



The Intelligent Surveillance Solution

NVRmini

Quick Start Guide

Step 1: Unpacking the Unit

This package contains the following items:

- The unit
- Quick Start Guide
- Screws for disk drives (1 package)
- Power cord
- Warranty card
- 12V DC power transformer (2 bay unit)
- CD with **Install Wizard**, **Backup**, **Live View**, and **Playback** application, user manual, and quick start guide

Warning



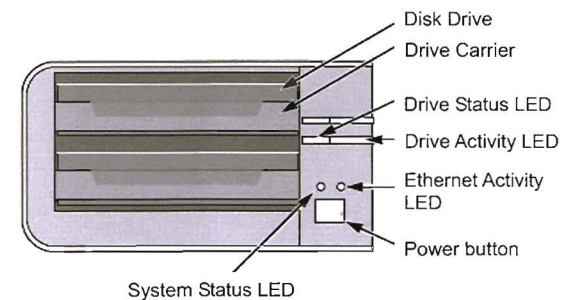
The electronic components within the unit can be damaged by Electro-Static Discharge (ESD). Please take precautions at all times when handling the unit or its sub-assemblies.

Important

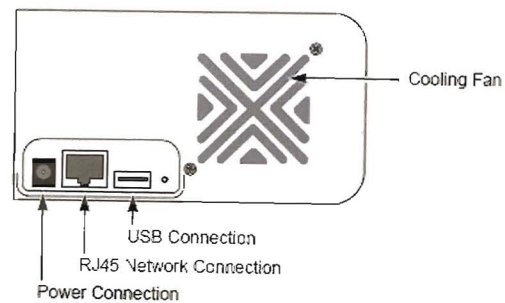


To configure the unit, you must install the software onto a desktop/ laptop running Windows Vista, 2003, XP Professional, or 2000.

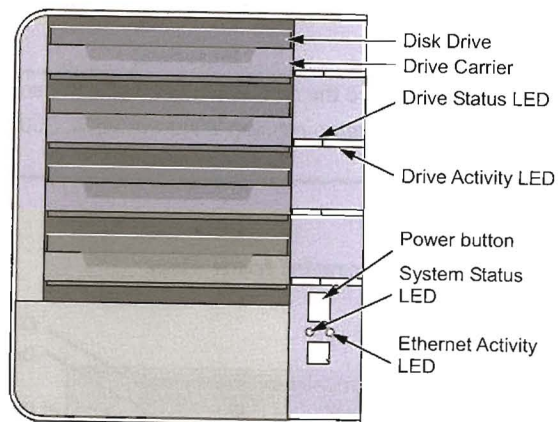
2 bay unit (4 channels) front view



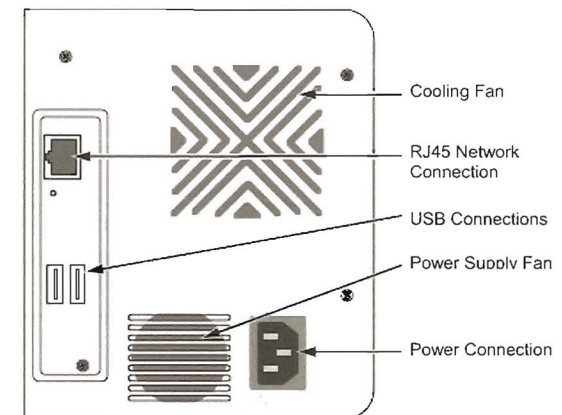
2 bay unit (4 channels) rear view



4 bay unit (8 / 16 channels) front view



4 bay unit (8 / 16 channels) rear view



Step 2: Installing Disk Drives

You can populate this unit with SATA 1.5 Gb/s or 3.0 Gb/s disk drives. For optimal performance, install disk drives of the same model and capacity. Your disk drives will become a RAID Volume on this unit.

1. Open the lid on the front of the unit enclosure.
2. Pull a disk drive carrier from the enclosure. See the front view figure.
3. Carefully lay the disk drive into the drive carrier, making sure that the screw holes on the sides of the carrier align with the screw holes in the drive.
4. Insert the screws through the holes in the drive carrier and into the sides of the disk drive.
 - Install only the counter-sink screws supplied with the unit.
 - Install four screws per disk drive.
 - Make sure each screw is securely tightened, but be careful not to over-tighten.
5. Reinstall the drive carrier into the unit enclosure.
6. Repeat step 2 through 5 for the other disk drives.
7. Close the lid on the front of the unit.

Step 3: Connecting to the Network

1. Attach one end of the network cable to the RJ45 network connection. See the rear view figure.
2. Attach the other end of the network cable to your Ethernet hub or switch.

Important



If there are multiple networks at your facility, note the network to which you connect the unit. You will need this information during the setup process.

Step 4: Connecting the Power

1. Attach the power cord from the power source to the power adapter.
2. Connect the power adapter to the back of the unit enclosure. See the rear view figure.
3. On the front of the unit, press the power button. See the front view figure.

Important



Before pressing the power button, please make sure the two ends of the network cable are attached to the unit and the Ethernet router, respectively. Please also enable the DHCP function within the network, as the unit will retrieve an IP address through DHCP by default.

It takes about a minute for the unit to fully power up. Once it is powered up:

- The System Status LED turns green. See the front view figure.
- The buzzer beeps one time.

Step 5: Installing the Software

1. Insert the CD into your CDROM.
2. Double-click **Setup.exe** to begin installation.
3. Click the **Next** button to continue with the installation.

4. Click the "I accept the terms of the license agreement" option, and then click the **Next** button.
5. Insert your "User Name" and "Company Name", and then click the **Next** button.
6. Select the setup type, and then click the **Next** button.
7. Click the **Install** button to proceed with installation.
8. When the above-mentioned installation processes are finished, a final installation screen appears. Click the **Finish** button to close the installer.

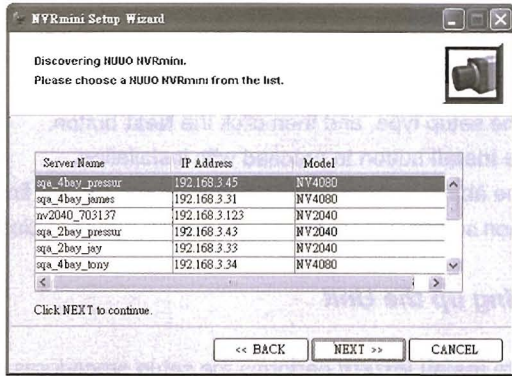
Step 6: Setting up the Unit

The software **Install Wizard** performs the setup procedures on your unit. After the procedure, you can begin using this unit.

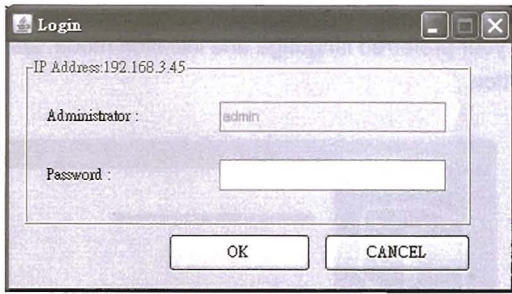
1. Go to Start > NUUO NVRmini > Install Wizard.
2. This program will show the default language setting and initiation mode.
3. Choose your preferred language and initiation mode, and then click the **Next** button.



- **Express Mode:** you don't need to set the date, time, network settings, and RAID level. (After step 5, jump to step 9 directly.)
 - **Advance Mode:** you need to set your specific date, time, and network settings.
4. The **Install Wizard** program will search for all the units on the internet right now. Choose one of them, and then click the **Next** button.



5. Type in the password, and then click the **OK** button.

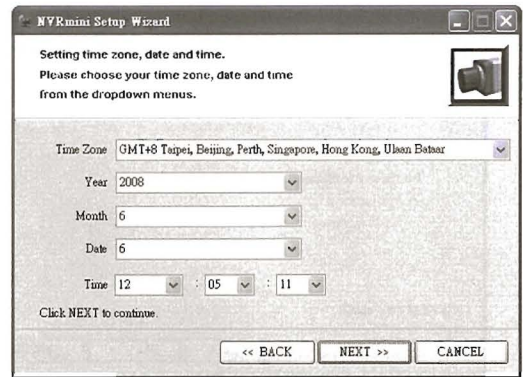


Note

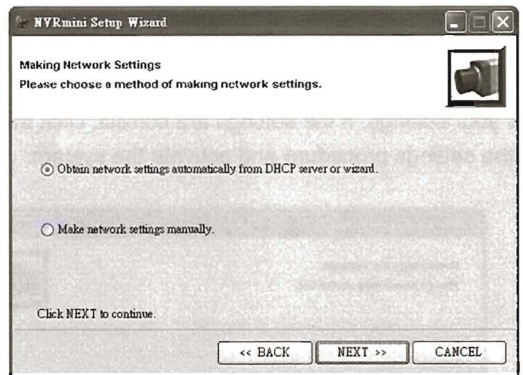


The default Administrator password is "admin".

6. Set the time zone, date, and time, and then click the **Next** button.

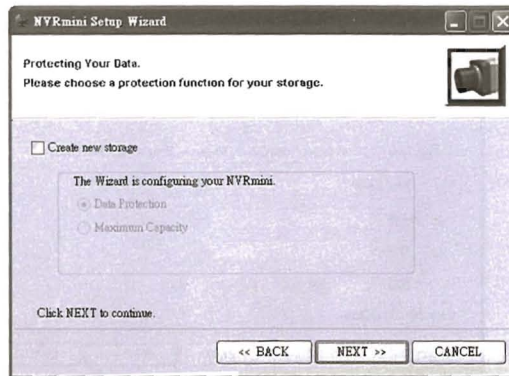


7. Select the network settings, and then click the **Next** button.

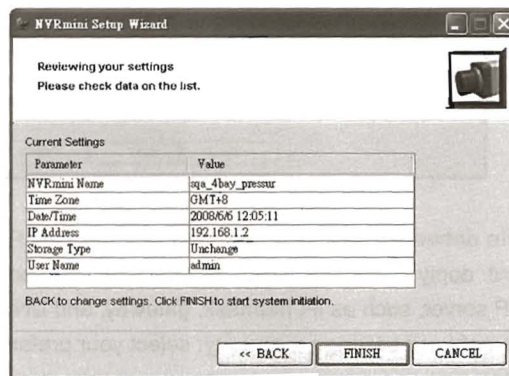


- **Obtain network settings automatically from DHCP server or wizard:** apply all settings which are automatically generated by the DHCP server, such as IP, netmask, gateway, and DNS.
- **Make network settings manually:** select your preferred settings one by one.

8. If you need to set a new disk(s), check the "Create new storage" option. After checking, click the **Next** button.



- **Data Protection:** set the RAID level to RAID 1 (2 bay). Set the RAID level to RAID 5 (4 bay).
 - **Maximum Capacity:** set the RAID level to RAID 0 (2 bay). Set the RAID level to RAID 0 (4 bay).
9. Review your settings. If the settings are correct, click the **Finish** button to exit the settings procedure and activate the system.



Caution



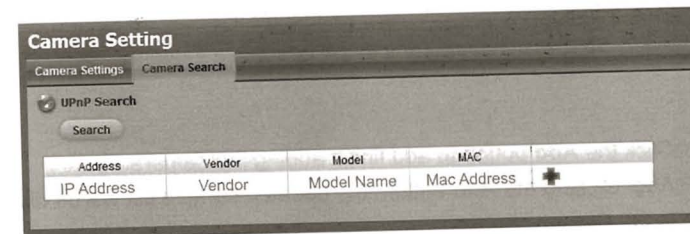
Once the "Finish" button is clicked, the unit will start working. In order to ensure the stability of your unit, never pull any disks out when the system is running.

Step 7: Adding Cameras

- Add UPnP Cameras
1. Open Internet Explorer and log in to the unit.
 2. Click **IP Camera/ Camera Settings**.
 3. Click the **Camera Search** tab.
 4. Click the **Search** button to search for UPnP cameras.



5. The system will list all the cameras it can currently find. Click the **+** icon to add a camera into your camera list.



6. After clicking the **+** icon, the camera settings page will pop-up. Click the item to which you want to add a camera.
7. Enter the camera name, user name, and password of the camera.

Note



Some cameras will limit the login authority to the administrator. In this case, you will need to change the user name and password to the administrator's to log into those cameras.

8. Click the **Add** button to add finish adding the camera.
9. After clicking the **Add** button, the updated camera list will be displayed in the **Camera Settings** tab.

Channel	Camera Name	Address	Port	Vendor	Model
1	Camera Name	IP Address	80	Vendor	Model Name
2			80	-- none --	-- none --
3			80	-- none --	-- none --
4			80	-- none --	-- none --
5			80	-- none --	-- none --
6			80	-- none --	-- none --
7			80	-- none --	-- none --
8			80	-- none --	-- none --

10. Repeat step 5 through 8 to add other cameras in your list.

- Add Cameras without UPnP function

1. Open Internet Explorer and login the unit.
2. Click **IP Camera/ Camera Settings**.
3. Click the **Camera Settings** tab, and the camera list will be displayed in the bottom of the page.
4. Click the item which you want to add a camera.

Index	Camera Name	Address	Port	Vendor	Model
1			80	-- none --	-- none --
2			80	-- none --	-- none --
3			80	-- none --	-- none --
4			80	-- none --	-- none --
5			80	-- none --	-- none --
6			80	-- none --	-- none --
7			80	-- none --	-- none --
8			80	-- none --	-- none --

5. Insert the information of this camera on the top of the page.

- **Camera name:** name this camera.
- **Address:** the IP address.
- **Port:** the transmission port.
- **User name:** login user name.
- **Password:** login password.
- **Video Channel:** select the number of analog cameras supported by one video server from the list.
- **Protocol:** data transmission protocol.
- **Vendor:** camera vendor name.
- **Model:** camera model name.

Note

Some cameras will limit the login authority to the administrator only. In this condition, you need to change the login user name and password to the administrator's to login those cameras.

6. Click the **Save** button.

- **Save:** save the information of this camera.
- **Reset:** return to the latest saved settings of the selected camera.
- **Auto Detection:** after inserting IP address, port, user name, and password, click this button to automatically find out all the information of this camera. (such as Camera Channel, Protocol, Vendor, Model)

7. Repeat step 4 through 6 to add other cameras in your list.

Step 8: Live View Function

There are two ways to implement the live view function: through Internet Explorer or through the **Remote Live Viewer** application.

- Internet Explorer
 1. Open Internet Explorer and log in to the unit.
 2. Set the cameras.
 3. Click the **Live view** button on the top of the page.
 4. Select a camera(s) from the camera list on the right and then drag it to where you wish the image to be displayed.

**Important**

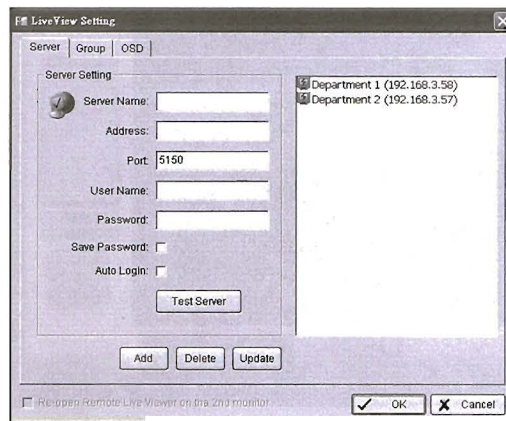
When running Internet Explorer, do not use the function "Open in New Window", as it may cause the browser to become unstable.

- Remote Live Viewer Application

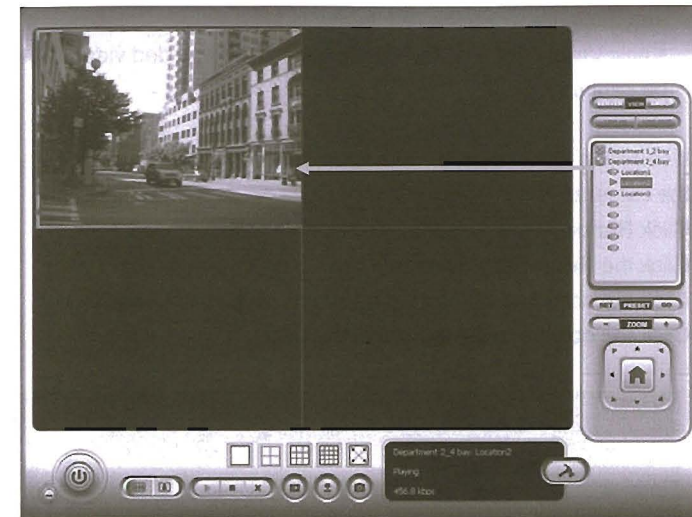
1. Go to Start > NUUO NVRmini > Remote Live Viewer.
2. Click the **Live View Setting** button.



3. Insert the unit name.



4. Insert the IP address.
5. Modify the port if necessary.
6. Insert the user name.
7. Insert the password.
8. Check the **Save Password/ Auto Login** option.
9. Click the **Test Server** button to test the connection between the local application and the remote unit.
10. Click the **Add** button to add this unit into your remote server list.
11. Click the **OK** button.
12. Click the unit you wish to access in your remote server list.
13. Click the **Log In** button to access your unit.
14. Select a camera(s) from the camera list on the right and then drag it to where you wish the image to be displayed.



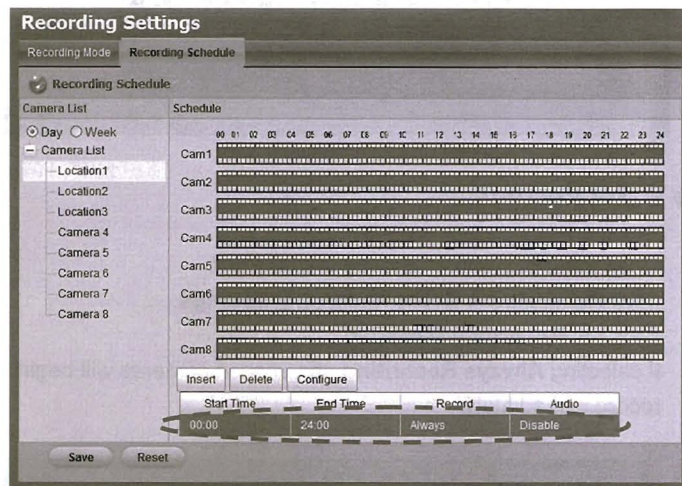
Step 9: Set Recording

1. Open Internet Explorer and log in to the unit.
2. Click **Recording & Event/Recording settings**.
3. Click the **Recording Mode** tab.
4. If selecting **Always Recording**, the chosen cameras will begin to record immediately.

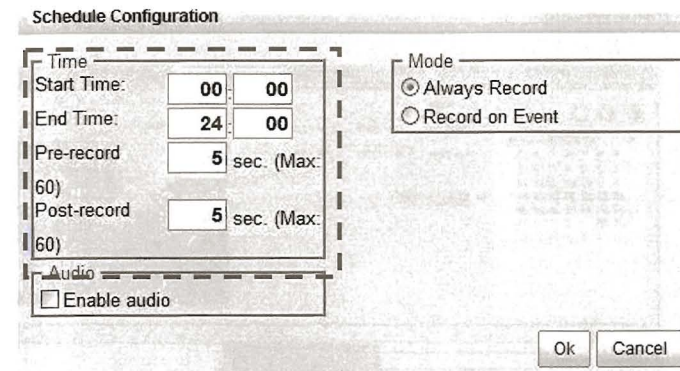


- **No Recording:** turn off the recording.
- **Recording by Schedule:** record according to a schedule.
- **Always Recording:** the chosen cameras are constantly recording
- **Automatic Recycle:** check the **Enable** option to recycle disk space

- automatically when the disk space is full.
 - **Keep Video:** set a period during which the recorded video clips will be kept intact.
5. If selecting **Recording by Schedule**, you need to set the schedules of the cameras.
 6. Click **Recording & Event/Recording settings**.
 7. Click the **Recording Schedule** tab.
 8. Click the schedule of the camera which needs to be modified.
 9. Click the column in the bottom of the page.



- **Insert:** insert new schedules.
 - **Delete:** delete the selected schedule.
 - **Configure:** modify the schedule and recording mode setting.
10. The default setting of the camera's recording schedule is from 00:00 to 24:00. If you want to modify the time slot, click the **Configure** button to modify the default setting first.



11. Choose the recording mode.

- **Always Record:** always record.
- **Record on Event:** record only when triggered by an event. The event can be triggered by **Motion** or **Digital input**.

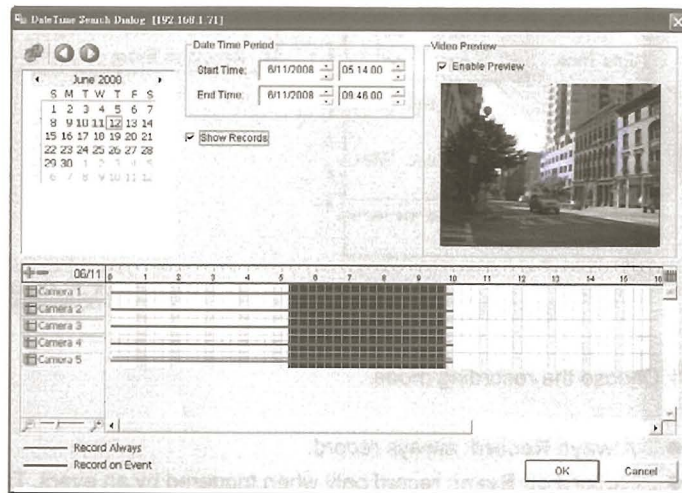
12. If you want to add another new schedule, click the **Insert** button to add a new one.
13. Repeat step 12 to add new schedules for the selected camera.
14. Repeat step 8 through 12 to set other cameras.
15. Click the **Save** button.

Step 10: Playback Function

There are two ways to implement the playback function: through Internet Explorer or through the **Playback System** application.

- Internet Explorer
1. Open Internet Explorer and log in to the unit.
 2. Click the **Playback** button on the top of the page.
 3. Click the **Open Record** button.
 4. The Record Display Window will show the information of the available video clips. Select the date of the record you wish to search for. See user manual for more details about this Record Display Window.
 5. Highlight the video records that you want to review. See user manual for

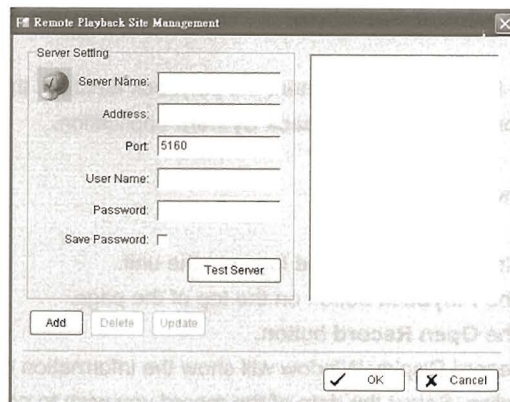
more details.




6. Click the **OK** button.

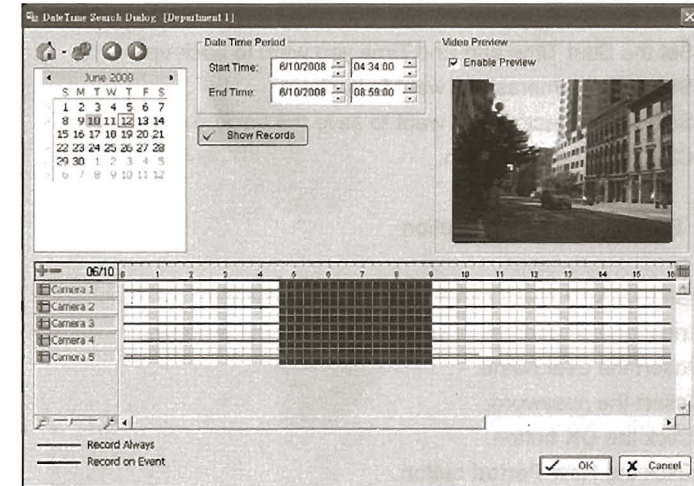
- Playback System Application

1. Go to Start > NUUO NVRmini > Playback System.
2. Click the **Remote Server** button.



3. Insert the name of your unit.

4. Insert the IP address of that unit.
5. Modify the port if necessary.
6. Insert the user name.
7. Insert the password.
8. Check the **Save Password** option.
9. Click the **Test Server** button to test the connection between the local application and the remote unit.
10. Click the **Add** button to add this unit into the remote server list.
11. Click the **OK** button.
12. Click the **Open Record** button.
13. Click the icon  on the top of the Date-Time Panel to obtain the Remote Playback Site Management dialog, and then select the server you want to access.
14. The Record Display Window will show the information of the available video clips. Select the date you want to search the record from. See user manual for more details about this Record Display Window.
15. Highlight the video records that you want to review. See user manual for more details.



16. Click the **OK** button.

Appendix A: Backup Function

There are three ways to backup your files: through Internet Explorer, through **Playback System** application, or through **Backup System** application.

- Internet Explorer

1. Open Internet Explorer and login the unit.
2. Click the **Open Record** button to select data.
3. Click the **Backup** button.
4. Set the Start Time and End Time you want to back up.
5. Select the cameras you want to back up.
6. Select the directory where you want to save the backup data.
7. Click the **Backup** button.

- Playback System Application

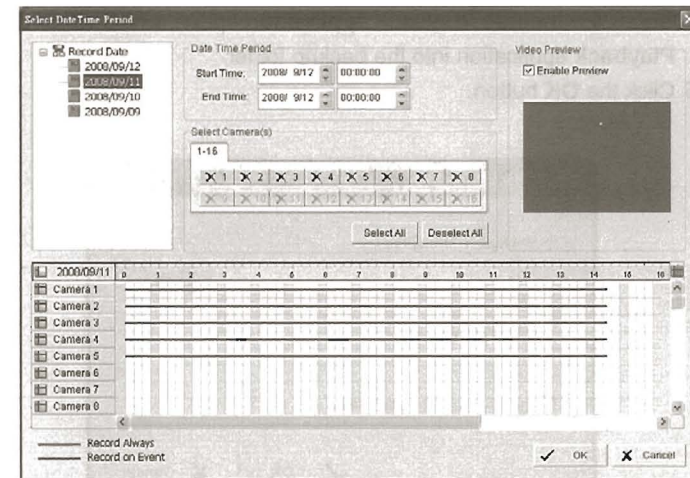
1. Go to Start > NUUO NVRmini > Playback System.
2. Click the **Open Record** button to select data.
3. Click the **Backup** button.
4. Set the Start Time and End Time you want to back up.
5. Select the cameras you want to back up.
6. Select the directory you want to save the backup data.
7. Click the **Backup** button.

- Backup System Application

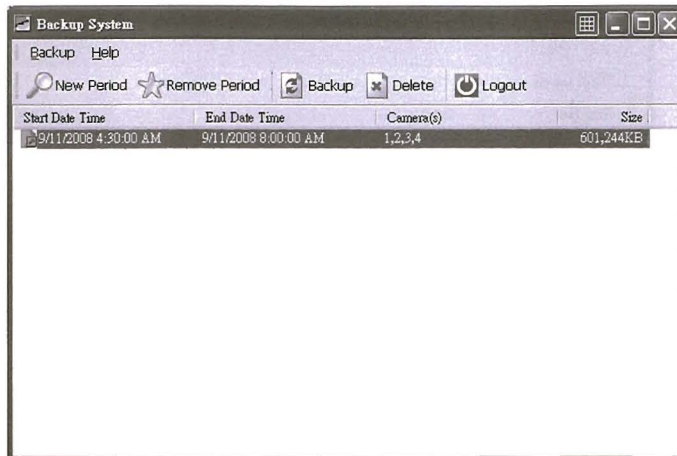
1. Go to Start > NUUO NVRmini > Backup System.
2. Insert the IP address of your unit in the login window.
3. Insert the user name.
4. Insert the password.
5. Click the **OK** button.
6. Click the **New Period** button.



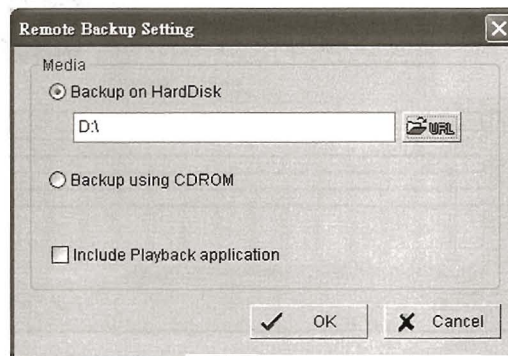
7. Select the record date.



8. Set the Start Time and End Time you want to back up. (or highlight the video records which you want to back up)
9. Select the cameras you want to back up.
10. Click the **OK** button.
11. Select the time slot which you want to back up.



12. Click the **Backup** button.
13. Select the way and directory you want to save the backup data.
14. Check the **Include Playback application** option, which will add **Playback** application into the backup folder.
15. Click the **OK** button.



Appendix B: Firmware Upgrade Function

1. Find your unit through Windows Explorer (insert "\\\" plus the IP address of your unit).
2. Use the administrator's ID and password to login.
3. Put the update file into the folder "public" in your unit.
4. Open Internet Explorer and login the unit.
5. Click **System/ System Upgrade**.
6. Click the **Firmware Upgrade** tab.



7. Choose the volume.
8. Choose the folder "public".
9. Insert the entire file name, including the extension name.
10. Click the **OK** button.
11. The system will begin the upgrade process.
12. After upgrade, the system will reboot. You will need to log into the unit again.