

Notice to Customer

- Thank you very much for purchasing our PATLITE product.
- This product requires installation and wiring work. Always have installation and wiring performed by a professional contractor.
- Read this manual thoroughly before performing maintenance, repairs or inspections. If there are any questions concerning this product, refer to the contact information at the end of this document and contact your nearest PATLITE Sales Representative.
- For instructions on how to use this product, download the Instruction Manual from our website.
- Updating improves product reliability and enables you to use any new features. You can download the latest version of the firmware by registering as a member from our website.
- Regularly log in to My Page to make sure that you have the latest version of the firmware.

Website Address www.patlite.com

To the Contractor

- Read this manual carefully prior to installation.
- Return this manual to the customer.
- If there are any questions concerning this product, refer to the contact information at the end of this document and contact your nearest PATLITE Sales Representative.

1 Before You Begin

About Safety Symbols

- Following the guidelines on this manual are important in preventing injury or damage to users and property.
- Below are a list of key words that describe the severity of potential consequences when instructions are not followed properly.

WARNING	This symbol indicates, "Failure to follow the instructions may lead to death or serious injury."
CAUTION	This symbol indicates, "Failure to follow the instructions may lead to injury or property damage."

The following symbols explain the types of precautions that need to be followed.

	This symbol identifies "Prohibited" operations that should never be carried out.
	This symbol identifies "Mandatory" instructions that should always be carried out.

Safety Precautions

WARNING Do not modify or disassemble this product. Failure to follow this instruction could result in fire or electric shock. Do not use this product where there is condensation. Failure to follow this instruction could result in fire or electric shock. Do not use the product while the LED unit is either removed or cracked. Failure to follow this instruction could result in fire or electric shock. Do not touch the AC power plug with wet hands. Failure to follow this instruction could result in electric shock. Do not apply voltage that exceeds the acceptable range. If you apply more than the rated voltage, internal circuits will be damaged. Failure to follow this instruction could result in fire or electric shock. Do not connect or disconnect the DC power plug while power is still applied to the AC adapter. Failure to follow this instruction could result in electric shock or equipment damage. Do not use or install the product in the following environments: where liquids such as water is present, where oil will splatter, or where it is humid or dusty. Failure to follow these instructions could result in fire, electric shock, or product failure. This product is not intended for use in applications where life is at risk, such as medical equipment, atomic energy equipment and machinery, aviation and aerospace, transportation, and control of other equipment. If this system is used for these applications, we cannot be held responsible in the event of injury, death, or property damage. Make sure that the product does come in contact with liquids or metallic objects. Failure to follow this instruction could result in fire or electric shock. Do not put excessive weight on the product, such as using the product for climbing. Failure to comply may result in product damage and/or falling. Any installation requiring construction must be done by qualified personnel. Failure to follow this instruction could result in fire or electric shock. Before performing wiring or installation work, turn off the power of this product. Failure to follow this instruction could result in electric shock. If an unusual condition occurs while using this product (ex: smoke emission, heat generation, odor, unusual sound), stop the application, disconnect the power, and contact your PATLITE Sales Representative. When plugging the AC adapter into an outlet, confirm that there is no dust on the surface of the plug as well as outlet, and ensure that the plug is pushed into the outlet all the way. Using a power plug with dust on it could result in fire or equipment damage. Regularly clean dust off the AC power plug and outlet. Using a power plug with dust on it could result in fire or equipment damage. To prevent injuries and property damage that could result from product failure or malfunction, ensure sufficient safety by using this product together with other equipment. To prevent accidents when operating or maintaining this product, follow all general safety guidelines in addition to the safety guidelines described in this manual. PATLITE can not predict all circumstances of hazards while using this product. Therefore, not all safety hazards are listed in this manual. In case the product falls over or falls down, install in a location where it will not hit any people or other objects.

CAUTION Do not use in locations near fire or in environments with high temperature and humidity. Do not use this product where corrosive, flammable gas is present. Do not use this product while it is exposed to any liquids (such as water or chemicals) or foreign metallic objects (such as copper wire). Failure to follow this instruction could result in product damage. Do not bend the power cable unnecessarily. Failure to follow this instruction could result in disconnection and malfunction or damage of equipment. Do not use this product near equipment or wires that generates strong electrical or magnetic fields (such as a solenoid). Failure to follow this instruction could result in product malfunction from inductive noise. Do not apply excessive force on this product. Failure to follow this instruction could result in deformed frame and product damage. Do not operate this product using sharp objects. Doing so may scratch and damage the buttons, or interfere with the contacts. Do not use this product near chemicals. This product could melt or become deformed if exposed to chemicals. To clean this product, use a soft cloth dampened with water. Do not use chemicals (thinner, benzene, gasoline, oil, etc.) to clean this product. Failure to follow these instructions could result in discoloration and deterioration of the product. When using a tripod with this product, do not try to move or transport the product with the tripod attached. Failure to follow this instruction could result in equipment damage if the product falls over. If any parts need replacement, use only the specified replacement parts listed in the Instruction Manual.

For Stationary Mounting

- Peel away the yellow non-stick paper from the adhesive sheet and place it within the recessed rectangles on the bottom of the base unit.
- Peel away the transparent non-stick paper and affix to the mounting surface.

When Using optional parts

- Wall Mounting Bracket (NH-001)
- Partition Mounting Bracket (NH-002)

Use the bracket mounting screw holes to attach this product to the corresponding bracket. For more information, refer to the instruction manual of the corresponding mounting bracket.

CAUTION When using a bracket, do not apply the adhesive sheet to this product.

When Using a Tripod

Use the tripod screw hole (1/4-20UNC) to attach this product to a tripod. For more information, refer to the instruction manual of the tripod.

5 Wiring Method

WARNING Be sure the power is turned off before performing any electric wiring. Failure to follow this instruction could result in fire or electric shock.

5.1. Line Out Wiring Method

Mini-plug cable is not included with this product. Please prepare your own.

CAUTION Do not use equipment that is not compatible with the Line Out terminal (600Ω 0 dBV). Connecting headphones or passive speakers (32Ω or less) could result in product failure. Do not connect multi-pole mini plugs other than monaural or stereo plugs. Failure to follow this instruction could result in product damage.

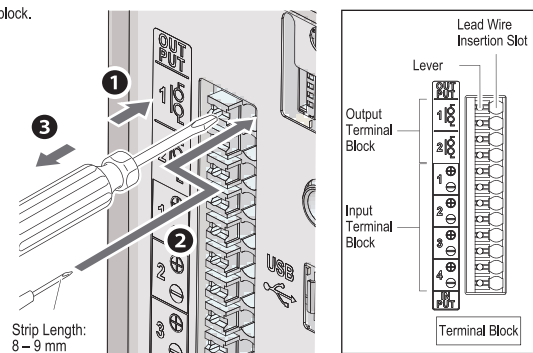
- Connect the mini plug cable to the Line Out terminal on the back of the main unit.
 - Confirm the other end of the cable is connected to line input on the target device.
 - A monaural mini-plug cable can be used with this product. If you use a stereo mini-plug cable, only the signal of the left channel will be output.

5.2. Terminal Wiring Method (D models only)

CAUTION Be sure the wiring is done properly. Any mistake in wiring may result in damage or fire. Wire so that the core of the lead wire is not exposed. Failure to follow this instruction could cause a short circuit leading to fire or equipment damage. After wiring, be sure that there are no loose wires. Failure to follow this instruction could result in malfunction or electric shock.

Follow the instructions below to wire the input terminal block and output terminal block.

- Use a flat-blade screwdriver to push in the lever on the terminal block.
 - We recommend a flat-blade screwdriver with a blade-edge width of 2 mm or less and thickness of 0.5 mm or less (or equivalent).
- Insert the lead wire into the insertion slot. (Keep the lever pressed down)
- With the lead wire inserted, release the lever to lock.
 - Confirm that the lead wire is secured into place.
 - Do not push the lever harder than necessary with the screwdriver. Failure to follow this instruction could result in equipment damage.
 - When removing the lead wire, do not pull on the wire to remove it. (Be sure to release the lock first, then remove.)



Wire Gauge

Single Wire	φ 0.4 - 0.8 mm (AWG26-20)
Stranded Wire	0.13 - 0.52 mm ² (AWG26-20)

Strip Length: 8 - 9 mm

CAUTION Current and voltage of equipment connected to the output terminal block should not exceed the following rated values. Ports 1 and 2: 30 VDC, 3 A inrush current 5 A or less / Minimum current 5 VDC, 1 mA (reference value) Equipment connected to the input terminal block should meet the following ratings. Port 1 - 4 (NPN transistor): "ON" output current 6 mA or less / Terminal OFF condition Voltage 24 V, leakage current 0.1 mA or less.

5.3. LAN Cable Wiring Method

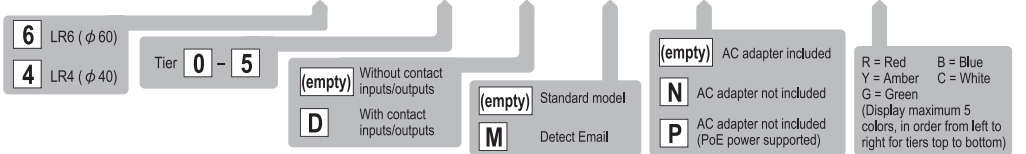
LAN cable is not included with this product. Please prepare your own.

CAUTION Make sure your entire PoE network is maintained indoors and that none of the LAN cable is running outdoors. Failure to follow this instruction could result in equipment damage from transient voltage caused by lightning. The LAN cable should have an RJ-45 connector and be rated for Category 5e or higher (Category 6 or higher recommended).

- Connect the LAN cable to the LAN connector on the back of the main unit.
 - When using a PoE power supply, IEEE802.3at compliant PoE+ power supply devices (HUB, injector) are required (P models only). However, PoE power supply devices that conform to IEEE802.3af cannot be used with the USB port.

2 Model Number Configuration

Model	Signal Tower Diameter	Number of LED Tiers	External Contact Input/Output	Software Specification	AC Adapter Option	LED Unit Colors
Modal number	NHV	-	-	-	-	- RYGB

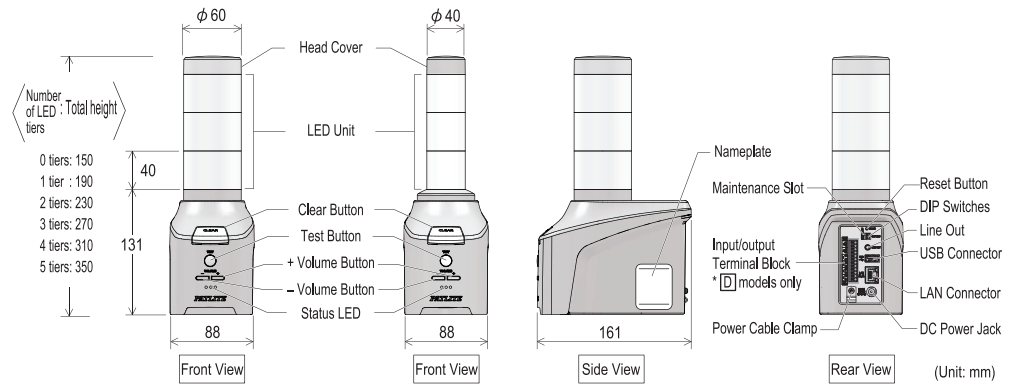


3 Names and Dimensions

NHV6

NHV4

Side view and rear view for NHV6 model.



Accessories	Quantity
AC Adapter	1
DC Power Plug	1
Adhesive Sheet	2 Sheets (1 Set)
Installation Manual (this document)	1

4 Mounting Method

- Before starting setup and installation, always read the Instruction Manual (downloadable from our website).
 - Follow the precautions below when installing or uninstalling this product.
 - For instructions on how to attach/detach the LED units, refer to the Instruction Manual.
- The mounting surface should be stable and level. Use this product with the adhesive sheet (included) affixed.

WARNING In case the product falls over or falls down, install in a location where it will not hit any people or other objects.

CAUTION This product is for indoor use only. Do not use outdoors. Do not apply excessive force to the LED units. There is a limit on the number of LED units you can attach to the body unit. Do not exceed this limit. Failure to follow this instruction could result in decreased performance and equipment damage. When using the adhesive sheet, do not install this product on materials that are coated with excessive amounts of plasticizer. Avoid using this product in the following locations: Places exposed to direct sunlight. Places near fire, or environments with high temperature and humidity. Environments where temperature changes are severe, and where there is condensation. Environments with poor ventilation. Places where vibrations are directly transmitted to this product. Environments where corrosive gas is present. Locations exposed to salty sea air. Environments with excessive dust or iron powder. Environments where chemicals and oil mist are present. Locations exposed to rain and water. Locations near equipment that generates strong electrical or magnetic fields. Locations from where the product may fall off. The adhesive sheet of this product may be difficult to remove depending on the environment in which it is used. Confirm the installation environment before installing this product. Failure to follow this instruction could result in damage to the product coating. Before attaching the adhesive sheet to the product, wipe away any dust, water, oil and other unwanted material from the main unit and installation location. When removing the adhesive sheet, firmly hold the outer edge of the product near the bottom and peel away slowly. When using a tripod, its screw should be shorter than 5.5 mm. When the screw is 5.5 mm or longer, the product cannot be affixed firmly to the tripod, which could lead to product damage. Use a tripod with a load capacity of 6 kg or more.

6 Turning on the Power

WARNING When using the AC adapter provided or an AC adapter other than ADP-001, use an AC adapter that meets the recommended specifications. Using an AC adapter that does not meet the recommended specifications could result in fire or equipment damage. Use an AC adapter equipped with overcurrent protection. Using an AC adapter without overcurrent protection could result in fire or equipment damage.

Use the AC adapter supplied with this product. For customers using N/P model where the AC adapter is not included, and want to order the AC adapter separately, please purchase our AC adapter (ADP-001). When you have no choice but to use an AC adapter other than ADP-001, use an AC adapter that meets the specifications as shown.

Recommended AC Adapter Specification: Secondary Voltage (DC)

Voltage	24 VDC ± 5%
Current	0.75 A or more, 1 A or less (with overcurrent protection)

Plug Length 9.5 or Longer
Outer Diameter of Plug Connector φ 5.5
Inner Diameter of Plug Connector φ 2.1
Housing φ 10 or Less

Follow the steps below to turn on the product.

- Loosen the screw with a Phillips screwdriver and detach the power cable clamp.
 - Pass the AC adapter power cable through the power cable clamp.
 - Insert the DC plug into the DC Power Jack.
 - Secure the power cable clamp with the screw without applying excessive force on the cable (recommended torque 0.3 N·m).
 - Plug the AC adapter into the power outlet.
 - When power is turned on and startup is complete, the status LED changes from green to blue. Additionally, when power is turned on and when startup is complete, all LED units (except tier 0 model) light up for about 1 second and then turn off. (Startup takes about 60 seconds)
- * When both a PoE and AC adapter try to supply power at the same time, priority is given to the PoE power supply. (P models only)

7 How to Use

Various functions of this product can be set up using the Setup Browser. For details on the setup method, refer to the Instruction Manual of this product, which can be downloaded from our website.

Network Settings

The default address for this product, as well as when initialized, is 192.168.10.1. Before setting up with the Web browser, change the computer network settings as follows:

- Computer IP Address: 192.168.10.2 - 254
- Subnet Mask: 255.255.255.0

Updating Firmware

Be sure to update this product to the latest version of the firmware before use. Updating improves product reliability and enables you to use any new features.

- You can download the latest version of the firmware by registering as a member from our website.
- Regularly log in to My Page to make sure that you have the latest version of the firmware.

Settings During Initial Setup

You will need to set a username and password during initial setup. Once a username and password is set, you can use it for future logins.

For Customers in U.S.A.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. (Responsible party in U.S.A.) 20130 S. Western Ave. Torrance, CA90501, U.S.A.

For Customers in Europe

This product has been tested and found to comply with the limits for a Class A device. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This product must not be used in residential areas.

For Customers in Korea

사용자안내문
이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

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