



DS-7600NI-H2/P Series

Installation Manual

UD.7L0202D1761B01

Thank you for purchasing our product. If there is any question or request, please do not hesitate to contact dealer.

Before you start, read the following statement first:

This manual, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. The content of this manual is furnished for informational use only, is subject to change without notice.

We assume no responsibility or liability for any errors or inaccuracies that may appear in the book.

During using the surveillance equipment, please obey the applicable laws and regulatory requirements. Using the equipment for monitoring people's privacy for other improper purpose is regarded as illegal.

The installation manual is applicable to **DS-7600NI-H2/4P** and **DS-7600NI-H2/8P series**.

Preventive and Cautionary Tips

Before connecting and operating your NVR, please be advised of the following tips:

- It is not recommended to replace the batteries by the user, since improper use or replacement of the battery may result in hazard of explosion. If needed, replace with the same or equivalent type only.
- Ensure unit is installed in a well-ventilated, dust-free environment.
- Ensure at least 2cm (0.79 inch) space between two devices.
- Environmental temperature should be within the range of 0°C ~ 45°C (+32 °F ~ +113°F).
- Environmental humidity should be within the range of 10% ~ 90%.
- The dust on the circuit board inside the device will short circuit the board. Please use the soft brush to clean the circuit board, the connector, the chassis and the fan. You can also use the water-diluted neutral detergent to wipe away the dust and then dry the components.
- The volatile solvents, such as alcohol, benzene or thinner, are not allowed to clean the device.
- Ensure no danger will be caused because of the uneven mechanical load.
- When installing cables, ensure that the bend radius of the cables are no less than five times than its diameter.
- Unit is designed for indoor use only.
- Keep all liquids away from the NVR.
- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the NVR in conjunction with an UPS if possible.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- A factory recommended HDD should be used for this device.
- Ensure the NVR is grounded.

Table of Contents

| | | |
|------------------|---|-----------|
| Chapter 1 | Overview | 3 |
| Chapter 2 | Chipset Features..... | 4 |
| Chapter 3 | Interface Description | 5 |
| | 3.1 Front Panel Introduction | 5 |
| | 3.2 Rear Panel Introduction | 5 |
| | 3.3 Motherboard Introduction | 6 |
| Chapter 4 | Operating System Installation..... | 8 |
| | 4.1 Installing a HDD..... | 8 |
| | 4.2 Setting Boot Sequence | 9 |
| | 4.3 Installing Operating System..... | 10 |
| | 4.4 Installing Driver..... | 10 |
| Chapter 5 | Specification..... | 12 |

Chapter 1 Overview

DS-7600NI-H2/P series is an embedded development platform. It is designed for professional digital surveillance. It is featured with well performance in CPU processing, encoding and decoding, and storage capability. Due to the openness of IA structure, various PC application software can be applied to the product, and providing a flexible NVR solution for the software developers or system integrators.

Developing Support:

- Support the Windows 7 (32bit / 64 bit) and Windows 8 (32bit / 64 bit) operating system.
- Provide the system SDK and open-source DEMO for programmable alarm input/output and PoE (Power over Ethernet) port.
- Provide third-party drivers including audio card driver, network interface driver, chipset driver, graphics card driver, etc.

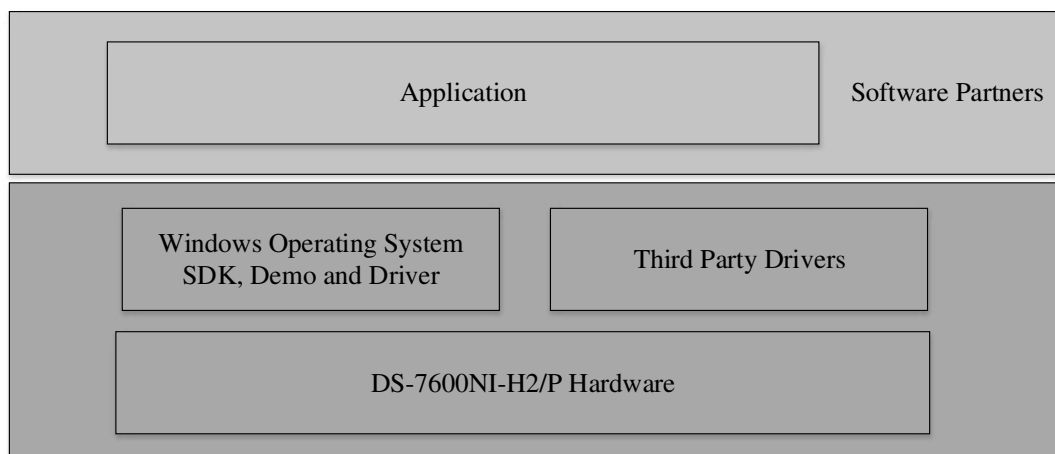


Figure 1. 1 Development Support

Chapter 2 Chipset Features

- Intel® Celeron® Processor J1900 (2M Cache, 2.00GHz) with low power consumption and high performance.
- Flexible development due to IA structure.
- 1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface.
- 4/8 PoE (Power over Ethernet) ports.
- H.264 hardware compression.
- Programmable alarm input/output and PoE ports.
- Compact and flexible structure design.

Chapter 3 Interface Description

3.1 Front Panel Introduction

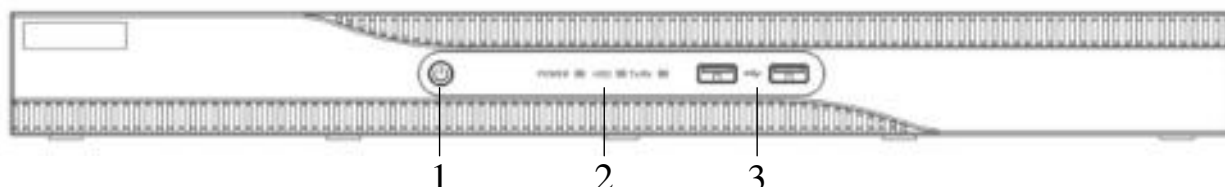


Figure 3. 1 View of Front Panel

Table 3. 1 Description of Front Panel

| No. | Name | Description |
|-----|-----------------------|--|
| 1 | Power Button | When the device is off and the power switch in rear panel is on, press the power button to start the device. |
| | | When the device is on, press the power button to shut down the device. |
| 2 | Status LED Indicators | Power Power indicator is red when the device is running and no light means the device is shutdown. |
| | | Tx/Rx Tx/Rx blinks in green when there is network data transmission. |
| | | HDD HDD indicator blinks in green when hard disk writing or reading. |
| 3 | USB Ports | Universal Serial Bus (USB) 2.0 ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD). |

3.2 Rear Panel Introduction

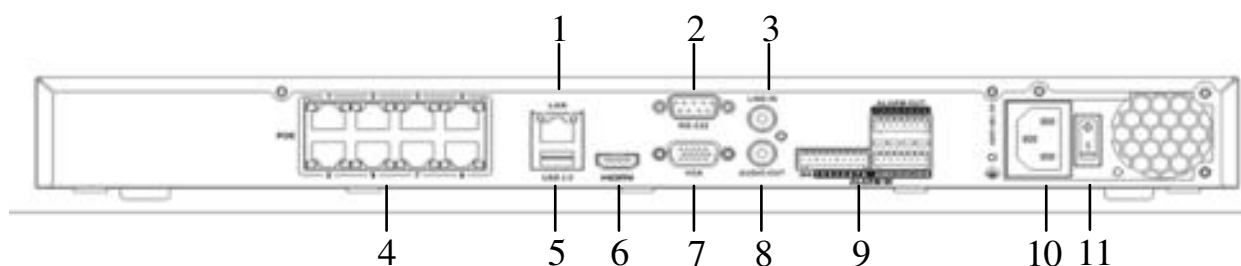


Figure 3. 2 Rear Panel View

Table 3. 2 Rear Panel Description

| No. | Name | Description |
|-----|--------|--|
| 1 | LAN | 1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface. |
| 2 | RS-232 | RS-232 interface for debugging and maintenance. |

| No. | Name | Description |
|-----|--------------|---|
| 3 | Line in | Audio input for two-way audio function. |
| 4 | PoE | Network interface for the cameras and to provide power over Ethernet. 4 PoE interfaces for DS-7600NI-H2/4P and 8 for DS-7600NI-H2/8P. |
| 5 | USB 3.0 | Universal Serial Bus (USB) 3.0 port for additional device such as USB mouse and USB Hard Disk Drive (HDD). |
| 6 | HDMI | HDMI video output interface. |
| 7 | VGA | VGA video output interface. |
| 8 | Audio out | RCA connector for audio output. |
| 9 | Alarm in/out | Connector for alarm input/output. |
| 10 | Power supply | Power supply interface. |
| 11 | Power switch | Power switch. |

3.3 Motherboard Introduction

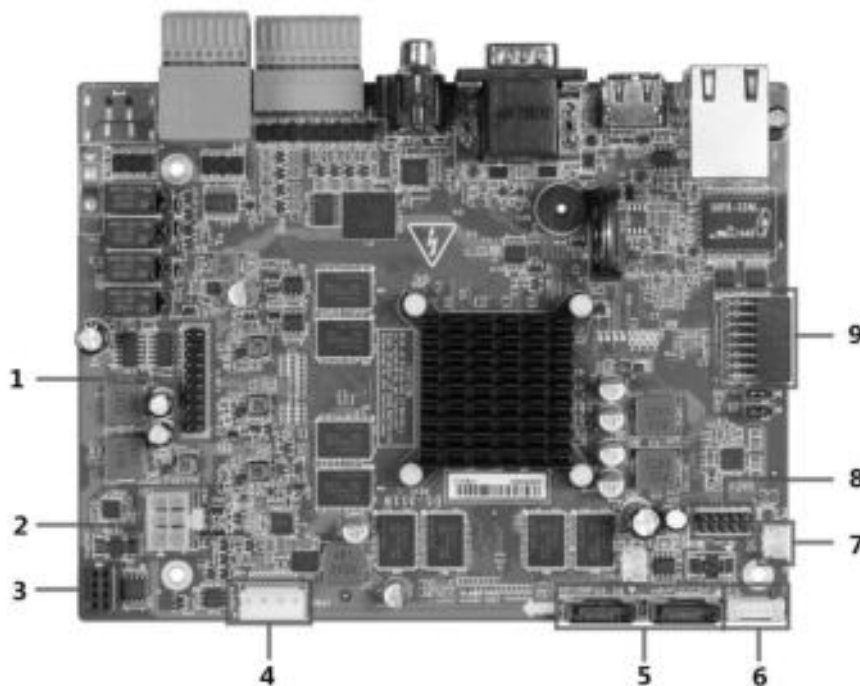


Figure 3. 3 Motherboard View

Table 3. 3 Motherboard Description

| No. | Description |
|-----|--|
| 1 | Debug card interface. For the purpose of debugging and maintenance. |
| 2 | Nonstandard ATX power interface, with 6 pins. |
| 3 | Debug card interface for BIOS. For the purpose of debugging and maintenance the BIOS module. |
| 4 | Power interface for SATA, with 4 pins. |
| 5 | 2 SATA interfaces for the system disk and system storage. |

| No. | Description |
|------------|---|
| 6 | Front panel interface, with 6 pins. |
| 7 | FAN interface. |
| 8 | USB 2.0 interface for front panel, with 9 pins. |
| 9 | PoE card interface, with 24 pins. |

Chapter 4 Operating System Installation

4.1 Installing a HDD

Before you start:

- Before installing a hard disk drive (HDD), please make sure the power is disconnected from the NVR.
- A factory recommended HDD should be used for this installation.

Steps:

1. Remove the cover from the NVR by unfastening the screws on the rear and side panel.
2. Connect one end of the data cable to the motherboard of NVR and the other end to the HDD.

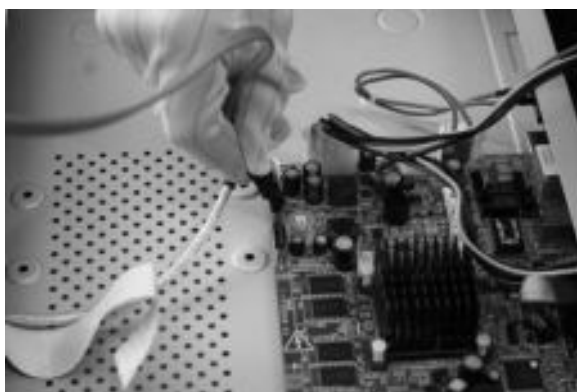


Figure 4. 1 Connecting Data Cable

3. Connect the power cable to the HDD.



Figure 4. 2 Connecting Power Cable

4. Place the HDD on the bottom of the device and then fasten the screws on the bottom to fix the HDD.



Figure 4.3 Placing the HDD and Fastening the Screws

-
5. Re-install the cover of the NVR and fasten screws.

4.2 Setting Boot Sequence

Purpose:

When installing the operating system, you need to manually set the CD/DVD-ROM Drive as the first boot type.

Steps:

1. Enter BIOS interface when starting process by pressing F2 on keyboard.
2. Enter Advance settings interface by pressing direction buttons and Enter button on the keyboard.

Boot > Legacy > Normal Boot Menu > Advance



Figure 4.4 Boot Configuration Interface

-
3. Set the CD/DVD-ROM Drive as the first boot type.



Figure 4. 5 Setting the Boot Type

4.3 Installing Operating System

Before you start:

- If you use a SATA CD/DVD-ROM drive, connect it to the interface of SATA.
- If you use a USB CD/DVD-ROM drive, connect it to any of the USB interfaces.

Step:

Insert the Windows installation CD and install the operating system.

4.4 Installing Driver

Purpose:

The NVR is attached with a driver installation program when delivery. The program is used for installing system driver, including motherboard chipset driver, audio card driver, graphics driver, etc. And it is applicable to windows 7 and windows 8 of 32 bit and 64 bit.

Step:

For the detailed steps, please refer to driver installation manual.



After successfully installing the drivers, you can view the drivers listed in the Computer Management interface.

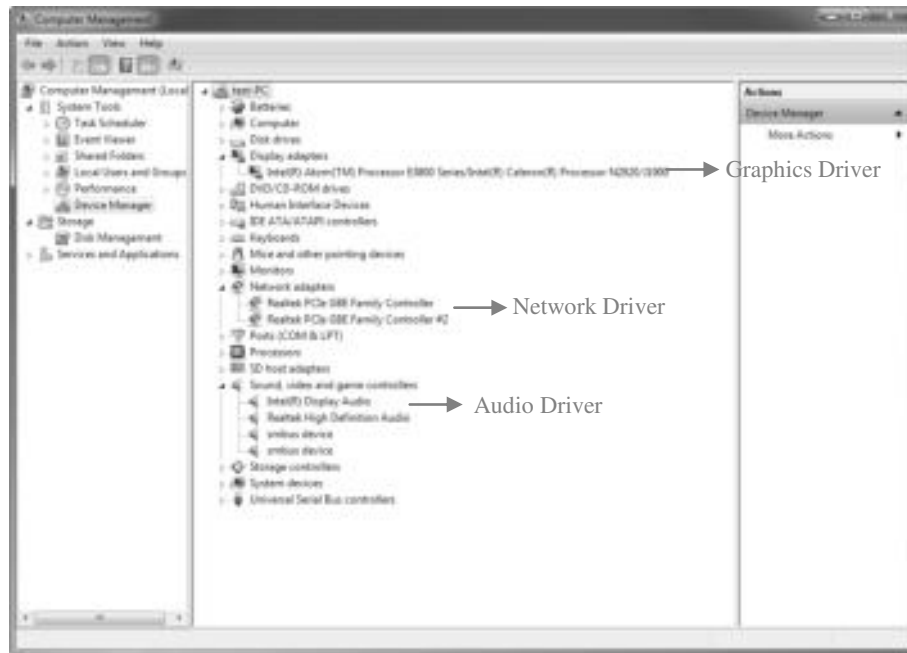


Figure 4. 6 Computer Management Interface

Chapter 5 Specification

| Model | | DS-7600N-H2/4P | DS-7600N-H2/8P |
|---------------------------|-------------------------|--|----------------|
| Processor | Type | Intel® Celeron® Processor J1900 (2M Cache, 2.00GHz) | |
| Memory | Memory size | 4GB | |
| Network | Incoming bandwidth | 300Mb | |
| Video/Audio output | HDMI output | 1-ch, resolution: 1920 × 1080/60Hz | |
| | VGA output | 1-ch, resolution: 2560 × 1600/30Hz | |
| | Audio output | 1 RCA (2.0Vp-p, 1kΩ) | |
| HDD interface | SATA interface | 2 | |
| | Capacity | Up to 4TB for each HDD. | |
| | HDD type | Support enterprise-class, surveillance-class and desktop HDD. | |
| External interface | Network interface | 1 1000Mbps self-adaptive Ethernet interface. | |
| | PoE interface | 4-ch | 8-ch |
| | Two-way audio interface | 1 RCA (2.0Vp-p, 1kΩ) | |
| | Serial port | 1 × RS-232 | |
| | USB interface | 2 USB 2.0 interfaces in front panel and 1 USB 3.0 interface in rear panel. | |
| | Alarm in/out | 16 / 4 | |
| Other | Power supply | 100 ~ 240VAC | |
| | Working temperature | 0°C ~ 45°C (+32 °F ~ +113°F) | |
| | Working humidity | 10% ~ 90% | |
| | Chassis | 1U chassis | |
| | Dimensions (W×D×H) | 445 × 290 × 45mm(17.5" × 11.4" × 1.8") | |
| | Weight (without HDDs) | ≤ 4 Kg (8.8lb) | |