





4CH DVR



This document contains preliminary information and subject to change without notice.

 <div style="display: inline-block; border: 1px solid black; padding: 2px; text-align: center;"> Caution RISK OF ELECTRIC SHOCK DO NOT OPEN </div> 	<p>WARNING</p> <p>TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.</p>
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>	<p>NOTE: This equipment has been tested and found to comply with the limits for a class 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.</p>
 <p>This symbol is intended to alert the user to the presence of unprotected "Dangerous voltage" within the product's enclosure that may be strong enough to cause a risk of electric shock.</p>	
 <p>This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>	



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This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household

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CHAPTER 1 PACKING DETAIL AND INSTALLATION

1-1 PACKING



1. DVR



2. Quick Start



3. IR Remote Control
***Please press "DVR1" button before operation**



4. Batteries x2



5. CD



6. SATA Cord x1



7. Screws x4



8. Power Adaptor



9. Power Cord

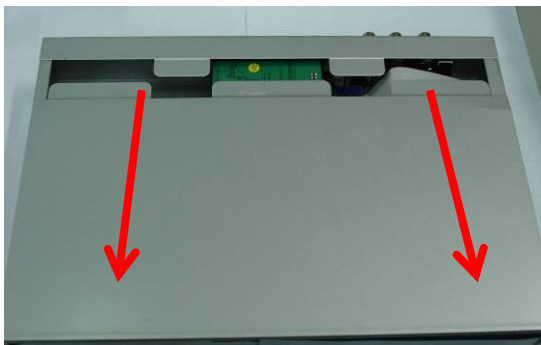
Note: Standard shipping products do not include HDD

1-2 Hard Disk Installation

Step 1) Remove the 3 screws from DVR as cycled below.



Step 2) Remove the front cover from DVR as indicated by the arrow.



Step 3) Place the HDD on the HDD plate and connect the power and the SATA cables.



Step 4) Screw the bottom of the DVR as indicated as cycled.

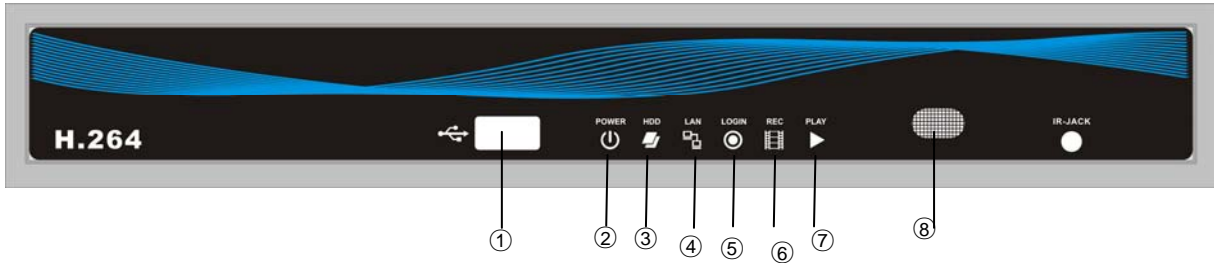


Step 5) Place the bottom of DVR and screw.



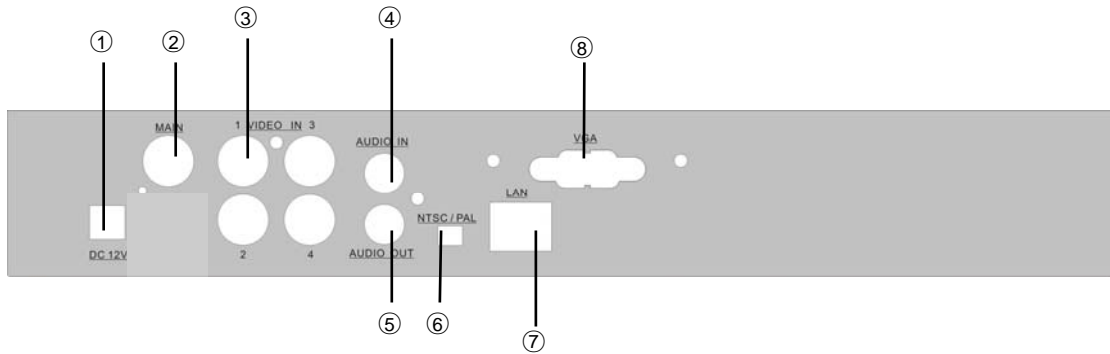
CHAPTER 2 PANEL LOCATION

2-1 FRONT PANEL CONTROLS



① USB 2.0 Port	Port for USB external devices.
② LED Display- Power	DVR Power is on.
③ LED Display - HDD	Hard disk is in use.
④ LED Display - LAN	Connected to the internet.
⑤ LED Display- LOGIN	Remote user logged in.
⑥ LED Display - REC	DVR Recording.
⑦ LED Display - PLAY	DVR Playing back.
⑧ IR Sensor	Input sensor for the remote control.

2-2 4CH REAR PANEL CONNECTORS



① DC 12V	Socket for a DC 12V input.
② MAIN monitor	BNC port for the main monitor.
③ VIDEO IN	BNC input ports for cameras, 16 in total.
④ AUDIO IN	RCA input port for audio signal.
⑤ AUDIO OUT	RCA output for audio signal.
⑥ NTSC/PAL Switch	Switch between NTSC and PAL format.
⑦ LAN	Network port.
⑧ VGA	VGA port

CHAPTER 3 LIVE AND PLAYBACK OPERATIONS

3-1 LIVE Mode

You can monitor all the channels, listen to audio signal and have some related operations under LIVE mode. This paragraph describes the IR remote control, mouse operation and on screen graphical icons under LIVE mode.

Table 3-1.1 Functions of remote control under LIVE mode





Button	Description
REC	Start/Stop recording.
PLAY	Start playing back the most recently recorded segment.
LOCK	Enable/Disable the Keypad function
1,2,3,4	Select the channel to monitor in full screen
FREEZE	Turn on/off screen freeze function.
	Switch to quad display.
	Switch to 9-channel display. 4ch DVR doesn't feature this function.
	Switch to 13-channel display. 4ch DVR doesn't feature this function.
	Switch to 16-channel display. 4ch DVR doesn't feature this function.
ENTER/MODE	Switch to full screen, quad display.
MENU/	Enable/ Disable setup Menu.
BK-UP/ESC	Enable/ Disable backup menu.
SRH	Enable/ Disable search menu.
MUTE	Switch channel 1 output audio / turn off LIVE audio
STATUS	Enable/ Disable Status.
OSD	Turn on/off the screen display
Zoom/Zoom -	Enable/ Disable double screen size display. You can click on the channel name for choosing a specific channel.
PIP/Zoom +	Turn on picture-in-picture format. Click on the channel name can switch to other channels.
PTZ	Enable PTZ control.
AUTO	In AUTO mode, all available channels will be cycled through in full screen.
DVR1,2,3,4	Switch DVR ID1~4

Table 3-1.2 Graphical icons that will display after right-clicking your mouse under LIVE mode.




























Icon	Description
	Resting the cursor on this icon will bring up the following four menu icons.
	Main menu.
	Search menu.
	Backup menu.
	Turn on/off recording.
	Playback.
	Resting the cursor on this icon will bring up the following five display icons.
	FREEZE.
	PIP, picture in picture
	ZOOM, double the screen size
	AUTO-sequence
	LOCK, activate the key lock.
	Full screen display.
	Quad display.

Table 3-1.3 Description of on screen graphical icons in LIVE mode

Icon	Description
	Recording is on
	Live Audio is on
	Live Audio is off
	Motion detected on the channel
	Video loss detected on the channel
	USB device detected
	Connected to the LAN cable
 	Timer recording is on Red : Timer is set and recording has been started White : Timer is set but recording has not yet been started
	AUTO-seq is on
2X	2X zoom in is on
	Freeze is on, screen is frozen
	LOCK is on
	IR remote signal has been set to 1-8 to correspond to your 1-to-8 remote control. Meanwhile, the standard remote control can't control DVR under this situation. It can only be controlled by 1-to-4 or 1-to-8 remote controls (optional device).

3-2 PLAYBACK Mode


Switch to PLAYBACK mode by pressing “PLAY” under the LIVE mode, the graphical icon  will show up on the upper center of the screen and the operation panel (see below picture) will show up at right lower corner of the screen. You can drag the panel by mouse to place it on any location of your screen.

Table 3-2.1 Remote control functions under the PLAYBACK mode










Button	Description	
ENTER / MODE	Switch to full screen and quad display.	
MENU / ■■	Turn on/off PAUSE.	
PLAY	Play back at normal speed.	
▲ / SLOW	Play back at slower speed. The speed will be slowed to 1/2, 1/4, 1/8, 1/16 by each pressing of the button till the slowest limitation of 1/16 of the normal speed. Current playback speed is shown in the upper center of the screen.	
◀◀ / ◀	Fast rewind. Each press increases the speed to the next level. There are six speeds: 2x, 4X, 8X, 16x, 32X and 64X.	
▶▶ / ▶	Fast forward. Each press increases the speed to the next level. There are six speeds: 2x, 4X, 8X, 16x, 32X and 64X.	
▼ / ■	Stop playback.	

Table 3-2.2 The mouse operation under the PLAYBACK mode.

Icon	Description
	「◀◀ / ◀」 Fast rewind
	「▶▶ / ▶」 Fast forward
	「PLAY」, 「■■」 Play/pause
	「▲ / SLOW」 slow playback
	「▼ / ■」 stop playback
	Playback channel by channel with snap shot display
	Full screen display
	Quad display

CHAPTER 4 MAIN MENU SETUP

To enter the main menu and set up DVR, log-in account and user password are required. The default password of the administrator is "123456". Please check the "Account Setup" for related setup of other log-in users.

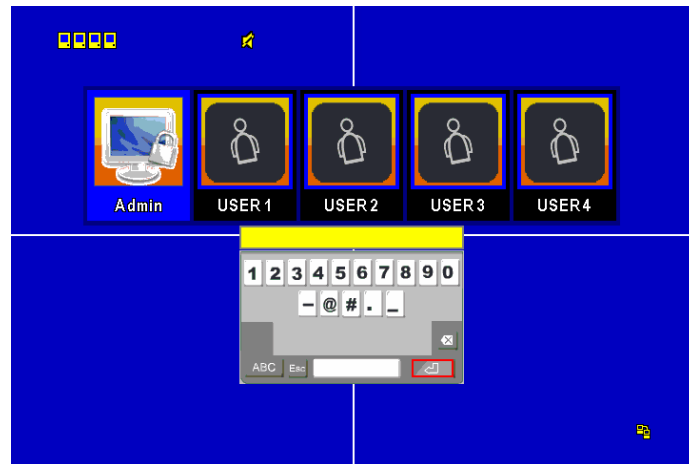


Table 4-0.1 Some definition of virtual keyboard.






Item	Description
	Switch between capital and small letters.
	Switch between numbers and letters.
	Press to cancel the setup, and re-choose the login account.
	Delete the last character.
	Enter to identify the password. It will enter the set up menu, If the password is verified.

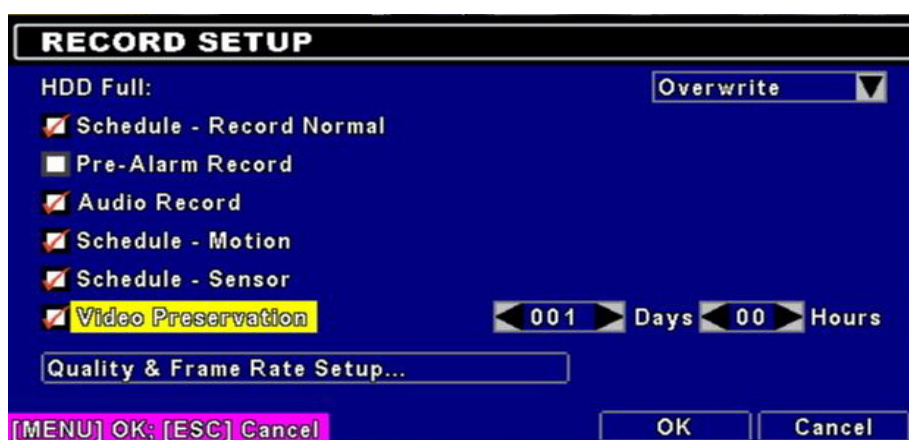


Table 4-0.2 The operation of remote control under the setting menu

Item	Description
◀ ▶	Switch to different options under one item
▲ ▼	Switch to different items
MENU	Save setup and back to LIVE mode
ESC	Back to Upper level of the menu
ENTER	Enter the menu, or display virtual keyboard

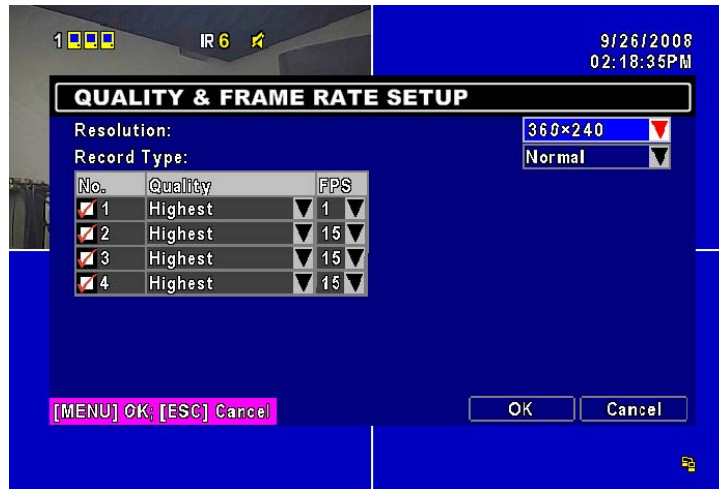
PS. The initialization of new-installed HD is required before recording, please refer to "4-9 UTILITY SETUP" for detail.

4-1 RECORD SETUP



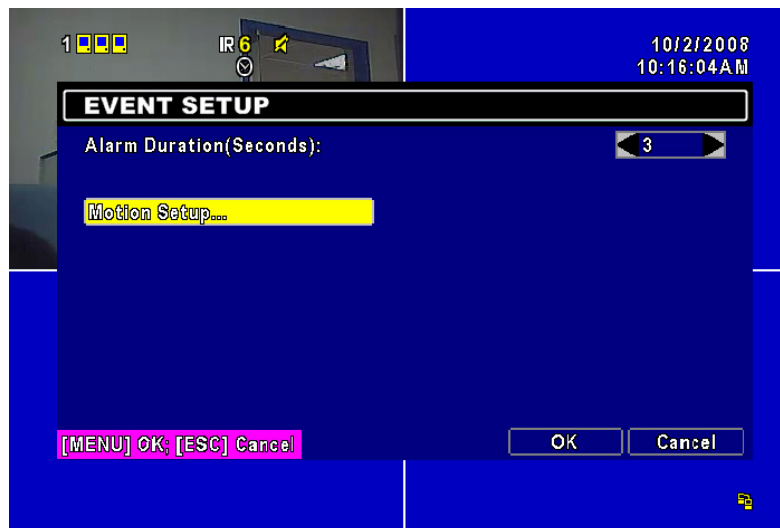
Item	Description
HDD FULL	Select STOP to stop recording or OVERWRITE to reuse the HDD when HDD is full 「 Stop 」 : Stop Recording 「 Overwrite 」 : Start to overwrite that begin from the oldest data of HDD, and continue to record.
Record Normal	Enable/Disable normal recording
Pre Alarm Record	Enable/Disable pre-event recording while motion or sensor is triggered but not in the recording mode. This option decides if save the pre-recording time 10 seconds data or not.
Audio Record	Enable/Disable Audio recording.
Record Motion	Enable/Disable recording while Motion is detected
Record Sensor	Enable/Disable recording while Sensor is triggered
Video Preservation	Setup the video preservation period. Recorded video will be deleted automatically after expiry of preservation period.
Quality & Frame Rate Setup	Setup the quality and frame rate for each channel under normal recording and event recording type.

4-1.1 Quality & Frame Rate Setup



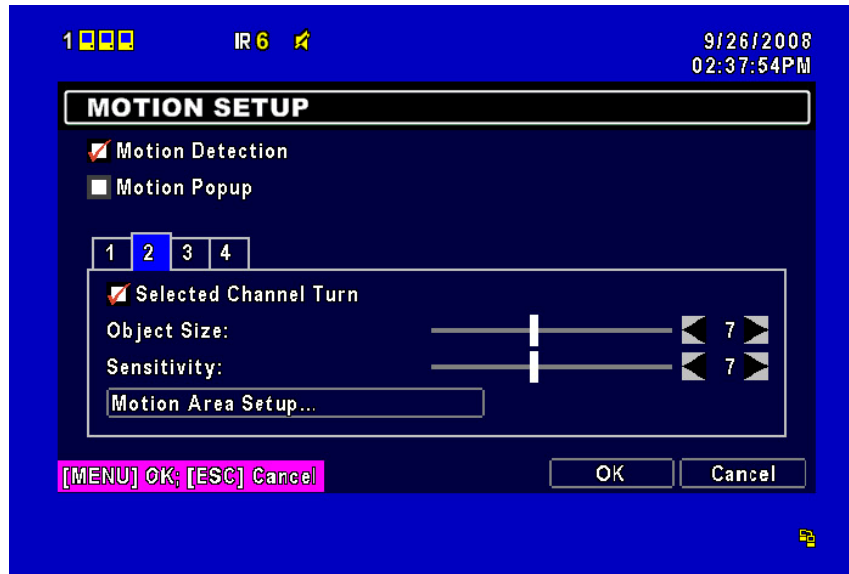
Item	Description
Resolution	Choose record resolution from : CIF/ HD1(2CIF) / D1
Record Type	You can setup quality and FPS separately for record type.
No.	Check/uncheck the box will enable/disable recording of that channel.
Quality	Choose from Lowest/ Low/ Normal/ High/ Highest
FPS	Choose recording frame rate.

4-2 EVENT SETUP



Item	Description
Alarm Duration (Seconds)	Set up alarm duration in seconds. Drag the white bar or press ◀ ▶ to adjust value.
Motion Setup	Enter to set up motion detection

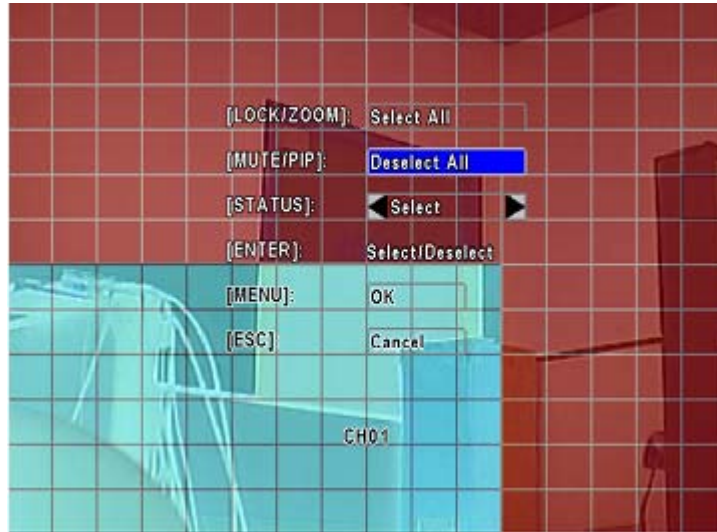
4-2.1 MOTION SETUP



Item	Description
Motion Detection	Check the box to Enable/Disable Motion Detection for all channels.
Motion Popup	Check the box to Enable/Disable popup screen function for all channels. When motion is detected in LIVE mode, the detected channel image will pop up in full screen display.
1~4	You can setup independently for each channel.
Selected Channel Turn	Check the box to Enable/Disable motion detection for each channel.
Object Size	Drag the white bar or press ◀ ▶ to set up Object Size from value 1 to 15 for each channel. The lower value you set the higher sensitivity it will be.
Sensitivity	Drag the white bar or press ◀ ▶ to set up Sensitivity from value 1 to 15 for each channel. The lower value you set the higher sensitivity it will be
Motion Area Setup	Enter to setup motion detection area

4-2.1.1 MOTION AREA SETUP

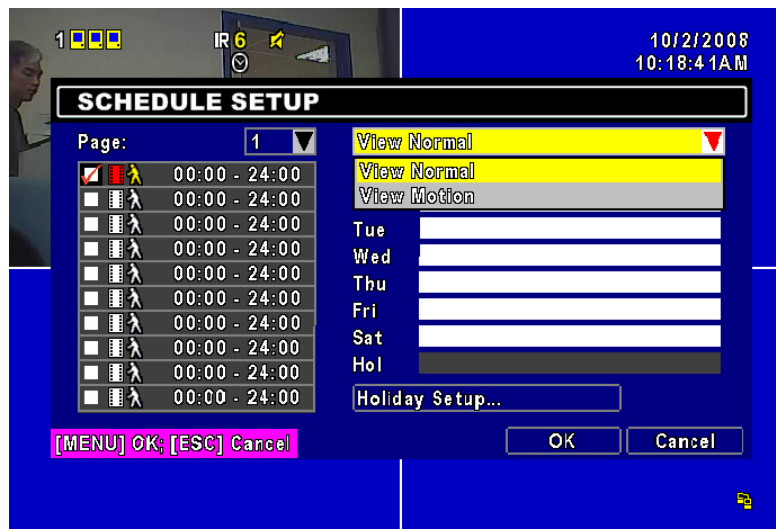
The motion detection has been divided into 16x12 grids. The default detection area is full screen as it marked in transparent for local DVR and purple for remote access. Areas deselected for motion detection are marked in red for both local and remote site.



Item	Description
LOCK/ZOOM	Press LOCK/ZOOM to select entire screen as detection area.
MUTE / PIP	Press MUTE/PIP to deselect entire screen as detection area.
STATUS	Switch between “select” and “deselect” for cursor-dragging function
ENTER	Press to function on the selected area with assigned status
MENU	Press to save the setup and leave
ESC	Press to cancel the setup and leave

4-3 SCHEDULE SETUP

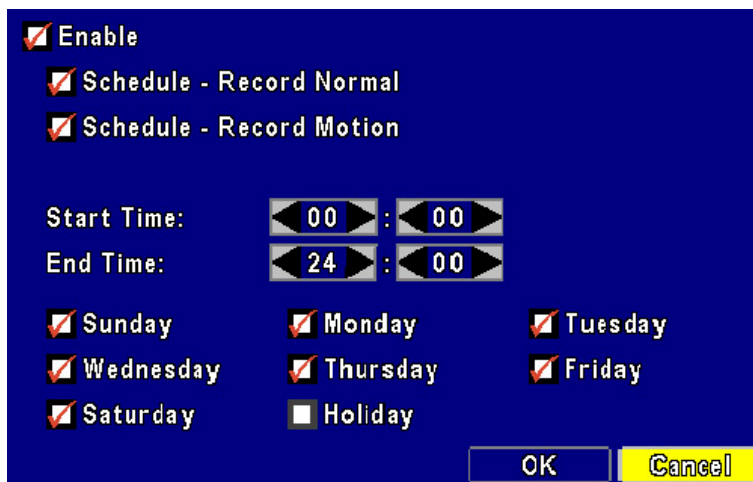
Except from starting recording manually, you can also setup the recording time by weeks and schedule including normal, motion detect, and sensor detect recording type.



Item	Description
Page	Click or press ▼ to select Page. Each page provides 10 schedules for setup. 5 pages in total.
Holiday Setup	Enter to setup holiday, up to 50 days, other than weekends,.
View Event Setup	View Normal/ Motion Setup

4-3.1 Schedule Record Setup

Click on the time on the left side. The setup menu will be displayed. You can have detail setup by dates, Time and event.

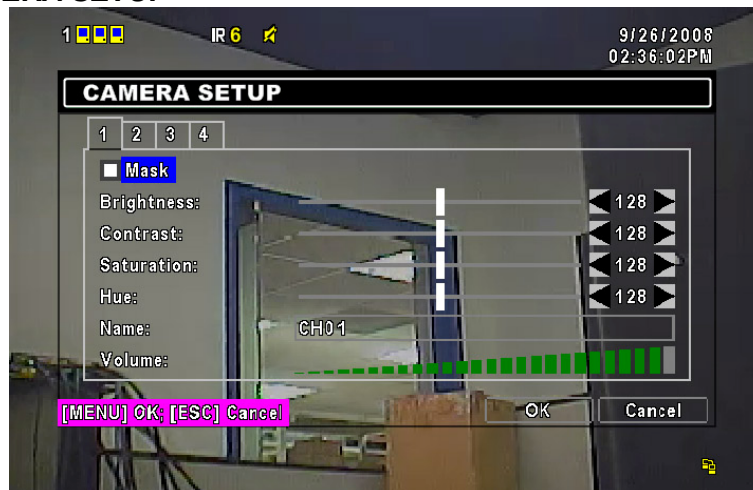


4-3.2 Holiday Setup

Since holidays are different by different country and region, you can setup the holiday of your location accordingly.



4-4 CAMERA SETUP



Item	Description
1~4	You can setup independently for each channel.
Mask	Check the box to Enable/Disable mask function for LIVE mode
Brightness	Drag the white bar or press ◀ ▶ to adjust Brightness of your camera from value 1 to 255. The default value is 128.
Contrast	Drag the white bar or press ◀ ▶ to adjust Contrast of your camera from value 1 to 255. The default value is 128.
Saturation	Drag the white bar or press ◀ ▶ to adjust Saturation of your camera from value 1 to 255. The default value is 128.
Hue	Drag the white bar or press ◀ ▶ to adjust Hue of your camera from value 1 to 255. The default value is 128. (This function doesn't support at PAL system)
Name	Set up name of each channel
Volume	Audio volume for CH1 to CH4 under LIVE mode and recording mode can be adjusted.

4-5 ACCOUNT SETUP

The Account Setup menu is used to provide role-based permission independently setting for each user (maximum of 4 users) to access DVR over network. The default admin account is 「admin」 and password is "123456".

P.S The factory default admin password is 123456, it will not be changed along upgrading with new firmware. 8-digit will be required to change a new password.



Item	Description		
Auto Lock	After one minute without any action, the DVR will switch to <i>LIVE</i> mode automatically. Auto lock can function differently according to the setting below.		
	Function Setting	Auto Logout(Note1)	Key Lock(Note2)
	Key lock	<input type="radio"/>	<input type="radio"/>
	Key unlock	<input type="radio"/>	<input checked="" type="radio"/>
	Disable	<input checked="" type="radio"/>	<input checked="" type="radio"/>
No.	Check to activate the user's account.		
Password	Enter to set up password for each user. Password is 8-digits required mixed by letters and numbers with case-sensitive.		
Permissions	Enter to set up Permissions for each user.		
Change Admin Password	Enter to change administrator's password		

There are three options: Disable, key unlock, key lock

Note 1: When **logged out automatically**, you will have to operate in limited authority such as operations like: Freeze the screen, Picture in picture, Zoom in/ out, switch between channels...etc. If you need to enter the Setup menu, Search menu, backup menu, Record...etc, user's account and password are required.

Note 2: When **the key lock automatically**, remote control and mouse can't function before entering verified password.

Note 3: 「」 : **Enable** the function, 「」 : **Disable** the function

4-5.1 Permission Setup

The Account Setup is set to provide individual user (maximum of 4 users) role-based permissions, including access to Setup menu, Network operation, PTZ function, Playback, Utility, Backup. Password expiry date and Mask on specific channels while playing back. Can not be accessed if the password is expired...



4-6 NETWORKING SETUP



Item	Description
Connect type	Setup mode for network connection: DHCP \ LAN \ ADSL .
HTTP Setup	Enter to set up HTTP for remote access into DVR.
DDNS Setup	Enter to Enable/Disable DDNS function and set up.

4-6.1 NETWORKING SETUP

The DVR supports DHCP, LAN and ADSL accesses for network connection.

4-6.1.1 DHCP

If the DHCP option is used for DVR network connection, an IP address is assigned by the DHCP server automatically.



4-6.1.2 LAN

Select LAN for network connection, the following information is required.



Item	Description
IP Address	Enter IP address provided by ISP
Subnet Mask	Enter IP address of Subnet Mask provided by ISP
Gateway	Enter IP address of Gate way provided by ISP
DNS	Enter DNS address provided by ISP. (Note: The correct DNS address must be entered for DDNS function).

4-6.1.3 ADSL

Select ADSL for network connection, the following information is required.

Item	Description
User Name	Enter user name provided by ISP
Password	Enter password provided by ISP

4-6.2 HTTP SETUP

Item	Description
Enable HTTP Server	Check to enable HTTP server. Users can remotely access into the DVR over the network if the HTTP function is activated.
Port	Enter a valid port value from 1 up to 65000. The default value is 80.

4-6.3 DDNS Setup

Item	Description
Enable DDNS	Check/Uncheck to enable/disable DDNS function.
DDNS Server	Enter the registered SMTP Server: DYNDNS.ORG 、 NO-IP.ORG 、 CUSTOM.COM 、 3322.ORG 、 I-DVR.NET (Provided by our company, please refer to appendix for more information) *
SMTP Server	Enter the completed registered SMTP Server. (Including username + Server) If the user name is h.264 and you choose i-dvr as your server, you should enter: h.264.i-dvr.net
User Name	Enter user name.
Password	Enter password.

*For more detailed I-DVR.NET operation instruction, please refer to appendix I.

4-7 SYSTEM SETUP

Item	Description
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DVR Name	The name of DVR will be shown when users login from remote access.
DVR Location	The location of DVR will be shown when users login from remote access
Language	Click or press ▼ to select OSD language.
Auto-Seq Interval (Seconds)	Click or press ◀ ▶ to set up duration time in seconds for the interval between channels under Auto-Seq mode.
Remote ID	Default ID is 1. When DVR is controlled by standard remote control, please press “DVR1*” before using it. When more than one DVRs are purchased, the DVRs can be numbered from 1 to 4. For instance, standard remote control can't operate DVR numbered 3. It only responds when “DVR3” button has been pressed beforehand.
Display Setup	Enter to set up Display
Date/Time Setup	Enter to set up Date/Time
Buzzer Setup	Enter to set up Buzzer
Relay/ Spot Setup	Not functional for 410M Model

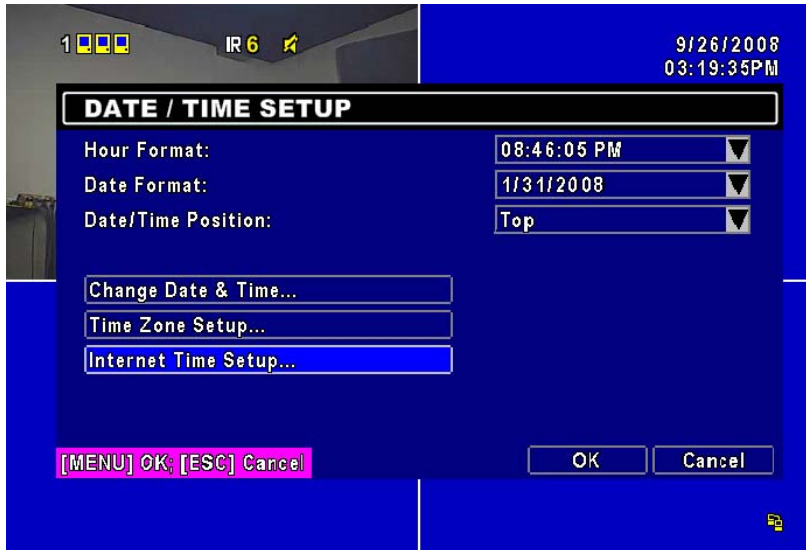
* Default ID is ID1. If remote control malfunctions, please press, “DVR1” button to renew corresponding DVR ID.

4-7.1 DISPLAY SETUP



Item	Description
OSD	Turn On / Off OSD display
DVR Status	Turn On / Off DVR illustration and record status display
Date/Time	Turn On / Off date and time display
Channel Name	Turn On / Off channel name display
Border Set	Set up the color of border in LIVE, PLAYBACK mode. (black 、 dark grey 、 light grey 、 white)

4-7.2 DATE/TIME SETUP



Item	Description
Hour Format	12HOURS/ 24HOURS
Date Format	MM-DD-YY/DD-MM-YY/YY-MM-DD
Date/Time Position	Choose the position of Time and Date display
Change Date & Time	Setup time and date of DVR
Time Zone Setup	Set up GMT and Daylight Saving Time.
Internet Time Setup	Setup automatic synchronization with internet server

4-7.2.1 CHANGE DATE & TIME

Users are allowed to setup date and time of DVR

4-7.2.2 TIME ZONE SETUP

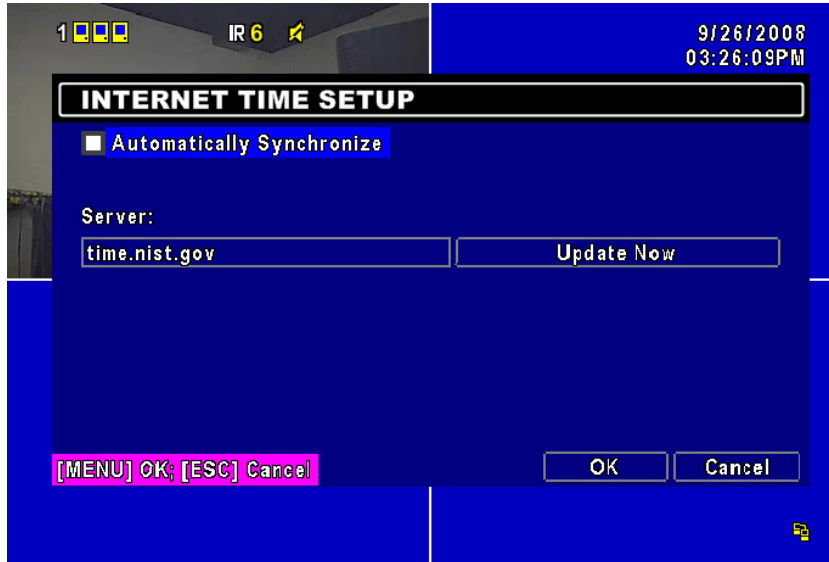
In time zone setup, users can change your time zone and activate Daylight Saving Time function according to your DVR location.



Item	Description
Select Time Zone	Enter to modify GMT from GMT- 13 to GMT+ 13
Daylight Saving Time	Turn on/ off Daylight Saving Time

4-7.2.3 INTERNET TIME SETUP

Synchronize your DVR time with internet time server.



Item	Description
Automatic Synchronization	Check to enable DVR automatic synchronization function. Effective by this option selected, DVR will automatically synchronize the time upon rebooting or by every 24 hours after booting.
Update Now	Effectively, Date and Time show on DVR will immediately correspond with those in internet server.

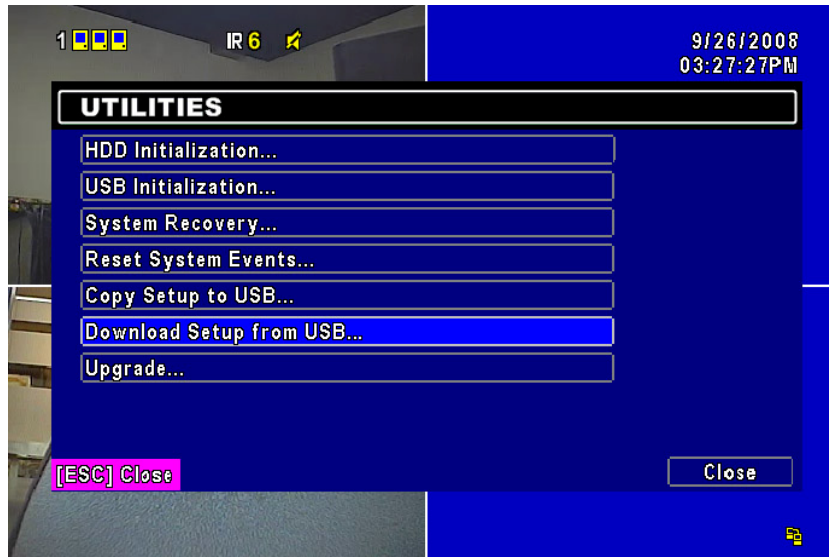
4-7.3 BUZZER SETUP



Item	Description
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KEY TONE	Enable/Disable keystrokes.
Buzzer Duration	Set up the duration from 1~999 seconds.
ALARM BUZZER	Enable/Disable buzzer operation when the alarm is triggered for sensor, motion and video loss.

4-8 UTILITY SETUP



Item	Description
HDD Initialization	Select to enter hard disk initialization menu. Please stop recording before entering this menu. Enter the menu, system will show all the data (model , volume) of HDD that installed in DVR. Check the HDD you'd like to initialize then press "Start". HDD initialization is successful when the status shows "Succeed"
USB Initialization	Clean up all data on USB. Enter USB initialization and press YES to clean up all data on your USB. The initialization is done when it's showed "Succeed".
System Recovery	Restore system default values
Reset System Events	Reset all the recording events in DVR.
Copy Setup to USB	Copy configuration to a USB device. There will be a file named "sdvr.config" on your USB.
Download Setup from USB	Download configuration from a USB device into DVR.
Upgrade	Upgrade DVR through USB. Please stop recording and backup setup configuration before upgrading. System will reboot automatically when the upgrade is completed.

Note! Do not unplug the USB device or turn off the DVR during the backup process to avoid irreversible damages.

4-9 DIAGNOSTIC



Item	Description
Version	The current firmware version of DVR
IP Address	The connected IP address of DVR. If disconnected from network, the screen will display" NETWORK DISCONNECT".
MAC Address	MAC Address of DVR
HDD Volume	The capacity of HDD
HDD Used Rate	Percentage of space used on HDD.
HDD Status	Shows HDD status. USING means the HDD is being used for recording now GOOD/BAD means the HDD has a known/unknown format for the DVR. (Note: Please initialize your newly-installed HDD before using it, otherwise it can be recognized as BAD by DVR.)
Format Time	The latest format time of HDD

CHAPTER 5 BACKUP & SEARCH

5-1 BACKUP SETUP

User can backup any segment of recorded data in a specified time frame. To do so, either a CD R/W or storage device, like USB, must be connected to the DVR. Recorded data can also backup into NB/PC through our remote access software: 「DVRRemoteDesktop.exe」 and to be saved in your assigned path. The format of backup file is *IRF* file that can be played by both “DVRRemoteDesktop.exe” and “CMS”



Item	Description
From	The start time of backup file
To	The end time of backup file
Device	Select USB as the backup device
Free Space	The available space in your backup device
Refresh	Recalculate the available space of backup device
Calculate	Calculate the size of backup file
Start	Start backup operation. Be sure to calculate the size of backup file BEFORE operating backup.


Note! Do not unplug the USB device or turn off the DVR during the backup process to avoid irreversible damages.

5-2 SEARCH SETUP



Item	Description
Event Search	Press to enter event search menu
Time Search	Press to enter time search menu

5-2.1 EVENT SEARCH

The DVR automatically records events with type, time and channel information included. If there is recording data for an event, a yellow signal  will be shown on the left side of time information. Rest your cursor under the line and press “enter”, or left click your mouse to playback the recording data.



P.S. Event Records will still be generated even when hard disk is not installed or the record function is not activated. However, the record can't be viewed after selecting it.

Item	Description	
Criteria	Setup conditions of event search	
Page	Convert pages of events	
Date/Time	Date/time when event occurred.	
Event Type	Event type, defined as following	
	VLOSS	Video Loss
	MOTION	Motion Detected
	REMOTEIN	user log-in over the network
	REMOTEOUT	user log-out over the network
	POWER ON	System Rebooting
	KEY LOCK	System key are locked
	KEY UNLOCK	System key are unlocked
	HDD FULL	HDD is FULL
Channel	The channel where event occurred.	

5-2.1.1 CRITERIA SETUP FOR EVENT SEARCH

The amount of events can be numerous. Therefore, you can facilitate event sorting by setting up "criteria". Setup "start time" and "end time" for event search, then the search result will be limited to this specific period of time. Only checked events and channels will be sorted in event search as well.



5-2.2 TIME SEARCH

TIME SEARCH can search for the specific time of recording data to playback. Note that dates with recording data are marked with a red square "□". System will start playing back according to the date you selected. Calendar will be shown by using mouse to click on "year" and "month".



Click "date" to display recording time of that specific date with time bar. You can change time (hour/minute/second) or click on a specific time of time bar by mouse then press "YES". DVR will playback the selected recording data.

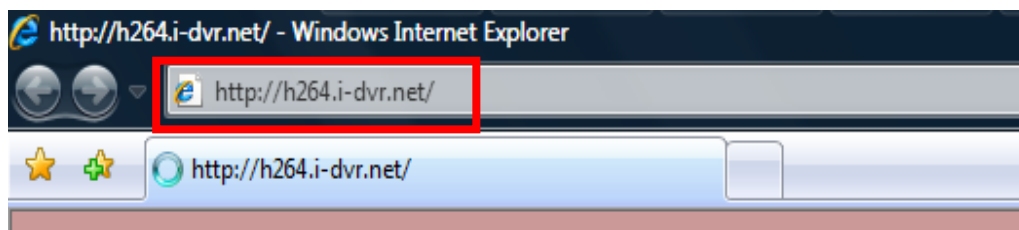


CHAPTER 6 NETWORK SURVEILLANCE

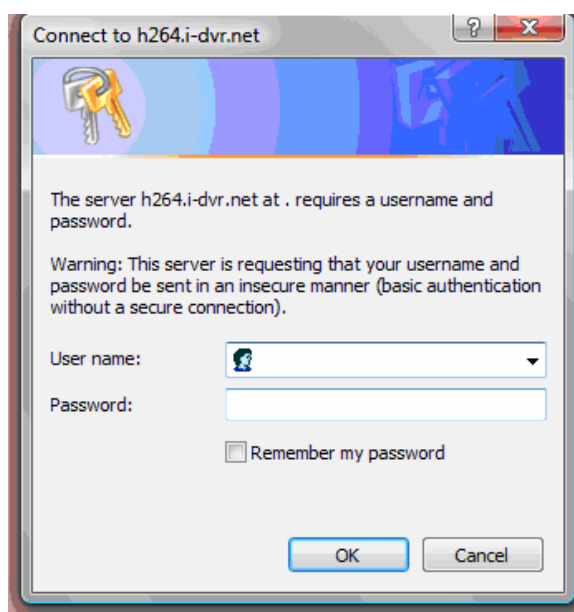
AP software: 「DVR Remote Desktop」 can allow you to remotely access and control the DVR from PC.

6-1 AP Software Installation and Setup

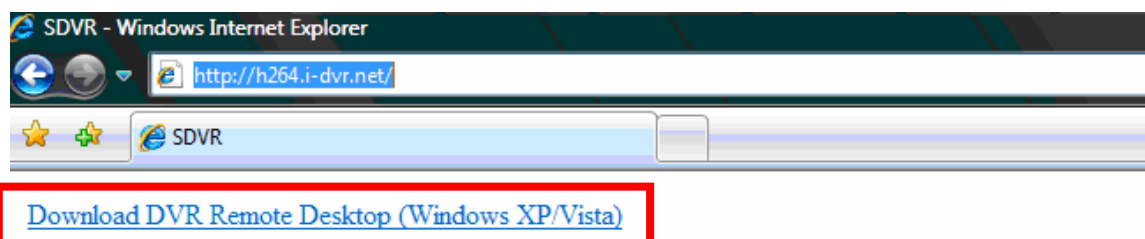
Step One : Enter the IP address of DVR in IE browser



Step Two: Below windows will be shown up. Please enter the user name and password. Default user name is **admin** and password is **123456**. Other related setup about user account and password, please check “4-5 Account Setup. “



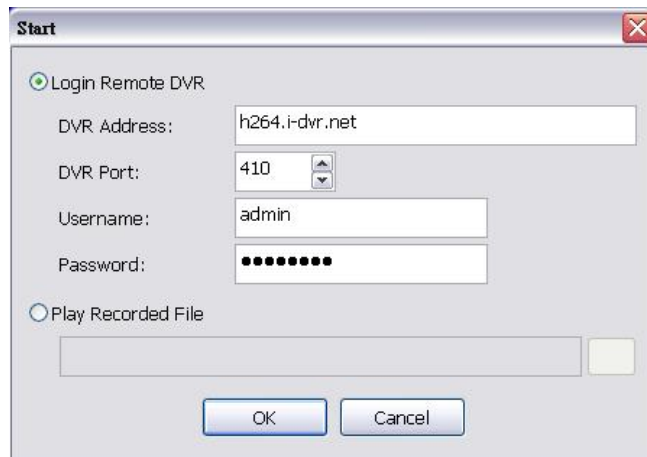
Step Three: Click on the link to start downloading the AP software.



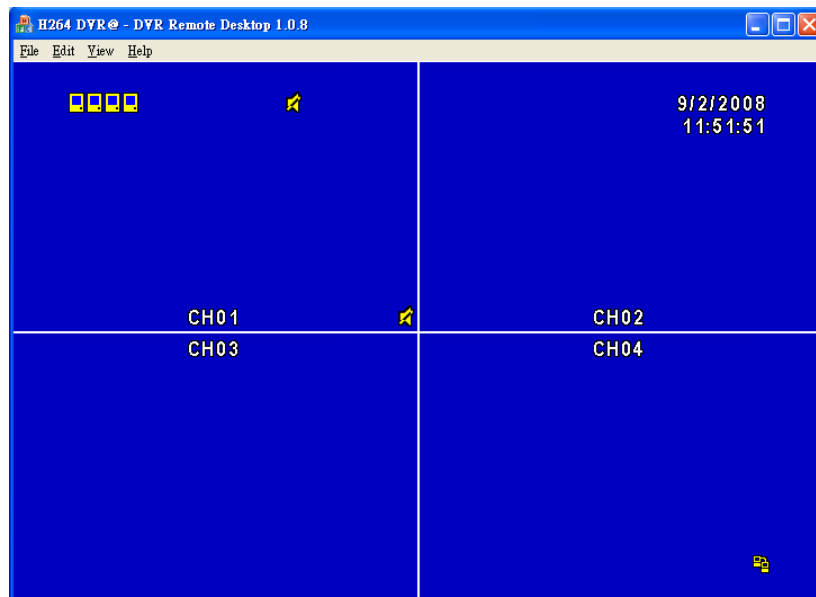
Step Four: Run or Save our AP software.



Step Five: If you choose to run the software, Start window will be shown up. Please enter information of login DVR: IP, Port, Username and Password, or choose "Play Recorded File" to open backup files in your PC.



Step Six: You've logged into the DVR



6-2 AP Software Operation

Open the file "DVRremoteDesktop.exe"; enter the information of DVR "IP address", "Port" "Username" and "Password" and click "OK". You should be able to login DVR successfully and start to use the software. The default username and password is 「 admin/ 123456 」

After successful login, the operation and interface are the same as local DVR.

Table 6-2.1

Describe some operations on your tool bar only for remote users.

Table 6-2.1 Toolbar of AP software

File - Record to Local	Record data to your PC, including <i>LIVE</i> and <i>Playback</i> .
File - Play Recorded Files	Play recorded files ".irf"
File - Exit / Alt + F4	Close the AP software.
Edit - Channel Name / F2	Edit channel name of your DVR including font, size italic, and boldface of characters. .
Edit - Reset Channel Name	Reset channel name back to default.
View - Hide Caption & Menu / F9	Hide the Caption and Menu
View - Disable resizing / F10	Disable the function of resizing window.
View - Full screen / F11	Switch it to full screen
View- Render Filter	Unable/ Disable the Bilinear function
View- Play All Frames	Unable this function will stop the audio transmission in order to improve the playback speed quality.
View- Language	Switch between languages for toolbar
Help – About	Show information about software and information

Table 6-2.2 System Requirements for AP software

CPU	Intel Pentium 4 above
OS	Microsoft Windows Vista · Windows XP SP2 above
RAM	512M above
Others	DirectX 9.0 above

Note 1:

Known VGA card that support DirectX9.0 currently:

NVIDIA: Geforce FXseries, Geforce 6series, Geforce 7series, Geforce 8series, Geforce 9series, Geforce 200series, etc.

Or

visit:http://en.wikipedia.org/wiki/Comparison_of_Nvidia_graphics_processing_units

ATI: Radeon R300series, Radeon R400series, Radeon R500series, Radeon R600series, Radeon R700series, Radeon HD 3xxx IGPseries, Mobility Radeonseries (9500 above), Mobility Radeon Xseries, Mobility Radeon HDseries, or FireGL Vseries etc.

Or visit: http://en.wikipedia.org/wiki/Comparison_of_ATI_graphics_processing_units

SiS: SiS 67Xseries, or SiS 77Xseries etc.

Or visit: http://www.sis.com/support/support_compare.htm

Intel: 91Xseries, 94Xseries, 96Xseries, G3Xseries, or G4Xseries, etc.

Or visit: http://en.wikipedia.org/wiki/Intel_GMA

CHAPTER 7 SPECIFICATIONS

1. VIDEO		
Input Level		1.0 Vp-p±10% Composite, 75Ω Balanced
Display Speed	NTSC	120 FPS
	PAL	100 FPS
Display Resolution	NTSC	720(H) X 480(V)
	PAL	720(H) X 576(V)
Monitor Output		2Vp-p Composite, 75Ω Balanced
2. RECORDING		
Compression Method		H.264
Recording Speed		Refer to table 7-1
Recording Resolution	NTSC	352 X 240
	PAL	352 X 288
Quality	Independent for each channel	Lowest/ Low/ Normal/ High/ Highest
Schedule		Setup by "minute" as unit
Mode		Manual / Event (Motion) / Schedule
Method		By resolution, fps and quality Setup fps and quality separately for normal and event recording
3. SATA DEVICE		
Capacity	Internal Storage	1 HDDs
Type		SATA / SATA II compatible
4. ALARM		
Motion Detection		Available per each camera/ Multi-detection level
5. CONNECTIONS		
Video Input		4 ports (4CH)
Video Output		BNC 1 port, VGA 1 port (Optional)
Audio Input		RCA 1 CH
Audio Output		RCA 1 CH
USB 2.0		USB memory stick, USB Mouse, USB Touch Panel
Remote		Remote control, 1-to-8 remote control (optional)
Ethernet		1 RJ45 connector, 10/100 Mbps
6. ELECTRICAL		
Power Source		DC 12V / 4A / 50W

7. ENVIRONMENTAL		
Operation Temperature		-5℃ ~ + 40℃
Humidity		Less than 90%
8. PHYSICAL		
Dimension		300(W) x 175(D) x 46(H) mm
Weight		1.3 KG (not including HD)
9. BACKUP		
BACKUP	USB Stick	Video Data, Audio
	Network	Video Data, Audio
10. SEARCHING & PLAYBACK		
Searching Method		Searching Method
Speed		120 FPS
11. MULTI-REMOTE SURVEILLANCE		
Monitoring Environment		Web / AP Software
Max. client		Supporting multi-client (5 clients accessible)
12. OTHERS		
OS		Embedded Linux
Multi Task	Triplex	Record · Playback · Network
Control Device		Remote Control / 1-to-8 Remote Control (Optional) Virtual Keyboard / Mouse / AP Software/Touch Panel ready
Numbers of event list		5120

Table 7-1

Recording Speed (Independent setting for each channel)	NTSC	352 x 240	120 FPS
	PAL	352 x 288	100 FPS
Compression Method			H.264

APPENDIX I -DVR.NRT REGISTRATION

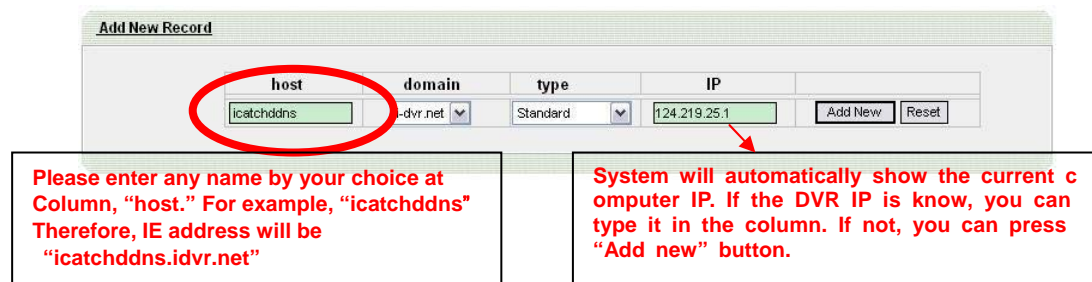
In the package of each DVR, you will find a sticker shows account information including username and password that allows users to login I-DVR.NET for registration.

To register DDNS on I-DVR.NET, please follow the steps as shown.

Step 1. Please open IE browser and then enter “ <http://i-DVR.NET/logon.asp> ” in IE browser bar. Next, “Control Panel Logon” dialog will appear. Enter the username and password provided by the sticker and then press, “Logon.”

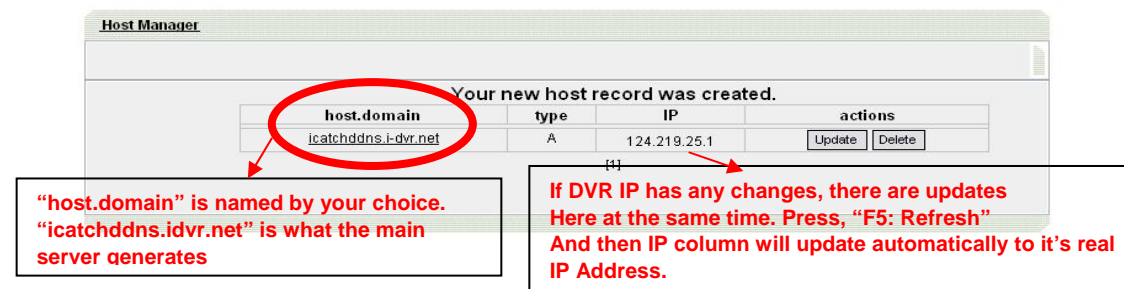


Step 2. After login successfully, enter name at “host” in “Add New Record” dialog. For example, “icatchddns” is the host name, and then the address will be “icatchddns.idvr.net.” Select “Standard” type and enter an IP address of the DVR. Input known IP address if any, or press the “Add New” button if none.



Step 3. The “Host Manager” dialog will show “Your new host record was created” when user setup successfully. The “host.domain” column will show up the setup just entered.

If DDNS set up at DVR side successfully, the website will update the IP information in one minute. The IP column will be renewed to the corresponding IP address by pressing “F5: refresh” button.


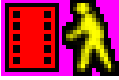






Step 4. Enter DVR → Main Menu → Network Setup → DDNS. Activate DDNS functions and input related information.



APPENDIX II Record Mode Comparison

Comparison between different setups while in Default Record mode and after it's been switched.

Schedule Record-Motion	Schedule Record-Sensor	Default Record Mode	After Switch Record Mode
Enable <input checked="" type="checkbox"/> Schedule - Motion	Enable <input checked="" type="checkbox"/> Schedule - Sensor	Default Record Activated 	Record and Event Record have both been activated 
Enable <input checked="" type="checkbox"/> Schedule - Motion	Disable <input type="checkbox"/> Schedule - Sensor	Default Record Activated 	Stop Record
Disable <input type="checkbox"/> Schedule - Motion	Enable <input checked="" type="checkbox"/> Schedule - Sensor	Default Record Activated 	Record when event occurs, and stop when none. 
Disable <input type="checkbox"/> Schedule - Motion	Disable <input type="checkbox"/> Schedule - Sensor	Default Record Activated 	Stop Record