

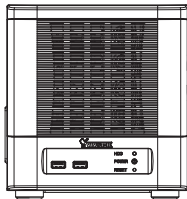


Warning Before Installation

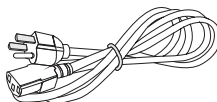
- Power off the Network Video Recorder if you detect abnormal smell or smoke coming from it.
- Do not place the Network Video Recorder around the heat sources, such as television or oven.
- Keep the Network Video Recorder away from direct sunlight.
- Do not attempt to remove or uninstall the software on the mounted IDE flash. Nor should you open the chassis. Doing so will void our warranty.
- Keep the Network Video Recorder away from water. If the Video Recorder is wet, power off immediately.
- Refer to your user's manual for the operating temperature.
- Do not place the Network Video Recorder in high humidity environments.

1 Package Contents

- ND8401



- Power Cord



- Software CD



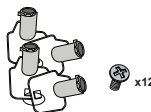
- Quick Installation Guide



- Warranty Card

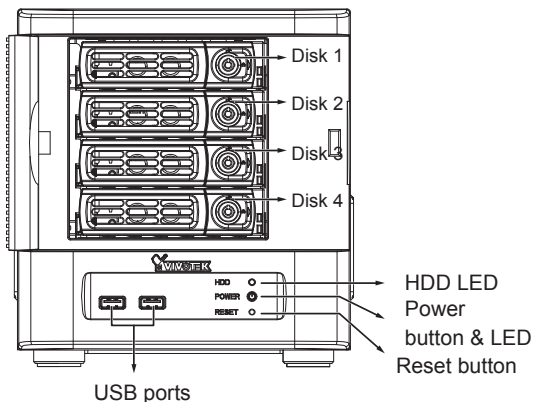


- Screws and Bezel Keys

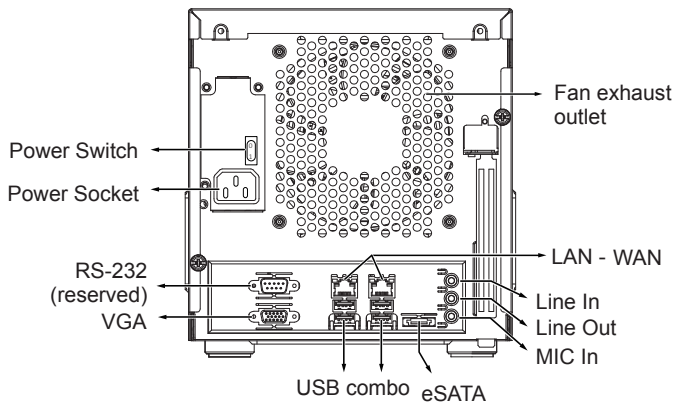


2 Physical Description

Front View



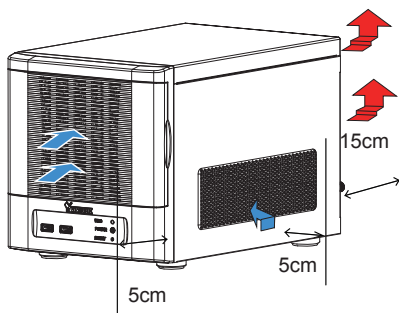
Rear View



IMPORTANT:

It is important to leave a clearance of 15cm to the rear side of the chassis. The clearance is required to ensure an adequate air-flow through the chassis to ventilate heat. A 5cm clearance is also required on both sides of the chassis.

To ensure normal operation, maintain ambient airflow. Do not block the airflow around chassis such as placing the system in a closed cabinet.

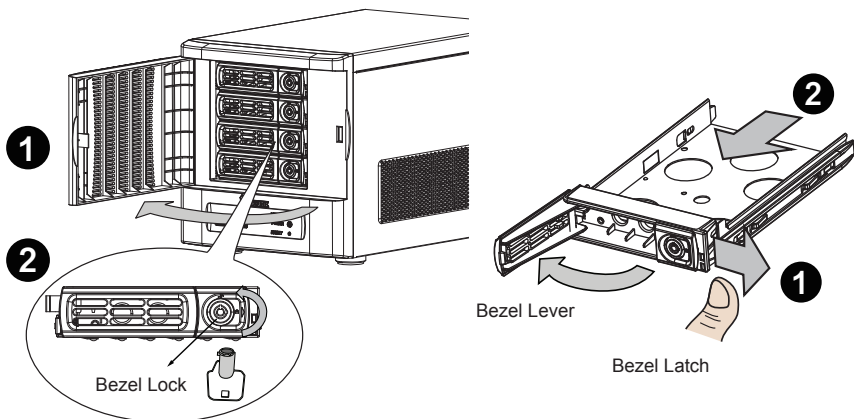


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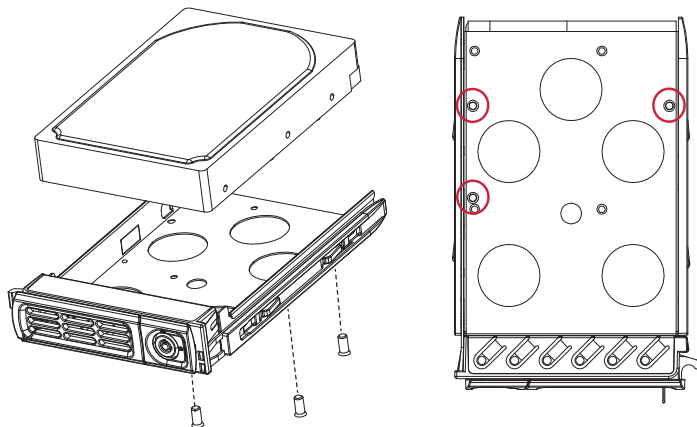
Hardware Installation

SATA hard disk(s) are user-supplied. The network video recorder can readily accommodate most of the off-the-shelf SATA hard drives.

1. Open the front panel.
2. Use the included bezel key to unlock the bezel lock.
3. Open the drive tray bezel by flipping the bezel latch to the side. The bezel lever will spring open, and you can then remove the drive tray.



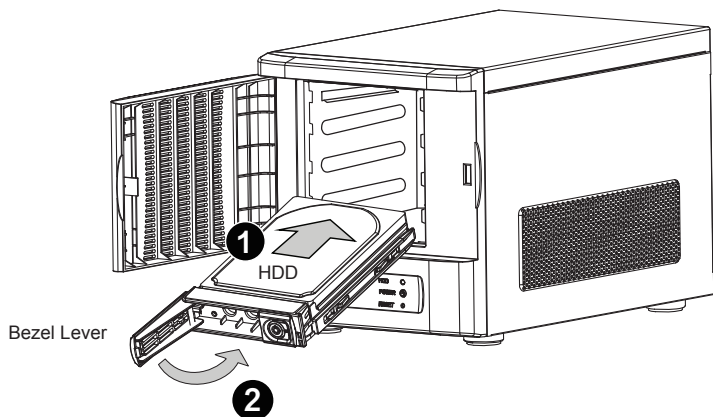
4. Install your hard disk to the drive tray. Gently put the hard disk into drive tray with its label side facing up and the connector side facing the inside of the chassis. Flip the hard drive and drive tray over, and then secure the hard drive by fastening 3 screws.



**IMPORTANT:**

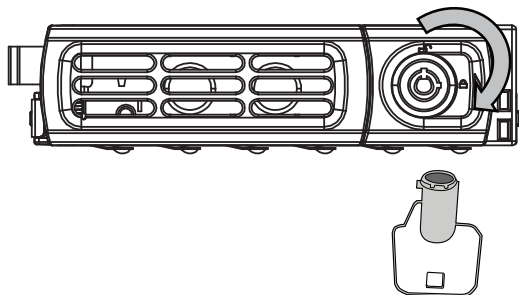
Avoid touching the hard drive's circuit board or connector pins. Doing so can damage the hard drive by electro-static discharge.

5. Install drive tray by pushing it into drive bay. When it is almost fully inserted, close the bezel. The bezel will secure the back-end connection to the backplane.



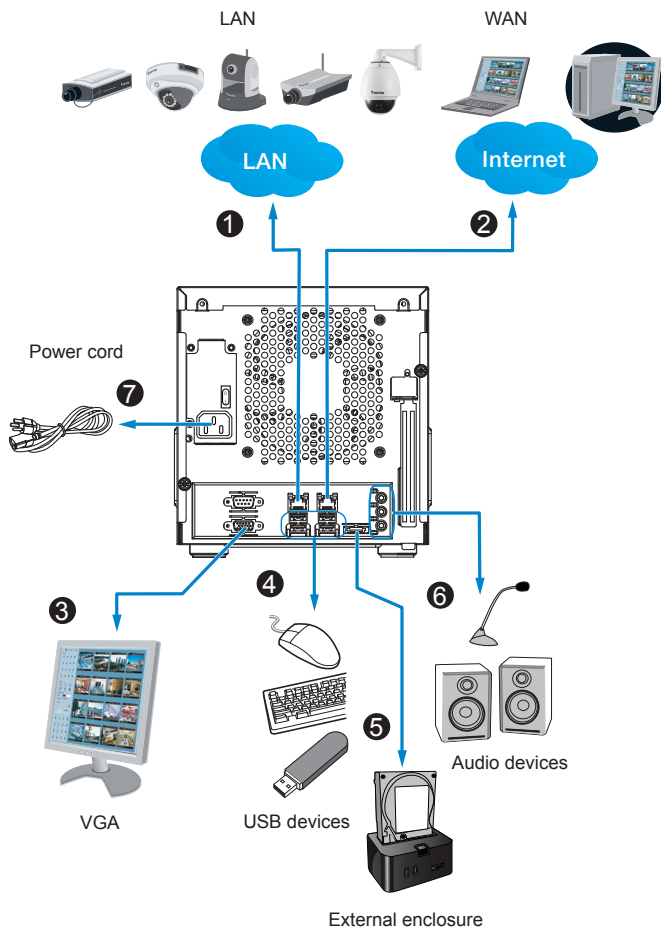
6. Use the bezel key to lock the drive tray. Repeat the process to install more disk drives.

Bezel Lock



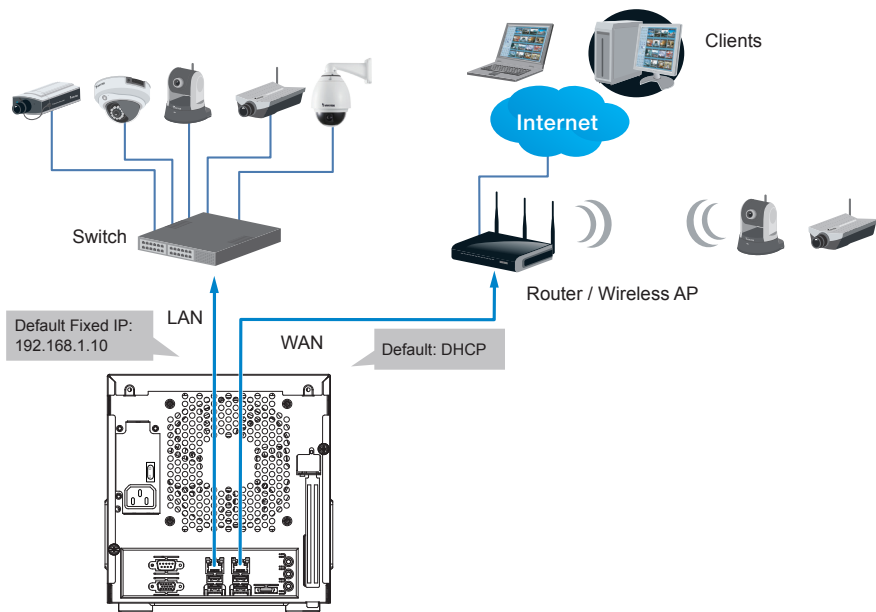
Interface Connections

- 1 & 2. Connect CAT5 or better-quality Ethernet cables to cameras via a local, switched network, or clients through the Internet. Refer to next page for more information.
3. Connect the DB15 VGA port to a monitor (with resolutions up to 1920x1080).
4. Connect USB devices such as keyboard and mouse.
5. If an external eSATA storage enclosure is available, connect it to the eSATA port.
6. Connect speakers or microphone to the phone-jack connectors.
7. Connect the power cord to the power socket 100-240V AC. (50~60Hz, 3~1.5A)



4 Network Deployment

1. Connect network cameras to the NVR's LAN ports.
2. If you want to access NVR over the Internet, connect the NVR to the Internet via the WAN port. A web console can be established from a remote PC by keying <http://<public IP>:3454> in a browser's URL address field. However, port forwarding on the router for the TCP port will be necessary.
3. Flip the power switch (at the rear of chassis) to the ON position, and push the power button to run the NVR.



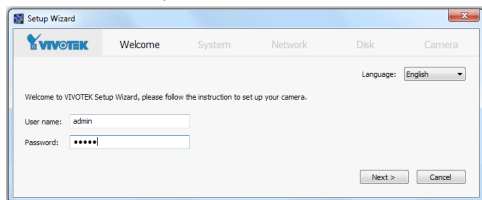
NOTE:

The LAN and WAN ports can be configured into the same or different subnets.

If you have cameras connected via the WAN port, make sure the WAN port acquires an IP address from a DHCP server on router or AP. If not, the cameras detected through the WAN port will use the default IPs, e.g., 169.254.xx.xx, and the LiveClient software will not be able to detect their presence.

5 Initial Configuration

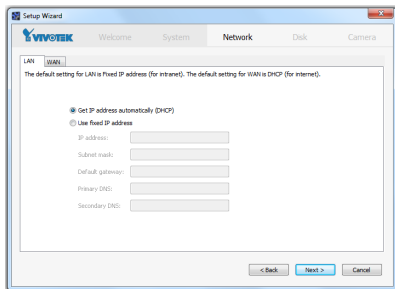
1. Once your NVR is started, you will be prompted by the **Setup Wizard**. You should then begin the initial setup. The system is booted from an embedded IDE flash. No software installation is required.



NOTE:

You must install at least one hard drive for the initial configuration. Otherwise, the LiveClient console will not start.

2. Enter the default User name and Password as **admin & admin**. It is recommended you change the password later to prevent unauthorized access.
3. Click **Next** to proceed with configuration and follow the onscreen instructions to finish the configuration process.
4. Note the following when you move to the **Network** page:
 - 4-1. If your local network has a DHCP server, you can select the "**Get IP address automatically (DHCP)**."
 - 4-2. If your LAN port connects to an isolated switch with cameras attached to it, you can manually assign IP addresses to cameras, and the address for the LAN port itself.

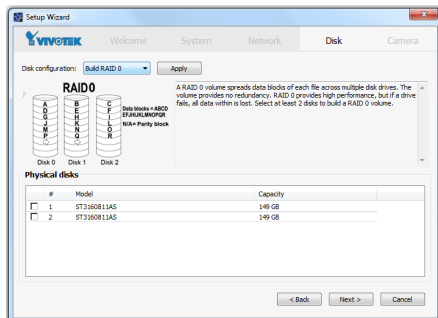


The default static IP for the LAN port is 192.168.1.10.

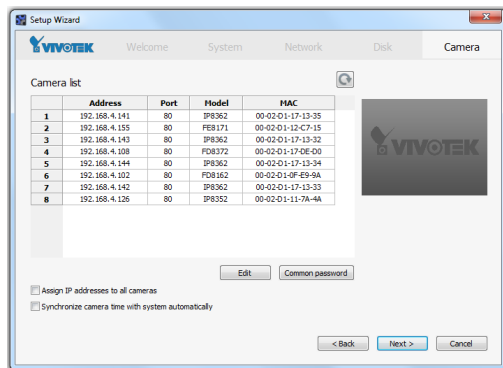
- 4-3. Connect your WAN port to a router or AP with the routing capability and then to a DSL or Cable modem.

5. On the **Disk** page, Select disk drives by clicking the checkboxes in front of the listed disk drives. Select **Build single disk**, **Build RAID0**, **RAID1**, or other option from the **Disk configuration** pull-down menu. Click **Apply** and wait for a few minutes for the configuration to take effect.

Refer to the description available with every disk volume type on the screen, such as those for RAID0 and RAID1.



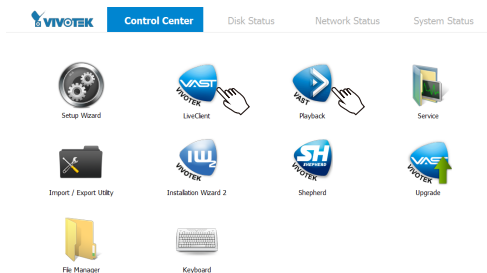
6. On the Camera page, all cameras connected through the local network should appear on a **Camera list** after a brief search. You can manually assign IP addresses by clicking on the cameras' address field. You can also select the "Assign IP addresses to all cameras" checkbox and let NVR assign IPs to cameras.



Click **Next** to end the initial setup. Make sure you have the cameras' access credentials in order to make individual changes.

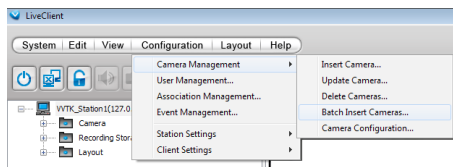
6 Ready to Use

1. You will then be at the **Control Center** screen. Double-click on the **LiveClient** or **Playback** buttons to configure live viewing and recording settings.

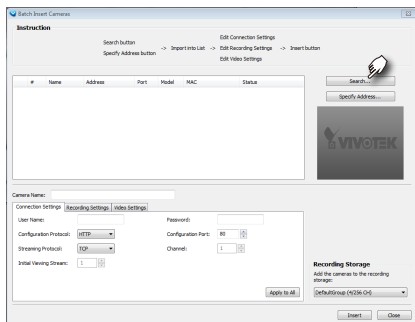


2. Open the LiveClient utility to change live view layout, camera streaming frame rate, and other options.

3. 3-1. By default, the **Batch Insert Cameras** window will prompt for you to recruit cameras into your configuration.

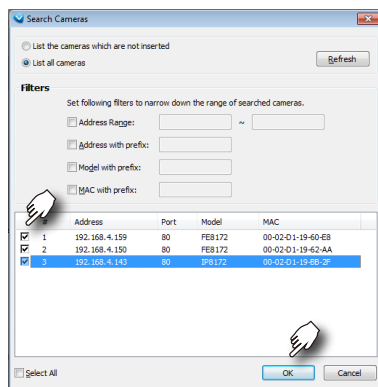


- 3-2. Click on the **Search** button.



- 3-3. Select cameras by clicking their checkboxes.

- 3-4. Click **OK**, return to the previous window, and click the **Insert** button.



4. It is important to ensure that the live viewing and recording configuration does not exceed the system's limits:

In terms of **local display**, the default stream 1 for live view can be configured with a resolution up to Full HD 30fps. Stream 1 is also a source for continuous recording. Make sure your cameras' **stream 1** resolution does not exceed **1080P at 30fps**.

Compression	MJPEG			H.264		
Resolution	QVGA	VGA	512x512	CIF	VGA	1080P
Frame rate	15fps	15fps	10fps	30fps	30fps	30fps
by bit rate / video quality	Good	Standard	Good	512Kbps	1Mbps	6Mbps
No. of streams	16	10	16	7	3	1

The NVR supports **Auto Stream Size**, which automatically adjusts streaming display for efficient leverage of system resources. If you disable the Auto Stream Size function and manually configure your stream settings, you must comply with the limitations listed above.

5. After inserting your cameras, you can start dragging cameras into view cells and proceeding with the rest of the configuration. Refer to your User Manual for more information.