



DS-7600 Series DVR Quick Operation Guide Version 1.2.0

# **Verify Contents**

Verify that the package contents are correct by checking the items against the packing list. *Note:* Please contact your dealer for damaged or missing items.

# **DVR Pre-Installation**

The DS-7600 Series DVR is highly advanced surveillance equipment that should be installed with care. Please take into consideration the following precautionary steps before installation of the DVR.

- 1. Keep all liquids away from the DVR.
- 2. Install the DVR in a well-ventilated and dust-free area.
- 3. Ensure environmental conditions meet factory specifications.
- 4. Install a manufacturer recommended HDD.

# **DVR** Installation

During the installation of the DVR:

- 1. Use brackets for rack mounting.
- 2. Ensure there is ample room for audio and video cables.
- 3. When installing cables, ensure that the bend radius of the cables are no less than five times than it's' diameter.
- 4. Connect both the alarm and RS-485 cable.
- 5. Allow at least 2cm (~0.75inch) of space between racks mounted devices.
- 6. Ensure the DVR is grounded.
- 7. Environmental temperature should be within the range of  $-10^{\circ}$ C ~ 55°C, 14°F ~ 131°F.
- 8. Environmental humidity should be within the range of  $10\% \sim 90\%$ .

# Hard Disk Installation

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

Tools Required: Phillips screwdriver.

To install a HDD on your DVR:

1. Remove the lid of the DVR by unfastening the screws on the back and side.



2. Install the HDD in the HDD rack using the provided screws. Fasten the screws on the button to fix the HDD.



3. Connect the HDD to the motherboard of the DVR with the included data cable.



**4.** Connect the power cable to the HDD.



 $\ensuremath{\textbf{5.}}$  Re-install the cover of the DVR and fasten screws.



# **Front Panel**

### DS-7604HI-S/ DS-7604NI-S/DS-7604NI-S/M Front Panel:



- 1. Status Indicators:
  - **POWER**: the POWER indicator turns green when DVR is powered up.
  - **STATUS**: the indicator: 1. Lights in green when the compound key (SHIFT) is used; 2. Flickers in red when the HDD is reading/writing.
  - Tx/Rx: TX/RX indictor flickers green when network connection is functioning normally.
- 2. IR Receiver: operation by IR remote control.
- 3. Compound Buttons:
  - 1 MENU: (1) Enter numeral "1"; (2) Access the main menu interface
  - **2ABC/F1**: (1) Enter numeral "2"; (2) Enter letters "ABC"; (3) The F1 button when used in a list field will select all items on the list. In PTZ Control mode, it will turn on/off PTZ light.
  - **3DEF/F2**: (1) Enter numeral "3"; (2) Enter letters "DEF"; (3) The F2 button is used to cycle through tab pages. It will also bring up the Channel & OSD Position settings.
  - 4GHI/ESC: (1) Enter numeral "4"; (2) Enter letters "GHI"
    - (3) Exit and back to the previous menu
  - 5JKL/EDIT: (1) Enter numeral "5"; (2) Enter letters "JKL"; (3) Delete characters before cursor;
    (4)Select the checkbox and ON/OFF switch; (5) Start/stop record clipping in playback
  - 6MNO/PLAY: (1) Enter numeral "6"; (2) Enter letters "MNO";
    - (3) Playback, for direct access to playback interface
  - **7PQRS/REC**: (1) Enter numeral "7"; (2) Enter letters "PQRS"; (3) Manual record, for direct access to manual record interface; manually enable/disable record
  - 8TUV/PTZ: (1) Enter numeral "8"; (2) Enter letters "TUV"; (3) Access PTZ control interface
  - 9WXYZ/PREV: (1) Enter numeral "9"; (2) Enter letters "WXYZ"; (3) Multi-camera display in live view
  - **0/A**: (1) Enter numeral "0"; (2) switch between input methods (upper and lowercase alphabet, symbols and numeric input)
- 4. SHIFT: Switch of compound keys between the numeric/letter input and functional control.
- 5. Control Buttons:
  - **Directional buttons:** In menu mode, the *direction* buttons are used to navigate between different fields and items and select setting parameters. In playback mode, the *Up* and *Down* buttons are used to speed up and slow down record play, and the *Left* and *Right* buttons are used to select the recording 30s forwards or backwards. In live view mode, these buttons can be used to cycle through channels.
  - Enter: The *Enter* button is used to confirm selection in menu mode; or used to select checkbox fields and ON/OFF switch. In playback mode, it can be used to play or pause the video. In single-frame play mode, pressing the *Enter* button will advance the video by a single frame. And in auto sequence live view mode, the buttons can be used to pause / resume auto sequence.
- 6. USB Interface: Connects USB mouse or USE flash memory devices

### **DS-7608 NI-S Front Panel:**



- 1. USB Interface: Connect USB mouse or USE flash memory devices.
- 2. Status Indicators:
  - POWER: the POWER indicator turns green when NVR is powered up.
  - **READY**: the indicator lights in green when the device is running normally.
  - STATUS: the indicator: 1. Lights in green when the IR remote control is enabled; 2. Lights in red when the compound key (SHIFT) is used.
  - ALARM: the indicator lights in red when there is sensor alarm occurring.
  - HDD: the indicator flickers in red when HDD is reading/writing.
  - Tx/Rx: TX/RX indicator flickers green when network connection is functioning normally.
- 3. SHIFT: Switch of compound keys between the numeric/letter input and functional control.

#### 4. Compound Buttons:

- **1 MENU:** (1) Enter numeral "1"; (2) Access the main menu interface.
- **2ABC/F1**: (1) Enter numeral "2"; (2) Enter letters "ABC"; (3) The F1 button when used in a list field will select all items on the list. In PTZ Control mode, it will turn on/off PTZ light.

• **3DEF/F2**: (1) Enter numeral "3"; (2) Enter letters "DEF"; (3) The F2 button is used to cycle through tab pages. It will also bring up the Channel & OSD Position settings.

- 4GHI/ESC: (1) Enter numeral "4"; (2) Enter letters "GHI"; (3) Exit and back to the previous menu.
- **5JKL/EDIT**: (1) Enter numeral "5"; (2) Enter letters "JKL"; (3) Delete characters before cursor; (4)Select the checkbox and ON/OFF switch; (5) Start/stop record clipping in playback.

• **6MNO/PLAY**: (1) Enter numeral "6"; (2) Enter letters "MNO"; (3) Playback, for direct access to playback interface.

• **7PQRS/REC**: (1) Enter numeral "7"; (2) Enter letters "PQRS"; (3) Manual record, for direct access to manual record interface; manually enable/disable record.

- 8TUV/PTZ: (1) Enter numeral "8"; (2) Enter letters "TUV"; (3) Access PTZ control interface.
- 9WXYZ/PREV: (1) Enter numeral "9"; (2) Enter letters "WXYZ"; (3) Multi-camera display in live view.
- **0/A**: (1) Enter numeral "0"; (2) switch between input methods (upper and lowercase alphabet, symbols and numeric input).
- 5. Control Buttons:
  - Directional buttons: In menu mode, the direction buttons are used to navigate between different fields and items and select setting parameters. In playback mode, the Up and Down buttons are used to speed up and slow down record play, and the Left and Right buttons are used to select the recording 30s forwards or backwards. In live view mode, these buttons can be used to cycle through channels.
  - Enter: The *Enter* button is used to confirm selection in menu mode; or used to select checkbox fields and ON/OFF switch. In playback mode, it can be used to play or pause the video. In single-frame play mode, pressing the *Enter* button will advance the video by a single frame. And in auto sequence view mode, the buttons can be used to pause / resume auto sequence.

**Note:** It is important to note that you must click the EDIT button on either the remote or front panel on a text field before you are able to edit its content. After you're done entering text, you must hit the ENTER button to be able to move on to the next field.

# **Rear Panel**

# DS-7604HI-S:



No.	Item	Description
1	USB Interface	Connector for USB devices.
2	VIDEO IN	BNC connectors for analog video input.
3	VIDEO OUT	BNC connector for video output. If VGA output has been connected, then the
		VIDEO OUT port provides no output.
		VIDEO OUT1 is main video out, and VIDEO OUT2 is spot video out.
4	AUDIO IN	RCA connectors for analog audio input.
5	AUDIO OUT	RCA connector for audio output.
6	LAN	Connector for LAN (Local Area Network).
7	VGA	DB15 connector for VGA output. Display local video output and menu.
	RS-485 Interface	Connector for RS-485 devices. T+, T- pin connects to PTZ.
8	ALARM IN	Connector for alarm input (up to 4 channels).
	ALARM OUT	Connector for alarm output (1 channel).
9	POWER	Switch for turn on/off the device.
10	12V	12VDC power supply
11	GND	Ground(needs to be connected when DVR startup)

## **DS-7604NI-S:**



No.	Item	Description
1	USB Interface	Connector for USB devices.
2	VIDEO OUT	BNC connector for video output. BNC connector for video output. If VGA
		output has been connected, then the VIDEO OUT port provides no output.
3	AUDIO IN	RCA connectors for analog audio input.
4	AUDIO OUT	RCA connector for audio output.
5	LAN	Connector for LAN (Local Area Network).
6	VGA	DB15 connector for VGA output. Display local video output and menu.
	<b>RS-485</b> Interface	Connector for RS-485 devices. T+, T- pin connects to PTZ.
7	ALARM IN	Connector for alarm input (up to 4 channels).
	ALARM OUT	Connector for alarm output (1 channel).
8	POWER	Switch for turn on/off the device.
9	12V	12VDC power supply
10	GND	Ground (needs to be connected when DVR startup)

## DS-7604NI-S/M:

	2	6 7
USB		VGA VGA VGA VGA VGA VGA VGA VGA VGA VGA
1	3 4	4 5 8 9
No.	Item	Description
1	USB Interface	Connector for USB devices.
2	VIDEO OUT	BNC connector for video output.
3	AUDIO IN	RCA connectors for analog audio input.
4	AUDIO OUT	RCA connector for audio output.
5	LAN	Connector for LAN (Local Area Network).
	RS-485 Interface	Connector for RS-485 devices. T+, T- pin connects to PTZ.
6	ALARM IN	Connector for alarm input (up to 4 channels).
	ALARM OUT	Connector for alarm output (1 channel).
7	POWER	Switch for turn on/off the device.
8	12V	12VDC power supply
9	GND	Ground(needs to be connected when DVR startup)

# DS-7608 NI-S:



No.	Item	Description
1	USB Interface	Connector for USB devices.
2	VIDEO OUT	BNC connector for video output.
3	AUDIO IN	RCA connectors for analog audio input.
4	AUDIO OUT	RCA connector for audio output.
5	LAN	Connector for LAN (Local Area Network).
6	VGA	DB15 connector for VGA output. Display local video output and menu
	RS-485 Interface	Connector for RS-485 devices. T+, T- pin connects to PTZ.
7	ALARM IN	Connector for alarm input (up to 4 channels).
	ALARM OUT	Connector for alarm output (1 channel).
8	12V	12VDC power supply
9	GND	Ground(needs to be connected when DVR startup)
10	POWER	Switch for turn on/off the device.

# **Peripheral Connections**

## **Connecting to Alarm Input / Output Device**

The alarm input/output interface of the DVR is shown below:



The alarm input is an open/close relay. If the input is not an open/closed relay, follow the connection diagram below:



To connect to an AC/DC load, use the following diagram:



For DC load, JP4 can be used within the limit of 12V/1A safely. If the interface is connected to an AC load, JP4 should be left open. Use an external relay for safety (as shown in the figure above).

There are 4 jumpers (JP4, JP5, JP6, and JP7) on the motherboard, each corresponding with one alarm output. By

default, jumpers are connected. To connect an AC load, jumpers should be removed.

*Note:* An external relay is needed to prevent electric shock when connecting to an AC load.

### **Alarm Connection**

To connect alarm devices to the DVR:

- 1. Disconnect *pluggable block* from the ALAM IN /ALARM OUT terminal block.
- 2. Unfasten stop screws from the *pluggable block*, insert signal cables into slots and fasten stop screws. Ensure signal cables are in tight.
- 3. Connect *pluggable block* back into terminal block.

### **RS-485** Connection



To connect RS-485 devices to the DVR:

- 1. Disconnect *pluggable block* from the RS-485 terminal block.
- 2. Unfasten stop screws from the *pluggable block*, insert signal cables into slots and fasten stop screws. Ensure signal cables are in tight.
- 3. Connect *pluggable block* back into terminal block.

*Note:* The RS-485 connections of DS-7604HI-S and DS-7604/7608NI-S are the same as DS-7604NI-S/M.

# Specifications

Model		DS-7604HI-S
	Video compression	H.264
	Analog video input	4-ch, BNC (1.0Vp-p, 75Ω), PAL/NTSC adaptive
		2-ch 4CIF real time or 1-ch 720P / UXGA / 1080P real time
		(default);
		3-ch 4CIF real time or 1-ch 720P / UXGA / 1080P real time (when
Video/Audio	IP Video input	2 analog channels are disabled);
input		4-ch 4CIF real time or 2-ch 720P / UXGA / 1080P real time or
		1-ch 2560×1920 not real time (when 4 analog channels are
		disabled).
	Composite video input	6-ch (4-ch analog video+ 2-ch IP video)
	Audio compression	OggVorbis
	Audio input	1-ch, RCA(2Vp-p, 1kΩ)
	Live view resolution	PAL:704×576, NTSC:704×480
	VGA output	1-ch, resolution: 1024×768/60Hz
	Playback resolution	2560×1920/UXGA/1080P/720P/4CIF/VGA/DCIF/2CIF/CIF/QCIF
<b>T</b> <sup>*</sup> <b>J</b> = = / <b>A</b> == <b>J</b> <sup>*</sup> =	Video output	1-ch, BNC (PAL: 704×576, NTSC: 704×480)
Video/Audio	Frame rate	1/16~25 fps (P) / 30fps ( N)
output	Video bit rate	32Kbps~2048Kbps, or user-defined (Max. 16384 Kbps)
	Audio output	1-ch, RCA(2Vp-p, 1kΩ)
	Audio bit rate	16kbps
	Synchronous playback	4-ch
Hand disk	Туре	1 SATA interface
	Capacity	Each interface supports more than 2TB capacity
	Network interface	1, RJ45 10M/100M adaptive Ethernet interface
E ( and )	Serial interface	1 RS-485 interface
External	USB interface	2, USB2.0
interface	Alarm in	4
	Alarm out	1
	Power supply	12VDC
	Consumption	$\leq$ 12W (without hard disk or DVD-R/W)
	Working temperature	-10℃~+55℃
Others	Working humidity	10%~90%
	Chassis	19-inch rack mounted 1U chassis
	<b>Dimensions</b> ( $\mathbf{W} \times \mathbf{D} \times \mathbf{H}$ )	$315 \times 230 \times 45 \text{ mm}$
	Weight	$\leq$ 2.5 Kg (without HDD or DVD-R/W)

Model		DS-7604NI-S	DS-7604NI-S/M
	Video compression	H.264	
		4-ch 4CIF real time or 2-ch 720	P / UXGA / 1080P real time or 1-ch
Video/Audio input	IP Video input	2560×1920 not real time	
*	Audio compression	OggVorbis	
	Audio input	1-ch, RCA(2Vp-p, 1kΩ), for voic	e talk input
	Live view resolution	PAL:704×576, NTSC:704×480	
	VGA output	1-ch, resolution: 1024×768/60Hz	_
	Playback resolution	2560×1920/UXGA/1080P/720P/4	CIF/VGA/DCIF/2CIF/CIF/QCIF
	Video output	1-ch, BNC (PAL: 704×576, NTS)	C: 704×480)
Video/Audio output	Frame rate	1/16~25 fps (P) / 30fps ( N)	
output	Video bit rate	32Kbps~2048Kbps, or user-defin	ed (Max. 16384 Kbps)
	Audio output	1-ch, RCA(2Vp-p, 1kΩ), for voic	e talk output
	Audio bit rate	16kbps	
	Synchronous playback	4-ch	
	Туре	1 SATA interface	
Hard disk	Capacity	Each interface supports more than	a 2TB capacity
	Network interface	1, RJ45 10M/100M adaptive Ethe	ernet interface
	Serial interface	1 RS-485 interface	
External interface	USB interface	2, USB2.0	
	Alarm in	4	
	Alarm out	1	
	Power supply	12VDC	
	Consumption	$\leq 12W$ (without hard disk or DVD	P-R/W)
	Working temperature	-10℃~+55℃	
Others	Working humidity	10%~90%	
	Chassis	19-inch rack mounted 1U chassis	
	Dimensions (W × D × H)	315 × 230 ×45 mm	
	Weight	$\leq$ 2.5Kg (without HDD or DVD-J	R/W)

Model		DS-7608NI-S
	Video compression	H.264
		8-ch 4CIF real time or 4-ch 720P / UXGA / 1080P real time or 2-ch
Video/Audio input	IP Video input	2560×1920 not real time
*	Audio compression	OggVorbis
	Audio input	1-ch, RCA(2Vp-p, $1k\Omega$ ), for voice talk input
	Live view resolution	PAL:704×576, NTSC:704×480
	VGA output	1-ch, resolution: 1024×768/60Hz
	Playback resolution	2560×1920/UXGA/1080P/720P/4CIF/VGA/DCIF/2CIF/CIF/QCIF
	Video output	1-ch, BNC (PAL: 704×576, NTSC: 704×480)
Video/Audio output	Frame rate	1/16~25 fps (P) / 30fps ( N)
output	Video bit rate	32Kbps~2048Kbps, or user-defined (Max. 16384 Kbps)
	Audio output	1-ch, RCA(2Vp-p, $1k\Omega$ ), for voice talk output
	Audio bit rate	16kbps
	Synchronous playback	4-ch
TT 1 -1'1-	Туре	2 SATA interface
Hard disk	Capacity	Each interface supports more than 2TB capacity
	Network interface	1, RJ45 10M/100M adaptive Ethernet interface
	Serial interface	1 RS-485 interface
External interface	USB interface	2, USB2.0
	Alarm in	4
	Alarm out	1
	Power supply	12VDC
	Consumption	$\leq 12W$ (without hard disk or DVD-R/W)
	Working temperature	-10°C~+55°C
Others	Working humidity	10%~90%
	Dimensions (W × D × H)	$445 \times 290 \times 44 \text{ mm}$
	Wainka	≤ 8 Kg
	weight	(without HDD or DVD-R/W)

# **HDD Storage Calculation Chart**

The following chart shows an estimation of storage space used based on recording at one channel for an hour at a

fixed bit rate.

Bit Rate	Storage Used
96K	42M
128K	56M
160K	70M
192K	83M
224K	98M
256K	112M
320K	140M
384K	168M
448K	196M
512K	225M
640K	281M
768K	337M
896K	393M
1024K	450M
1280K	562M
1536K	675M
1792K	787M
2048K	900M

*Note:* Please note that supplied values for storage space used is just for reference. Storage space used is estimated by formulas and may have some deviation from actual value.

# **Menu Operation**

## **Menu Structure**

The menu structure of the DS-7600 Series DVR is as following:



## **Startup and Shutdown**

Proper startup and shutdown procedures are crucial to expanding the life of your DVR.

To start your DVR:

- Ensure the power supply is plugged into an electrical outlet. It is HIGHLY recommended that an Uninterruptible Power Supply (UPS) is used in conjunction with the unit.
- 2. Press the POWER switch on the rear panel. After the power has been started up, the POWER indicator will light green.

To shutdown the DVR:

1. Enter the Shutdown menu by clicking on Menu >Shut Down.



- 2. Select the Shut Down button.
- 3. Click the Yes button.

#### Using the Setup Wizard

By default, the Setup Wizard will start once the DVR has loaded. The Setup Wizard will walk you through some of the more important settings of your DVR. If you do not wish to use the Setup Wizard at this time, click the Cancel button. You may also choose to use the Setup Wizard at a later time by leaving the "Start Wizard when DVR starts?" checkbox checked.

To start using the Setup Wizard:

- 1. Click the Next button on the Wizard window. This will take you to the User Permission window
- 2. Navigate to the Admin Password input field.
- 3. Enter the admin password into the Admin Password input field. By default, the password is 12345.
- To change the admin password, check the New Admin Password checkbox. Enter the new password and confirm the password in the given fields.

Wizard	Wizard
Start wizard when DVR starts?	Admin Password ***** Mew Admin Password
	New Password *****
	Confirm *****
Next Cancel	Previous Next

5. Click the Next button. This will take you to the General Settings window

Wizard	General	eneral Settings
Enter "General Settings"?	Language	English 👻
8333	CVBS Output Standard	NTSC 👻
	VGA Resolution	1024*768/60HZ 🚽
Enter	Time Zone	(GMT+08:00) Beljing, Ur <del>-</del>
	Menu Date Format	MM-DD-YYYY 🔍
	System Time	06-08-2011 18 ≑: 46 ≑: 18 ≑
	Mouse Pointer Speed	•
	Enable Password	
Previous Next Cancel		ANNY OK Ca

- 6. To Start General Settings, click the **Enter**. This will take you to general settings like Language, DST, VGA resolution, time zone and so forth.
- 7. After general setting, click ok back to setup wizard.
- 8. Click the *Next* button. This will take you to the **HDD Management** window.
- 9. To start HDD management, click the Enter button.



10.If a new HDD was recently installed, select the HDD from the list to initialize it. Initializing the HDD will format

and remove all data from it

11.After the HDD has been initialized, click the OK button which will take you back to the Setup Wizard window.

12.Click the Next button. This will take you to the Record Settings Window.

13.To enter the **Record Settings** window, click the *Enter* button.

Wizard							F	Rei	cord	Settin	gs		
Enter "Record Settings"?	Da	Ena iys	ble	Sci	hed	ule			aii v	Veek		Ŧ	
		Ali C	Day							Туре	Time		
Enter	10	+	0	-		0	-	0	-	Туре	Time		
	20		0			0		0		Туре	Time		
	30	-	0			0		0		Туре	Time		
	40	+	0			0	-	0	-	Туре	Time		
	50	÷	0	1		0		0		Туре	Time		
	60		0			0		0		Type	Time		
	70		0			0	1	0		Туре	Time		
	8 0	4	0	-		0	1	0	-	Туре	Time		-
Previous Next Cance										E	AUDIY	ок	Cancel

14.Select the **Schedule** tab.

- 15.Click the Edit button. This will open up a new recording schedule.
- 16. Check both the Enable Schedule and All Day checkbox. This will enable the recording schedule and have it record continuously all day.
- 17.Click the *OK* button. This will take you back to the **Schedule** tab. To copy the schedule to a different channel, select the channel or all under *Copy To* and click the *Copy* button.

	_	Record S	Settings			
General 🧧	Advanc	ed 🔤Schedu	le			
Camera		Analo	g 1		×	
	00	06	12	1	8	24
Mon						
Tue						
Wed						
Thu Eri						
Sat					-	
Sun						
Timing		Motion None		A	larm	
Сору То		Al			Ŧ	ppy
				F	Edit	OK

18.Click the Next button. This will take you to the Network Settings window.

19.To configure network settings, click the Enter button.

20.Enter the IP Address, Subnet Mask and Default Gateway.

21.Click the OK button to return to the Setup Wizard.

22. Click the Next button. This will take you to the Camera Management window.

Ne	etwork Settings		
Ceneral Advanced 🔤	Network Status		
NIC Type	10M/100M Auto	-	
DHCP			
IP Address	172.8.116.11		
Subnet Mask	255 . 255 . 255 . 0		
Default Gateway	172.8.116.1		
Preferred DNS Server			
Alternate DNS Server			
MAC Address	00:40:30:11:11:8d		
	Apply	OK Cance	el

23.Select Add to add IP camera, and click OK to return to Setup Wizard.

24.If all the settings are entered as desired, click the Done button to finish and exit the Setup Wizard.

Congratulations! You've completed the Setup Wizard. The next step in the initial setup process is to setup the system

date and time.

### Setting Date & Time

It is extremely important to setup the system date and time to accurately timestamp recordings and events.

To setup date and time:

1. Enter General Settings menu by clicking Menu> Settings > General.



- 2. Enter the correct date and time under System Time.
- 3. Click the Apply button to save the setting.

#### Playback

### Playback by Video Search

To play back files from a general search:

1. Enter into the Video Search menu by clicking Menu > Video Search.

Select **General** tab, and Set the search parameters by selecting cameras to search, video/file type and the start/end time.

		Video Search	08-00	6-2011 Wed 10:50:22	
IP Camera	All 1				
Status	2 M				
Video ⊤ype		All 👻			11/2
File Type		All 👻	il in the second s		
Start Time		06-08-2011 Detaits 0 ≎:0 ≎:0 ≎		San A	
End Time		06-08-2011		-///	
		23 😄 : 59 😂 : 59 🚭		111	
					40
		Play Search Can	cel 🔤 🔽		Normal Event

- 2. Click the *Play* button to start playback of all the files found with the specified search criteria or click the *Search* button to bring up the list of search results. After search results are presented, select the file you would like to playback and press Play to enter synchronous playback cameras selection.
- 3. Recordings will automatically be played back in the Playback interface.

#### **Playback by Event Search**

To play back files by a video event search:

- 1. Enter into the Video Search menu by clicking Menu > Event Search.
- 2. Set the search parameters by selecting event type to search, Alarm Input/ Motion Detection and the start/end time.



- 3. Click the Search button to start bring up the list of search results. After search results are presented, you can press play icon to playback the selected event.
- 4. Recordings will automatically be play backed in the Playback interface.



#### **Playback in Live View**

You may also instantly playback from a channel while watching a Live View. The playback will be of recordings

from the past 5 minutes.

To play back from a channel instantly in Live View:

#### Using a Mouse:

- 1. Right-click the mouse on desired channel and select the Playback button.
- 2. Recordings from the selected channel will start playing back in the Playback interface. An *Attention* message will appear if there are no recordings found from the previous 5 minutes. You may also press the Play button to view the day's recording for the selected channel.



3. You may also select additional channels for playback from the channel list on the right hand side of the Playback interface.

#### Using the Front Panel/Remote:

- 1. Press the PLAY button. This will take you into the Playback interface.
- 2. Enter the channel you would like to watch recordings for on the front panel or remote (i.e. press 'SHIFT', the

STATUS light will turn green, then press '1' for channel 1, press '2' for channel 2).

3. Recordings will begin for the selected channel.

#### Playback by System Log

You may also playback recordings from the System Log.

To play back video from the System Log:

1. Enter the Log Search menu by clicking Menu> Maintenance > Log Search.

Major Type	Information 🚽
Minor Type	Start Record 🛛 🗸
Start Time	11-20-2009
	0 💠: 0 💠: 0 💠
End Time	11-24-2009
	23 . \$; 59 \$; 59 \$

- 2. Set Major Type setting to Information.
- 3. Set Minor Type setting to Start Record or End Record.
- 4. Set Start Time and End Time.
- 5. Click the *Search* button.
- 6. A list of results with your search criteria will be displayed. Select the video log to playback and click Play.
- 7. The recording will begin to play in the Playback interface.

### Backup

Recorded files can be backed up to various devices, such as USB flash drives, USB HDDs or a DVD writer.

#### **Exporting Files**

To export recorded files via Video Search:

- 1. Enter the Video Search menu by clicking Menu > Video Search.
- 2. Select desired parameters to search for files to export.
- 3. Press the Search button. This will take you to the Search Results menu.
- 4. Select the files to export. You may also click the Play icon to verify that these files are indeed the ones you would like to export.

		Video Search	
IR Camera	AU 1		
Status			
Status			× *
Video Type		All	×
File Type		All	S
Start Time		06-08-2010 Details	<b>2</b>
		0 💠 0 💠 0 🗢	<b>2</b>
-		00 00 00 dd	
End Time		06-08-2011	<b>V</b>
		20 - 00 - 00 -	
		Play Search Cancel	Т

				Search F	Results			
2	Cam	HDD	Start Time		Stop Time	Size	Play	Loc
2	A1	5	2010-06-10	11:12:08	12:24:47	228,032KB	0	•
2	A1	5	2010-06-10	12:24:47	13:08:43	137,584KB	0	1
2	A1	5	2010-06-10	13:10:14	13:49:34	121,920KB	0	9
2	A1		2010-06-10	13:49:34	15:13:32	259,345KB	0	-
2	A1	5	2010-06-10	15:13:32	16:37:32	259,502KB	0	5
2	A1		2010-06-10	16:37:32	16:43:29	18,388KB	0	-
2	A2		2010-06-10	11:12:10	11:12:26	3,655KB	C	-
2	A2		2010-06-10	11:12:41	11:13:25	9,887KB	0	-
2	A2	5	2010-06-10	11:13:44	11:13:56	3,922KB	C	9
2	A2	5	2010-06-10	11:14:06	11:14:18	4,031KB	0	-
2	A2	5	2010-06-10	11:14:27	11:15:19	11,254KB	0	<b>6</b>
	A2		2010-06-10	11:15:28	11:15:40	3,826KB	0	-
2	A2	5	2010-06-10	11:15:50	11:16:02	3,859KB	0	9
Т	otal S	70. 5	MAGR			Evport	Ca	ncel

- 5. The size of the currently selected files is displayed in the lower-left corner of the window. Select the Export button to enter the Export menu.
- 6. Select device to export to from drop-down list (USB Flash Drive, USB HDD, DVD Writer). If backup device is not recognized:
  - Click the Refresh button.
  - Reconnect device.
  - Check for compatibility from vendor.
- 7. Click Start to begin backup process.

#### DS-7600 Series DVR Quick Operation Guide



8. After the backup process has completed, you may select the files from your device and click the Play button to verify that it has been exported successfully.

		Ex	port		
Refresh	USB1-1	-	Free Space	e 1.71GB	
File Nat	me	Size	Туре	Date Modified	
<b>1</b> .	Exported si	uccessfully	- 11		40:42
				ок	

*Note:* Video Player software will automatically be copied on to the device that the recorded files were exported on.

To export recorded files via Event Search:

- 1. Enter the Event Search menu by clicking Menu > Event Search
- 2. Set the search parameters by selecting event type to search, alarm input/ channel and the start/end time, then click Search button, this will take you to search results interface.

		Event S	Searcl	h 👘					Motion De	tection		
							Source	e Start Time		Stop Time	Play	
Event Type		Motio	n Det	ection			A2	2010-06-10 11	12:10	11:12:22	0	
Start Time		05-26	-2011			20	A2	2010-06-10 11	12:41	11:12:53	0	
		0	11	0 😂	: 0	0	A2	2010-06-10 11	12:56	11:13:20	0	
End Time		05.28	2011			-	A2	2010-06-10 11	13:44	11:13:50	0	
		23	1	59 😂	59		A2	2010-06-10 11	14:06	11:14:12	0	
			-				A2	2010-06-10 11	14:27	11:14:52	0	
P Camera	All 1 3						A2	2010-06-10 11	14:56	11:15:05	0	
Status	v v v						A2	2010-06-10 11	15:05	11:15:13	0	
							A2	2010-06-10 11	15:28	11:15:34	•	
							A2	2010-06-10 11	15:50	11:15:59	0	
									*** ***		-	
							Pre-play		30s			
							Post-play		30s	-		
					Se	arch Cancel				Detail Export	Canc	el .

- 3. Select the files to export, you may also click the Play icon to verify that these files are indeed the ones you would like to export.
- 4. Press Export button to enter Export menu, then you can export the files following the step 6 to step 8 as above explanation in this chapter.

### **Configuring IP Cameras**

To configure IP cameras: (Take DS-7604HI-S as an example)

- 1. Enter the Camera Management menu by clicking Menu > Settings > Camera.
- 2. Determine number of analog channels to disable. When you want to connect more than 2 IP cameras at 4CIF

resolution or 1 IP camera at 720P/UXGA/1080P/2560×1920 resolution with the DS-7604HI-S unit, it needs to adjust the number of analog cameras connected. 1 IP cameras at 4CIF resolution can be added by disabling 2 analog channels; and 2 IP cameras at 4CIF resolution or 1 IP camera at 720P/UXGA/1080P/2560×1920 resolution can be added by disabling 4 analog channels. Up to 4 IP cameras at 4CIF resolution, or 2 IP cameras at 720P/UXGA/1080P, or 1 IP camera at 2560×1920 resolution can be connected to the DS-7604HI-S unit. Operate the following steps to adjust the analog camera status:



- 3. To disable analog channels, click the Status button to enter the Camera Enabled Status menu. Uncheck checkboxes to disable corresponding channels. Click *OK* to save setting. A confirmation message will appear on the screen asking you to reboot the DVR. Click *Yes* to reboot. After the system has rebooted, enter back into the Camera Management menu and continue with the following steps.
- 4. Select the Add button to enter IP Channel Settings menu.
- 5. Select the IP device from the list. The devices found in the list are those supported by SADP and found by the DVR.



- 6. If no device was found, you may manually enter the camera parameters in the fields below.
- 7. Enter IP camera parameters. This includes the IP address, ports, user name and password of the IP camera.
- 8. Select *OK* to save and return to the Camera Management menu.
- 9. If IP camera was added successfully, the Status for that camera would show that it is *Connected*. If it does not, click the Set button to verify that the parameters were entered correctly. You may also delete an added channel by clicking the Delete button.

	Camer	a Management				Record Settings	_	
Channel No,	Camera Name	IP Camera Add	Port	Status	EGeneral Advanced			
A1	Camera 01	Local	N/A	Enable	Camera	IP Camera 1		
A2	Camera 02	Local	N/A	Enable	Encoding Doromotors	Main Straam/Mormal)	-	
A3	Camera 03	Local	N/A	Enable	Encoding Parameters	main Streamin withary		
A4	Camera 04	Local	N/A	Enable	Stream Type	Video & Audio		
D1	IPCamera 01	172.8.114.5	8000	Connecte	Resolution	HD720P		
					Bit Rate Type	Variable		
					Video Quality	Medium		
					Frame Rate	25(PAL)/30(NTSC)		
					Max. Bit Rate(Kbps)	1792		Custom
					More Settings	Set		
					Сору То	All	-	Сору
	Set IP	Add Set	Dete	te OK		Apply	OK	Cancel

10.Click OK to exit out of the Camera Management menu.

To adjust IP camera compression settings:

- 1. Enter the Record Settings menu by clicking Menu > Settings > Record.
- 2. Select the General tab.
- 3. Select the IP camera to configure next to the **Camera** label.
- 4. Adjust IP camera compression settings. If the IP camera was added successfully, the DVR will show OSD, channel name and the compression parameters in accordance to the IP camera's current settings.
- 5. Click OK to save and exit out of menu.

*Note:* The quality of resolution, frame rate and bit rate depends on the performance of the IP camera.