Quick Start Guide (QSG): DS-7716NI-I4/16P • DS-7732NI-I4/24P

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FCC Information

FCC Compliance: This equipment has been tested and found to comply with the limits for 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. This 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.

FCC Conditions: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement

This product and, if applicable, the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2004/108/EC, the RoHS Directive 2011/65/EU.

2012/19/EU (WEEE Directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

Industry Canada ICES-003 Compliance: This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

Safety Instruction: These instructions are intended to ensure that the user can use the product correctly to avoid danger or property loss. The precaution measure is divided into "Warnings" and "Cautions."

- **Warnings:** Serious injury or death may occur if any of the warnings are neglected.
- **Cautions:** Injury or equipment damage may occur if any of the cautions are neglected.

Warnings Follow these safeguards to prevent serious injury or death.	**Cautions** Follow these precautions to prevent potential injury or material damage.

Warnings

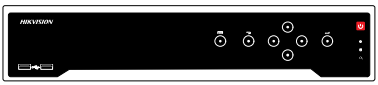
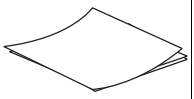
- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Refer to technical specifications for detailed information.
- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket. When the product is mounted on wall or ceiling, the device shall be firmly fixed.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

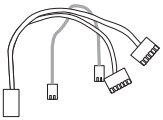
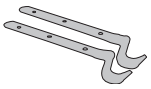
Cautions

- Make sure the power supply voltage is correct before using the device.
- Do not drop the device or subject it to physical shock.
- Do not place the device in extremely hot, cold (the operating temperature shall be -10° to +55° C (+14° to +131° F), dusty, or damp locations, and do not expose it to high electromagnetic radiation.
- To avoid heat accumulation, good ventilation is required for the operating environment.
- Keep the device away from liquid while in use.
- While in delivery, the device shall be packed in its original packing or packing of the same durability.
- Regular part replacement: some equipment parts shall be replaced regularly according to their average endurance time. The average time varies because of differences between operating environments and usage history, so regular checking is recommended for all users. Contact your dealer for more details.
- If the product does not work properly, contact your dealer or the nearest service center. Never attempt to disassemble the camera yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

WHAT'S IN THE BOX

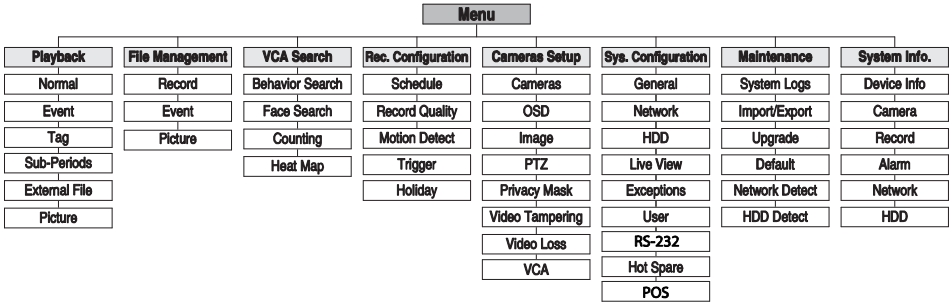
Make sure the following items are in your box

				
NVR	Mouse	Remote	AC Cord	QSG

				
HDD Screws	HDD	HDD Cables	HDD Rails	Ear Mounts
Installed				

MENU TREE

Use this menu tree to navigate the embedded menus.



FRONT PANEL

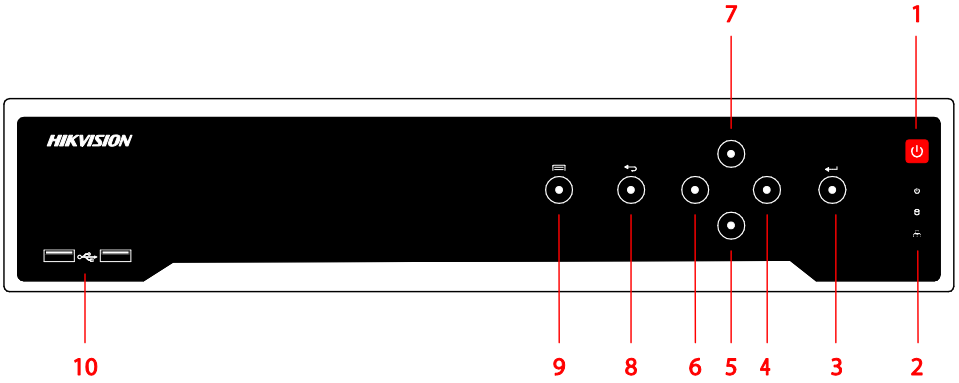


Figure 1, DS-77xxNI-I4/xP Front Panel

No.	Item	Description	
1	On/Off Power	Turns green when device is on	
2	Status Indicators	Ready	Flickers red when data is being read from or written to HDD
		HDD	Blinks red when data is being read from/written to HDD
		Tx/Rx	Blinks blue when network connection is functioning properly
3	Enter	Confirms menu selection. Ticks checkbox fields. In Playback mode, plays or pauses video. In Single Play mode, advances video a single frame.	
4	Direction Buttons	Right	Move right
5		Down	Move down
6		Left	Move left
7		Up	Move up
8	Back	Go back one screen	
9	Menu	Display the menu	
10	USB Ports	Connects USB mouse or USB flash memory devices	

REAR PANEL

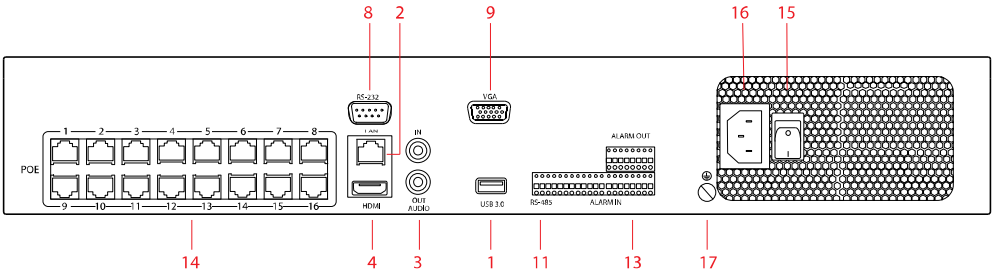


Figure 2, DS-7716NI-I4/16P Rear Panel

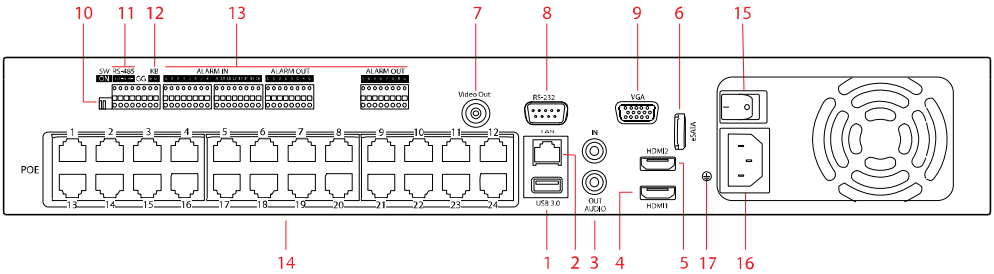


Figure 3, DS-7732NI-I4/24P

No.	DS-7732NI-I4/xP		
1	USB 3.0 Interface	10	SW Terminal Switch
2	LAN Interface	11	RS-485
3	Audio In/Audio Out	12	Keyboard Controller
4	HDMI1 Interface	13	Alarm In/Alarm Out
5	HDMI2 Interface	14	Network Interfaces with PoE Function
6	eSATA Interface	15	Power Switch
7	CVBS Video Output	16	100 to 240 VAC Power
8	RS-232 Serial Interface	17	GND
9	VGA Output		

1 CONNECT DEVICES

1. Connect AC power cord to the NVR.
2. Connect NVR to LAN using Cat 5e cable.
3. Connect video monitor(s) to NVR using HDMI and/or VGA cables, as appropriate.
4. Connect mouse to USB port (wireless mouse can be used in lieu of included mouse).

2 START THE NVR

1. Plug AC power cord into grounded wall outlet (line conditioning UPS is recommended).
2. Turn power switch on. Power indicator LED will turn **GREEN**.

3 LOCAL ACTIVATION

System access requires a secure, user-assigned password.



▼ Set Admin Password

First-time access requires user to create an admin password.

1. Input same password in **Create New Password** and **Confirm New Password** text fields.

Strong Password REQUIRED
Password must contain 8 to 16 characters, combining numbers, lower and upper case letters, and special characters. At least two types of the above-mentioned characters are required. Also, reset password regularly.

2. Click **OK** to activate the device.



▼ Set Unlock Pattern

Admin user will be prompted to configure an unlock pattern for login in place of a password.

1. Hold down left mouse button and draw a pattern by connecting at least four dots on the screen, with each dot connected only once). Release mouse button when done.
2. Draw the same pattern again to confirm it.

NOTE: If you forget pattern, select Switch User to display normal login box.

▼ Log In (Unlock Pattern)

1. Draw the unlock pattern to unlock system.



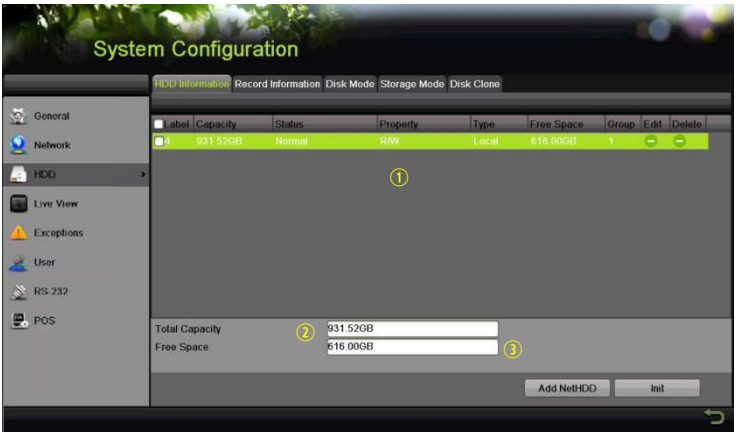
▼ **Log In (Dialog Box)**

1. **User Name** field will be prefilled with "admin."
2. Input **Password** (account locks for 30 minutes after 7 incorrect attempts).
3. Click **OK**.

4 INITIALIZE THE HARD DRIVE (IF NEEDED)

The system is set up to record upon power up and will beep and display "Do you want to initialize drive" prompt if the hard drives are not initialized.

1. Go to MENU > SYSTEM CONFIGURATION > HDD.
2. Use the checkboxes to select the HDDs that need to be initialized.
3. Press **INIT.** (Factory installed HDDs come initialized. Initializing again will erase any record video. This does not affect settings).



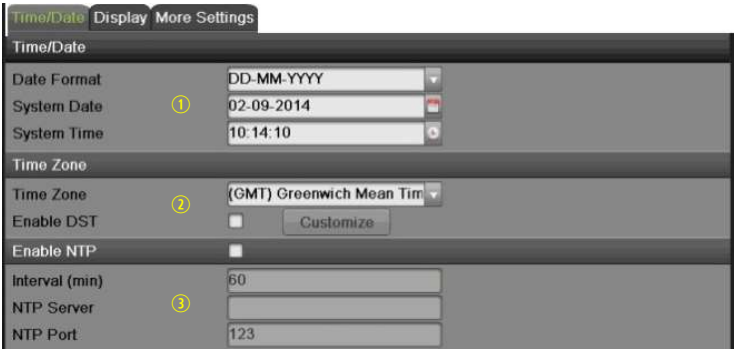
❶ HDD LIST

❷ TOTAL HDD SPACE

❸ FREE SPACE

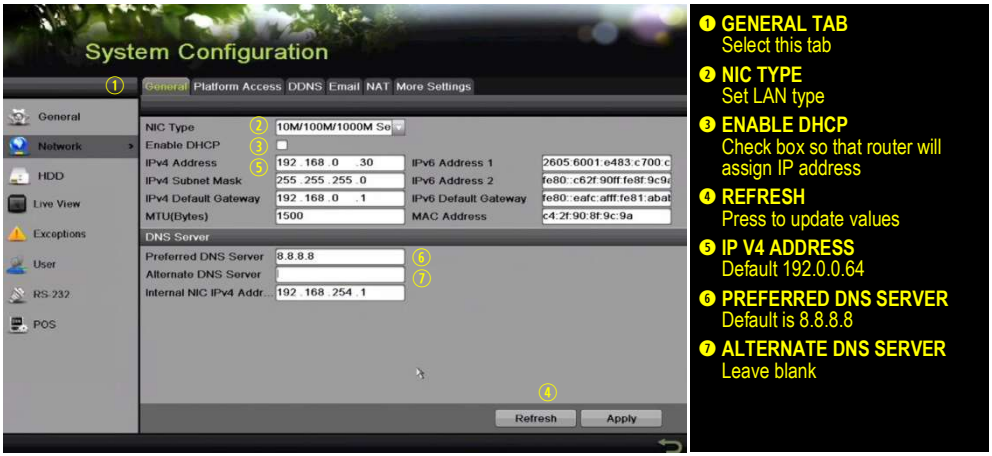
5 SET DATE AND TIME

1. Go to MENU > SYSTEM CONFIGURATION > GENERAL.



6 SET UP NETWORK ACCESS

1. Go to MENU > SYSTEM CONFIGURATION > NETWORK.
2. Enable DHCP (check the checkbox).
3. Press **Refresh** button to update the IPv4 address, subnet mask, and IPv4 default gateway.
4. Disable DHCP (uncheck the checkbox).
5. Change “Preferred DNS Server” value to 8.8.8.8 (leave Alternate DNS Server blank).

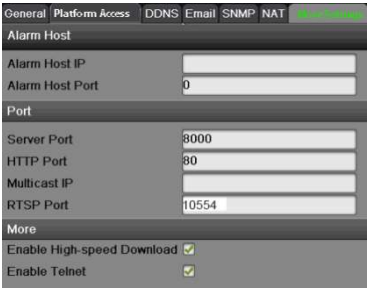


7 SET CAMERA PORTS

After assigning the IP information, click the **More Settings** tab.



The **More Settings** tab contains the ports that need to be forwarded for remote access.



- **SERVER PORT** is responsible for the mobile app and client software log-in.
- **HTTP PORT** is responsible for Web browser log-in.
- **RTSP PORT** is responsible for video/audio streaming.

NOTE: The **HTTP port**, **server port**, and **RTSP** can be changed to avoid conflicts with the ISP or if multiple devices are installed at a single location.

8 SET UP HIK-CONNECT P2P CLOUD SERVICE

1. Use the Hik-Connect mobile app (from iOS App Store or Google Play) to create a Hik-Connect P2P Cloud account to connect Hikvision devices over the Internet.
2. Enable Hik-Connect P2P on the NVR.
   1). Go to Main Menu > System Configuration > Network > Platform Access.
   2). Check the **Enable** checkbox.
   3). Use the drop-down Access Type menu to select “Hik Cloud P2P.”
   4). Server Address must be “dev.hik-connect.com.” If not, check the **Custom** checkbox, and type “dev.hik-connect.com.”
   5). Click the **Apply** button. Status will change to “Online” (if all settings are correct).
   6). Note the Serial Number and Verification Code shown here (for use when registering the NVR in your Hik-Connect account) or use the QR code displayed.

8 SET UP HIK-CONNECT P2P CLOUD SERVICE (continued)



3. To see a device's video stream on the Hik-Connect mobile app or iVMS-4500 mobile app, you must add the device.
   1) Login to Hik-Connect mobile app with your user name, e-mail, or mobile number and password.
   2) On the Home screen, click the "**+**" button (upper right corner).
   3) Enter the device's information.
      - If you have the device's **QR Code**: Use the QR Code Scanner to scan the device's **QR Code**.
      - If you do not have the device's **QR Code**: Enter the device information manually:
        a. Click the Edit (pencil) icon on top right corner.
        b. Enter device serial number (device must be online), then click the **OK** button.
        c. When the device appears on the "Results" screen, click the **Add** button.
        d. Enter the device's 6-character Verification Code (all upper case), then click the **OK** button.
        e. Click the **Finish** button.

9 ADD IP CAMERAS

1. Right click a window in **Live View** mode to display the menu.
2. Click **Menu** to display Menu choices.
3. Click **Cameras Setup** to display the Add Cameras window.
4. Add camera(s) as follows:
   - **Hikvision Camera Connected to Unit's PoE Port (Cameras 1 – 16)** — Will automatically be added to an NVR camera channel (D*x*) and will be visible on the camera list in white.
   - **Hikvision Camera Connected to Network, but Not to Unit's PoE Port (Cameras 1 – 16)** — Add manually:
     1) Click an unused camera channel's **D*x*** checkbox.
     2) Click the **EDIT** (Pencil) button to display the **Edit IP Camera** window.
     3) Use pull-down menu to change **Adding Method** from "Plug and Play" to "Manual."
     4) Enter the camera's IP address and other information as required.
     5) Press the **OK** button to add the camera.

     NOTE: If camera does not connect, use SADP program to modify camera settings.

- **Hikvision Camera Connected to Network but Not Unit's PoE Port (Cameras 17 – 32)** — Will automatically be detected and displayed at bottom of camera list in yellow. Add to NVR camera channel manually:
  - **To Add All Cameras** – Click the **One Touch Adding** button.
  - **To Add Select Cameras** – Click the + sign next to each camera you wish to add, then enter the camera's IP address and password.
- **Undetected Hikvision or Third-Party Camera Connected to Network, but Not Unit's PoE Port** – Add Camera Manually:
  1) Click the **Custom Adding** button to display the **Add IP Camera (Custom)** window.
  2) Enter the camera's IP address and other information as required.
  3) Press the **Add** button to add the camera.

IP Camera Management Icons

Icon	Explanation	Icon	Explanation
	Edit basic camera parameters		Upgrade the connected camera
	Camera disconnected; click icon to get camera's exception information		Delete the IP camera
	Play connected camera's live video		Camera connected



❶ NVR CAMERA CHANNELS
Cameras connected to NVR

❷ PLAY
Play camera's live video

❸ EDIT (Pencil)
Change IP address (in **LAN** range)

❹ CAMERA LIST (White)
Added cameras

❺ LAN CAMERAS LIST (Yellow)
Detected cameras will appear here

❻ CAMERA CONNECTED
Shows camera is connected

❼ CAMERA DISCONNECTED
Shows disconnected camera

❽ PASSWORD VISIBLE
Show passwords

❾ ENABLE H.265
Use H.265

10 VIEW LIVE VIDEO

Live View displays real-time video.



Icons in the upper right of screen show each camera's record and alarm status.

- **Alarm** (video loss, tampering, motion detection, sensor alarm, or VCA alarm)
- **Record** (manual record, continuous record, motion detection, alarm, or VCA triggered record)
- **Event/Exception** (event and exception information appears at lower-left corner of screen)

11 SET UP RECORDING

The system defaults to continuously record video at 8 fps, or at 15 fps when motion is detected.

▼ **Recording Schedule**

Default is to continuously record everyday. Do the following to change the recording schedule:

1. Go to MENU > RECORDING CONFIGURATION > SCHEDULE.
2. Choose **CONTINUOUS** or **EVENT/(MOTION DETECTION)** under the **Type** pull-down menu.
3. Use cursor to select (days will turn blue [continuous] or yellow [event/motion detect]) or deselect (days will turn gray [off]) the calendar days you wish to record.
4. Apply time settings as desired.
5. Press **APPLY**.



❶ **TYPE**
Motion or Continuous (default)

❷ **COLOR**
Shows Recording Schedule days:
- Blue=Continuous
- Yellow=Event (motion/alarm)
- Grey=None

❸ **TIMES**
Customize schedule times (ignore for "motion only" recording)

❹ **ADD**
Press to add time settings to schedule

❺ **ENABLE SCHEDULE**
If not checked, camera will not record

▼ Motion Detection Areas

To define the image areas that Motion Detection will monitor for each camera, do the following:

1. Go to MENU > RECORDING CONFIGURATION > MOTION DETECT.
2. Use **Camera** pull-down menu to select camera to configure.
3. Check the **Enable Motion Detection** checkbox to enable motion detection.
4. Use the **Sensitivity** boxes to select how responsive the detection should be (the more green boxes lit, the greater the sensitivity).
5. Drag a grid(s) over the area(s) on the image that will be sensitive to motion.
6. Click the **Settings Set** button to configure **Arming Schedule** (when detection is enabled) and **Linkage Actions** (what action(s) to take when motion is detected).



❶ **CAMERA**
Select camera

❷ **ENABLE MOTION DETECTION**
Click to enable/disable

❸ **MOTION GRID**
Draw grid area to detect motion

❹ **SENSITIVITY**
No. of squares sets sensitivity

❺ **SETTINGS/SET**
Set arming schedule, link actions

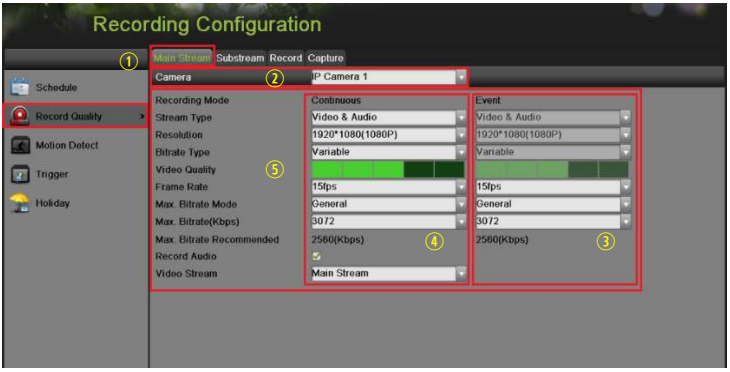
❻ **APPLY**
Click to apply settings

▼ Record Quality

- **Main Stream**

1. Go to RECORDING CONFIGURATION > RECORD QUALITY > MAIN STREAM and set the following items:
   - **Stream Type** enables/disables audio streaming from the cameras (if the camera does not have audio capabilities, **Stream Type** will have only **Video** option).
   - **Resolution** sets recording resolution.
   - **Bitrate Type** saves HDD space when set to **Variable.** Choices: **Variable** and **Constant**.
   - **Video Quality** adjusts picture clarity (high setting = four green squares is default). Consider highest if hard drive space allows. Medium setting is a balance between good picture and saving HDD space.
   - **Frame Rate** sets recording frame rate (8 fps on continuous and 15 on motion by default). Higher frame rates require more storage, but allows better slow motion playback.
   - **Max Bitrate Mode** chooses between pre-set bitrate values and customized values (**General** setting is default).

IP Cameras



❶ **MAIN STREAM**
Select tab

❷ **CAMERA**
Select IP camera

❸ **EVENT**
For event recording only (motion or alarm)

❹ **CONTINUOUS**
For live view image and continuous recording

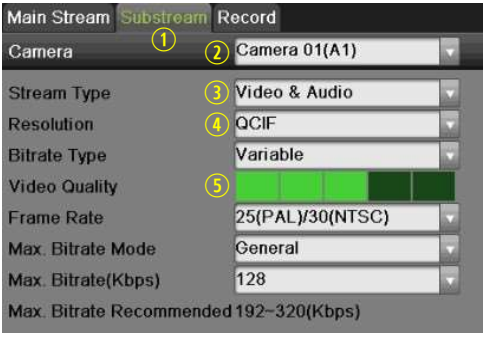
❺ **VIDEO QUALITY**
Select number of green squares to set quality (in example, sensitivity is set to 3)

- **Max Bitrate (kbps)** is the chosen bitrate for streaming the video. Max Bitrate should be adjusted to meet or exceed the rate recommended by the system for the chosen parameters.
- **Max Bitrate Recommended** is impacted by resolution, quality, and framerate.
- **Record Audio** turns on audio recording. Requires connection of external microphone or camera with built in mic.
- **Video Stream** determines which stream is recorded. Leave at default (Main Stream).

• **Substream**

1. Go to RECORDING CONFIGURATION > RECORD QUALITY > SUBSTREAM to set up the **Sub Stream** to stream to mobile devices and display multiple cameras locally.

NOTE: If the upload speed is not sufficient, lower the frame rate, bitrate, and or resolution for more fluent mobile viewing.



❶ **SUBSTREAM TAB**
Select

❷ **CAMERA**
Select camera

❸ **STREAM TYPE**
Select choice

❹ **RESOLUTION**
Can go up only to 4CIF

❺ **VIDEO QUALITY**
Select number of green squares to set quality (in example, sensitivity is set to 3)

12 PLAY BACK RECORDED VIDEO

1. Go to MENU > PLAYBACK.
2. Select the desired camera(s) from the menu on the right of the screen.
3. Select the desired date (days that contain recordings will be blue if recording was continuous only or yellow if all or part of the day was event recording).
4. Press **PLAY**.
5. Click within the timeline to jump to desired time.



❶ PLAYBACK TYPE MENU
Select type of record to play

❷ FULL SCREEN
Goes to full screen for multiple channel playback

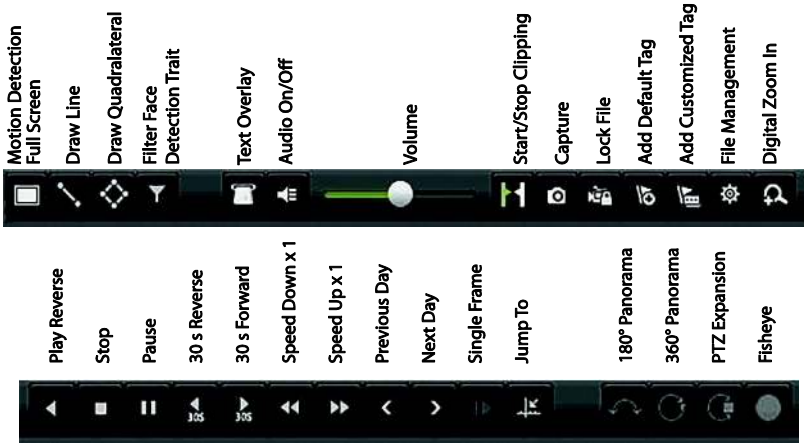
❸ PLAY/STOP
Begin playback (toggles between Play and Stop)

❹ CAMERA LIST
Select camera(s) to play back

❺ CALENDAR
Select date to play back

❻ TIMELINE
Click on timeline to jump to desired playback time

Playback Controls



▼ Play Back Record Files

1. Go to MENU > LIVE VIEW.
2. Left click a Live View window to bring up a shortcut toolbar and click on the icon for instant playback.

▼ Playback Controls

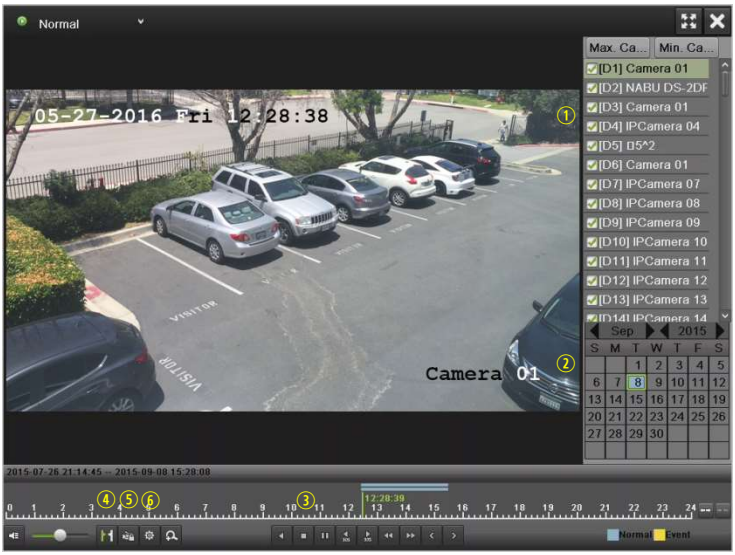
1. Right click a Live Image to display a Quick menu and click on icon for instant playback.

13 BACK UP VIDEO RECORDINGS AND CLIPS

Back up recorded video clips to ensure important video is not lost or destroyed.

▼ Choose Recorded Video Clips To Back Up

1. Connect a USB flash drive, HDD, or DVD writer to an available USB port (this step is mandatory).
2. Go to MENU > PLAYBACK.
3. Select cameras for playback.
4. Select the date and beginning time of the incident.
5. Click **START CLIPPING** button.
6. Select the ending time of the incident.
7. Click **END CLIPPING** button (same button as **START CLIPPING**). Clip will be marked.
8. Repeat steps 1-6 as many times as required.
9. Click **FILE MANAGEMENT** button to display a new window containing all marked clips.
10. Select the desired clips.
11. Click **EXPORT** to save files to the inserted USB device.



❶ **CAMERA LIST**
Select cameras to view

❷ **CALENDAR**
Select dates to view

❸ **PLAY/STOP**
Toggles between Play and Stop

❹ **START/STOP CLIPPING**
Toggles between Start Clipping and Stop Clipping

❺ **LOCK**
Locks selected video clips to prevent them from being deleted

❻ **FILE MANAGEMENT**
Displays list of saved clips, export clips from this window

▼ Lock Video Clips

1. Click on the images of the clips you want to lock.
2. Press the **LOCK** button to prevent the file from being erased.

▼ Back Up Video Clips

3. Connect a USB flash drive, HDD, or DVD writer to an available USB port.
4. Click on the File Management button to display the File Management window.
5. In the File Management window, choose video clip(s) to back up and click **Export** button.

6. Choose backup device (USB flash drive, USB HDD, or DVD writer).
7. Click **Export** (to check backup, choose recorded file in **Export** interface and click button).



❶ **VIDEO CLIPS LIST**
Select desired clips to export

❷ **EXPORT BUTTON**
Save clips to USB device



First Choice for Security Professionals

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