C930 Edition 9.3 Issued on April 2010

Hybrid DVR Server & Live Center Operation Guide

For Version 9.3x

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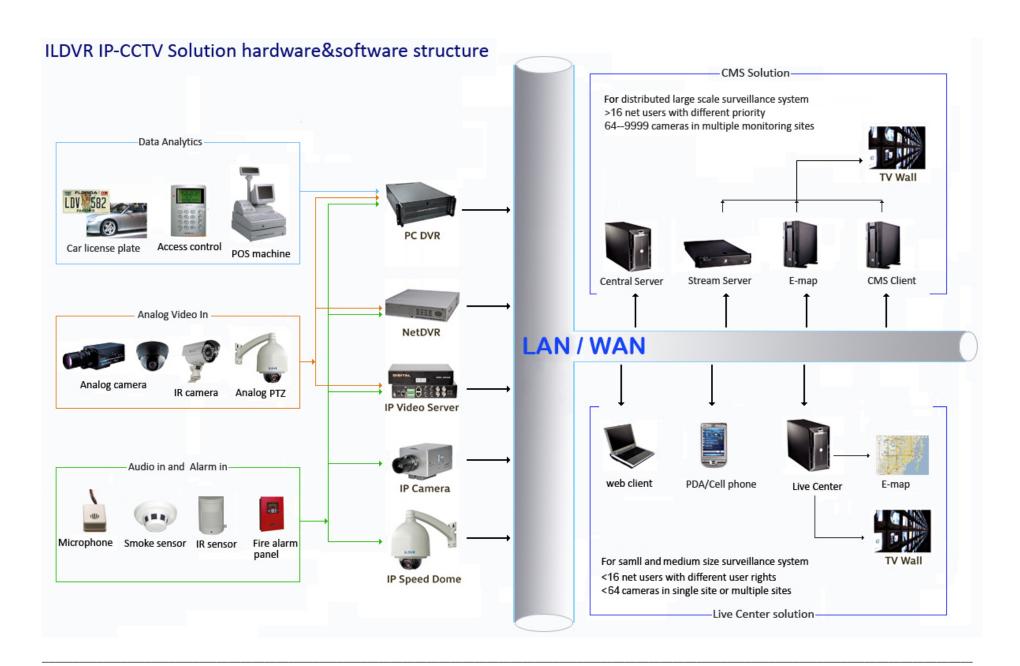
Introduction of IP-CCTV Solutions

Thank you for using the ILDVR® IP video surveillance system. This operation manual illustrates how to set up the hardware and software. It also helps to explain each individual icon function and demonstrates how to use the system effectively in a stable environment. Prior to installing the system, operators should go through this manual thoroughly. Local suppliers may support them in due course.

IP-CCTV Product Lines

Item	Product Name	Video Record Type	Reasons for choosing
1	PC-DVR (DVR card)	Local HDD	High resolution and high quality video images with a friendly GUI interface. It's convenient to operate, easy to expand the cameras, and possesses powerful integration capabilities.
2	NetDVR (Stand Alone)	Local HDD	Stable, without risk of computer viruses. Requires very low maintenance.
3	IP Camera	Local SD card and network	This is the next generation product in security surveillance. This product has everything you need, all built into one! The IP Camera is very cost effective and incredibly easy to install
4	IP Speed Dome	Network stream	This has all the traditional high speed dome features, but overcomes the distance limit of coaxial cable transmission.
5	IP Video Server	Network stream (5001HS both SD card and network)	Convert your existing analog camera to an IP camera. Use IP video server to upgrade your existing CCTV system to IP-CCTV system
6	IP Matrix	N/A	Innovative IP TV-wall solution to replace traditional analog TV-wall facility.

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Chapter 1 DVR Server

1.1. Product Features and Model difference

System Key Features

- Hardware built to support H.264 compression.
- Maintains the highest recording video quality while keeping hard drive memory usage to a minimum, even as it adapts to low and high speed network access
- Supports both analog camera and IP camera hybrid connections (including Mega Pixel camera, NetDVR, and IP server)
- Supports POS/ATM machine transaction with text data overlay recording
- Supports Access Control integration
- Supports digital watermarking, preventing any binary program from editing the recorded video
- Real-time full-motion video display & recording. Max. 64ch video inputs (either DVR card or IP camera) at 30 fps per channel
- Synchronous audio monitor and recording (optional) with an embedded VoIP function
- Motion Detection (Whole area or max. 12 detection zones per channel). Privacy mask feature
- Continuous record and event record options (Motion detection or external sensors)
- Data analytics includes Motion Event search, Sensor trigger alarm search, Object Search (Smart Search), POS Search and ACU Search)
- Network access via LAN, Ethernet, PSTN, ISDN, ADSL, etc.
- 10 different types of alarm notification, including SMS text message, email, E-map, etc.
- Pre-alarm / Post-alarm recording
- Remote Relay out (D/O) control and management
- Support 4 screen output.
- Support mobile phone remote surveillance including most popular brand name iPhone, Blackberry, Android, Window Mobile, Symbian etc.
- Supports both decode card IP Matrix and PC decode IP Matrix.

Model difference

The DVR server supports different DVR cards mixed in one system, but it has a maximum limit of 64 cameras. Please refer to Appendix C for more info.

DVR card model	Cameras	Audio	Preview Resolution	Record / Playback Resolution	Dual-Stream
----------------	---------	-------	--------------------	------------------------------	-------------

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3000H4C+ Series	4/8/16	4/8/16	704*576(PAL), 704*480(NTSC)	704*576(PAL), 704*480(NTSC)	Yes
3000H4F8	8	8	704*576(PAL), 704*480(NTSC)	704*576(PAL), 704*480(NTSC)	Yes
3000HQ Series	8/16	8/16	704*576(PAL), 704*480(NTSC)	704*576(PAL), 704*480(NTSC)	Yes
3008HQF	8	8	704*576(PAL), 704*480(NTSC)	704*576(PAL), 704*480(NTSC)	Yes
3000HS Series	4/8/16	4/8/16	704*576(PAL), 704*480(NTSC)	704*576(PAL), 704*480(NTSC)	Yes
3000HSE Series	8/16	8/16	704*576(PAL), 704*480(NTSC)	704*576(PAL), 704*480(NTSC)	Yes

1.2. Hardware and Software Installation

1.2.1. Compatible hardware List

The DVR Server software can only run on INTEL based platforms running Microsoft Windows Operation System (Both 32 bit and 64 bit). Avoid using AMD, VIA and SIS chipset motherboards and/or onboard display cards. The DVR server System does not work properly with these hardware components.

	ITEM	REQUIREMI	ENTS		ITEM	REQUIREMENTS
1	All Intel 8xx and 9xx chipset series ASUS, GIGABYTE, or INTEL motherboards are recommended 2 RAM 33-48 cameras 49-64 cameras 3.0GB or more Please choose ATI if using a decode card for TV-o NVIDIA cards do not support overlay very well. 1920×1080 pixels, HDMI/DVI/VGA support 1680×1050 pixels, HDMI/DVI/VGA support 1440×900 pixels, HDMI/DVI/VGA support 1440×900 pixels, HDMI/DVI/VGA support		5	CPU	Pentium4 1.8GHz and/or higher frequency	
		< 32 cameras	1.0 GB or less	6	Hard Disk	No limitation
2	RAM	33-48 cameras	2.0 to 3.0 GB	7	Audio Card	No limitation
		49-64 cameras	3.0GB or more	8	Power Supply	ATX 600W or higher
3	Display Card	_		9	Computer Case	4U Industrial Computer Case
		1920×1080 pixels, HDMI/DVI/V	DVI/VGA support Computer Case 40 Industrial	PS/2 or USB		
	1440×900 pixels, HDMI/DVI/VGA sup	1680×1050 pixels, HDMI/DVI/VGA support		11	Mouse	PS/2 or USB
4		GA support	12	Net-card	100Mbps or 1000Mbps	
4	Widilitoi	1280×1024 pixels, HDMI/DVI/VGA support		13	CDRW/DVDRW	Optional
		1280×768 pixels, HDMI/DVI/VO	GA support	 14	FDD	Optional
		1024×768 pixels, HDMI/DVI/VO	GA support	15	USB Disk	Optional

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Important! More than 95% of defected cards are damaged by over heating or electrical surges. We strongly recommend that you pay attention to 3 things when you install DVR system:

- Choose a 4U industry computer case which embeds powerful cooling fans.
- Choose a power supply specifically designed for servers that can operate heavy workloads for long hours.
- Make sure to create a ground connection to your DVR computer case.

1.2.2. DVR card cable connection

All ILDVR 3000xx series DVR cards support audio recording, audio spy and remote chat. To perform these features, you need:

- Support 16KHz sample ratio microphone (MIC) for the DVR card.
- Full duplex PC sound card (PCI). (Both Server and Live Center).
- Normal PC MIC for the PC sound card. (Both Server and Live Center).
- Support 16kbps output ratio audio speaker. (Both Server and Live Center).

Card to card cable wiring inside case

- Refer to the diagram on the next page. Connect the audio cable between the DVR card and the PC sound card for audio spy in the DVR Server preview mode.
- Card #1's audio-out connects to the CD-in or AUX-in of your sound card (if you only have one DVR card, this is the only step you need to follow).
- Card #2's audio-out connects to card #1's audio-in.
- Card #3's audio-out connects to card #2's audio-in and so on.

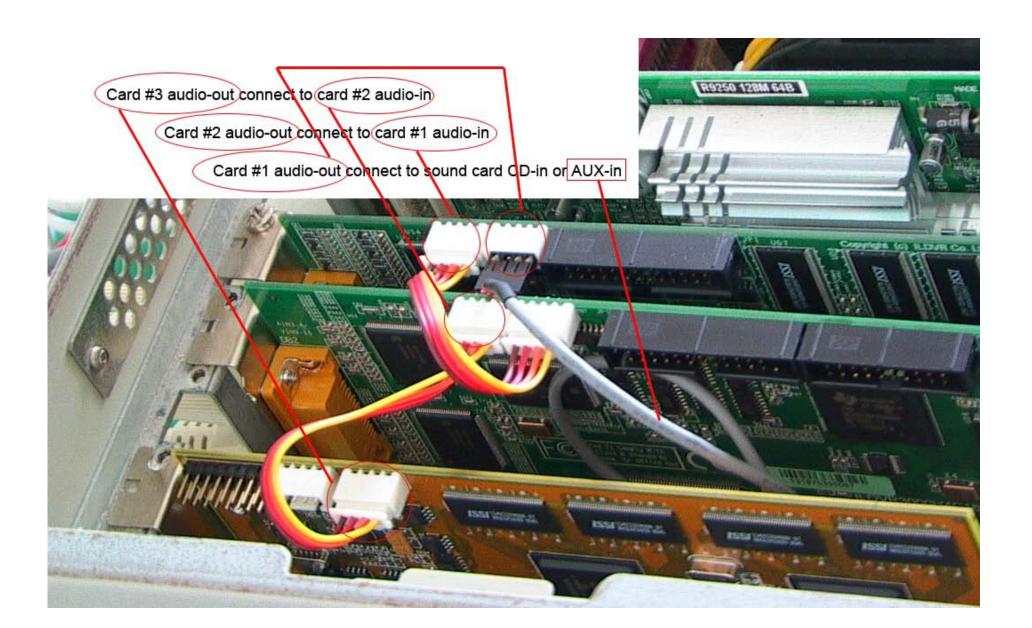
Microphone to BNC connection

Connect the MICs (microphone) to the DVR card's BNC cable for audio recording and audio streaming.

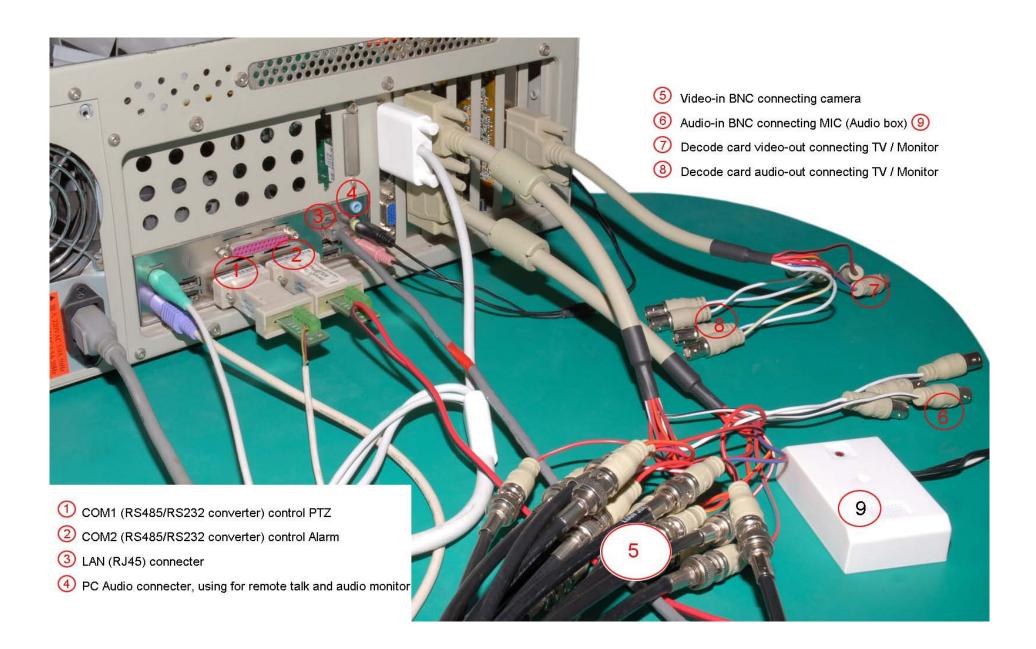
PC audio card Microphone and speaker connection

Connect the MIC (microphone) and speaker (or headphone) to the PC sound card for remote chat and remote audio spy.

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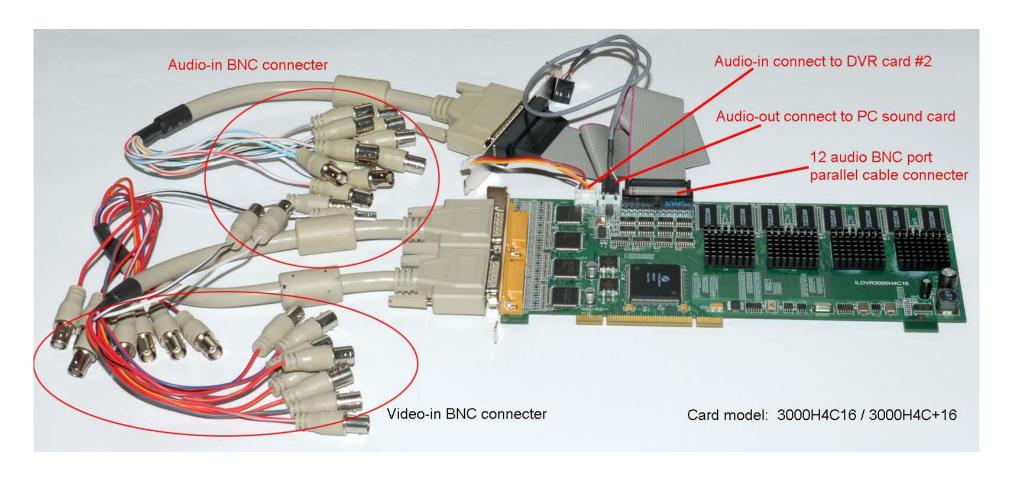


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$16\hbox{-channel cards } (3000H4C16/C+16/G16) \ audio \ cable \ wiring.$

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1.2.3. Windows OS display property settings

After you finish the Window OS installation, please install all the hardware drivers, for example: Intel 915/945/965/975 Chipset INF UPDATE, ATI or NVIDIA display driver, Net card driver (necessary) and audio card driver. If your system does not have DirectX V8.0 or later installed, please go ahead and install it.

Personalize display setting

Set the font size to Smaller (96DPI). Never set this to different font size because the DVR server software will not run properly.

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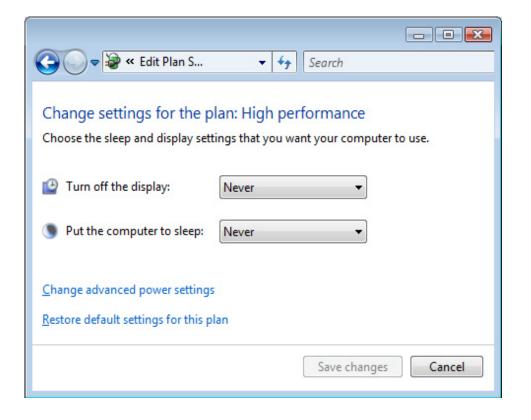
Set color quality to 32bit true color. Set screen resolution to one of following pixels: 1024×768, 1280×768, 1280×1024, 1440×900, 1680×1050, 1920×1080.

Special setup in Windows VISTA / Win 7

If you run the DVR Server v9.x on Windows Vista or Win 7, please complete the following three steps after finish the Windows Vista / Win7 installation. If you run the DVR Server and find that it is displaying abnormal video, please proceed to step 3 to correct the display setting. Refer to following illustration pictures.

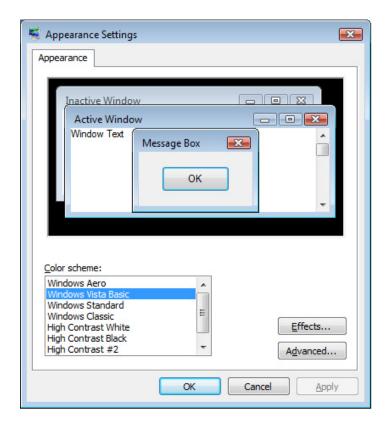
- a. Turn off Windows Vista's UAC function and disable the Windows Sleep function.
- b. Disable the Windows Vista / Win 7 updates auto-check function to prevent Windows auto reboot frequently.
- c. Change the Windows Color and Appearance setting to Windows Classic or Windows Vista / Windows 7 Basic.





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For your attention, if you need protect your Windows system with password login. Please run registry editor (regedit.exe) then locate the key:

"HKEY_LOCAL_MACHINE\Software\Microsoft\WindowsNT\CurrentVersion\Winlogon", you can manually input 4 String Value to enable Windows Auto Login

1.2.4. Card Driver and DVR software installation

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[&]quot;AutoAdminLogon" set value to 1

[&]quot;DefaultUserName" set value as your login ID

[&]quot;DefaultPassword" set value as your password

[&]quot;DefaultDomainName" set value as your domain (if you have)

Install DVR card driver

After finish installation of Windows OS, shut down the computer, plug in the DVR card. When Windows start up again, a message of "Find New Hardware" will pop up, please locate the driver path [CD]...\DVR_Server_v9.x\Drivers\ to install the driver. The driver folder name with x32 is applying for 32 bit Windows OS, The driver folder name with x64 is applying for 64 bit Windows OS

Install Hybrid DVR Server software

Locate the software path: [CD]...\DVR_Server_v9.x\Hybrid_DVR_Server.exe and double click the EXE file to initial the setup. After finishing the installation, Disk Manager will automatically run. You must build up the DVR file system otherwise the DVR Server cannot save the recorded video onto disks. You can also run the Disk Manager later on to organize your local disk drives whenever you feel the need to do so (see next section).

On the Windows desktop, there is a shortcut icon that will show up automatically after the installation is complete. Double click on it to run the DVR server program.

If you do not want the DVR system to auto run at windows startup, please delete the icon named "DVR_Server_v9.x" from the Startup menu. You can drag & drop the shortcut icon to the startup menu to recover the auto run feature after deleting it.

1.2.5. Disk Manager Operation

The DVR Server uses a pre-built DVR File System for video recording. You must first run **Disk Manager** to build up the DVR File System. The DVR system's default setting starts recording from disk drive E (drive C:\ is for the operating system and drive D:\ is used for backup). The following illustration shows that Drive C: D: E: F: G: and J: are never recording (Allotted DataPack=0). The row "Free DataPack" shows the free disk space that you can use to record. Please click the row "Add New DataPack" and select a number from dropdown list to assign data pack to DVR file system. Click "Create Database" after you assign the number.

If you need reorganize the disk space or break the DVR file system, please delete the file folder _RECORD_DATA_ in every disk drive.

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Disk Drive	Total Cina/MD\	Free Canaci(MD)	Allotted DataPack	1 datapack = 256 Free DataPack	Add New DataPack	T &
	Total Size(MB)	Free Space(MB)				_ ב
C:\ (NTFS)	45907	23447	0	91	0	
D:\ (NTFS)	99999	85889	0	334	0	
E:\ (NTFS)	130029	96669	0	376	373	
F:\ (NTFS)	100458	92074	0	358	355	
G:\ (NTFS)	100439	39603	0	154	151	
I:\ (NTFS)	476936	450908	100	1757	1754	1
J:\ (FAT32)	1905	900	0	3	1750 1751 1752 1753 1754 1755 1756 1757	
Notice: FAT3 Create Databas		pe Created very slow	wly, Recommend al	I disk to NTFS.	Ex	it

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1.3. Program Main Interface

Before you press the **DVR** power button, please make sure that all of the connector interfaces are firmly installed.

After checking the connections are firmly installed, press the **DVR** system power button. The Power LED will turn on and the application's interface will display after 1 minute following the completion of the system diagnostics. The more encoding channels you have installed, the longer it will take for the application program to load.

If the ILDVR Server auto startup shortcut has been deleted from the startup menu, please double click on the icon, located on your windows desktop. Once the application program loads, you may proceed to the next step.

Login

Press the button to display the login dialog box. Input your User ID and password, and then press OK.

The default User ID is "admin", with no password.

Note: If the DVR system is not being configured in User Manage Mode, the lock button will be unusable.

Show tips: when the mouse moves close to, or stops at a hot button, a short description tip will show up immediately.



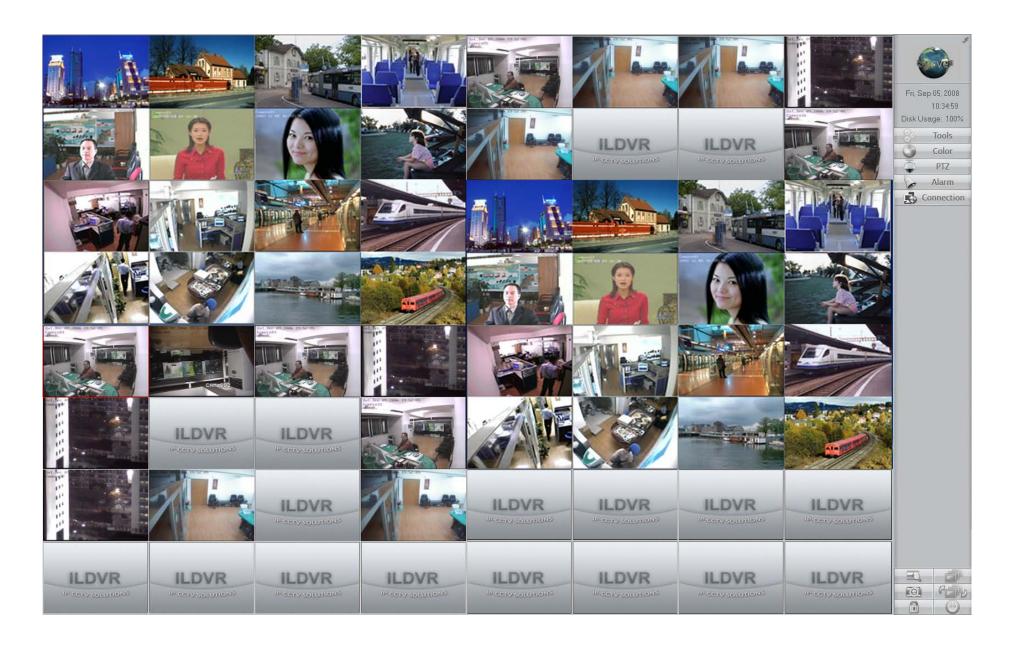
Full Screen Mode

To enter Full Screen mode on one camera view, just double click on the camera window. Double clicking the screen again will revert back to its original state. To enter Full Screen mode so that the Control Panel disappears and only the camera views are showing, just right click on any of the camera windows and click on "Full Screen Display". Right clicking the camera window again and clicking on "Full Screen Display" will revert back to its original state.

Recording status

- a. This icon indicates that the system is recording continually (**Continuous Record**)
- b. This icon indicates that the system is recording in motion detect mode (**Motion Record**)
- c. This icon indicates that the system is recording in sensor detect mode (**Sensor Record**)
- d. This icon indicates that the system is recording manually (Manual Record)
- e. If there is no icon on the screen picture, the system is not recording (**No Record**)

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Date and time

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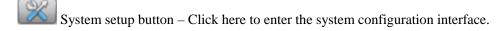


Displays the date, time, and hard disk's free space status.

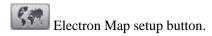
Control Panel

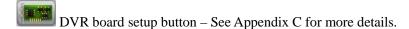
Press one of the 5 main icons to open each section of the control panel. Clicking the icon again closes that section of the control panel.

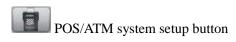




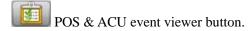


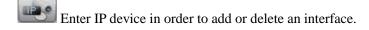












Switch button for TV-out Matrix Groups.

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Emergency record button records video for 30 seconds.



Manually record with this button.



Press this button to write to the On Duty Log.



View Log button.



Remote Talk button – Click this button to begin a remote talk session.



Run DVD/CD backup program.



Run external program.



Press this button to open Windows Explorer.



Switch button for pre-defined display group.



Color/Audio Adjust Panel



Brightness

Contrast

Tone

Saturation

Voice

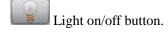
Move slider to adjust color settings.

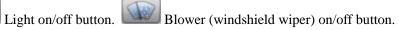
Click color icon to restore default value.

Copy the current camera color settings to other cameras by clicking the "Copy Settings To" button.

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Zoom in/Zoom out Focus in/Focus out Iris change



Click the direction icon to move PTZ in different directions. Use the circle button if you would like to initialize auto scan. Some protocols, such as Pelco-D, do not take advantage of this function. The _____i icon displays the active channel number on the screen. In this example, the PTZ camera is listed as 1.



Move the slider to adjust the Pan/Tilt speed. Press the button and select "**Preset Setup**" to bring up the preset setup interface. See section 9 for more information.



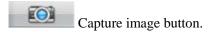


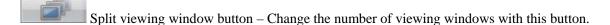
A grey number icon indicates a sensor or D/O port that is not available for use. A light blue number icon indicates that this sensor or D/O port is working on guard mode. A dark blue number icon means this sensor or D/O port is either alarming, or is being operated manually.

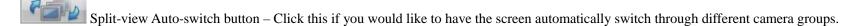
[22] DVR / NVR User Manual

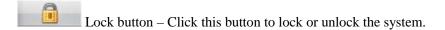
Quick control buttons (on the bottom left hand corner)

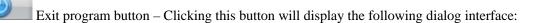
Playback button – Click this button to enter log file searching mode. If your DVR system supports multiple monitors, you can set the playback interface display on any one of the extension monitor, while the preview cameras show on the main monitor.

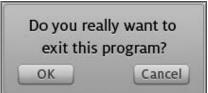












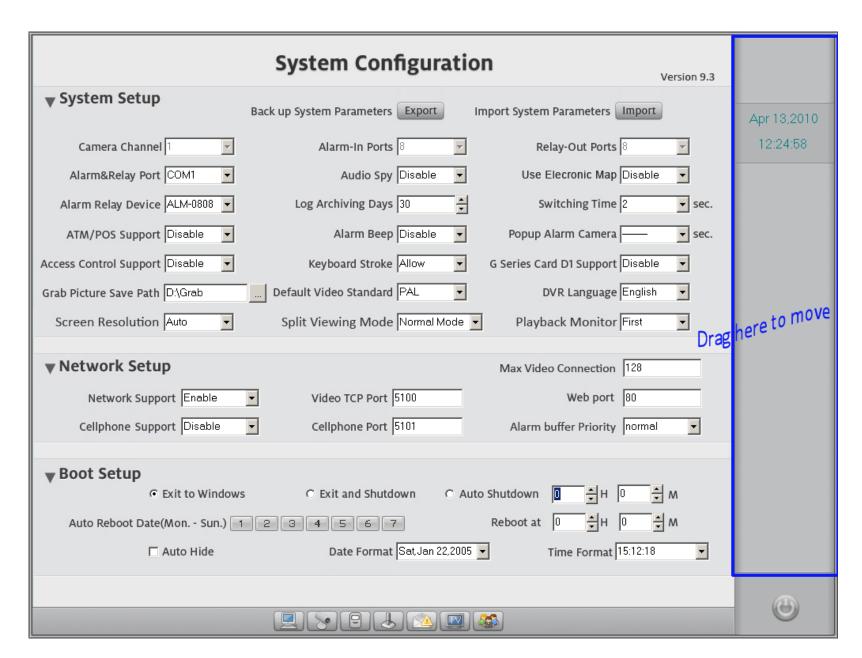
Click "OK" to exit ILDVR system.

1.4. DVR Server Configuration

1.4.1. System Configuration

In the **Tools Panel**, press the button to enter the DVR's **System Configuration**. If your DVR system supports multiple monitors feature, the setup interface will display on the second monitor. To move the interface please drag & drop the right side, see following illustration.

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System Setup

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- **Backup System Parameters**: Saves the system settings for backup Use this feature to keep your settings when upgrading or reinstalling software.
- > Import System Paramenters: This restores your system setting from a backup file.
- **Camera Channel:** This displays the total number of camera channels.
- ➤ **Alarm-in Ports:** This displays the number of sensors (D/I).
- **Relay-out Ports:** This displays the number of alarms (D/O).
- ➤ Alarm & Relay Port: Select the COM port used for the alarm control device.
- > Alarm Relay Device: Select an alarm control device.
- Audio Spy: Enable or disable the audio monitor in preview mode.
- > Use Electronic Map: Select this to display the Electronic Map when an alarm is set off.
- ➤ Log Archiving Days: Saves the System Log for this many days (max 99 days).
- Switching Time: Set split-view auto-switch interval (max 180 Sec).
- Alarm Beep: This enables or disables the mini-speaker on the mother board to beep when there is an alarm.
- > Popup Alarm Camera: Setup an alarm camera to show the time whenever it pops up. This setting only takes effect when you right click on a camera view and selecting "Start alarm popup".
- > ATM/POS Support: Enables or disables ATM/POS support. Set this to enable to activate the POS setup button on the main interface.
- > Access Control Support: Enable or disable Access Control Unit (ACU) support. Set this to enable to activate the ACU setup button on the main interface.
- ➤ **Keyboard Stroke:** When setting the Keyboard Stroke to "**Allow**", you are enabling it to be used normally. Setting this to "**Block**" will prevent anyone from using the PC keyboard function keys. In "**Block**" mode, the DVR interface is permanently on the screen. You cannot minimize it or shift to your Windows Desktop. The keyboard is only used to input 26 alphabet letters and digits 0 through 9.



For security reason, sometime the PC keyboard will be disabled on the DVR system. In this case, if you need to input something like a username and password, all you have to do is just double click on the blank Input Box and it will automatically bring up the DVR soft-keyboard (shown left).

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- > G Series Card D1 Support: Set the 3000H4G8/G16 DVR card to save D1 resolution images at low frame speed (about 3 fps).
- **Default Video Standard:** Setup default video standard to match Decode card.
- **DVR Language:** Change language setting is only available for software versions that support multiple languages.
- > Grab Picture Save Path: Set the folder you would like to save all the captured images in. If you don't set a path, the DVR uses the default path D:\Grab\camera_name. The camera_name will be the alias you put in the Camera Setup interface.
- > Screen Resolution: Set program main interface to fit the Windows OS display resolution.
- > Split Viewing Mode: Select split mode according your monitor type.
- Playback Monitor: Choose playback monitor. Before you do configuration here, please first go to Windows Display Property to configure every monitor's display resolution and sequence. Playback program will auto check the display resolution then show up as proper resolution. When you enable multiple display, the SETUP interface also move to the second monitor.

Network Setup

- ➤ **Network Support:** This enables or disables network connections.
- > Video TCP Port: Set this to the TCP/IP port you would like to use for connecting remotely with Live Center.
- > Web Port: Set this to the TCP/IP port you would like to use to connect through Internet Explorer.
- **Cellphone Support:** Enable or disable PDA/mobile phone connection
- **Cellphone Port:** Set this to the TCP/IP port you would like to use for cell phone network access.
- Max. Video Connection: Set maximum connection of cameras that the server support including PC Decode Client.
- > Alarm Buffer Priority: Set high priority means the server will buffer and transfer more frames on network but it needs more bandwidth. Recommended settings is Realtime for LAN and Smooth for WAN

Boot and Shut Down

For system stability, the system can be set to restart automatically.

- **Exit to Windows:** Select this if you would like Hybrid Server to automatically exit to Windows.
- **Exit and Shutdown:** Select this if you would like Hybrid Server to exit and shut down the computer.
- Auto Shutdown (hour, minute): Select the appropriate time you would like the system to automatically shutdown.
 - Auto reboot date (Monday to Sunday): Select the appropriate day or days you would like the system to automatically restart.
 - **Reboot at (hour, minute):** Select the appropriate time you would like the system to automatically restart.

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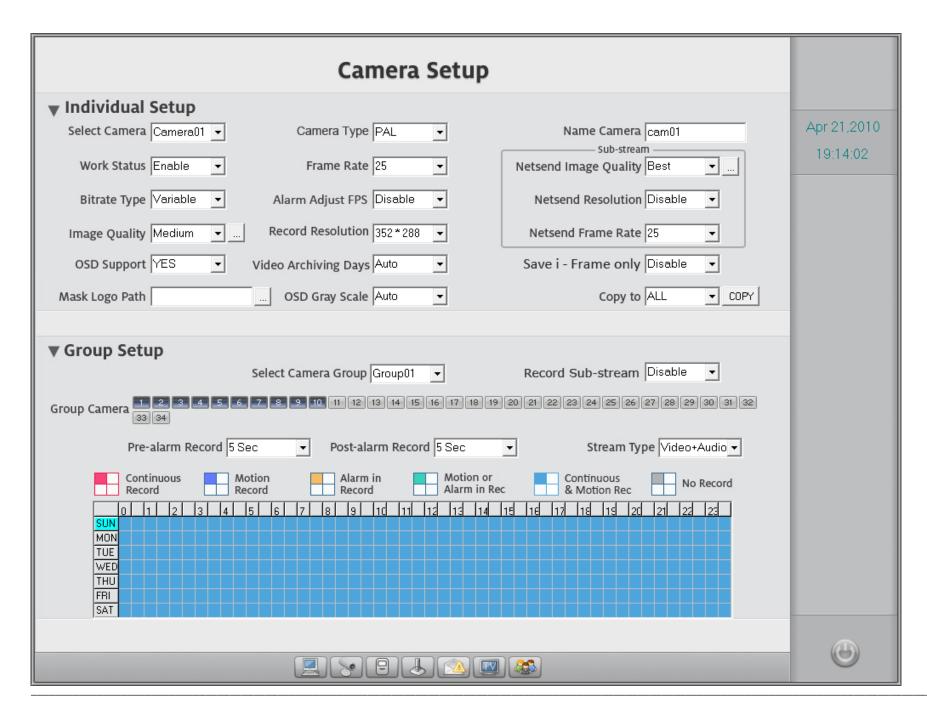
- > Auto hide: Select this if you would like Hybrid DVR Server to minimize after starting up.
- **Date Format:** Select the date format you would like to use.
- **Time Format:** Select the time format you would like to use.

1.4.2. Camera Setup

Individual Setup

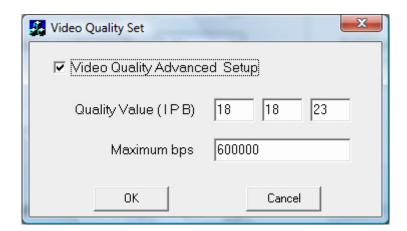
- > Select camera: Select the channel number to change the settings for.
- **Camera Type:** Set camera video standard.
- Name Camera: This is the channel's OSD (On-Screen Display). Write the description for this camera here (example, "Front Door").
- Work Status: Select enable if you want to enable the camera to record. Selecting disable will disable the camera from functioning.
- ➤ **Bitrate Type:** Select which bit rate mode you want to record in. VBR/CBR mode, VBR=Variable bit rate, CBR=Constant bit rate. For better network streaming performance and better image quality, please choose VBR.
- Frame Rate: Select the recording frame rate (fps) you would like to use Only available in VBR mode.
- Alarm Adjust FPS: Set alarm recording frame rate. For the purpose to save disk space, you can set low fps in above normal recording Frame Rate, here you set high frame rate to get real time video when alarm happens.
- **Record Resolution:** Select the recording resolution you would like to use. Pick 352*240 for CIF resolution, or 704*480 for D1 resolution.
- Video Archinving Days: Select how many days you want Hybrid Server to record for. For example, if you set this to 7 days, once the 7 days are up it will delete the first archiving day to make room for new video data to be saved. If you run out of disk space before the 7 days, Hybrid Server will stop recording and issue a warning to notify you of the problem.
- **OSD Support:** Select **YES** if you would like the OSD date and time to be recorded on top of the video.
- > **OSD Gray Scale:** This is to set the color of the OSD display. Setting this to Auto will change the OSD to black if it's behind a white background and white if it's behind a black background. For a solid color OSD, chose between 0 (all black) and 255 (all white).
- ➤ Mask Logo Path: If you would like to apply a watermark feature, click the button and locate the logo you would like to use. The picture must be edited to fulfill the this requirements: Width and length must be in multiples of 16 pixels such as 96×80 pixel and maximum no more than 128 pixels. The watermark picture must be saved as 24bit BMP file.

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> Image Quality: Select the recording image quality. Click the ____ button to bring up the following advanced bit rate control dialog box.



either CIF (352*240) or QCIF (172*120).

You usually don't need to change the default settings.

The following 3 items are sub-stream settings. These settings are unavailable for DVR cards that do not support dual stream (3000H4C16, 3000H4G8 and 3000H4G16).

- > Netsend Image Quality: Select the network streaming image quality you would like to use. Click the button for advanced bit rate control.
- Netsend Resolution: Set the network streaming image resolution here. Select 352*240 for CIF resolution, or 704*480 for D1 resolution.

 For the purpose of viewing high quality images remotely, it is best to use main stream for network streaming. To enable main stream viewing, set this to "Disable". Live Center right-click menu cannot adjust image quality of main stream. Refer to section 2.11.1.

 For the purpose of viewing smooth video remotely on a low bandwidth network, please choose sub-stream for network streaming. To enable sub-stream, chose
- Netsend Frame Rate: Select the network streaming frame rate you would like to use.
- Save i-Frame only: Select "Enable" if you would like to save video data at one frame per second. This is used when hard disk space is very limited.
- **Copy to:** This button saves the current camera settings to all cameras or to selected cameras only.

Group Setup

The DVR system manages all cameras and their working time table by groups. One group of cameras uses one schedule. If you add one camera into two different groups, the first operation will be voided. Only the second setup will function.

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- **Select camera group:** Here you will select a group number to setup.
- **Record Sub-stream:** Select "Enable" if you would like to record the sub-stream video for your group. The default is set to "Disable".
- ➤ **Group Camera:** Click the camera number(s) you would like to add to your group.
- **Steam Type:** Select the video and audio recording mode for your group.
- > **Pre-alarm record:** Select the time would like to start recording before an alarm is triggered. When the ILDVR system is in **Motion Detect mode** or in Sensor Detect mode, it can record video prior to the alarm being triggered.
- > Post-alarm record: Select the time you would like to stop recording after an alarm has been triggered. When the ILDVR system is in Motion Detect mode or in Sensor Detect mode, it can stop recording video after the alarm has already ended.

Schedule Setup



Tips: One block of pane equals to half an hour. First, click the icon of whichever type of record mode you would like to use. Then go ahead and click schedule diagram, holding down the left mouse button and moving it to select an area (drag & drop).

- a. Continuous Record : The DVR System is always recording video. (e.g. Sun. Fri. and Sat.)
- b. **Motion Detect Record** : The DVR System begins to record video only when it detects a moving object. (e.g. Mon.)
- c. Alarm in Trigger Record : The DVR System begins to record video only when there is a sensor triggered alarm. (3:30 to 11:00 in Tue. Wed. Thu.)
- d. **Motion Detection or Alarm in** : The DVR system begins to record with it either detects a moving object or one of the sensors has been triggered.
- e. **Continuous and Motion Record -**: The DVR system works as continuous record but meanwhile save the motion detect information for smart search.
- f. **No Record -** The DVR System stops recording any video.

To set up "Motion Detect Record", click the icon and select your schedule time by left clicking the mouse button and moving it to select an area. For example, the

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above picture implies that Monday is set on motion detect record mode and Sunday is set on continuous record mode. Tuesday, Wednesday, and Thursday, from 3:30 to 11:00, they have set up their schedule to operate on sensor record mode, while from 14:00 to 22:30, they're schedule is set to both motion detect record mode and senor detect record mode. Everything else is scheduled to record normally on continuous record mode. To record motion detect alarm video from an IP camera, please refer to section 1.5 (Motion tab) to set an IP device locally.

Note: The schedule for Alarm in Trigger Record (or Sensor Record) must match the schedule for Check Alarm in the Schedule Setup interface. If it is not set up this way, it will not work properly. For example, if you setup the DVR system with No Check (alarm) from 8:00 to 9:00 in Wed. even sensor alarm happen in this hour, DVR doesn't record any video in this hour.

1.4.3. Alarm In and Relay Out Setup

The Alarm In and Relay Out function needs an alarm controller in order to work. We suggest an 8, 16 or 32-port alarm controller device.

Individual Setup

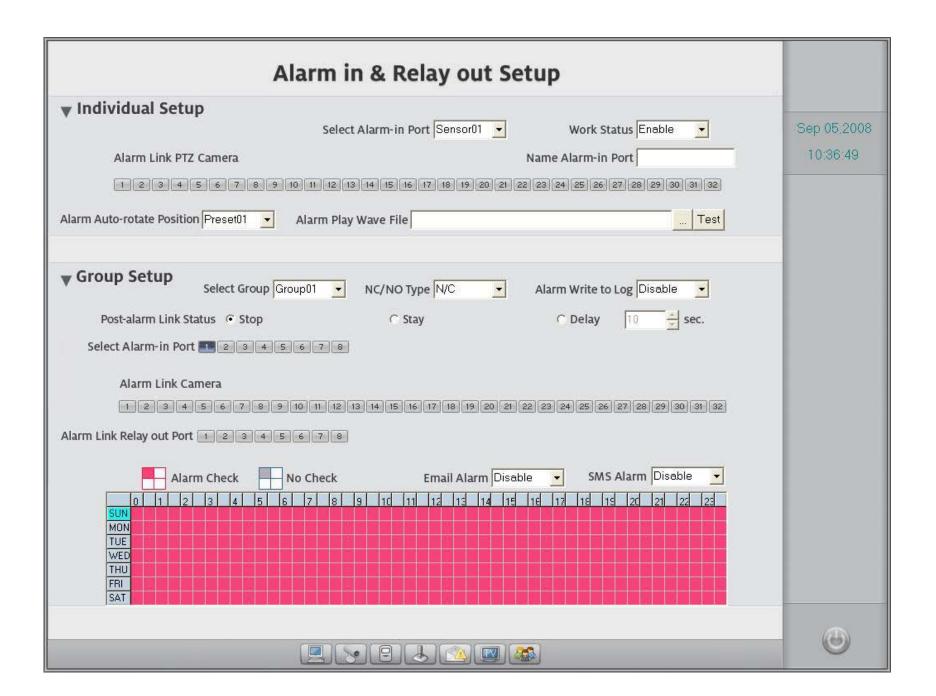
Select Alarm-in Port: Select a sensor to configure.

- **Work Status:** Check "**Enable**" here if you would like to enable the alarm port.
- Name Alarm-in Port: In this box, put in a description or name of the sensor.
- Alarm Link PTZ Camera: Select which Speed Dome corresponds with this sensor alarm.
- Alarm auto-rotate Position: Select which preset you would like to use for the alarm's automatic rotation here (only available if preset is saved). If an alarm goes off, you can link a PTZ camera to move to a different position with a preset. To learn how to do this, please read section 1.4.4 PTZ Setup and Motion Alarm.

Note: When you install the ILDVR Speed Dome, please do not use preset #1 to link any alarm triggers. If you use preset #1, the camera configuration menu will always pop up. This happens because the ILDVR Speed Dome is designed to use preset #1 for the popup configuration menu. If you need to utilize the Alarm Link PTZ Auto-rotate function, please choose preset #2 or greater.

Alarm Play Wave File: Setup the audio file path to play an alarm warning sound.

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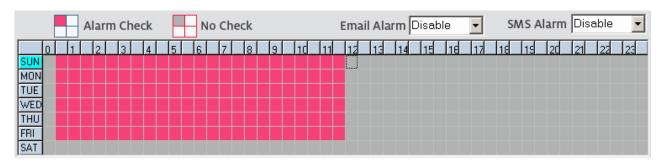
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Group Setup

The DVR system manages all sensors (alarm in) and their working time table by groups. These groups act just like the camera groups we already discussed earlier in Section 1.4.2. Each group of sensors uses its own schedule. If you add the same sensor in two different groups, the sensor in the second group will void the sensor in the second group.

- > Select Group: Select a group number to configure.
- > NO/NC Type: Select an N/C or N/O alarm type.
- Alarm Write to Log: Enable or disable writing to the alarm log.
- Post-alarm Link Status (Stop, Stay, Delay): Choose what you would like to do with the DVR System's alarm linkage mode after an alarm time-out. Clicking "Stop" tells the system to stop the alarm alert immediately after an alarm time-out. "Stay" tells the system to continue the alarm alert after an alarm time-out. Clicking "Delay" will tell the system to extend the alarm alert short time (e.g. 10 seconds), then stopping the alert after an alarm time-out.
- **Select Alarm-in Port:** Add sensor(s) to above selected group.
- Alarm Link Cameras: Here, you add linkage cameras to the above mentioned group. One camera can be chosen in multiple groups. These cameras respond to groups of sensors to perform "Sensor Record" according to the schedule of this group. Any one of the sensors in a group can trigger all camera links to this group.
- Alarm Link Relay-out Port: This adds an alarm device (alarm out port) to the above mentioned group. This operation works exactly the same like "Alarm Link Camera". One Relay Out port can be reduplicate chosen in multiple groups. These ports respond to the group of sensor(s) to do the job "trigger alarm out" according to the schedule of this group. Any one of the sensors in a group can trigger all ports link to this group.
- **Email Alarm:** Enable or disable email alarm support.
- > SMS Alarm: Enable or disable SMS alarm support.

Schedule Setup (Example used below)



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Tips: One block of pane equals to half an hour. The procedures for this are identical to the way we setup the previous record schedule.

- a. Alarm Check Time : The DVR System responds to the group of sensors at this time (00:30 to 12:00 from Sun. to Fri.).
- b. No Check Time : The DVR System stops responding to the group of sensors at this time (12:00 to 0:30 from Sun. to Fri. and whole day of Saturday).

1.4.4. PTZ Setup and Motion Alarm

PTZ Setup

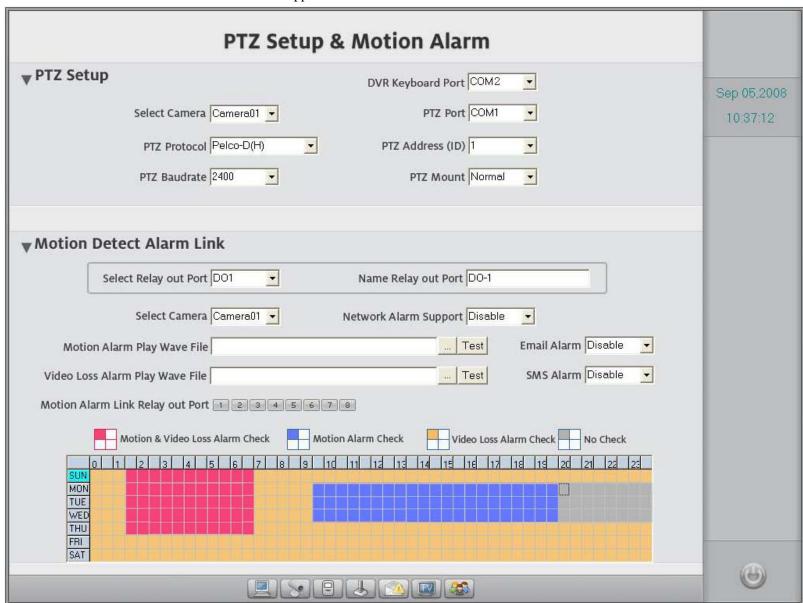
- **DVR Keyboard Port:** Set the PCDVR keyboard 2988 connecting COM port.
- > PTZ Port: Set the PTZ connecting COM port. All of the PTZ's in one DVR system share one COM port.
- > Select Camera: Select a camera to configure the following 4 items.
- **PTZ Protocol:** Set PTZ control protocol. The protocol name with H means high speed dome protocol.
- > PTZ Address (ID number): Set PTZ address, the address ID can be different from the camera sequential number.
- **PTZ Baudrate:** Set the correct protocol baud rate.
- > PTZ Mount: Set PTZ installation method.

Motion Detect Alarm Link

- **Select Relay out Port:** Select a description for the alarm out port number.
- Name Relay out Port: The name you type in here will show up on the Alarm Control Panel in Live Center. The relay out port can be used to open a door, or maybe to turn on a light.
- \triangleright Select Camera: Select a camera to set up the following 7 items (a g). Motion detect alarm must be configured one by one for the cameras.
- > Network Aalrm Support: Enable or disable the network alarm.
 - Important: To apply the function of "Motion Record" and "Network Alarm Support" in Live Center and CMS, you must enable Network Alarm Support.
- Motion Alarm Play Wave File: Set audio file path to play sound warning when motion alarm is set off.
- Video Loss Aalrm Play Wave File: Set audio file path to play sound warning when video is lost.
- Motion Alarm Link Relay out Port: Select which relay out ports respond to this camera. One camera can trigger multiple ports.
- **Email Alarm:** Enable or disable email alarm support.

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SMS Alarm: Enable or disable SMS alarm support.



Schedule Setup (Example for above figure)

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- Motion and Video Loss Alarm Check : The DVR System responds to either Motion Detect or Video Lost in this time frame (01:30 to 07:00, Sun. to Thur.).
- Motion Alarm Check : The DVR System only responds to Motion Detect in this time frame (09:30 to 20:00, Monday Wednesday).
- Video Loss Alarm Check : The DVR System only responds to Video Loss Alarm in this time (yellow area).
- No Check : The DVR System stops responding to Motion Detect and Video Loss Alarm in this time (20:00 to 24:00, Monday Wednesday).

Note: The 'No Check' setting will not impede the 'Motion Record' setting you have set up in the Camera Setup page in Section 1.4.2.

1.4.5. Email and SMS Setup

SMTP Setup

Enter mail server name or IP address, login ID, password and all other information.

- > SMTP Server: Enter your mail server address.
- > SMTP Port: Enter the mail server SMTP port (sending mail TCP port).
- **Authentication:** Enter the mail server authentication method.
- **Login ID:** Input Login ID
- **Password:** Login Password.

Email Setup

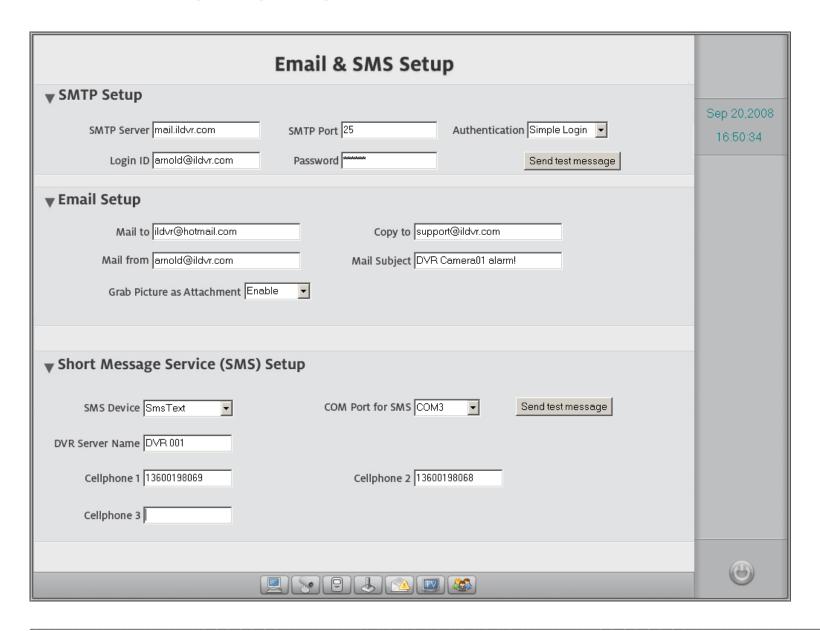
- Mail to: Enter the recipient mailbox address here.
- **Copy to:** Enter the second recipient mailbox address here.
- Mail from: Enter the sender's mailbox address here. This address must match the above mail server.
- > Mail Sunject: Enter the Email subject here.
- > Grab Picture as attachment: Enable or disable attaching a picture of the alarm camera.

Short Message Service (SMS) Setup

- > SMS Device: Select the SMS device type you would like to use. We suggest you use SMS Text.
- COM Port for SMS: Set the SMS device connecting COM port you would like to use. Please check it from Windows Device Manager after you install the GSM modem driver correctly.

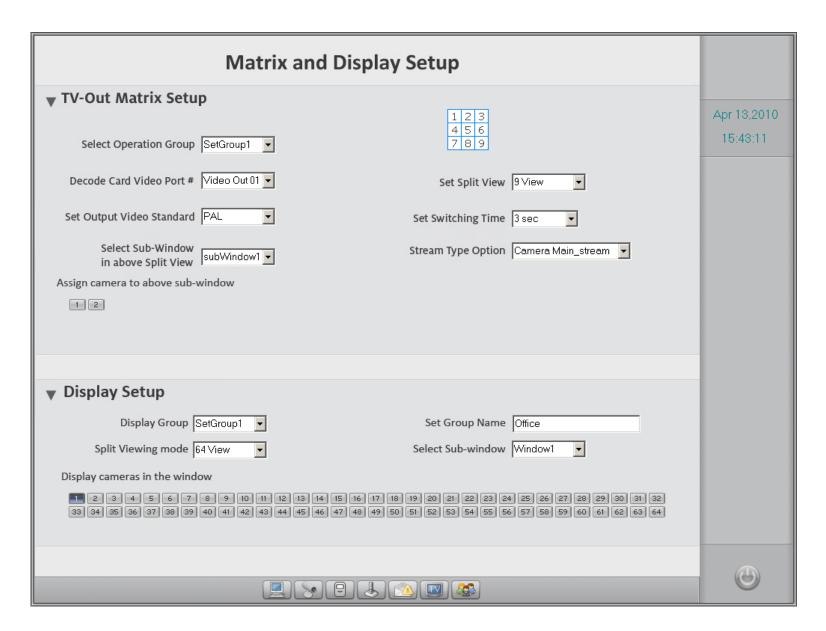
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- **Dvr Server Name:** Enter a description of your DVR system.
- **Cellphone** (1,2,3): Input the recipient's cell phone number(s).



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1.4.6. Matrix and Display Setup



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Matrix TV-out Setup

This feature only supports following products: 3000H4C/C+/F/G series cards, IL6000 series NetDVR, IL5000 series IP server, INC series IP Camera and INS series IP Speed dome. If DVR Server has or mixes other model of product, please choose PC Decoder TV-Client solution. See section 1.4.8 and section 1.4.9. The matrix TV-out function requires a 3000H4Dx decoder card. Please make sure that you know how many TV-out ports are available on your DVR system. Typical decoder cards have 2 or 4 ports. The DVR Server supports up to 24 ports (max. 24 monitors).

- > Select Operation Group: The DVR system manages the matrix settings by groups. All of the following operation steps are saved in this group until you change to operate another group. From the main interface, you can easily switch TV-out groups by clicking the switch button and selecting the target group name.
- Decode Card Video Port: Choose a TV-out port number to set your display parameters. Your TV-out display port settings must be configured one by one for all ports. All of the following 6 steps are saved in this port (video out 01) until you change to operate a different port. Please finish all 6 steps before you change to configure another port. Repeat steps 1 through 6 until all Video-out ports completed.
 - > Step 1: Set Output Video Standard: Select an out-going video format to match the monitor video standard (NTSC or PAL).
 - > Step 2: Set Split View: Select a split viewing mode for this port (TV-out port 01).
 - > Step 3: Set Switching Time: Set a time (in seconds) to switch camera views. If you assign multiple cameras (step 6) to one window or sub-window, the DVR system will automatically show these cameras in sequence at the interval you configured above.
 - Step 4: Select Sub-window in above Split View: Choose one sub-window in the above split view (step 2) to assign cameras to. The sub-window must be assigned one at a time. The next two steps are saved in "sub-window1" until you change to operate another sub-window. Before changing another TV-out port, please repeat step 4, 5 and 6 until all sub-windows are completed.
 - > Step 5: Stream Type Option: Select the stream type for the cameras in next operation.
 - > Step 6: Assign Cameras to above sub-window: Click the camera number to add it to sub-window1.

Important Tips

- Due to the dual-stream function of the DVR card, you will have twice the number cameras for your TV-out. That means that every camera can be assigned twice. One is for the camera's main-stream; the other is for the camera's sub-stream. If you assign one camera multiple times through the same stream type, the DVR System will only remember the final operation. This means that the earlier "add in" operations will no longer be valid.
- If your DVR connects to an IP device, please check the resolution (D1 or CIF) of the network video and the settings for "Decode Card Working Mode" in the IP Device List interface. If this optional setting is disabled, even if you add in IP cameras to the TV-out, they will not show up on the screen. Set the decode mode to match the video resolution. D1 mode can support the exact amount of IP cameras equivalent to your TV-out ports. CIF mode supports twice as many.

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Display Setup

The operation is similar to above TV-out Matrix Setup. You should configure every group and sub-window one by one.

1.4.7. User Management

User Information

- Local Password Support: Enable or disable the Local User Management function. Selecting "Enable" will activate the lock button on the main interface.

 When DVR system is locked, the network users can still log in and operate the system remotely. This is just to lock the DVR system locally.
- Auto Lock: Select the auto lock idle time in minutes. The DVR software can be set up to lock automatically if left idle for a specific amount of time.
- > Network Password Support: Enable or disable the Network User Management function.
- > User ID: This shows the current user ID. You may input a new User ID in this box as well.
- Administration Group: Select the user type for a new user ID. Only the Administration Group members have the rights to enter the User Management interface.
- **Password:** Here you can create or change a user's password.
- **Confirm Password:** Re-type the password you entered in the above field.
- Notes: Enter your user description in this field.

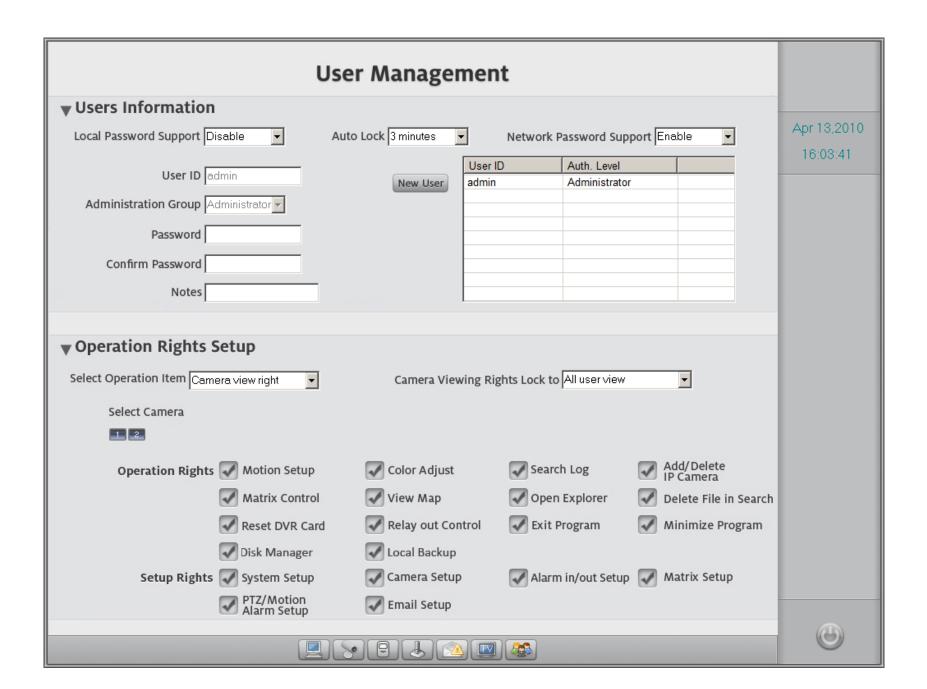
	User ID	Auth. Level	
New User	admin	Administrator	
	USER02	operator	

The User List shows all users and their user information. To delete a user ID, please select the user and click the "delete" button. Deleting a user ID will disable them from logging in locally and remotely.

New User To add a new user into the system, firstly click this button to empty the "User ID" box and activate the "Add User" button.

Add User Click this button to add a new user. You can set a maximum number of 16 users per system.

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Save all changes with this button. Click this button to save all settings when you finish the "Operation Rights Setup" for the current user.

Delete User Click this button to delete current user.

Operation Rights Setup

- > Select Operation Item: Camera operation rights are divided to four types: camera view rights, camera playback rights, camera audio rights, and PTZ control rights. Each type of rights must be configured individually with the next operation step.
- > Select Camera: Click the camera number to authorize above "camera operation rights" for the current user.
- > Camera Viewing Rights Lock to: This setting only takes effect when the DVR system locks. When you set this to the "All users view", the screen hides the cameras that the users are forbidden to view. When you select the "Current user view", the screen hides the cameras that the final operator is forbidden to view.

The following operation rights are the system operation rights. Click on the check icon to enable these rights for the current user.

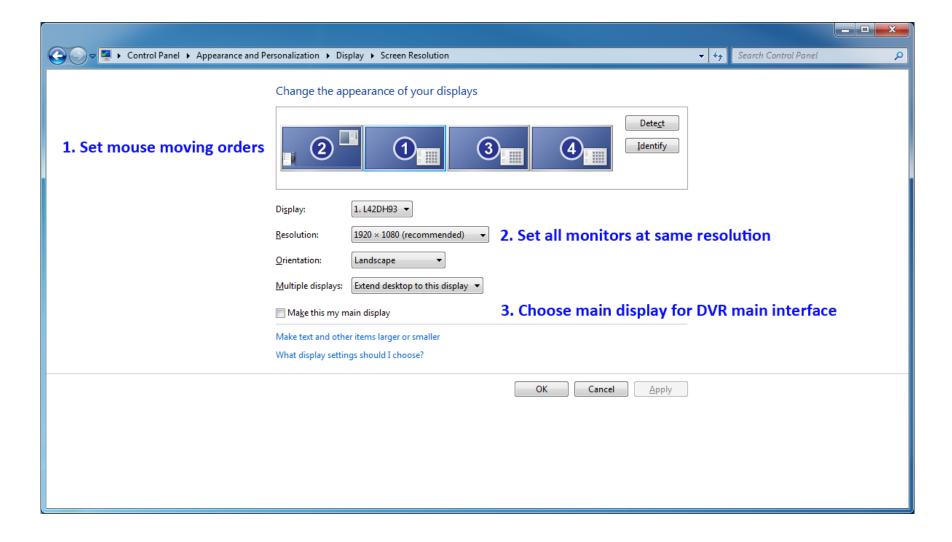


This is the exit button. Once you're ready to exit the screen, press this button. A message box will appear asking you if you would like to save. Click "Yes" if you would like to save your changes; "No" to discard any changes you may have made.

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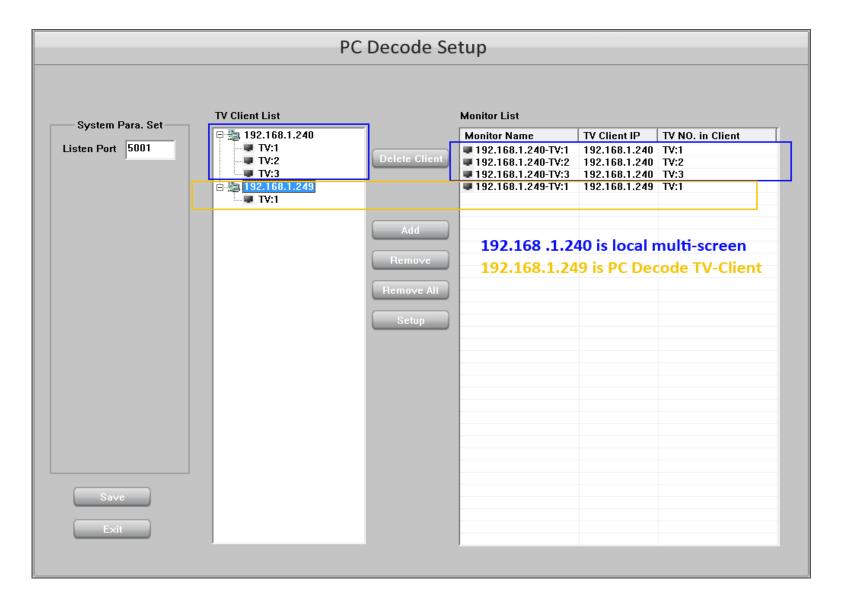
1.4.8. Multiple Display Outputs

If your DVR computer installed dual-head display card or installed dual display cards and mounted with multiple monitors. Please enter Windows OS display settings to personalize the display appearance. See following illustration.



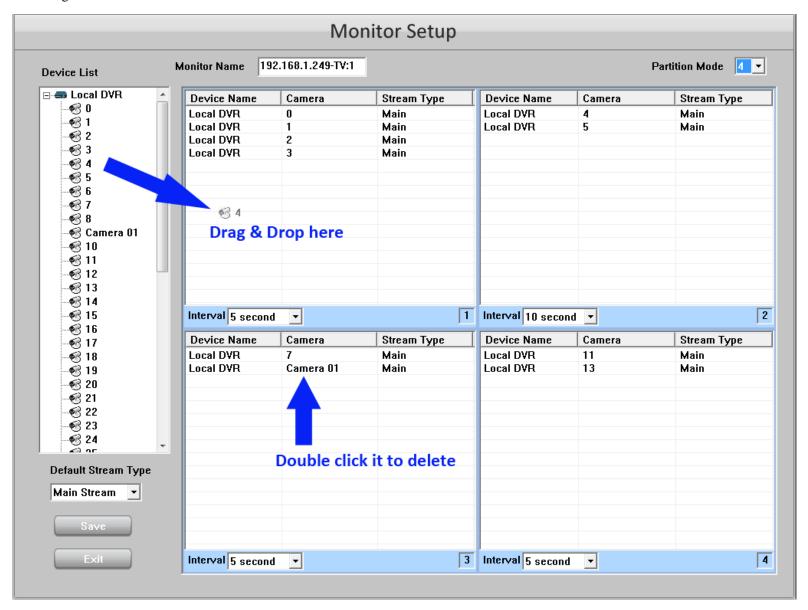
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After you finish multiple display configuration, DVR system will auto detect how many local monitors could be used, The screen right-click menu will add a new item "Multi-Screen Setup". Click it to enter following PC Decode Setup interface. In the illustration, DVR server installed 4 monitors and one PC Decode Client connect it.



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In the Monitor List table choose one monitor then press Setup button to enter following "Monitor Setup" interface. If you add multiple cameras in one sub-window, please don't forget to set a switch time.



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1.4.9. PC Decode TV-Client

PC Decode TV-Client is a kind of simple network client software, after you finish its installation, the following diagram pops up. Please input remote Server IP address and TCP port number then press "Save" button. When Windows OS startup, PC Decode TV-Client will automatically run and keep on top of the screen. If you want to exit this program, please press Windows key to popup the taskbar, right-click the TV-Client icon, select Exit from the right-click menu. Also you can change the Server IP address by click "setup". If you want to disable its auto-start feature, please delete the shortcut from startup menu. For the configuration info please see above section. For your attention, DVR Server must enable dual-monitor firstly then it could support PC Decoder TV-Client.





1.5. IP Device Operation

Connecting IP Device

In the tools panel of the main interface, click the button to enter the **IP Camera Device List** interface (pictured below). The definition of ILDVR IPcam includes all models of IP camera, IP video server, IP speed dome and IL6000 series of NetDVR. IL8000NetDVR is new series of NetDVR. For non-ILDVR IP devices, the Hybrid DVR server needs a device of USB Watch Dog to support. Please contact your dealer for more information.

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		IP Cam	era Device	List			
Server Name	IP Address	Port	Camera NO.		Registered?		
INSoutdoor INS indoor	74.0.113.59 74.0.113.60	8009 8000	10	connect ok	Yes		
INC_TS288NI	74.0.113.52	8002	11		Add/Modify If	Device Device	
MEGAIP	74.0.113.54	8004	12				
				Server name IN	C_TS288NI	Device type NetD	VR_IPDevice
				IP address 74	.0.113.52	Stream type Main	-Stream ▼
				TCP Port 80	02	DNS support No	•
				Login ID ad	min	DNS IP address	
				Password ***	**	DNS TCP Port 7071	
	Decode card working mode D1 Decode Mode				ОК	Cancel	
Add Cam Cl	hange Del. Ca	m		Save	Cancel		

Click the "Add Cam" button to add a new IP device. Click the "Change" button to modify an existing IP device. Click the "Del. Cam" button to delete an IP device. All IP Device cameras are automatically arranged to the position behind the DVR card channel's and are given a channel number by the sequence of add-in operations. Please check the Connect Status and Register information from the IP device list. After connecting the IP device successfully, you can perform Remote Configuration for the IP device if necessary. See next section.

If your DVR system has decoder card installed, please set the "Decode card working mode". First check the network video resolution (D1 or CIF), then set the Decode **Mode** to match the network video resolution. Refer to section 1.4.6.

IP Device Configuration

Before you perform a remote configuration, please make sure that your login ID has authorized administration rights. Right click on any part of the screen and scroll down

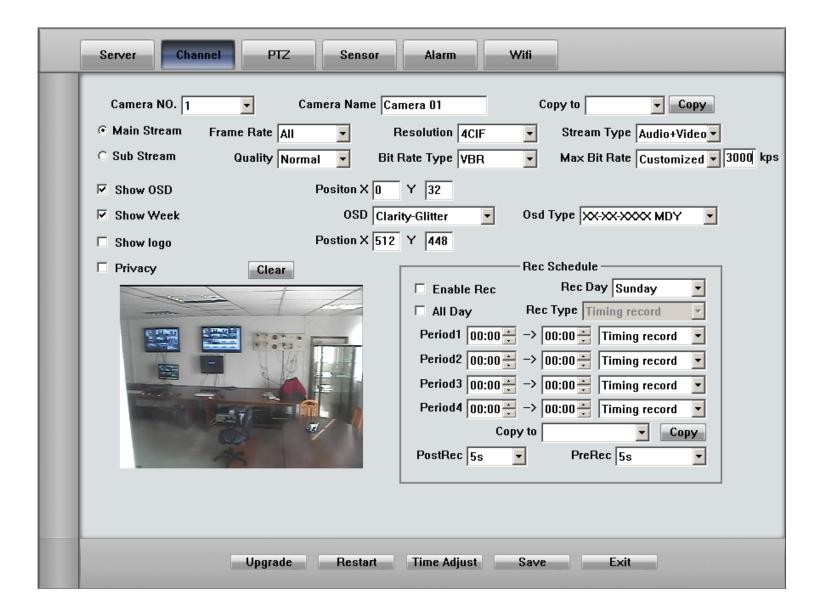
DVR / NVR User Manual [47] and select "NetDVR_IPdevice Setup" to enter the following IP Camera Setup interface. In default "System" setup page, you can modify the device name, IP address, TCP port number and read the device serial number and system version information.

For your attention, following operation steps are not applying to new megapixel IP camera INC-M13xx and INC-M20xx series.

Server Channel PTZ	Sensor	Alarm Wifi	
Server Name Embed	led Net DVS	User name	admin
Server IP 192.168	3.1.26	User Pass	****
Listen Port 8000		DNS Server IP	0.0.0.0
Subnet Mask 255.25	5.255.0	Remote Manage IP	0.0.0.0
Net Gate 0.0.0.0		Remote Manage Port	0
Net Cable Type 10M/10	OM(5 cable)	Physical address	00:40:3b:95:7e:6e
Use PPP0E □		Software Ver.	V2.0 build 080826
PPPOE Login Name		DSP software Ver.	V4.0 build 080729
PPPOE Login Pass		Hardware Ver.	0×0
PPP0E IP 0.0.0.0			
Serial NO INS-500	11HS0020080710AAWR	190170014WC	
Upgrade	Restart T	ime Adjust Save	Exit

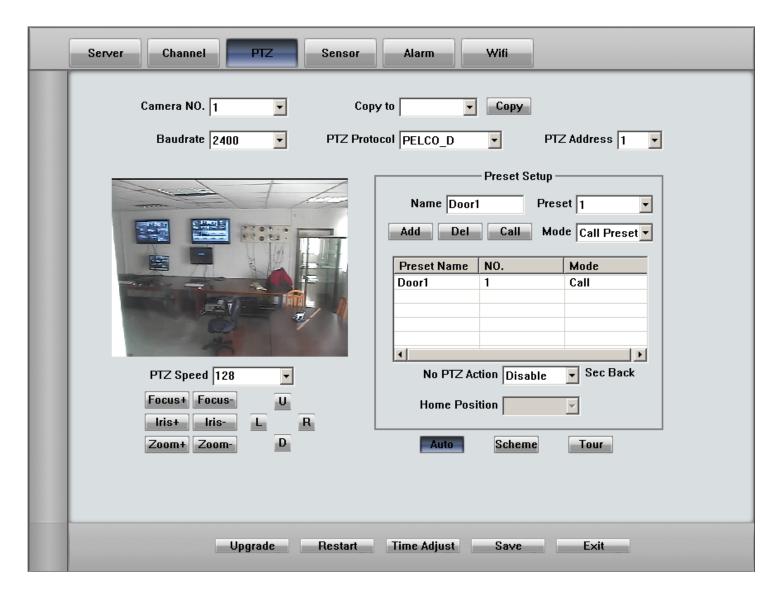
DVR / NVR User Manual [48]

In the "Channel" setup page you can modify the camera name, video stream type, video quality, frame rate, bit rate, OSD parameters and setup privacy mask areas. The **Record Schedule** only takes effect locally at the IP device site. For example, if you setup the Record Schedule for the IP camera in this page, it will record to the SD Card.



DVR / NVR User Manual [49]

In the "PTZ" setup page, please set the protocol, baud rate, and address to match your PTZ camera. After you setup the PTZ preset positions, you have 3 choices to enhance the PTZ usage. You might want to save a home position to make the PTZ go back to its original view, or set a schedule to call the PTZ to move to a preset position, or set PTZ to scan roads or highways.



DVR / NVR User Manual [50]

In the "Sensor" setup page you can configure every external sensor settings such as on guard schedule, trigger PTZ preset and trigger camera to record. If your IP device doesn't connect to a sensor or alarm-in equipment, the settings in this page will be negated.

Sensor NO 1 ▼	Сору То Сору
Sensor Name test	Type N/O
✓ SensorAlarmHandling Policy ✓ On Screen Warning	Preset Use
□ Audible Warning □ Upload To Center □ Trigger Alarm Out 1 □ 2 □ 3 □ 4 □	Camera 1 Preset Day
Trigger rec camera 1	Period1 00:00 - > 00:00 - Period2 00:00 - > 00:00 - Period3 00:00 - > 00:00 - Period4 00:00 - > 00:00 - Copy To Copy
Upgrade Restart	Time Adjust Save Exit

DVR / NVR User Manual [51]

In the "Alarm" setup page you can setup the Motion Detect alarm type, sensitivity level, on guard schedule, and trigger camera to record. The most important setting in this page is the "Upload to center" setting, which sends the motion detect alarm signal and video through the network. Even if you have video to view, if you don't check this item, the motion record for the IP cameras will never take effect in the DVR system.

Server Channel PTZ Sensor Alarm	Wifi
Camera NO. 1 Copy To Copy Alarm Type Motion detect Level 5 Handling Current Alarm Clear All Test	Policy On screen warning Audio warning Upload to center Trigger alarm out 1 2 3 4 Trigger rec camera 1 5 9 13 2 6 10 14 3 7 11 15 4 8 12 16 Schedule Check Date Period1 00:00 > 00:00 > Period2 00:00 > 00:00 > Period3 00:00 > 00:00 > Period4 00:00 > 00:00 > Copy To Copy
Upgrade Restart Time Adjust	Save Exit

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DVR / NVR User Manual [52]

In the "WIFI" setup page you can change WIFI connection parameters. This page is only available to operate when your DVR system has connected IP camera via WIFI connection.

	A	pp Num	Wifi Res	Ref	resh		
SSID	Work	Mode Secu	rity Type		Channel	Signal Level	Velocity
SSID		Work Mode	,	▼	Security	NO	▼
Declare			Wep				
Deciare							
Authen	√	Key1					Activatio
Key Length	7	Key2					
Key Type	7	Key3					
Key Type	Wpali	Key4					
Key Len 0	rrpan						
Key Len 0	*** Pall						
_	***pail		N. IIII G D				
Key Len 0		ID Address	Net Wifi Res		First DNS		
Key Len 0	Auto Switch	IP Address Mask	- Net Wifi Res -		First DNS		

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1.6. Motion Detect Setup

In the main interface Tool panel, click the button to bring up the **Motion Detect Setup** interface. Here you will set each of your camera's motion detect zones, sensitivity, and dynamic scales.



Operation Steps:

Step 1: Hold down the left mouse button and draw a rectangular zone around the object you would like to monitor. You can make a total 12 zones for each camera. Default setting is set to full screen.

Step 2: Adjust the motion detect sensitivity scale. 1 = highest sensitivity, 6= lowest sensitivity.

Step 3: Set the Dynamic Scale to prevent small moving objects, such as cats or small dogs, to trigger the motion detector. The Dynamic Scale is the ratio of a moving object's size compared to the whole image size. Low value means high sensitivity. 1% is the highest sensitivity.

Step 4: Click the "**Test**" button to test your settings. The motion detect area will show in yellow grid.

Step 5: To setup motion detect record schedule, please refer to the Camera Setup in Section 4.2.

Step 6: To setup motion detect alarm schedule, please refer to the PTZ Setup & Motion Alarm in Section 4.5

DVR / NVR User Manual [54]

1.7. System Search (Playback)

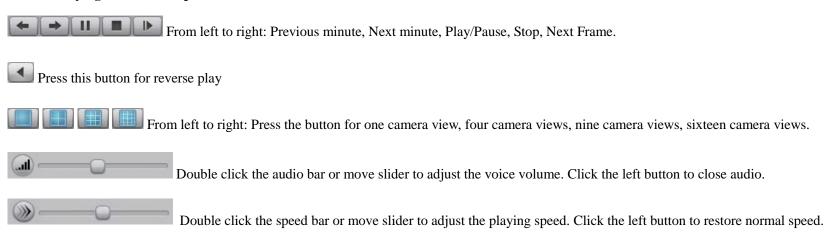
On the main interface, press the button to enter **Playback mode**. If your DVR system supports multiple monitors, the playback camera will display on the assigned monitor.



DVR / NVR User Manual [55]

Tips: Right click the picture to perform full screen viewing mode. Double click one camera to zoom out it full screen mode.

1.7.1. Playing button Discriptions



1.7.2. Time Slice Bar



Here offers a kind of fast and visually search operation. Double click anywhere in the time area, the DVR will immediately playback the video from that moment. Different color represents different type of record.

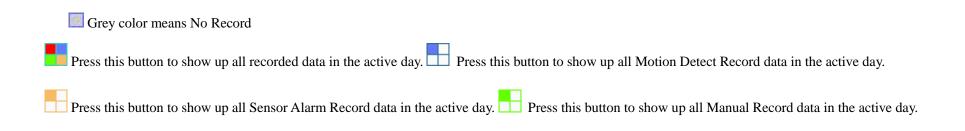
Red color means Continuous Record

Blue color means Motion Detect Record

Yellow color means Sensor Alarm Record

Green color means Manual Record

DVR / NVR User Manual [56]



1.7.3. Date Panel

Press the "Date" button to bring up the Calendar. Double click the date number to search video record in the day.

A highlighted **blue** number indicated that there is recorded data for that day.

A highlighted **green** number indicates the current active date.

A highlighted gray number indicates that there is no recorded data for that day.

Click or to change the year and month.

1.7.4. Camera Panel

Press the "Camera" button to bring up the camera panel. Click on a sub-window to highlight it then click on a camera number to initiate the DVR system to play back the recorded data in the highlight sub-window from the beginning of the day. The camera number icon has two status colors:

Grey color indicates that the camera has no recorded video for this day.

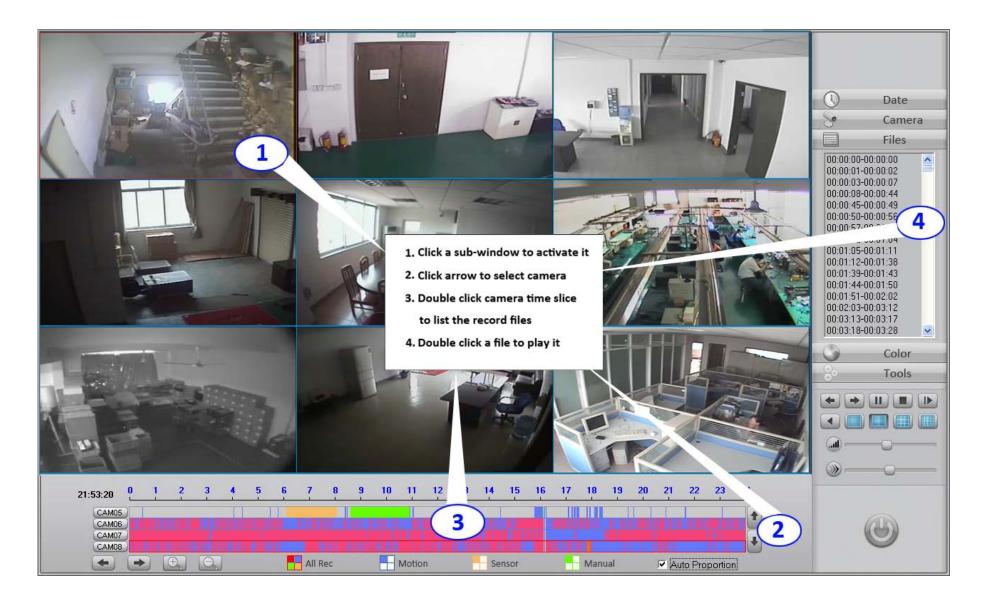
Light blue color indicates that the camera has recorded video for this day.

Press the button to synchronize all of the cameras to play at the same time marker.

1.7.5. File List Panel

Here offers another fast search method. The operation steps show on the following illustration.

DVR / NVR User Manual [57]



1.7.6. Color Panel

Press the "Color" button to adjust the image color. See the Color/Audio Adjust Panel on Section 1.3 of this manual.

DVR / NVR User Manual [58]

1.7.7. Tools Panel



Capture a still picture while in play back mode by pressing this button. See Section 1.12.6.



View the captured image.



Print the captured picture saved on the hard disk.



Press this button to play all cameras in current split view. If the cameras number exceeds the split window number, you should be asked for choosing.



Press this button to stop all playing video.

Zoom out on the video. Press this button to activate image the zoom function. With the left mouse button, draw a rectangle zone in the camera view and the image you highlighted will be magnified. Right clicking on the image will restore it back to normal. Press the zoom button again to end zoom mode.



Create a video clip and save it.



Backup your camera footage to the disk drive.



Review video clips.



Burn a backup data DVD/CD. See Section 1.10.

Object Search

Object Search, also known as Smart Search, it is a useful tool to save time when looking for an event. It fully utilizes the DVR Motion Detect technology and data analysis function. No matter what kind of record type it is, the DVR always saves the camera image for data analysis. This makes it easy to search a certain area in

DVR / NVR User Manual [59] one camera at fast speeds.

After one camera starts its playback, press button to enter **Object Search mode**. Left click, hold and drag the mouse to draw a rectangular area (in green). The search engine will quickly analyze the movement in that particular area. The Object Search starts the second you press the button. The DVR system will skip all moments that don't show any movement and jump to display the motion video it has recorded. Press button again to end Object Search.

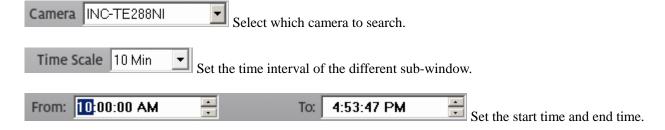
Notes:

- Clicking the "Align" button will stop the Object Search while it's still running.
- The sensitivity of Object Search depends on the Motion Detection settings. A reasonable sensitivity should be set according to the camera quality and its install surroundings. If a high sensitivity was set, the DVR system will take longer to search, even when there is no motion in the specified area. If a low sensitivity was set, the DVR system will not search even if there is some small range motion in specified area.

1.7.9. Incremental search

Incremental Search, also known as Icon Search, is a tool used to playback one camera at different periods of time, showing the video in multiple windows.

Every sub-window shares an interval time, but the start time is incremental. Before you press the button to enter Incremental Search mode, please make sure that the current split view mode is your expected split view.



1.7.10. POS search

DVR / NVR User Manual [60]

Press the button to enter the **POS Search** interface. Select a camera and set a start time and end time. Press the "**Search**" button and all the POS record data will display on the left table. Just double click a record to begin playback.

1.7.11. **ACU** search

Press the button to enter the **ACU Search** interface. Select a camera and set a start time and end time. Press the "**Search**" button and all the ACU record data will display on the left table. Just double click a record to begin playback.

1.8. System Alarm Control

1.8.1. Sensor alarm trigger relay out

This function needs an alarm controller to support it. Operation steps: (Refer to Section 1.4.3)

• Set alarm controller device type and connecting port.



Alarm&Relay Port COM2 Select alarm control device connecting COM port.

- Set the sensor's Check Alarm schedule.
- Set link camera groups and relay out ports.

1.8.2. Sensor alarm trigger PTZ preset

This function requires a High Speed Dome (PTZ camera). Operation steps: (Refer to Section 1.4.3)

Select Alarm-in Port Sensor01 Select the sensor to configure.



Select which Speed Dome corresponds to this sensor.

DVR / NVR User Manual [61]

• Alarm Auto-rotate Position Preset01 Set the preset number. The speed dome will automatically move to this position when there is an alarm.

1.8.3. Motion alarm trigger relay out

This function requires an alarm controller. Motion detect alarms must be configured one by one for these cameras. Operation steps: (Refer to Section 1.4.4).

- Select Camera Camera01 Select camera to configure.
- Motion Alarm Link Relay out Port 1 2 3 4 5 6 7 8 Select which relay out ports respond to this camera. One camera can trigger multiple ports.
- Set the Motion Detect check alarm schedule.

1.8.4. Motion alarm trigger PTZ preset

This function requires a High Speed Dome (PTZ camera). Refer to Section 1.6, "Motion Detect Setup".

Enter the motion detect setup interface and select the target camera to be configured. Press the "**Link to PTZ**" button to activate the optional settings. After setup finishes, press this button again to save all settings.



Select how many Motion Detect zones you want to use in a whole image area. You can chose up to 128 zones, where one preset represents one zone. Select one of the zones (for example, zone 01) and draw a rectangular pane (define a motion detect zone).

Select the PTZ camera name.

Select the preset name to link the above mentioned zone (zone 01).

1.8.5. Sound alarm trigger beep

This function requires a microphone for it to work. When the DVR system detects that the sound signal exceeds the preset bit rate, the mini-speaker connecting to the motherboard will beep.

- Alarm Beep Disable Set alarm beep to "Enable".
- Enter motion detect setup interface, select target camera to be set. The operating audio channel is equal to the camera channel.

DVR / NVR User Manual [62]

• Select a bit rate scale from "Sound Alarm" dropdown list. The maximum bit rate is 16000 bps (16Kbps).

1.8.6. Alarm send image to Center

The DVR Server can automatically send the alarm camera to Live Center / CMS and show the camera on the screen. Follow these steps:

- Step 1: Set network support Enable in "System Configuration Network Setup". For sensor alarm settings, please refer to Section 1.4.3 Alarm in and Relay out Setup.
- Step 2: If you want to send motion alarm camera, please do further more set **Network Alarm Support Enable** in "PTZ Setup and Motion Alarm", please refer to Section 1.4.4.
- Step 3: Configure Live Center to show up alarm camera without E-map. Disable the E-map function, Set Network Alarm Support as Auto Connect or a specific connection group. Live Center will auto monitor and respond to network alarm signals. Set Auto Connect means Live Center will check all servers (all IP address) in the IP Address Alias List in "IP Setup" tab. To set a specific connection group means Live Center only check that Operation Group's IP address in "Window Setup" tab. Refer to Section 2.3.2.
- Step 4: Configure Live Center to show up alarm camera with E-map features. Please refer to Section 2.7.

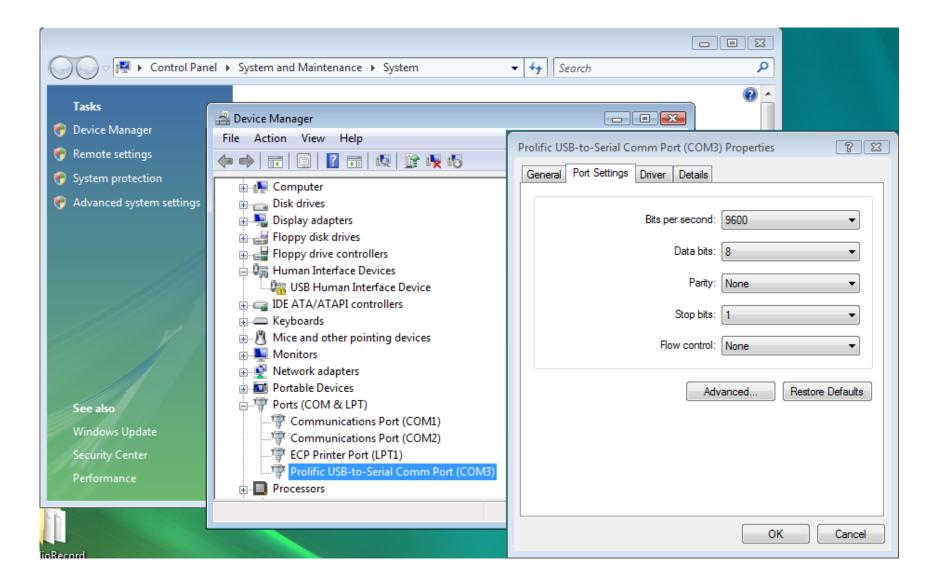
1.8.7. Alarm send email

The DVR Server will automatically send email notifications to appointed receivers. Please refer to "Email &SMS Setup" in Section 1.4.5

1.8.8. Alarm Send Text Short Message (SMS)

This function needs a GSM MODEM in order to work. The GSM modem is a type of USB interface plug & play device. After installing the GSM modem driver successfully, please go to **Windows Device Manager** and check the COM port number connecting to the GSM modem (usually the system sets this as either COM3 or COM4). Set the LDVR system short message COM port to match the COM port number in Device Manager. Set the SMS Device to SMS Text. Enter the receiver's mobile phone number and click the "**Test**" button to test your settings. Use the pictures below as a reference.

DVR / NVR User Manual [63]



1.8.9. Alarm playing audio

You can record your customized voice and save it on the local disk drive. The DVR System saves the file's location and plays it when an alarm goes off. Every sensor and every camera can be linked to any wave file.

DVR / NVR User Manual [64]

1.8.10. Alarm Popup Image

In the System Configuration interface, select

Popup Alarm Camera

sec. a time from the drop down menu. On the screen's right-click menu, select

"Start alarm popup". When an alarm goes off, the alarm camera will pop up in full screen mode. Multiple alarm cameras will switch and popup according the interval you just adjusted.

1.8.11. Alarm Popup Electronic Map

Before using this function, please edit your customized electronic map and save it as a JPEG format on your local disk drive. In the System Configuration interface, set

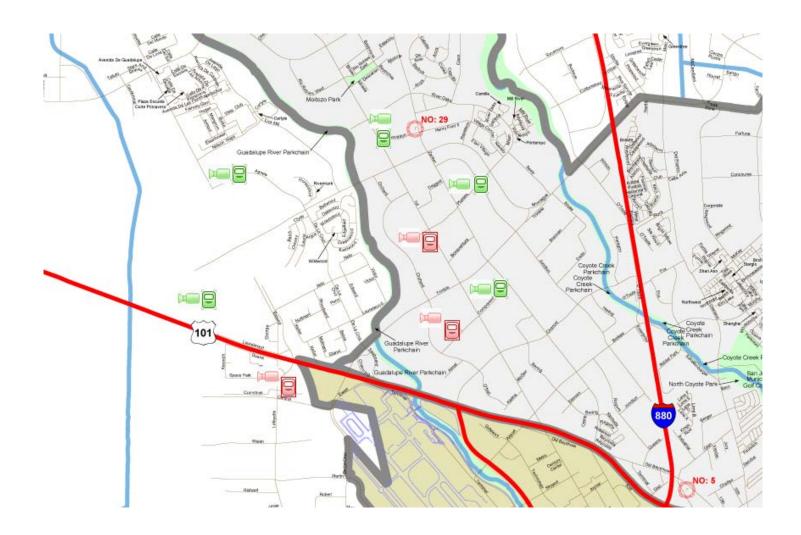
the "Use Electronic Map" feature

Use Electronic Map Use

to "Use". On the main interface, you will want to press the button to bring up the default Electronic Map. Follow the following steps:

- Click the Setup button to activate setup mode.
- On the default map **right-click menu** (just right click anywhere on the map to bring up the right-click menu), select "Change map" to initiate a new map.
- On the map right-click menu, select "Add camera" to add a camera onto the map
- On the map right-click menu, select "Add sensor" to add a sensor onto the map
- On the map right-click menu, select "**Delete all annunciator**" to delete all the cameras and sensors.
- "Auto Delete Alarm" means the map will auto hide after the alarm has stopped.
- "Auto display map when alarm" will automatically display the map when an alarm goes off, but you must check this to enable this function.

DVR / NVR User Manual [65]



1.9. PTZ Preset Operation

Before using this feature please go back to "**PTZ Setup**" in Section 1.4.4 to configure all your PTZ cameras correctly. The DVR Server supports 4 methods of PTZ control: 1) PC keyboard, 2) Analog PTZ keyboard connecting to COM port, 3) PC mouse operation on GUI PTZ panel, and 4) PC mouse operation on screen camera.

DVR / NVR User Manual [66]

1.9.1 PC keyboard PTZ control

Please see Appendix A.

1.9.2 Analog PTZ keyboard connecting to COM port

Please refer to the operation manual or user's guide that came with the analog PTZ keyboard.

1.9.3 PC mouse operation on GUI PTZ Panel

On the main interface, press the "PTZ" button to open the PTZ panel. Move the mouse over the PTZ control button to show the PTZ button tips. Press the and select "Preset Setup" to bring up the following interface:



Save Preset steps

- Move PTZ camera to your target position.
- Input a "Preset Name" to describe your target position
- Select a preset # that you want to use for your target position.
- Click "+" button to save it to the system. The preset name will show in the list and on the screen.

Delete Preset

Select a preset name in the list and click the "-" button to delete it.

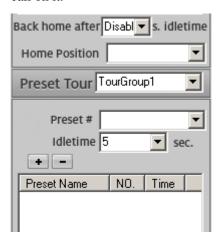
Adjust Preset

DVR / NVR User Manual [67]

If a preset has been saved, however, you would like to adjust its position, just move the PTZ to its new position and click the "Set" button.

Call Preset

On the main interface, click the button to bring up the **PTZ operation** menu. Highlighting "**Preset Call**" will show a sub-menu of presets. Clicking the preset will call on it.





Save Preset Tour steps

- Select a Preset Tour group name from the dropdown list to save your settings.
- Select a preset name from the Preset # dropdown list.
- Select a time from the Idle Time dropdown list. Putting this setting at 5 sec. will delay the PTZ 5 seconds before it moves to its next position.
- Click the "+" button to add this preset into the Tour group. Repeat these steps to add more preset.

Save Preset Home position

Set a time from the "Back home after xx sec. idle time" dropdown list and select a preset name for the home position. The PTZ will automatically move to your home position if no operations have occurred during the time you have set.

Run Preset Tour

On the main interface, clicking the button will bring up the **PTZ operation** menu. Highlighting "**Preset Tour**" will show the sub-menu of the Tour group. Click the name to run it.

DVR / NVR User Manual [68]

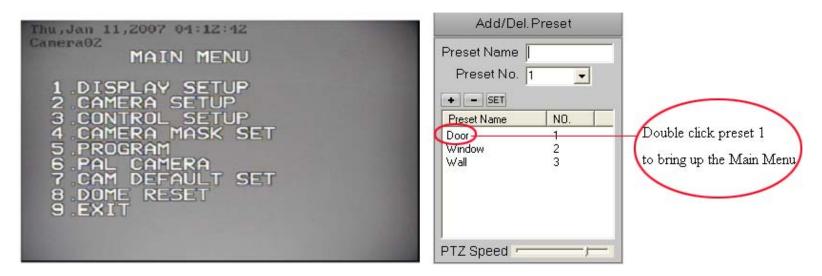
Stop Preset Tour

After the preset tour starts up, you will have to stop it manually by operating any of the directional buttons.

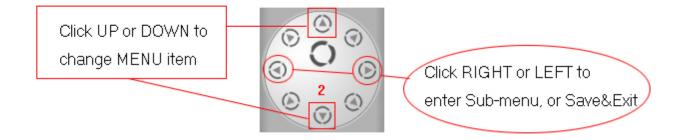
Advance Menu Operation

If you need change the system default settings of high speed dome, please refer to following steps. This operation only applies to the ILDVR Speed Dome.

• Double click preset #1 or call preset #64 from the **Preset Setup** interface to bring up the PTZ system's **MAIN MENU**.

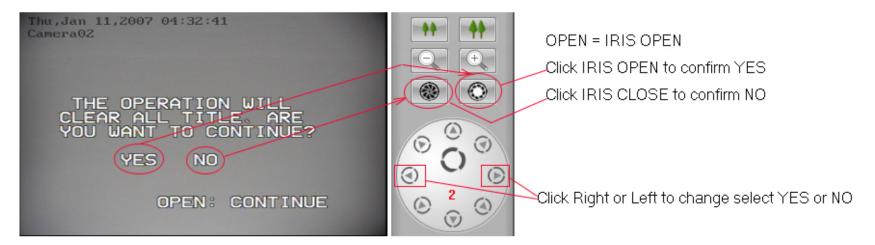


• When the main menu shows on the screen, click "TILT UP" or "TILT DOWN" to move the cursor to your selection. Click "PAN LEFT" or "PAN RIGHT" to enter the sub-menu or modify current selection if it's lacking its sub-menu. Repeat these steps until you finish all modifications.



DVR / NVR User Manual [69]

• Special buttons like "CLOSE: EXIT", "OPEN: CONTINUE", and "PRESS OPEN TO ENTER" are represented through the "OPEN IRIS" and "CLOSE IRIS" buttons to finish the selection or enter/exit the menu. See the example below for better clarification.



Function Icons on the screen when the option DISPLAY is set ON

Focus Control Mode: When the camera is on focus near, the icon 🔄 appears and when reach the nearest point, the icon 📤 appears. When on the focus far, the icon 📤 appears.

Backlight Compensation: when the monitoring object is dark or dim, you can open the backlight compensation according to actual need and the icon appears.

White Balance: when the image has color distort on the screen, you can set different modes to fix the problem. There are 6 options: ① Indoor Mode 💢 ② Outdoor

Mode * 3 Touch Mode 4 Automatic Trace of White Balance ATW. 5 Manual WB-MAN. 6 Automatic Mode.

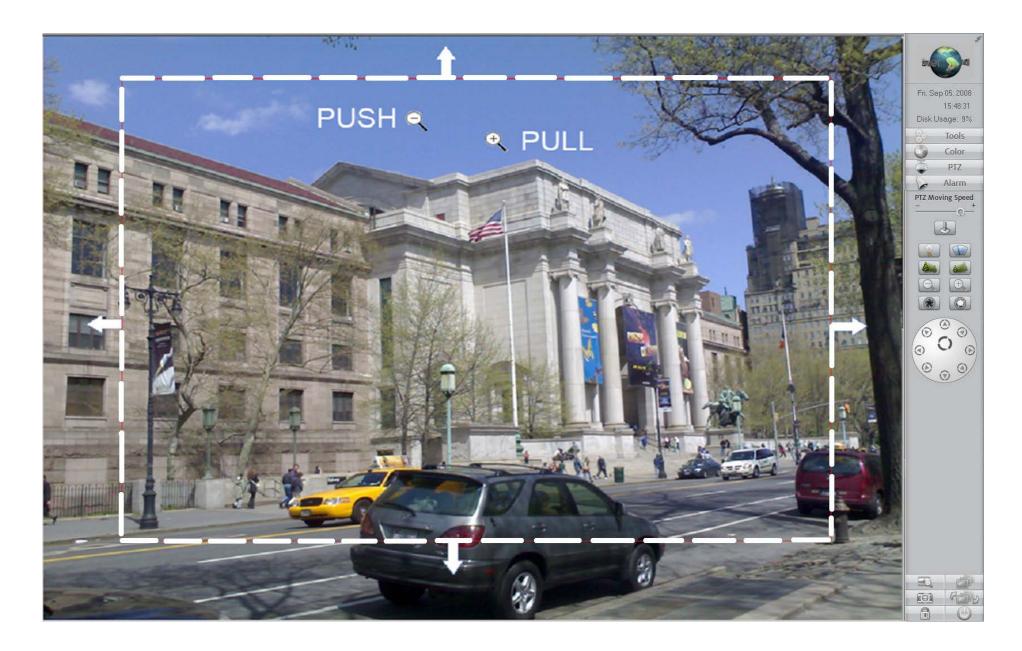
Zoom Control: When the camera is on zoom in or zoom out, the icon W will show up on the screen.

B&W: When the camera is on black and white status "B&W" appears on the screen.

Minimum illumination: The camera works on zero illumination status **⚠** (lower than 1.0Lux).

1.9.4 PC mouse operation on screen camera

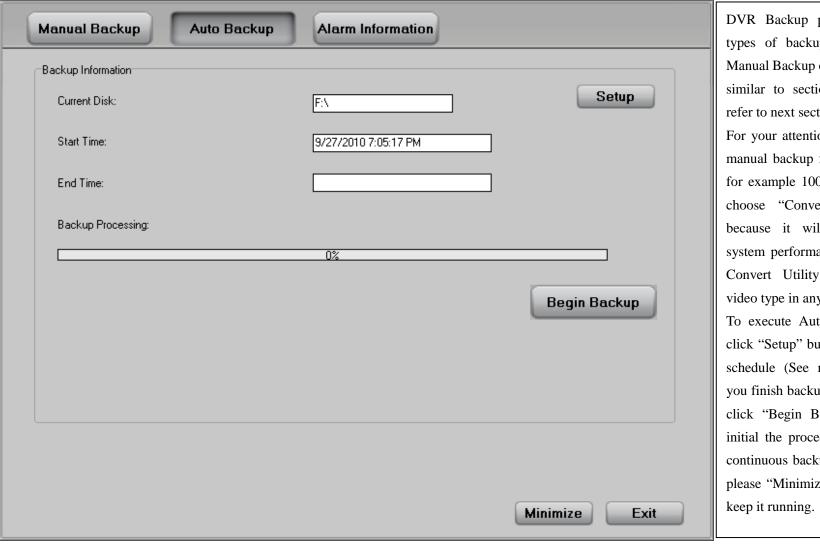
Looking at the picture below, you can see how easy it is to control the PTZ by just using the screen. In the central area of the camera view, left clicking and holding down the mouse button gives you the opportunity of zooming in (by moving the mouse up on the picture) and zooming out (by moving the mouse down on the picture). Moving the mouse to all four sides and all four corners of the screen can change the direction of the PTZ in that direction.



1.10. Data Backup

1.10.1 DVR Backup Program

To run DVR Backup program please click "DVR Backup" in Hybrid DVR Server program folder.

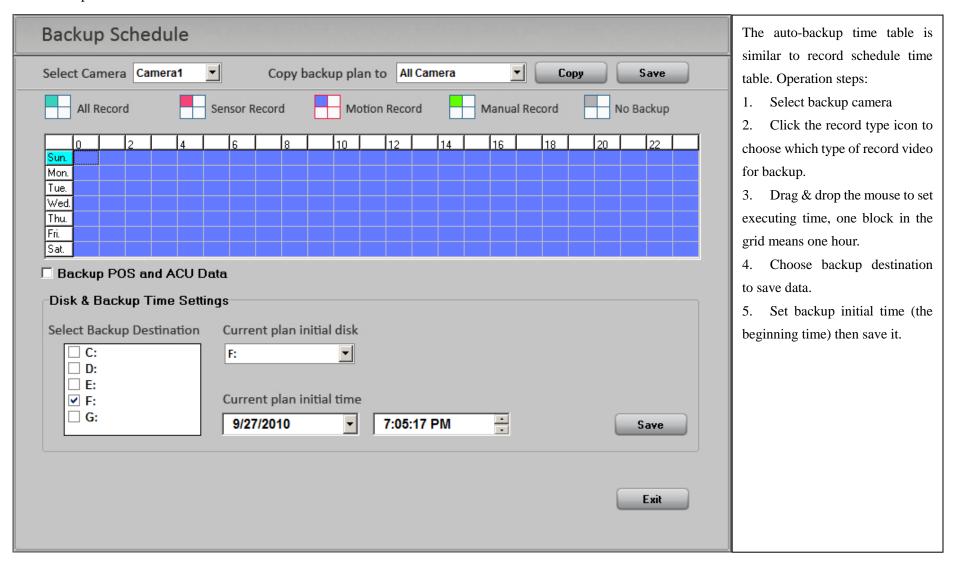


DVR Backup program offers 2 types of backup operation. The Manual Backup operation steps are similar to section 1.10.2, please refer to next section.

For your attention, if you execute manual backup for large file size, for example 100MB, please don't choose "Convert Video Type" because it will slowdown the system performance. You can use Convert Utility to convert the video type in any other computer. To execute Auto Backup, please click "Setup" button to set backup schedule (See next page). After you finish backup schedule, please click "Begin Backup" button to initial the procedure. If you need continuous backup recording data, please "Minimize" the program to

DVR / NVR User Manual [72]

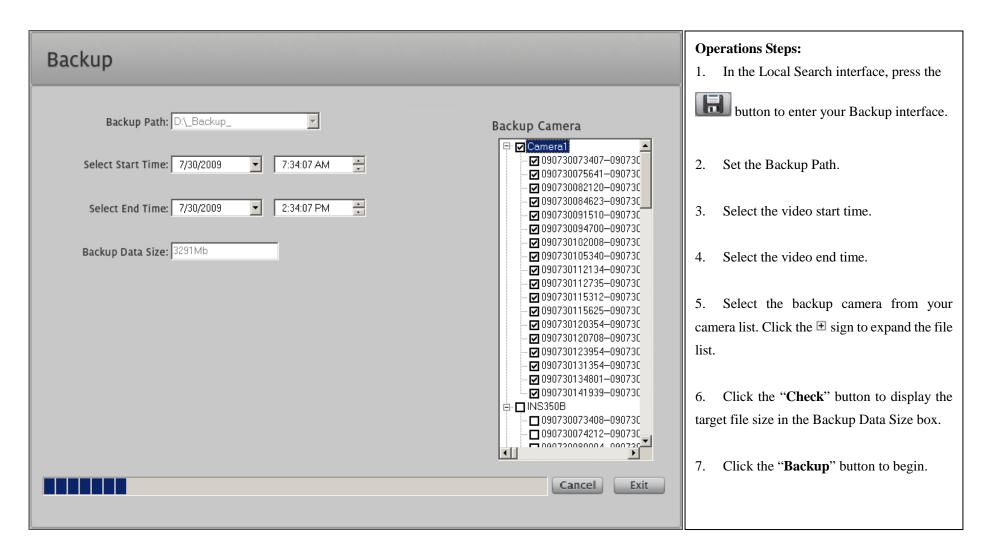
Auto backup function



DVR / NVR User Manual [73]

1.10.2 Backup by Time

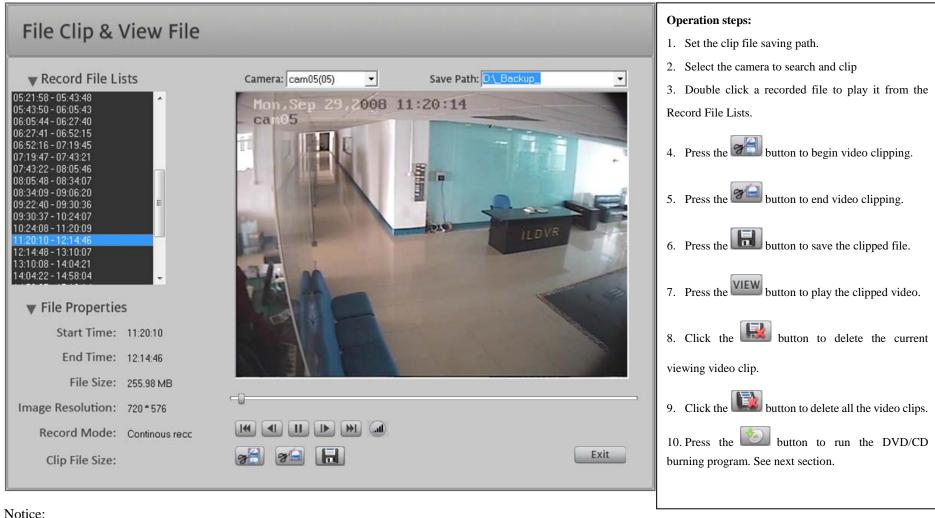
Backup by Time is used to filter and output the recorded video from the original saved Data Pack (256MB per file). You can use a USB device or use the default path (**D:_Backup_**) to backup your video file to. **Player.exe** is used to play back the backup video. It will automatically save to the Backup Path.



DVR / NVR User Manual [74]

1.10.3 Video Clip

On the Local Search interface, press the button to enter the File Clip & Backup interface.

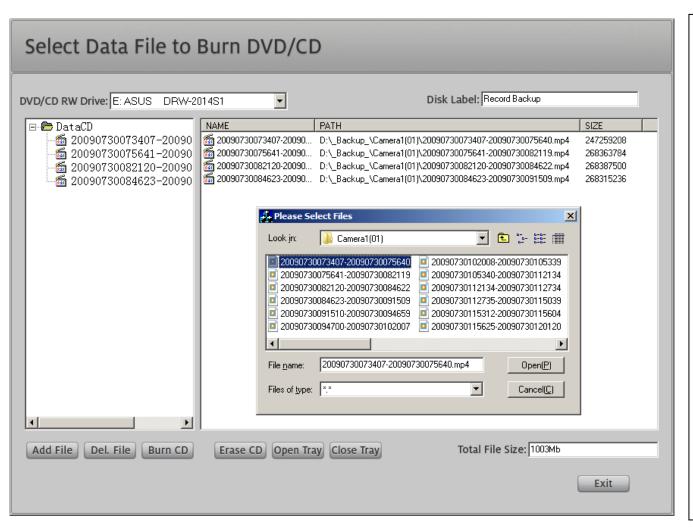


If you click the "View" button but there are nothing shows up in the "Record File Lists", please check the "Save Path" folder. The default folder is set to D:\ Backup \Camera## (## indicates the actual camera number).

DVR / NVR User Manual [75]

1.10.4 Backup to CD/DVD

On the **File Clip & Back** interface, press the button to run the **DVD/CD burning program**. This purpose of this function is to burn DVD and CD copies of the video that has been backed up by the two methods we just discussed earlier (see Section 1.10.1 and Section 1.10.2).



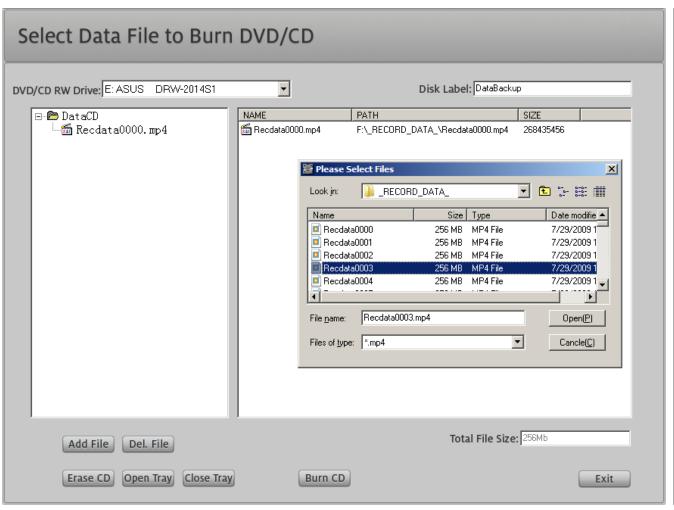
Operation steps:

- 1. Check the DVD/CD RW drive name to make sure that you have selected the right drive.
- 2. Label the DVD/CD that you will be backing up your files on.
- 3. Press the "Add File" button to import the video files that you would like to backup. You can press the "Del. File" button to change your selection.
- 4. Please check the "**Total File Size**" to make sure that your backup data is not exceeding the disk's free space.
- 5. Press the "**Burn**" button to begin burning. If the DVD/CD disk is re-writable, you can press the "Erase CD" button to erase the data that is on it.

DVR / NVR User Manual [76]

1.10.5 Burn data CD/DVD

On the main interface, press the button to run **the DVD/CD burning program**. This program is designed to backup the video files of the original recordings.



All the operation steps are exactly the same as Section 10.3.

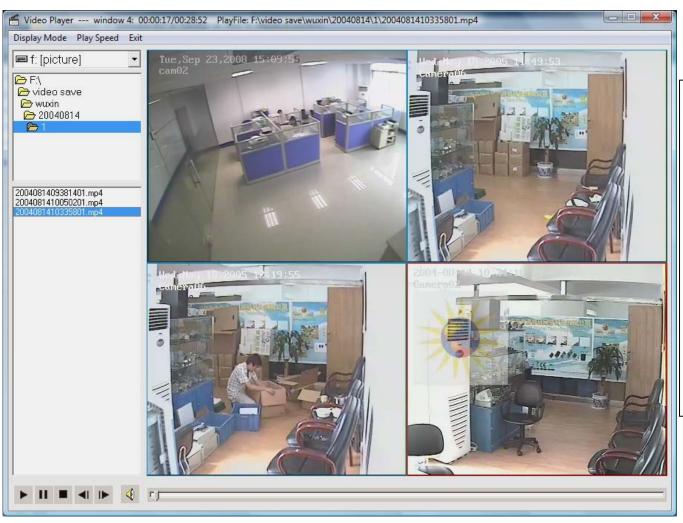
Important:

Because of the difference in design, the DVD/CD that you burn from here will take longer to play because of its larger file size (256MB per file). A normal DVD/CD ROM needs about 3 to 5 minutes to cache one file to the system's memory. Please properly select your backup method according to your needs.

DVR / NVR User Manual [77]

1.10.6 Viewing Backup Data

If you successfully burn a backup onto a DVD or CD, the software used to playback the recorded video will always be included in the video folder. Insert the backup disc into any PC CD ROM and "Player.exe" will auto-run. Once it starts, Video Player will display 4 sub-windows on your screen.



Operation steps:

Step1: Select the disk drive from the drive's dropdown list.

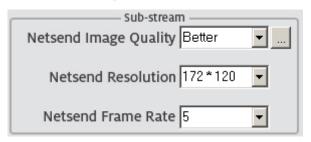
Step2: Locate the video file's saved path from the folder list. If you open a folder that contains any video files in it, all of the video files will list in the table below.

Step3: Click on a sub-window to activate it. Double click a video file to play it in this sub-window.

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1.11. PDA / Cell Phone Remote View

The DVR system supports most brand name mobile phones. For **Windows Mobile, Linux OS** and **Symbian OS** mobile phones, please choose MobileDvr.jad mobile client. For **Blackberry**, please choose Blackberry.jad mobile client. For **iPhone**, please download ILDVR mobile client from Apple Store. For **Android**, please download mobile client from ILDVR web site (maybe you need third party installer to install the mobile client into your Android mobile phone). Please check your PDA/cell phone to see what type of video resolution it can support (usually it's either CIF or QCIF). Configure the "**Netsend Resolution**" on the Camera Setup interface to match your cell phone's resolution.



The mobile DVR uses sub-stream video transmission. In the "Camera Setup" interface, please set the camera's Netsend Resolution to 172*120. It must be different than the recorded image size. Set the Netsend Frame Rate to a number less than 5.

The DVR system uses port 5101 for the default mobile DVR TCP port number. You must configure your internet router (if you have one) to open this port for remote access. You can change the default TCP port number if necessary. Visit http://YourSeverAddress/mobiledvr or directly input your DVR server's IP address (domain name) in the web browser on your mobile device. Please replace 'YourSeverAddress' with your own DVR server address. If you changed the default web port 80 to other number, please add it behind the address with a colon, for example http://YourSeverAddress:8080/mobiledvr. After connecting DVR Server, the mobile phone will display following page:

Windows / Linux / Symbian OS Mobile Client (Java):

MobileDvr.jad

BlackBerry Client(Java):

BlackBerry.jad

Please choose correct mobile client to download, save it in your mobile phone. The process may take up to several minutes depending on your internet speed. After finish download, the java program components will automatically install to your mobile phone. If not, please open it to run the installation. After that, a login dialog will pop up asking you to input your login ID and password in order to access the DVR server. For blackberry/iPhone, please run the program named Blackberry/iPhone (there is icon shown on screen). If your mobile phone has a good internet connection, waiting about 15 seconds will help you to achieve around a 3 to 5 fps viewing speed. If this

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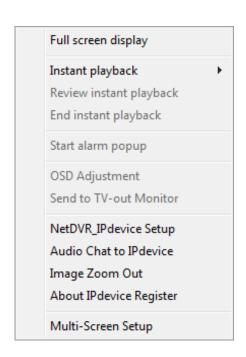
doesn't work for you, you can download/copy the 2 files **MobileDvr.jad and MobileDVR.jar** to any folder in your mobile phone. Run MobileDvr.jar to install the java program, which is inside the folder on your mobile device. You can find the 2 files in the DVR server installation folder (C:\Program Files\Hybrid DVR Server\).

1.12. Miscellaneous Operation

1.12.1. Instant Playback

In the camera's **Right-click menu**, select "**Instant playback**" and choose one of the time options to play video from within the last few minutes. In the Right-click menu, select "**End playback**" to end it.

Note: If the camera is not on the status of recording video at the moment when you do Instant Playback, the camera will show black screen.



The **Right-click menu** might change on different type of camera.

"Instant playback" only displays video when the camera is recording.

"Start alarm popup" will be available after you set a switch time for the Popup Alarm Camera in System Configuration

"OSD Adjustment" is not available for IP Camera

"Send to TV-out Monitor" will be available after you install decode card in the DVR system

"NetDVR_IPdevice Setup" is available for all IP devices and NetDVR. Click to enter remote setup interface. See section 1.5.

"Image Zoom Out" is only available for IP Camera and NetDVR's camera

"About IP device Register" read the device serial number

"Multi-Screen Setup" only shows up when Windows detects dual monitors or more monitors. Click to enter PC Decode TV-Client setup interface. See section 1.4.8.

1.12.2. Audio spy

Audio spy lets you locally monitor the audio attached to every camera. This function needs a sound card and speaker to work. Please refer to Section 1.4.2 to configure

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Audio Record.

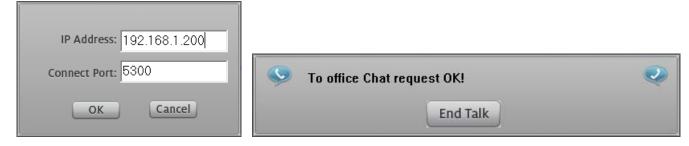


Refer to Section 1.4.1 to configure Audio Monitor.



1.12.3. Remote Talk

The Remote Talk function needs a sound card, speakers, and a microphone to work. On the main interface, click the button to enter **Remote Talk** mode. Enter the remote IP address and TCP port number and click "**Ok**" when finished.



1.12.4. Adjust OSD Position

In the camera's **Right-click menu**, select "**OSD Adjustment**" to bring up the OSD Position Setup interface so that you may drag & drop the OSD overlay text onto the target position on the camera picture.

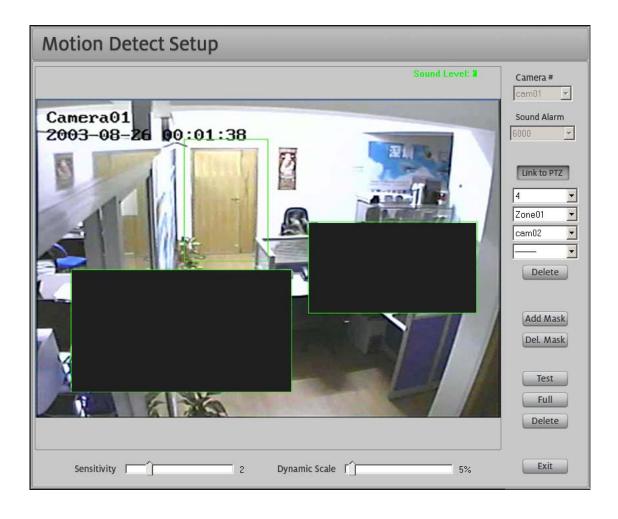
OSD Gray Scale Auto

If the OSD text does not show clearly, please set the OSD Gray Scale to "Auto" to make the OSD overlay text automatically adapt to the picture's background.

1.12.5. Mask Private Area

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This setting is similar to the **Motion Detect** setting. On the main interface, press the button to display the **Motion Detect Setup** interface. Click the "**Add Mask**" button and draw a rectangular area in the camera by holding down the left mouse button and moving it around. This area will turn black immediately after you do this. You can set a maximum of 12 mask zones pre each camera. Clicking the "**Del. Mask**" button will delete all mask zones.

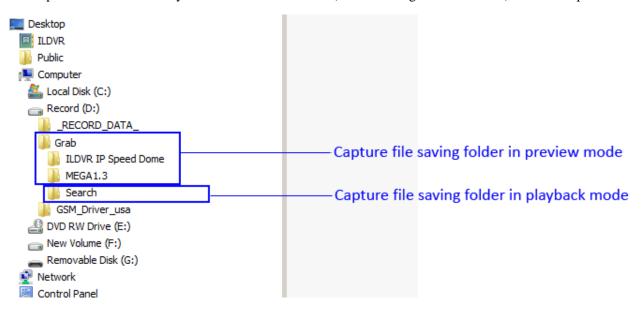


1.12.6. Capture Picture

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Capture image in preview mode

button on the main interface, the DVR system will automatically capture one picture of the active camera and save it in the folder that you assigned in the System Configuration interface's "Grab Picture Save Path". If you didn't set a path, the DVR will use the default path D:\Grab\camera_name. The camera_name is the alias you entered in the Camera Setup interface (See following illustration). The DVR only grabs the active camera picture, so if you wanted to take a snap shot of the screen all you would have to do to is 1) click the target camera and 2) click the capture button.



Capture image in playback mode

In playback mode, click the button to grab a picture from the active searching camera and save it into your saved pictures folder (default path) D:\Grab\Search\filename. The filename is the name you entered in the dialog box. If you don't name it, the DVR will use the camera name or channel number plus the current time for the file name. See following illustration.

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1.12.7. Print Picture

You can print the captured image if the DVR system has a printer installed. In the Search interface, press the button to bring up the **Windows Open** dialog interface. Then you must locate and open the picture saved in the above section.

1.12.8. Manually Control Relay out

This function needs an alarm controller in order to work.



Open the alarm control panel on the main interface. Once you're on the main interface, click the D/O port number icon to manually trigger the relay out port. This function can be used to integrate other devices to turn on lights, open doors, and so on.

1.12.9. System Log

Write on duty log

On the main interface, press the button to display the "On Duty Log" interface. The administrator/operator will write his work report/even messages in here. Click the "Finish" button to save your work log. All messages you create and save will be stored in the system log.

View system log

On the main interface, press the button to display the "**System Log List**" interface. Here you can search archived system logs or backup system logs within a longer time frame, compared to the default settings of 30 days for Log Archiving.

It is also very important to export the system log to a text file and send it to ILDVR for technical support if the DVR system is running abnormal.

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Chapter 2 Live Center

2.1 Program Installation and Main Interface

To install Live Center from path: [CD]...\LiveCenter_v9.x\LiveCenter_v9.x.exe, double click the EXE file to initial the setup. Disk Manager will automatically run when

the installation finish. Please refer to section 1.2.5 to build DVR file system. After installing the Live Center software, double click the shortcut icon on your desktop to run Live Center program. The operation buttons and control panels are similar to those of the DVR Server, except for the Group panel that the DVR Server does not have. The Connection list panel has different content from that of DVR Server.

Tips: To run Live Center automatically when Windows starts up, please drag & drop the desktop icon for Live Center into the Windows Startup folder.

Information Board



Video Server name of the current active sub-window connection

Camera name of the current active sub-window

CPU usage (percentage). When CPU usage exceeds 80% the E-map will stop to popup more alarm camera.

Group Panel

On the main interface Group panel, the camera number (sub-window) icon has 3 different status colors:

- 3 Grey color indicates no connection and the system is not recording.
- Light blue color indicates the connection camera is on the status of alarming.
- Dark color indicates the connection is OK.

2.2 Live Center Local Setup

2.2.1 IP Setup

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On the main interface \rightarrow Tools panel, press the Setup button to enter the Local Setup interface. The default tab is the "**IP Setup**" page. When running Live Center for the first time, the IP address list is going to be empty. Press the "**Add IP**" button to enter the "**Add/Modify Server and Login Information**" interface. Select the correct device type for the remote video server. Give it a name (alias) to describe the video server, enter its IP address, TCP port, login ID and password. All items must match the user ID settings in the video server's user management page. Click on the "**OK**" button to save your settings. Repeat the same steps to add more video severs into the IP address alias list. Click on "**Modify**" to change an existing IP. Click on "**Delete IP**" to terminate an existing IP.

Setu	р					Version 9	9.3		
IP Setu	up Window Setu	ıp Record Setup User	Manage		Add/Modify Server and Login Information				
Max. Recording Channels 64			Display Resolution 1280*1		_				
Network Listen Port 5300			Split Viewing Mode Normal		IP Address Alias	nega	Device Type IPcam/DVR6000	▼	
	Web Port 80			PTZ Keyboard COM Port		IP Address	192.168.1.200	User ID admin	
	Use E-map Disable ▼ S		Stretched 🔻	Main Screen Switching Time 3		Real Listen Port	2000	Password Password	
	Network Alarm Support Disable		_	Matri	x Card Support Disable	Real Listell Port	3000	Fassword	
	Alarm Write to Log Disable		-	Auto Con	nect at Startup Disable	Default Stream Type	Main Stream		
	Max. Time to Instant Playback Disable			Connection Re	covery Options Disable	Motion Alarm Play Wave File		Test	
	Data Stream Auto Adjust Disable			Grab	Picture Save to	Sensor Alarm Play Wave File		Test	
	PC Decode Support Disable		▼		Language English				
	IP Address Alias List				ОК	(Const.)			
IP Alias IP Address		Disp. Port	p. Port Device Type Cameras			UK	Cancel		
n	mega	192.168.1.200	8000	IPcam/DVR6000	0				
						Add IP			
						Addii			
						Modify			
						Delete IP			
			Export	Import		Save Exit			

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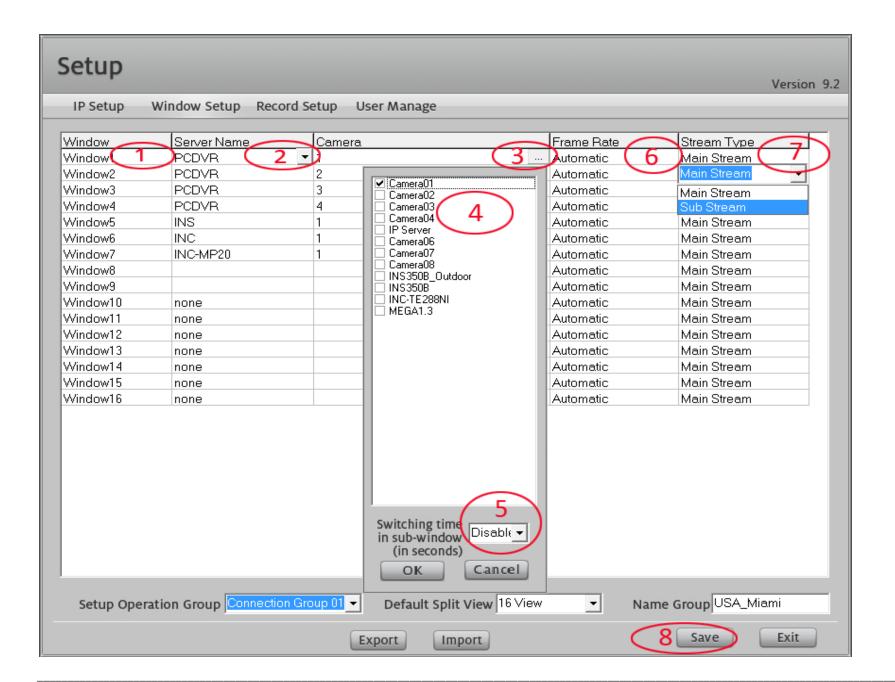
Items	Description			
Max. Recording Channels	Configure the number of recording channels (cameras).			
Network Listen Port	This is alarm video and remote chat TCP port. Default port number is 5300.			
Web Port	TCP/IP port number used for the web client (IE browser).			
Use E-map	Enable or disable the E-map function (section 2.9).			
Network Alarm Support	Enable or disable auto-connect & display the alarm camera when receive alarm message from remote server. Set "Auto Connect" means Live Center will check all servers (all IP addresses) in the IP Address Alias List in "IP Setup" tab. To set a specific connection group means Live Center only check that Operation Group's IP address in "Window Setup" tab.			
Alarm Write to Log	Enable or disable the writing log when there is an alarm from a remote server.			
Max. Time to Instant Playback	Instant playback uses up a great deal of systems resources, especially the memory resources. You should check your PC CPU usage and memory usage in task manager to determine the proper configuration.			
Data Stream Auto Adjust	Set this option Enable to get high quality video of main stream when the camera alarm			
PC Decode Support	Set Enable to support PC Decode TV-Client, refer to section 1.4.9			
Display Resolution	Configure Live Center's main interface display resolution.			
Split Viewing Mode	Set this option according your monitor type.			
PTZ Keyboard COM Port	Set PCDVR keyboard 2988 COM port			
Main Screen Switching Time	Configure the Main-screen auto-switch interval time (in seconds).			
Matrix Card Support	Setup or disable the decode card work mode (D1/CIF).			
Auto-connect at Startup	Configure an auto-connection group when Live Center starts up.			
Connection Recovery Option	Configure the system to wait a certain time before trying to recover a connection if the network has been disconnected.			
Grab Picture Save to	Set grabbed picture saving path			
Language	Select a language (only available in the multiple language version).			

Tips:

- If the remote server is not available or your configurations are wrong, the information that you've entered cannot be saved.
- You can "Export" system settings for backup and/or can also "Import" your system settings from a backup file when upgrading the software.

2.2.2 Window Setup

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On the "Window Setup" interface, you must configure every sub-window's connection one by one. If you assign multiple cameras to one sub-window, please set a switch time from the drop-down list that reads "Switching time in sub-window". If you do not set a switch time, the cameras will not be shown properly (it will only

display the first camera). On the main interface, open the "Connection" panel and press the button to turn on/off the IP Matrix switching view.



Important: For Frame Rate setting, only the PCDVR supports all 3 types of frame rates. The NetDVR and IP Server/Camera do not support 1 fps frame rate because this feature is not supported by the embedded OS.

2.2.3 **Record Setup**

On the "Record Setup" interface you can easily customize every sub-window's record timetable. All operations are similar to the DVR Server except the Continuous & Motion Record that Live Center does not support.

Important:

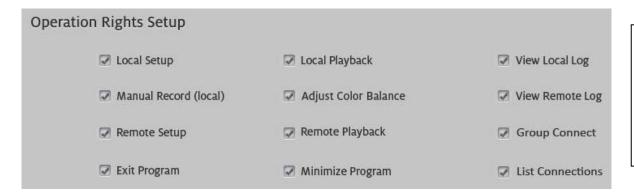
To setup Motion Detect record or Sensor/Alarm-in record in Live Center, not only should you do to setup record schedule in Live Center, but you should also setup the camera to send an alarm signal to the network (Live Center or CMS). For alarm cameras from DVR card please refer to Hybrid DVR Server section 1.4.3 and 1.4.4. For alarm cameras from IP device please refer to section 1.5.

2.2.4 **User Management**

Operation steps:

- Set "Local Password Support" to Enable
- Press the "Add User" button and enter a new User ID and password/Confirm password.
- Select a user type from the Administration Group.
- Click the check box to enable/disable the current user's operation rights in "Operation Rights Setup".
- Exit "Setup" interface will auto save all of your settings.
- If you want to delete a username, just select the User ID and click the button.

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Note: This is Live Center's local user management interface. The user's rights here are different from the user's rights on the server. You can not configure network login parameter through here.

2.3 Connect to Video Server

2.3.1 Auto connect at start up

Auto Connect at Startup Connection Group 01 Select a connection group from the dropdown list. When Live Center starts up, this group of cameras will automatically show on your screen. Refer to Section 2.2 to set and save groups.

2.3.2 Auto connect alarm camera

Network Alarm Support Connection Group 01

Auto Connect

This function is only available when you don't use the E-map utility and close "Auto-connect at Startup" and avoid connecting any of your cameras manually. Set this option to "Auto Connect" Live Center will check all servers (all IP addresses) in the IP Address Alias List in "IP Setup" tab. All alarm cameras on the video servers will pop up sequentially on your screen automatically. If the alarm camera is already connected and showing on screen, the connection will not reduplicate. This feature is useful if you are managing more than 64 cameras. Set this option to a "Connection Group" so that only the cameras on this specific group show on your screen automatically. The alarm camera in other groups will be ignored.

For your attention: Live Center set default split view as auto adjust for alarm camera, that means when the alarm camera number changes, the split view also changes. To turn off / turn on this feature, please choose "Views Manual Adjust" from right-click menu, refer to section 2.11.1.

2.3.3 Manually connect camera from Connection Group

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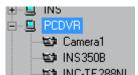
On the main interface press the "Group" button to open the connection panel.

- Select a group to connect to the camera manually.
- Con. All Ois. All Click on "Con. All" to display all the cameras in the group. Clicking "Dis. All" terminates all cameras.
- Click the camera number icon to connect each camera one by one. Click the icon again to disconnect it. Icon color will change after the camera connects successfully.
- Press the button to turn on the IP Matrix switch view. Click it again to turn it off.

2.3.4 Manually connect camera from Connection List

On the main interface press the "Connection" button to open the connection list panel.

Click "Con. All" to display all the cameras in its sequence order. Click "Dis. All" to terminate all camera views.



Click the sign "+" to expand the connection list. Double click a camera to show it in the current active window. Double click again to terminate it.

2.4 Remote Manage Video Server

From Tools panel, press the Remote Setup button to bring up the Connect Server selection dialog interface.

Select the remote server's alias from the drop down list. Click "OK" to enter the remote server's setup interface.



If you login to PCDVR, all setup interfaces and operations are exactly the same as the DVR Server. Please refer to the Section 1.4. If you login to NetDVR or IP devices, all setup interfaces and operations are still the same as login from DVR Server. Please refer to the Section 1.5.

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Important: In order to use Remote Setup, you need administration user rights. Please make sure that you log into the remote server with correct user ID. Some configuration parameters are not available in remote setup because changing those settings might cause DVR system malfunction.

2.5 Local Search (Playback)

On the main interface, press the button to enter **Playback mode**. All buttons and operation are exactly the same as those on the PCDVR local search. Please see Section 1.7 for more details.

2.6 Remote Search (Playback)

On the Tools panel, press the button to bring up the **Connect Server** dialog interface.



Select a PCDVR server from the drop down list. Click "OK" if you would like to enter the remote server playback interface.

If you login to PCDVR Server, all the operational steps are similar to the steps of local search except for the "**Sub-stream**" search. If you setup enable Sub-stream Record in the DVR server, you have to click the "**Sub-stream**" button to playback the sub-stream video. This feature is useful for low bandwidth network connections.

If you login to NetDVR or IP Camera, all buttons and operation are still similar to the local search except for the four missing buttons for Sub-stream Search, POS Search, ACU Search and Object Search. These features are only supported on the PCDVR.

For your attention, the icon color in remote search of NetDVR and IP device has some changes from those in PCDVR remote search. The calendar in IP device remote search is a little bit different from the calendar in PCDVR remote search. Here it cannot show the first recording date. It shows the current date as green color and highlight all days before current date. Another difference is the time bar color. It doesn't show 4 colors for different type of recording data like the PCDVR remote search. It always shows red color for all kinds of record mode despite of **Motion Record**, **Sensor Record** or **Manual Record**. This is because the low speed embedded system takes more time to search whole disk drive than Live Center can wait for response.

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2.7 Alarm Management and E-map Operation

2.7.1 Introduction of E-map

The E-map client is designed to give you a way to visually manage your alarm signals in a convenient manner. The Live Center E-map function uses 2 levels of electronic maps to manage all devices, including DVR servers, sensors and cameras. The first level map (**main-map**) is used to display the video server devices. These devices include PC-DVRs, NetDVRs, IP video servers, IP cameras, IP speed domes, etc. The second level map (**sub-map**) is used to display sensors and analog cameras that connect to PC-DVRs, NetDVRs and IP video servers.

The main-map supports BMP image format. Resolution size can be no less than 1024*768 pixels and no bigger than 4096*3072 pixels. The sub-map supports BMP image format as well, with resolution size being no less than 160*120 and no larger than 1024*768 pixels. Before using the E-map feature, please design and prepare your own E-maps according your surveillance system camera layout. Save it in the local HDD for future usage.

When an alarm is triggered, the alarm device's icon will flash on the maps. The meaning to each icon is listed below.

Device type	Off-guard status (green)	On-guard status (yellow)	Alarm status (red)	
Camera				
NetDVR/IP video server	0	0	0	
PC-DVR	*****	*****	*****	
Sensor	9	9	9	

2.7.2 E-map Setup

To use the E-map function please set the option to "Enable" in the local Setup interface. Use E-map Enable Extended If you're using only one monitor, please select the "Stretched" display mode. If you'll be using two monitors, please select Extended or Stretched according your computer display settings. After you configure the E-map Enable/Disable setting, Live Center will need to reboot in order to initialize the dual-monitor function. After the reboot is complete, a diminution

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map will show on the upper right corner of the main interface. The main map will show on the second monitor. Refer to the next diagram to setup E-map before trying to use it.

The E-map setup steps:

Step1: Right click anywhere on the main-map, select "Map setup" from the right-click menu to enter E-map setup mode.

Step2: Right click anywhere on the main-map, select "**Change main map**" from the right-click menu. Locate your new map path from the Windows standard Open File interface to install new map. If you do not change the main map, the sample map will be used instead.

Step3: Right click anywhere on the main-map, select "Add Device" from right-click menu to bring up the "Add Server" interface.

Step4: Select a video server device name from the dropdown list. The dropdown list has all server names listed in the "IP Setup" interface. Please refer to Section 2.1.

Step5: Click the button to change the sub-map for the above video server like we did in step 2.

Step6: Choose the correct device type for the above mentioned video server, clicking the **OK** button when finished. A **green color** icon will show on the main map. Drag and drop it to move its position. If you add an IP camera, the camera icon will be put directly on the main map. You don't need to do the next step because the IP camera does not need a sub-map.

Step7: Right click the sub-map and select "Add camera" or "Add sensor" to enter the camera/sensor for the second level map.

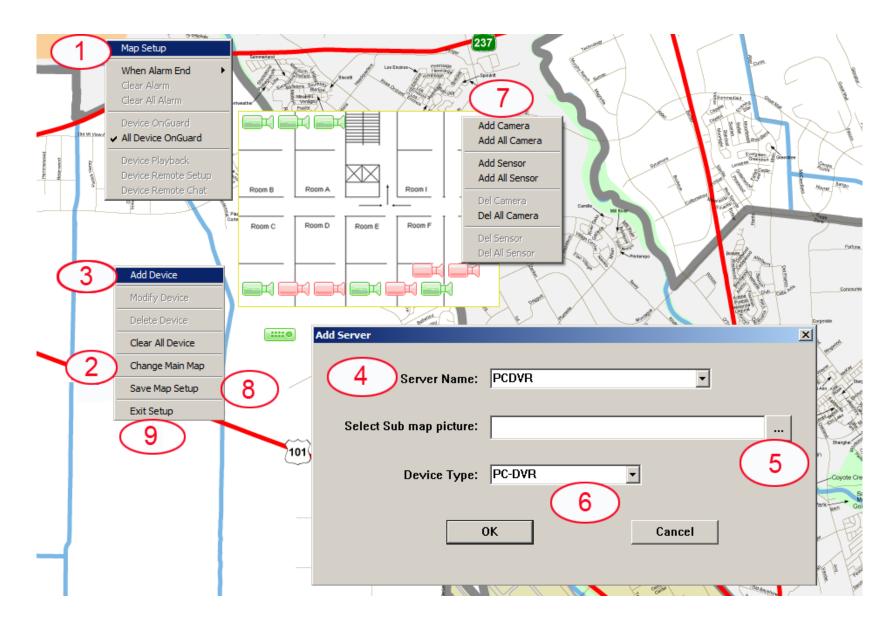
Tips: To hide a sub-map just double-click anywhere on the sub-map. To bring up the sub-map of a device just double-click on the device. Double clicking on any camera icon will force that camera to be displayed on first monitor in full screen mode.

Step8: After you finish all the video devices, right click anywhere on the main-map and select "Save Map Setup" to save settings.

Step9: Right click anywhere on main-map, select "Exit Setup" to end E-map setup mode.

After you exit the E-map setup mode, E-map is ready to be used. If you would like to delete some items, modify a sub-map or move the position of any sensor, camera and device, you should enter the E-map setup mode again.

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2.7.3 Operation on E-map

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The operation on E-map is used for viewing where the alarm signal came from and what happened on the scene. The right-click menu has a list of all the operations that you can do on the map, but the menu will change when you click on different spots of the menu.

If you right-click a device on the map, the menu will list individual operation for this device. The individual operations include:

- Clear Alarm: Choose this operation to manually clear the current alarm signal. The auto pop up alarm video from this video server will stop.
- **Device On-guard:** Choose this operation to set the device to on-guard status. The device icon will change from green to yellow. When this device has an alarm trigger, its icon color will change from yellow to red and flash continuously. Meanwhile, the alarm camera video will automatically pop up in a free sequential sub-window. But if the camera is showing on your screen (already connected), it will not pop up again (the connection will not reduplicate).

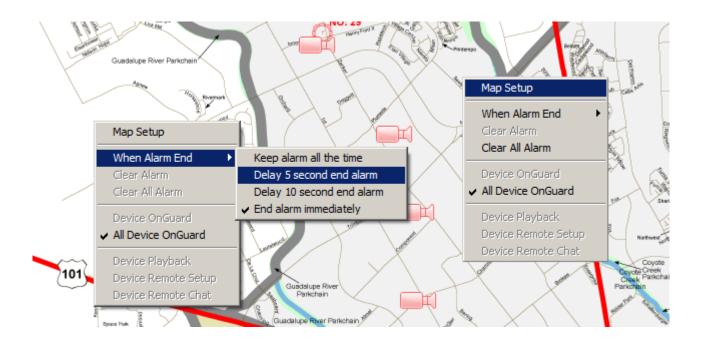
Important: This operation step is only to setup the Live Center program to receive alarm signals from video server. You must make sure the video server is already configured correctly to send out the alarm signal. Otherwise the E-map will work abnormally. You also need concern with your computer CPU usage shown on the information board in main interface. When CPU usage exceeds 80% the E-map will stop to popup more alarm camera.

- **Device playback:** This operation is equivalent to Remote Search, see Section 2.6
- **Device Remote Setup:** This operation is equivalent to Remote Setup, see Section 2.4.
- **Device Remote Chat:** This operation is equivalent to Remote Talk, see Section 2.11.3.

If you right-click a free area on the map, the menu lists common operations to all devices. The common operations include:

- Map Setup: See Section 2.7.2
- When Alarm End: Select an action for the E-map to perform after the alarm has stopped in the video server site. Go to the sub-menu to set alarm control
 method.
- ✓ **Keep alarm all the time:** This holds an alarm status on. The alarm will not stop and the alarm camera stays on screen continuously.
- ✓ **Delay alarm 5 seconds end alarm:** Hold on alarming status only 5 seconds then stop. The alarm camera stays on screen 5 seconds then disappear.
- ✓ **Delay alarm 5 seconds end alarm:** Hold on alarming status only 10 seconds then stop. The alarm camera stays on screen 10 seconds then disappear.
- ✓ End alarm immediately: Stop immediately. The alarm camera only shows up for the time preset in server configuration of alarm control.
- Clear all alarm: Manually clear current alarm signal for all devices
- All Device On-guard: Set all devices to on-guard mode.
- Tips: "Clear Alarm" and "Clear all alarm" are not available if you set "End alarm immediately" because the system clears alarm automatically. When a device is on-guard, there is a check-on sign " $\sqrt{}$ " in its right-click menu, to off-guard this device just click this menu again.

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2.8 Remote Control PTZ

All buttons and operation are exactly the same as those on the PCDVR PTZ control. Please see Section 1.9 for more details.

2.9 Data Backup

All buttons and operation are exactly the same as those on the PCDVR Data backup. Please see Section 1.10 for more details.

2.10 IP Matrix TV-wall Operation

2.10.1 Introduction of IP Matrix

Traditional Analog Video Matrix routes the video from many cameras to multiple monitors. Signals from a range of input sources can be distributed to various output

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devices. Traditional matrix is limited by the transmission distance of coaxial cable (usually only couple hundreds of meters). IP Matrix routes the digital video from the network connections to multiple sub-windows (channels) on single monitor, or outputs them to multiple monitors (TV-Wall) via PC VGA display card or video decoder card. The great advantage of the IP matrix is that it overcomes the limitation of distance in traditional analog matrix systems. Live Center offers two solutions of IP matrix TV-wall function.

2.10.2 Decode Card IP Matrix Operation

The Decode Card TV-out function requires a 3000H4Dx decoder card. One system can support a maximum of 24 TV-out ports (max. 24 monitors). A decoder card TV-out channel (or port) and decoder channel have two different definitions. The TV-out port has a physical BNC connecter while the decoder channel has a virtual network connection. In the DVR server system, the video the DVR card transfers to the decoder card's TV-out is called **video forward**. The working theory is different from IP video. In the Live Center system, the video transferred from the connection video server/IP camera to the decoder card's TV-out is called **video decode**.

- 3000H4D4 decoder card supports 4-ch TV-out. It can decode 4-ch D1 resolution video or 8-ch CIF resolution video.
- 3000H4D2 decoder card supports 2-ch TV-out. It can decode 2-ch D1 resolution video or 4-ch CIF resolution video.

For example, if you install a 3000H4D4 and a 3000H4D2 card in the computer running Live Center, you will be creating a physical 6-port TV-out system. That means you can connect 6 analog monitors (TV) to view the remote camera. When you set D1 Decode Mode in Live Center program, you get exactly 6 cameras to show on these monitors. When you set CIF Decode Mode in Live Center program, you'll get a total of 12 cameras to show on your monitors.

Set the decoder card working mode in the IP Setup interface.

TV-Out/Matrix Card Support CIF Decode Mode

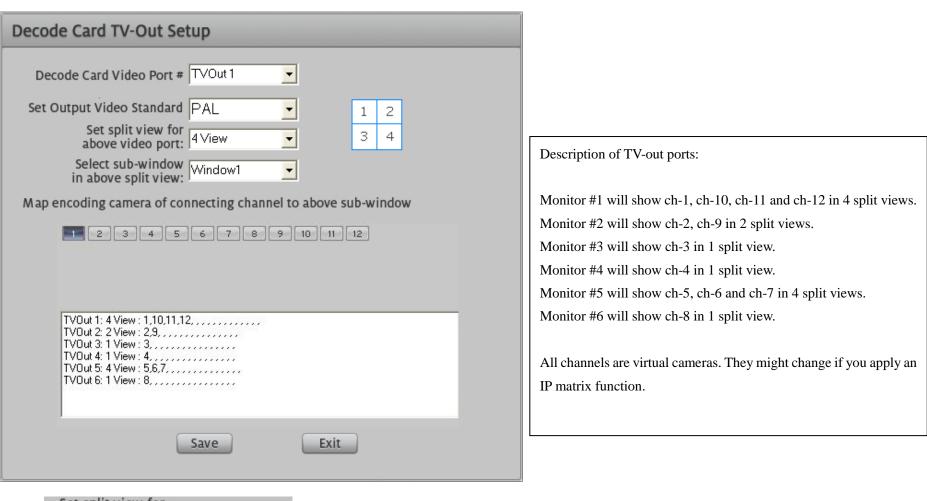
The following "Decode Card TV-Out Setup" interface will pop up.

Operation steps:

Step 1: Decode Card Video Port # TVOut 1 Choose TV-out port number to set your display parameters. The TV-out display settings must be configured one by one for the ports. All the following 5 operation steps are saved in this port (video out 01) until you change another port to operate. So please finish all 6 steps before you change to another port. Repeat step 1 to step 6 until all Video out ports configured.

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Step 2: Set Output Video Standard PAL Select the out-going video format to match the monitor video standard (NTSC or PAL).



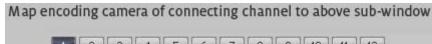
Step 3: Set split view for above video port:

Step 3: Select a split viewing mode for this port (TV-out port 01).

Step 4: Select sub-window Window1

Choose one sub-window in the above split view (step 3) to assign camera(s) to. The sub-window must be assigned one by one. Before you change another TV-out port, please finish all sub-windows assignment.

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Step 5: Click the camera number to add it in sub-window1.

After you save above settings, the TV-monitor will auto display cameras when you connect remote video server. If you have already setup multiple cameras from one connection video server to display in one sub-window (Refer to section 2.2.2), when you press switch button in Group control panel, the TV-out video will auto switch according to the switching time settings.

Notice: To change the decoder card working mode, the hardware must be initialized by exiting and restarting the program. Decode card IP matrix system only supports 3000H4C/C+/E/F/G series DVR Cards, IL6000HCS/HDS/HN series NetDVR, INC-TS/TE series IP Cameras, INS-SC series IP Speed Dome, IVS-5000 series IP video server. The PC Decode IP Matrix system in next section supports all video devices that could be integrated in ILDVR Hybrid DVR Server.

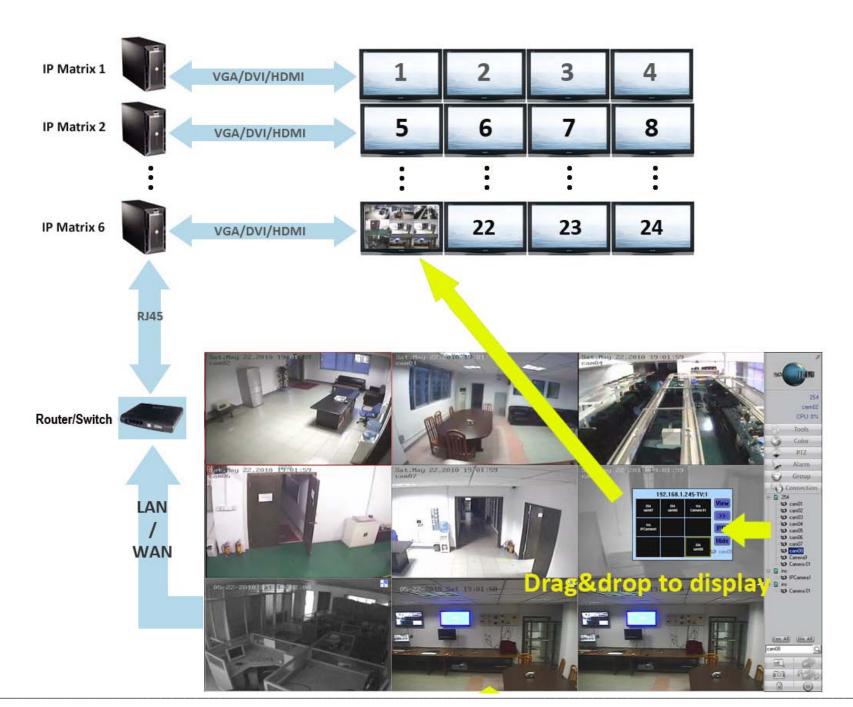
2.10.3 PC Decode IP Matrix Operation

To enter PC Decode TV-wall setup interface, please right click any camera window then select "PC Decoder Function" from right-click menu.

The PC Decoder TV-Client is exactly the same software as in DVR Server. Please refer to section 1.4.8 and 1.4.9 for configuration steps. One Live Center system supports up to 24 monitors to build up a TV-wall. Each monitor supports maximum 16 split viewing. That means you can watch 16 cameras simultaneously in one monitor. But if you add multiple cameras to one sub-window for applying switch view. The camera number can be amplified by 64 times to maximum. The following illustration shows the IP matrix TV-wall architecture. To build up a 24-monitor TV-wall, you just need 6 computers. Each computer has 4-head VGA/DVI/HDMI output.

There are 2 different operations in Live Center.

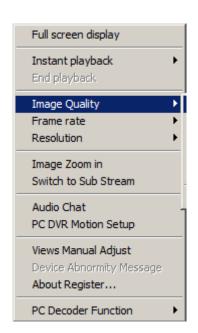
- It is not necessary for Live Center to enable dual-monitor function to support PC Decoder TV-Client.
- Besides the same setup steps as in the DVR Server, Live Center offers more convenient operation called drag & drop to display. It means you can drag any camera from connection list to display it in any monitor.



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2.11 Miscellaneous Operation

2.11.1 Right-click menu operation



Choosing "Full screen display" will hide the operation panel located on right side of main interface.

Select a time to play back. The Instant Playback time depends entirely on the setting located in the local setup configuration.

Image Quality, Frame Rate and **Resolution** are used to dynamically adjust video quality. If the video type is already main-stream, these options are not available.

Draw a rectangular zone in the camera window to amplify the image in the zone.

If the video type is already sub-stream, the **Switch to Sub-stream** is not available.

Click to enter Remote Talk. Refer to section 2.11.3.

Remote setup the Motion Detect parameters of PCDVR camera.

Views Manual Adjust: Turn off /turn on the alarm camera split view auto change function, refer to section 2.3.2.

Read malfunction device information.

Read IP device register information

Click to enter PC Decode T V-Client setup interface, please refer to section 1.4.9.

2.11.2 Remote Monitor Audio

Click any camera to activate and output its audio to your speakers. Only one audio channel can be heard.

2.11.3 Remote Talk

On the main interface Tools panel, press the button to bring up the **Remote Server selection** dialog interface. Select the remote server's alias from the drop down list and click "**OK**" to begin VoIP communication with the remote server. Click the "**End Talk**" button to terminate the remote talk session.

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Note: The Remote talk function requires a sound card, microphone and speaker to function properly.

2.11.4 Change camera viewing window

Click the target sub-window in which you would like to show the camera. Click the "+" sign to expand the connection list and double click your target camera name.



Double click a camera to show it in the active window. Double click again to terminate it.

2.11.5 Capture Picture

Please refer to Section 1.12.6.

2.11.6 Print Picture

Please refer to Section 1.12.7.

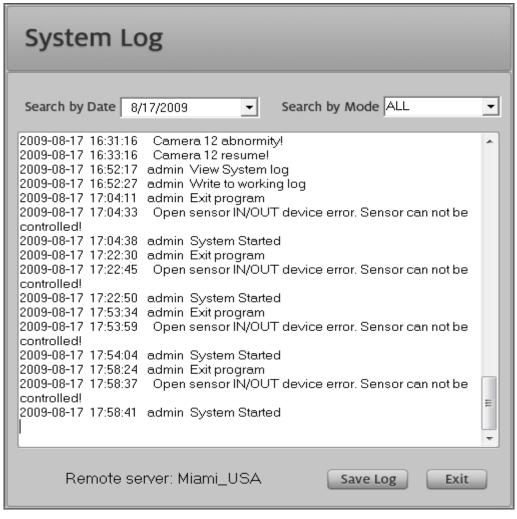
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2.11.7 System Log

Remote Log

Press the remote log button to view the remote server's system log. (This feature is only available when connecting to a PCDVR).

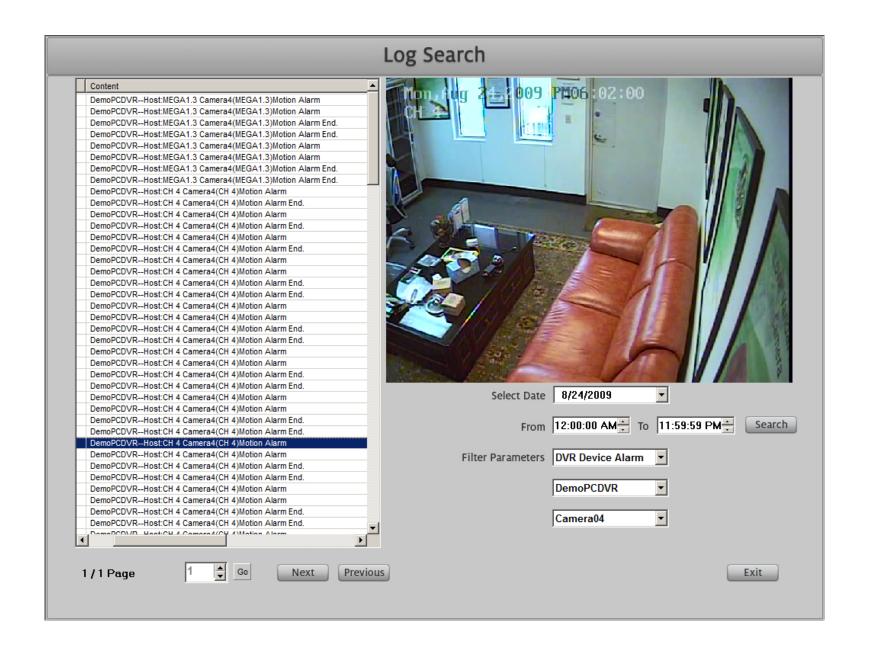
Click on "Save Log" to backup the system log as a text file.



Local log

On the main interface, press the button to display the following "Log Search" interface. Here you can use filter function to search alarm event. When you select filter to "DVR Device Alarm", the sub-level filter will show up below the first level. See the picture in next page. Double click the alarm event item in left Content List, the linked alarm video will show up in the video window.

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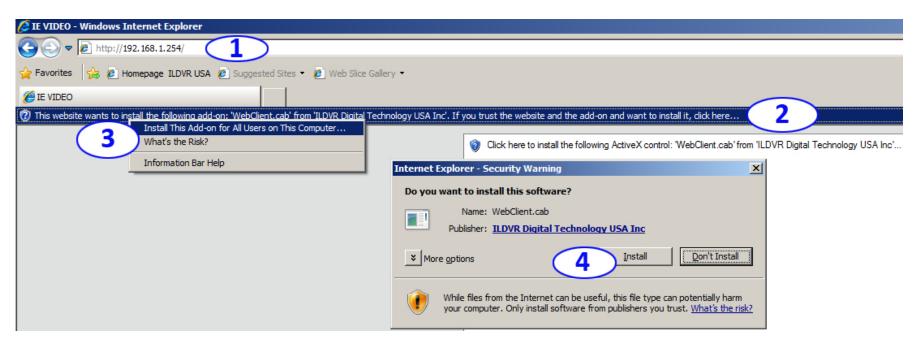
Chapter 3 Web Client

Both ILDVR Server and ILDVR Live Center supports the PC-DVR web client (IE CLIENT). Live Center works as a video server to forward video stream to the web client to reduce the DVR Server's network load and save network bandwidth.

3.1 Download and install ActiveX Control

Run Internet Explorer and enter the DVR Server/Live Center IP address and web listening port (if web port is not 80) in the address box. Press "**Enter**" and a security warning will appear after connecting with the DVR server. This warning is the ActiveX control that needs to be downloaded in order to use this feature. Follow the 4 steps to install the ActiveX Control shown on the illustration.

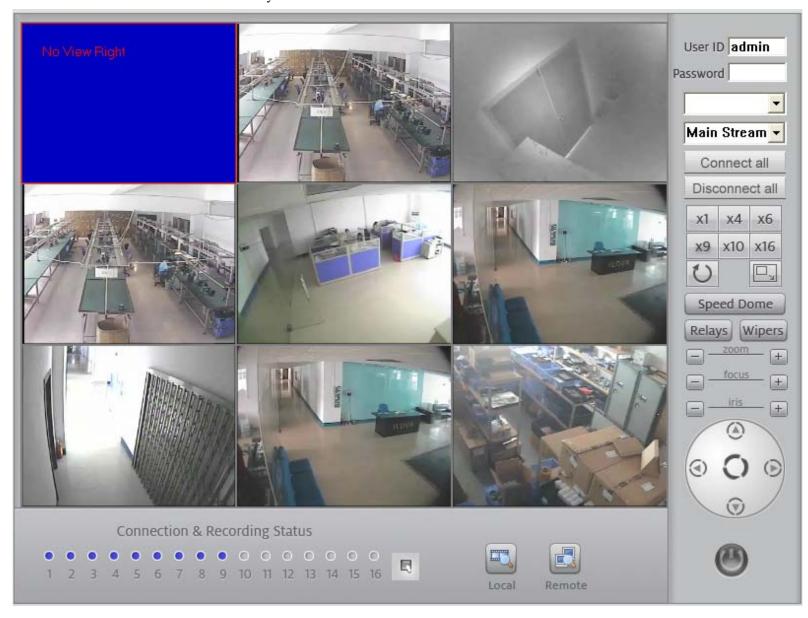
If you have correctly configured the DVR server with DNS/DDNS, you can also input the DVR server domain name and web listening port in the IE address box.



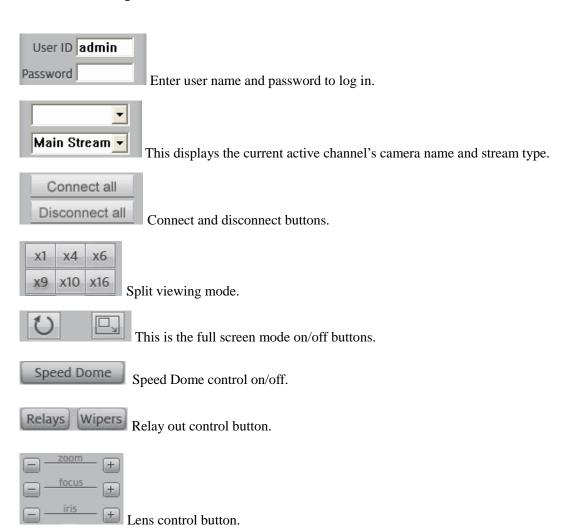
After installing the ActiveX controls, the following web client interface will show on your screen. Click the camera number icon to connect each camera one by one, or

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click the "Connect all" button to connect all your cameras at once.



Control panel 3.2





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3.3 Remote Record



Channel number and status indicator button. Click this button to start recording onto your remote client's hard disk drive.

- Connecting status indicator (blue color): Clicking this will change the status to (green color) and the camera will start recording video.
- No connection status indicator.
- Record status indicator (green color): Clicking this will change the status to (blue color) and the camera to stop recording.
- Change-All button: Click this button to change every channels status. Click it again to restore every one of the status channels to its original setting.

3.4 Remote Search

Click the button to enter the **Remote Search** interface. Choosing a specific date and camera will bring up all the recorded data into the right info box. Click any file to display it.



Control buttons from left to right: Play, Pause, Stop, Last Frame, Next Frame, Low Speed Play, Fast Speed Play.

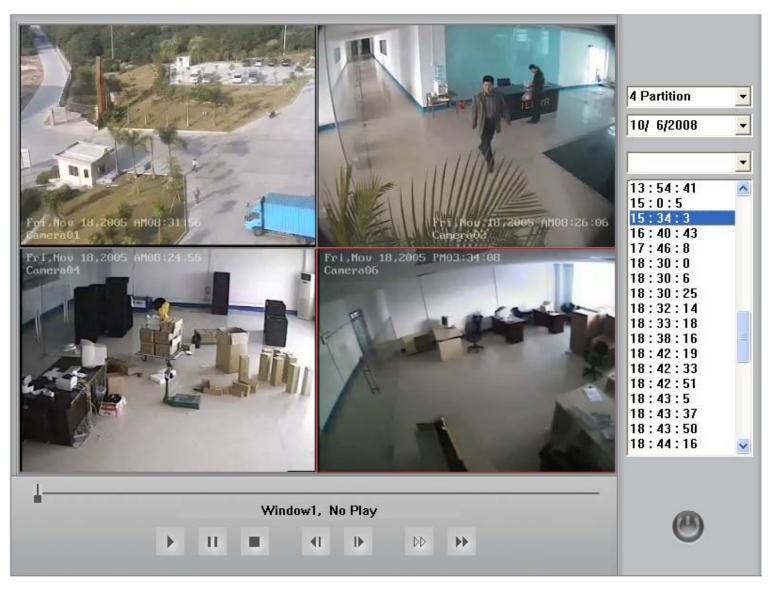
Note: The "Last Frame" button does not work because the remote search is playing streaming video. It will only work if you are looking at recorded data.

Save button: Click this button to save the displayed camera video to your local disk. All video displayed will be recorded in the DVR server, but you can download the video when you are in remote playback simply by clicking this button Download.

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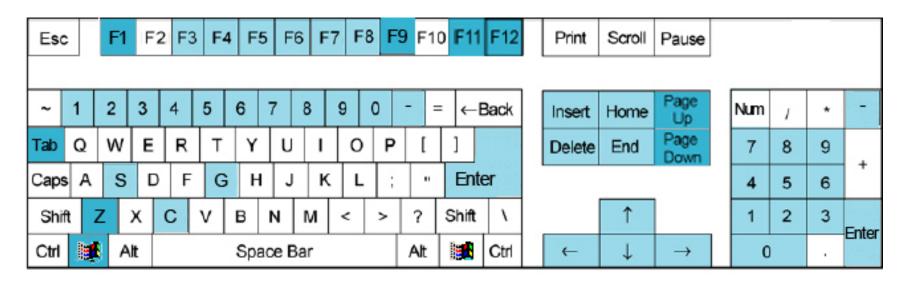
3.5 Local Search

Click the button to enter the **Local Search** interface (shown below). All displayed video are manually recorded on a local disk via the web client.



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Appendix A: PC Keyboard PTZ Control Guide



The light blue color keys are used to control the PTZ.

The dark blue color keys are used to control all other functions.

PTZ Control:

Keyboard	Function
↑	UP
↓	DOWN
←	LEFT
\rightarrow	RIGHT
Home	ZOOM IN
End	ZOOM OUT
Insert	FOCUS IN

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Delete	FOCUS OUT
S	Save Preset
G, Enter	Call Preset
C, -, Num0-9	Delete Preset
F3-F8	Run PTZ Tour, F3 - F8 means 3 to 8 second interval

Other Control:

Keyboard	Function	
F1	Reserved	
Tab	Switch camera / channel	
Page Down	Switch to next camera / channel	
Page UP	Switch to ahead camera / channel	
F9	All cameras record 30 seconds urgently	
F11	Single screen enlarge / shrink	
F12	Full screen switch	
WIN+ Z	Hide screen	

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Appendix B: PCDVR Keyboard IKB-2988 Operation Guide



COM port Connection: IKB-2988 keyboard use COM port communication, please plug in the data cable connecter to the COM port that you assign to the settings "DVR keyboard Support" in DVR / Live Center software. The communication parameters are Baud Rate= 9600, Parity=none, Data Bit=8, Stop Bit= 1. If the keyboard doesn't work, please check the COM port parameters in the Device Manager of Windows OS.

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The LCD screen displays the information of current state and user inputs. The contents might change according to operations.

Lock/Unlock: Press this key to lock/unlock the keyboard. Unlock steps is "Unlock + 0000 + OK". The default password "0000" cannot be changed.

Page: This key is similar to **Auto Switch on/off** button in software main interface. Press it to shift the screen page one by one. It only works when the total camera number exceeds current split viewing number.

F11: Single view or one split view key. Press it to turn on/off current window or camera in single widow mode.

F12:Full screen key. Press it to turn on/off full screen mode.

4 view/9 view/16 view/24 view/36 view: Press these keys to shift to proper split viewing mode directly.

Views: Press this key plus a number then press OK to shift other split viewing mode. If you input a non-standard split view number, the system will show up the most close to this number of standard split view.

Window: Sub-window select key. Press this key plus a number then press OK. The target sub-window will show up in single mode immediately.

Camera: Camera select key. Press this key plus a number then press OK. The target camera will show up in single mode immediately.

For your attention: Even the camera key has same operation result as the Window Key, but they are definitely different. The Window key calls virtual camera of screen, the Camera key calls physical connection camera (default settings) that saves in system. So the Camera key has different functions in Hybrid DVR server and Live Center (or other network software such as CMS E-map and CMS Client). In DVR Server, when you setup display groups to break the default relations of camera and sub-window, press Camera key to call camera will ignore the group display settings and force the default target camera to pop up. In Live Center, press Camera key to call camera will force the default connection camera to pop up, even if it is not connecting, it will auto connect immediately.

Switch: TAB key. Press this key to select next sub-windows one by one.

Talk: Press this key to activate remote talk with current camera connection site.

30's Record: Emergency record key, same function as it in software main interface. Press it to force all cameras to record video for 30 seconds.

Inst. Play: Instant Playback key. Same function as the right-click menu of instant playback. Press this key plus a number then press OK to playback the recording video of current active camera. The setting options of "Max. time to instant playback" in DVR system will take effects to this operation.

Grab: Capture image key, same function as the Capture Image button in software main interface. Press it to capture and save one picture of current active camera.

Stop: Press this key to stop Instant Playback or Remote Talk.

Armed/UnArmed: These two keys only work with Live Center E-Map. Same function as the E-map right-click menu of "All devices OnGuard / All devices OffGuard". Press it to set all devices on guard / off guard.

OK: Confirm key. Always press it after you input a correct number.

Cancel: Press it to cancel your input number then input again.

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Focus+ / Focus-: Press it to adjust the focus of active camera's lens.

Zoom In / Zoom Out: Press it to zoom in / zoom out the active camera.

Tips: This operation can be used to control mega pixel camera's **digital zoom in / zoom out** features.

Iris+ / Iris-: Press it to adjust the iris of active camera's lens.

Set Preset: Move the PTZ camera to aim position by joystick, press this key plus a number then press OK to save preset.

Clear Preset: press this key plus a number then press OK to delete preset.

Call Preset: press this key plus a number then press OK to call preset.

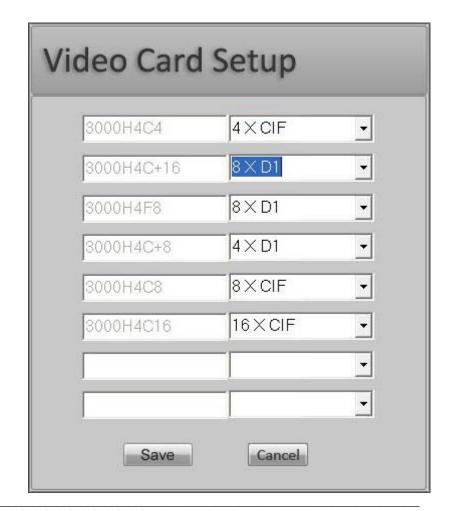
Auto Pan, Wiper, Relay: These keys are reserved.

Appendix B: Change DVR card's default setting

In the Tools panel, press the button to open the **Video Card Setup** interface.

ILDVR 3000H4xx Series DVR cards channel settings list below.

Model name	Default channel setting	Support channel options	Support Dual-Stream?
3000H4C4	4×CIF	4×CIF 2×CIF + 1×D1 1×CIF + 2×D1	Yes
3000Н4С8	8×CIF	8×CIF 6×CIF + 1×D1 4×CIF + 2×D1 2×CIF + 3×D1 4×D1	Yes
3000H4C16	16×CIF	16×CIF	No
3000H4C4+ 3004HS	4×CIF	4×DCIF 2×DCIF + 1×D1 1×DCIF + 2×D1	Yes
3000H4C8+	8×CIF	8×DCIF	Yes



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3008HS		$6 \times DCIF + 1 \times D1$	
3008HSE		$4\times DCIF + 2\times D1$	
		$2 \times DCIF + 3 \times D1$	
		4×D1	
		16×DCIF	
		$14 \times DCIF + 1 \times D1$	
		$12 \times DCIF + 2 \times D1$	
3000H4C16+		$10 \times DCIF + 3 \times D1$	
3016HS	16×CIF	$8 \times DCIF + 4 \times D1$	Yes
3016HSE		$6 \times DCIF + 5 \times D1$	
		$4\times DCIF + 6\times D1$	
		$2 \times DCIF + 7 \times D1$	
		8×D1	
3000H4F8	8×D1	8×D1	Yes
3000H4G8	8×CIF	8×CIF	No
3000H4G16	16×CIF	16×CIF	No
3008HQ	8×CIF	8×D1@50FPS	Yes
3008HQV	8×CIF	8×D1@50FPS	Yes
3016HQ	16×CIF	8×D1@100FPS	Yes
3008HQF	8×D1	8×D1	Yes

Notes:

- ILDVR3000H4C4 and 3000H4C8 cards support CIF and D1 AutoF resolution recording. D1 AutoF has a max. of 13-17 fps, depending on the PC's performance.
- 3000H4C+4, 3000H4C+8, 3000H4C+16 cards support DCIF and full D1 resolution recording.
- 3000H4G8 and 3000H4G16 cards only supports CIF resolution recording.
- 3000H4F8 and 3008HQF only support D1 resolution recording.
- 3008HQ, 3008HQV and 3016HQ can support D1 resolution recording at not full frames.
- 3004HS, 3008HS/HSE and 3016HS/HSE cards support 2CIF and full D1 resolution recording.
- When changing the DVR card settings from CIF to D1, you will lose half the channels you originally had. An 8 channel card now turns to 4 channels. You end up losing all the even channels in this process. For example, if you switch the 3000H4C+8 from CIF to D1, VID2, VID4, VID6, and VID8 will be disabled.
- To set D1 resolution recording, you will also need to set the Record Resolution to 704×480 in the Camera Setup. See Section 1.4.2.

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Technical Support Information

Please fill in this form in order to get prompt technical service in case of an emergency.

Item	Description
DVR Model Name	
Card serial number	
DVR Server Software Version	
Computer hardware list	Mother board: CPU: Memory: Display card: HDD:
Windows OS	\square NT \square 2000 \square XP \square 2003 \square VISTA \square WIN7
Purchasing date	
Dealer's Contact info	Company name: Technical Engineer: Tel: Fax: Email: