE to the default state once an alert is confirmed

Dimensions (Unit : mm)



Options



Production Site Terminals

Visualize production status by connecting PHE to PC-based terminals.



		NBM-D88NN	PHC-D08N
		Interface Converter	Interface Converter
Input Interface		Ethernet	RS-232C / USB
Monitor	PING	Monitoring Node Qty	24
		Abnormality Determination Setting Qty	0 - 30
		Transmission Qty Setting	1 - 3
	SNMP	Cycle Setting	1 - 600 seconds
		TRAP Reception	64 (4 cases x 16 groups)
		Variable-Bindings Judgement	✓
Application Monitoring		✓	✓
Notification	EMAIL	Send to	8 addresses
		POP Recognition	✓
		SMTP Recognition	✓
	RSH Command Transmission	8 cases	✓
SNMP	TRAP Transmission	8 cases	✓
Control	HTTP Command		✓
	RSH Command		✓
	SNMP SET Command		✓
	SOCKET	PHN Command	✓
PNS Command		✓	
Mounting	Stationary	✓	✓
	Rack Mounting	Use NBM-ANG	✓
Contact Input & Output	Digital Input		8
	Digital Output		8
	Digital Input Detection Function	ON / OFF Operate Independently	✓
		Digital Output ON Control	✓
Others	Configuration Setting	Reading	✓
		Writing	✓
	WEB Browser Setting	✓	✓
Conformity Standard	RoHS		✓
	Comforms to CE Requirements		Without AC Adapter
	Comforms to UKCA Requirements		✓
	EMC		EN 55032, EN 55035
	FCC Part 15 Subpart B		Class A
	UL		✓
KC		✓	
Rated Voltage		Main Unit: 24V DC AC Adapter 100V AC - 240V AC (ADP-001)	Main Unit: 24V DC USB bus power: 5V DC AC Adapter: 100V AC - 240V AC (ADP-001)
Outer Dimension (mm) W x D x H		262 x 124.5 x 42	117 x 100 x 28
cUL or CSA		✓	✓

PHC-D08N Interface Converter

- Send ASCII commands over USB or RS-232C to control PATLITE signaling devices
- Receive power over USB or a 24V DC supply source
- Built-in Clear button to quickly return the PHC to the default state once an alert is confirmed



Dimensions (Unit: mm)

