

EDNS2000 Series

Version 2.0 with mouse control

User Manual

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- This user manual is based on EDNS2000 Ver. 2.0
- Pictures may be different according to version or operating status.
- Specification or pictures are based on the latest information but can be changed without notification

Thank you for purchasing an Ernitec Digital Video Recording System

PRECAUTIONS

Please read before operating the DVR System.

The following precautions MUST be observed in order to prevent personal injury and/or damage to the system.

Please avoid these conditions when selecting a storage location for your system:

- Excessive heat, such as direct sunlight or heating appliances
 - Moisture, dust, and smoke
 - Magnetic fields or electrical waves
 - Temperature below 5°C or 41°F
 - Obstruction to the system's ventilation hole
 - Uneven surfaces and surfaces where the system may be subjected to vibration
-

WARNING

- Do not attempt to dismantle or disassemble the system.
 - Do not use without Uninterrupted Power Supply (UPS). Failing to use UPS will result in voided warranty.
 - Do not attempt to repair the System. Contact your dealer/installer for technical support and/or repairs.
 - Do not drop the system or subject the system to strong vibration.
 - Do not unplug the system without turning the power off first.
- If the system "freezes", depress the power button for 5 full seconds to turn the power off.
- Do not use the power cords and extension cords without a ground connection.
-

To replace the lithium battery in the system, contact your dealer/installer.

Only certified technicians should attempt replacing the lithium battery inside the system.

- Turn the system power off before replacing the battery.
 - Check the lithium battery polarity before installing.
 - The replacement lithium battery must be the same type as the original battery or the similar type recommended by vendor.
-

Signs of Caution and Warning



Warning

This sign indicates that the user could die or be seriously wounded if not used or installed properly.



Caution

This sign indicates that the user could be wounded or could expect property damage if not used or installed properly.

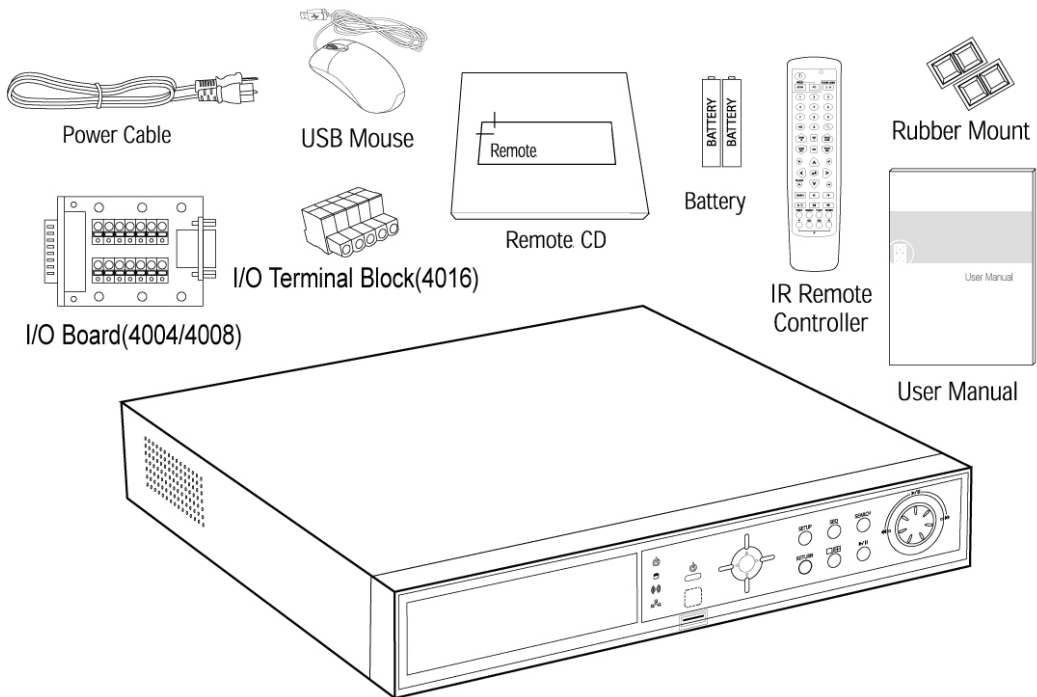
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1. System Contents

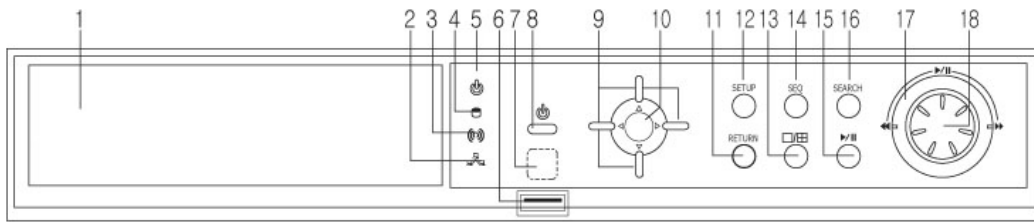
The following items should be included in the EDNS2000 SERIES box. If there is anything missing, please contact your vendor immediately



2. Explanations for each function

2.1 Front Panel

The front panel of the DVR is illustrated below and each button is described by name and function.

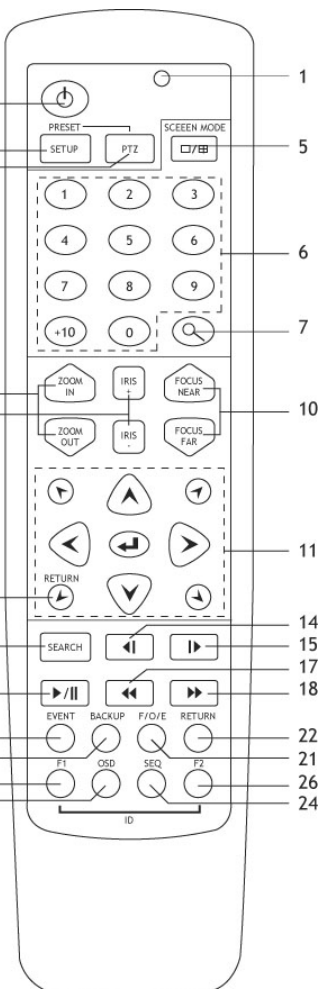


No.	Name	Function
1	CD-RW / DVD-RW	Use the CD-RW / DVD-RW to backup the video recording. Refer to Backup section (5.3.4) for detailed instructions.(Option)
2	Network LED	Network LED is blue when the system is connected to a network client. Network LED is off when there are no remote clients connected to the system.
3	Alarm LED	Alarm LED is lit if one of the sensors connected to the system has been triggered.
4	HDD LED	HDD LED shows the recording status. The LED is blue when the video is recorded onto or is being retrieved from the HDD (Hard Drive Disk). It is normal for the HDD LED to flicker.
5	Power LED	Shows Power On/Off status of the system (YELLOW: Working, RED: Stand-by).
6	USB Port	USB Port is used to connect the external USB storage devices. System software upgrades are possible via USB port. Refer to Tools (6.5) for the detailed system upgrade instructions.
7	Remote controller Receiver	Apart from the face panel buttons and mouse, This system can also be operated with the remote control. The Remote Controller Receiver on the This system receives the input signal from the remote control.
8	Power Button	Use to turn the Power On/Off.
9	Select Channel Button	In a single-screen mode, use Pan (Left-Right) buttons to display the previous/next channel. In a Picture-In-Picture (PIP) mode, Use Pan (Left-Right) buttons to display previous/next channel in the larger screen, use Tilt (Up-Down) buttons to display previous/ next channel in the smaller screen. In a split-screen mode, use Pan buttons to display the next set of channels. In a Digital Zoom mode, use Pan/Tilt buttons to move the zoomed image on the screen. Also use the Pan/Tilt buttons to move up/down and left/right within the menus or to increase/decrease the settings values.
10	ENTER Button	Use to enter the menu, select the item in the menu or to confirm the entered values.
11	RETURN Button	Use to return to the previous menu or to erase/cancel the entered values.
12	SETUP Button	Menu to set user environment of the system. Refer to Setup section (6) for detailed instructions.

No.	Name	Function
13	Screen Mode Selection	Screen mode can be selected from the monitor screen. Press the button to change the screen-division mode to: 1, PIP, 4, 9, 10 and 16-screen mode.
14	SEQ Button	Press SEQ button to turn the sequencing On/Off. The automatic sequencing works on a single, PIP, 4, and 9 screen divisions. Refer to System section (6.1) for the detailed instructions.
15	Playback	Playback the video recording.
16	SEARCH Button	Opens the Calendar window. To search, select the exact date and time of the video recording. Refer to Recording Image Playback Mode section (4.4) for detailed instructions.
17,18	Jog/Shuttle	Jog (inner dial) / Shuttle (outer dial) are used to control video playback. To play forward, turn the dials clockwise, to play backward, turn in the counter-clockwise direction. Use the Jog dial for frame-by-frame playback. Use the Shuttle dial to rewind/fast-forward. The speed will be indicated on the screen: x2, x4, x8, x16, and x32.

2.2 IR Remote Controller

The function buttons on the IR Remote Controller are the same functions on the front panel, as shown below. The IR Remote Controller for the System is illustrated below. The button functions are the same as the ones on the System front panel.



No.	Functions
1	The LED is on when the remote is in use
2	Power Button
3	SETUP (In PTZ mode, press this button to program Presets. Move the camera and enter the two digit preset position to be stored. e. g. press SETUP, 0, 5 to store preset 5. Up to 99 presets can be programmed.)
4	PTZ
5	Screen Mode Selection (1/PIP/4/9/10/16 -screen division mode)
6	Camera Selection Buttons. Press the corresponding channel number on the remote control to display it in a single-screen division mode on the screen.
7	Digital Zoom Button
8	ZOOM IN (enlarge) / ZOOM OUT (decrease)
9	IRIS+ (Open) / IRIS - (Close)
10	FOCUS NEAR / FAR
11	Pan-Tilt buttons, Enter button Use the Enter button to access the Start menu, select the setting or value. In the Digital Zoom mode, use the Enter button to turn the PIP mode on/off.
12	RETURN (Use the 4 diagonal direction key button while using the PTZ)
13	SEARCH Button
14	Playback Backwards Frame by Frame
15	Playback Forward Frame by Frame
16	Playback/ Pause Button
17	Fast Playback Backwards Button
18	Fast Playback Forward Button
19	EVENT Button
20	BACKUP Button
21	*F/O/E Button. Press to eliminate the "feathering effect" during the video playback.
22	RETURN
23	OSD Button
24	SEQ Button
25	F1 (Use to set Remote Controller ID)
26	F2 (Use to set Remote Controller ID)

NOTE: *F/O/E Button (use only on remote controller)

The object in the recorded image might show the feathering effect during frame playback because images at 704x480(PAL: 704x576) resolution have higher vertical resolution than 704x240(PAL: 704x288) or 352x240 (PAL: 352x288). The feathering of the image can be solved when only one of two Fields (Odd, Even Field) is selected. Default is frame playback. When the button is pressed, it will change to Odd Field Playback→ Even Field Playback→ Frame Playback order.

NOTE: To use the IR Remote Controller, set the initial ID the same as the ID in SETUP→ RECORDER→ GENERAL→IR REMOTE CONTROLLER. The user is required to set the ID only once. Refer to the next page for detailed information about ID input.

- Number Button

Change the channel on the 1-screen mode. Press the number buttons for all channels to see the corresponding channels. Also used to set the setting value on the "Setup" menu.

- Direction Key Button

The direction key activates differently for Realtime Image/Playback Mode, Setup Menu Mode, Search Menu Mode and Digital Zoom Mode. The Digital Zoom Mode only activates in Realtime Image Mode, Recording Image Playback Mode and 1-screen mode. Thus, change the screen to 1-screen mode to activate the direction key.

On RealTime Image/Playback Mode	On Digital Zoom Mode
Right Side Direction Key: Increase the channel on screen	Up, Down, Left, Right Button: To Move Direction
Left Side Direction Key: Decrease the channel on screen	Enter (↵)Button: PIP Screen On/Off
Up Side Direction Key Button: Increase PIP channel on PIP Mode.	Zoom In/Out Button: To Decrease or Enlarge Screen
Down Side Direction Button: Decrease PIP channel on PIP Mode	Diagonal Direction Button: Return
Setup Menu, Search Menu Mode	PTZ Mode
Up, Down, Left, Right Button: To Move direction	Up, Down, Left, Right Button: To Move Direction
Diagonal Direction Button: Return	Diagonal Direction Button: To move Direction

<Method to set or move to preset positions>

- Set Preset Position

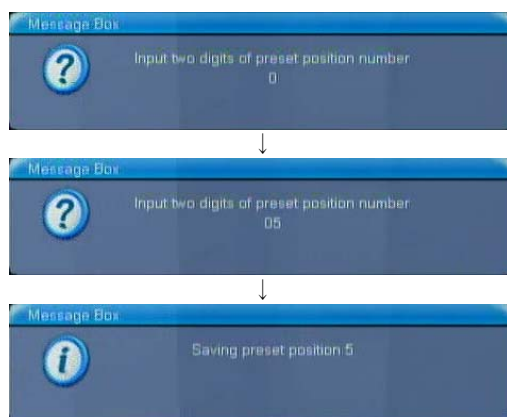
When in PTZ mode, press Setup button and two digit of preset position number (Up to 99 preset can be set).

- Move to preset position

In PTZ mode, enter two digit of preset position and camera will move to the position.

e. g. 1: Set Preset 5

In PTZ mode, press Setup, 0 and 5button. You can see following message boxes when press buttons.



e. g. 1: Move to preset 5 In PTZ Mode, press 0 and 5 button

2.2.1 Setting ID on IR Remote Controller

The Remote Controller ID for each System system is set to default value of 0 upon shipping. Until the specific ID is configured by user, the IR Remote Controller can control several System systems at once. In order for an IR Remote Controller to communicate with the specific System system, the ID must be set for the System system and for the Remote Controller itself. This will only have to be done once.

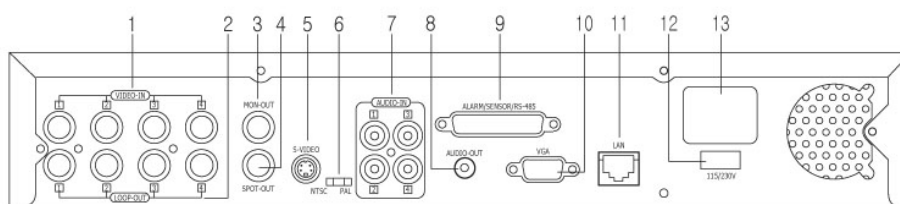
To configure the IR Remote Controller ID, do the following:

1. Insert AAA batteries into the IR Remote Controller.
2. Click Start button in the bottom left corner of the main screen
3. Select the Setup option in the menu (or press the Setup button on the System Front Panel/IR Remote Controller)
4. Go to SYSTEM → General menu.
5. In the General menu, enter the desired IR Remote Controller ID (00~99). e.g. 03
6. Click OK in the General menu to save the Remote Controller ID. The ID has been set for the system.
7. To set the same ID for the Remote Controller, simultaneously press and hold F1 and F2 buttons on the IR Remote Controller for full 3 seconds. The IR Remote Controller LED will be on.
8. With Camera Selection Buttons [11], enter the same -digit ID number set in Step 4 (00~99)
9. e.g. 3 The IR Remote Controller LED will blink three times and will turn off.
10. The ID setup is complete.

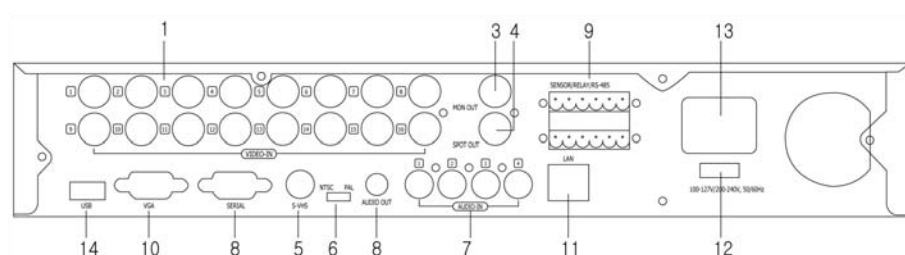
To program the IR Remote Controller to support a different the system, change the IR Remote ID on the Remote Controller to the corresponding ID on the desired the system.

2.3 Rear Panel

The back panel of the DVR is illustrated below.



[ENDS2000 4ch/EDNS2000 8ch]



[EDNS4000 16 ch]

No.	Functions	Description
1	VIDEO-IN (BNC)	Connect the BNC connector of each camera to the corresponding BNC connector on the System back panel. The BNC connector number determines the channel's position on the screen. (Supports NTSC/PAL). Note: Camera Input voltage level is 1Vp-p±10%.
2	LOOP-OUT(BNC)	These BNC connectors are used to duplicate the video signal from the camera to another system. Only channels 1-8 are loop out capable. (16 Channel has no LOOP-OUT)
3	MON-OUT(BNC)	Connect the main monitor for surveillance/setup/playback via BNC connector.
4	SPOT-OUT(BNC)	Connect the spot monitor for automatic sequential switching. Configure the Dwell Time for the spot monitor in SYSTEM → General menu.
5	S-VIDEO Connector	Connect additional main monitor for surveillance/setup/playback via S-Video connector.
6	NTSC / PAL Dipswitch	Select the video standard: NTSC / PAL. To change the video standard, turn the DVR power off first, set the dipswitch to NTSC or PAL. Turn the DVR power on.
7	AUDIO IN Connector	Connect Audio Input Device (Microphone). Note: It is recommended to use an amplifier with an audio input device.
8	AUDIO OUT Connector	Connect an Audio Output Device (Speakers) Note: It is recommended to use an amplifier with an audio output device.
9	ALARM/ SENSOR /RS-485	Connect up to 4 sensors inputs (NO/NC). Connect RS-485 signal out to control P/T/Z camera.
10	VGA Port	Connect the PC monitor for surveillance/setup/playback via VGA port.
11	LAN Port	Connect the LAN cable (RJ-45 jack) to the LAN port. Note: The Network has to be TCP/IP base 10 Ethernet LAN (Local Area Network), Internet or exclusive line, and the IP address should be fixed. Consult your network administrator for proper network configuration.
12	Power Input	Connect to the power source. Uninterrupted Power Supply (UPS) must be used.
13	RELAY OUT (Control)	Connect Controls 1 to 2.

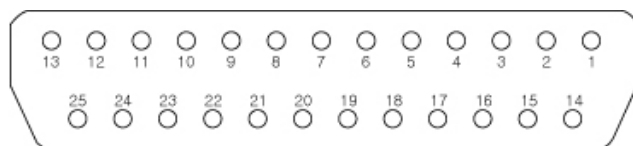
NOTE: When you connect to devices with DVR, ensure whether the specification of this system and devices is matched. Contact to your vendor for additional connection to devices or detail explanation. Use audio input/output device with amplifier.

- ALARM/ SENSOR /RS-485 Input

The connection method differs according to the type of P/T/Z controller use. Enquire from your vendor incase you

are using other than RS-485.

Refer to picture below for printer port connection of the EDNS2000 series rear panel.

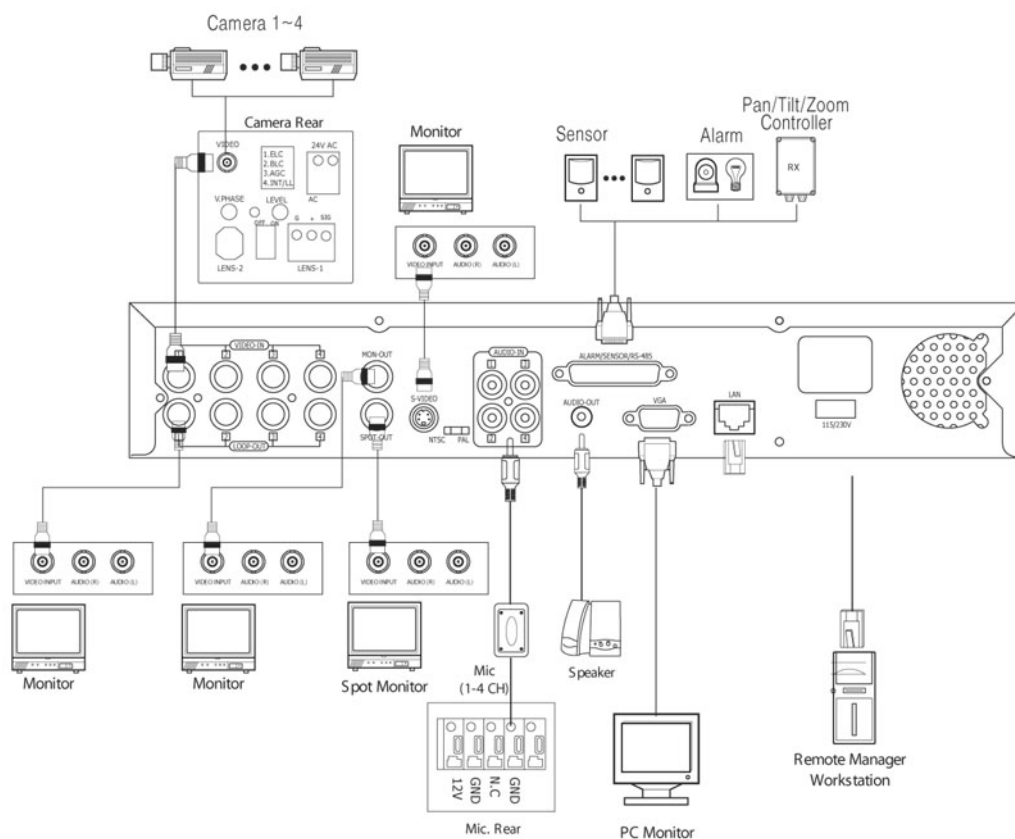


NO.	SENSOR	NO.	RELAY	NO.	Serial Communication	NO.	NO Connect
1	SENSOR1	5	RELAY1(+)	8	rs485-RX	9	NO Connect
2	SENSOR2	6	RELAY2(+)	20	rs485-TX	10	NO Connect
3	SENSOR3	7	GND	22	rs232-TX	11	NO Connect
4	SENSOR4	13	GND	24	rs232-RX	12	NO Connect
14	SENSOR1-GND	18	RELAY1(-)			23	NO Connect
15	SENSOR2-GND	19	RELAY2(-)			25	NO Connect
16	SENSOR3-GND	21	GND				
17	SENSOR4-GND						

3. Installation

3.1 Connecting Peripheral Devices

Install the system on a flat surface. If required, attach the rubber mounts for installation. Install the system in location with good ventilation to prevent overheating. Please leave 1.75" (4.45 cm) space for proper ventilation. Do not connect the DVR to the power source until all peripheral devices have been connected. Please refer to the diagram below for proper peripheral devices connection.



Caution

Depending on the grounding, if the coaxial cable connecting to the camera has any risk or danger of electric shock, shut down the power on the system completely (unplug the power cable) before connecting video cable to BNC port.

NOTE: Please ensure that the peripheral devices do not have any conflicts with the system specifications. It is recommended to use an amplifier with audio input/output devices.

3.2 System Startup and Shutdown

3.2.1 System Startup

After connecting all peripheral devices, connect the system to the power source and press the Power button on DVR front panel or IR Remote Controller. In case of power outage or failure, the power will turn on automatically.

Upon the initial System startup, the user can create an administrator password that will allow full access to the system settings and functions. The administrator can also create up to 4 additional user accounts to allow limited access to the system functions and to prevent the unauthorized changes to the system settings. Please refer to the Password section (6.1.3) for user management instructions.

1. After the initial startup, create numerical administrator password and click OK. If no password required, do not enter password and click OK.



2. Re-enter the administrator password to confirm and click OK.



On the next startup, enter the admin/user password. If no password has been set, the system will login automatically. Several user passwords can be configured. Please refer to the Password section (6.1.3) for user management instructions.

**Caution**

Be cautious not to forget password when you firstly register administer password.
If it is forgotten, contact to your dealer.

3.2.2 System Shutdown

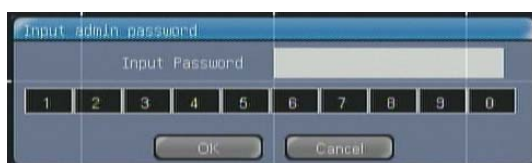
It is not advisable to shutdown the system, since no video is recorded when the system is off. Only authorized users can turn the system off.

To turn shutdown the system, do the following:

1. Press the Power button on the front panel of the system or on the IR Remote Controller.
2. The confirmation window will appear, when the Power button is pressed. Click 'Yes' to proceed with the system shutdown.



3. Enter the admin password and click OK to shutdown the system.



3.2.3 Recovering After Incorrect Shutdown

The system is designed to operate virtually problem-free for extended periods of time.

The system's operation, however, can be affected by external factors, such as electric or physical shock to the system. The systems are programmed to reboot within minutes after the system crash caused by external factors or after the power failure. After the power is reset, the system will start normally.

However, if the system hardware has been physically damaged, the normal system recovery may not be possible. Physical damage to the hardware may result in the system crash or continuous system rebooting.

If the system does not restart automatically and cannot be shutdown by pressing the Power button for 5 seconds, do the following:

1. Unplug the DVR from the power source.
2. Wait for approximately 10 seconds and reconnect the system to the power source.
3. Ensure the proper functioning of the system. If the system still does not function properly, do not attempt to repair. Contact your dealer for technical support.

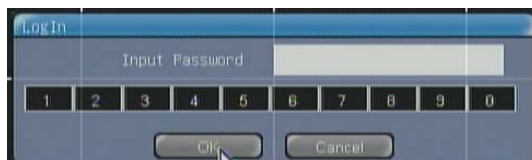
4. Operation

4.1 Log In

Check power is connected to system.

The system has various configurable settings. The administrator can set the system password and <User> to prevent unauthorized changes to setting values and alteration to recorded files.











Insert <Admin> or <User> password. If <Admin> and <User> password are same, the system recognize with <Admin>.



NOTE: Be cautious not to forget password when you firstly register administer password. If it is forgotten, contact to your dealer.

4.2 See Operating Status

In real time live mode, icons or messages will be indicated on the screen to notify the system mode or status. Below are the icon categories, which are indicated on the monitor.


	Click to rewind the video recording. Click again to increase the rewind speed: x2, x4, x8, x16, and x32		Sequence mode. This icon is displayed in the top right corner of the screen when the SEQ button is pressed on the DVR front panel or on the IR Remote Controller. The automatic sequencing works on a single, PIP, 4, and 9 screen divisions. Please also refer to Sequence Dwell section (6.1.1) for the more instructions.
	Play the video recording backward. Shows one frame of every 16 frame grouping.		Alarm. This icon is displayed on the taskbar, when the Sensor (Alarm Input) is triggered. The channel number, associated with the triggered alarm is highlighted red. The camera title, associated with triggered alarm will also be highlighted red. See Figure. Please refer to the Task Bar (5) section for more information.
	Stop / Pause		P/T/Z mode. This icon is displayed when the P/T/Z button in the top right corner of the screen when the PTZ button is pressed on the System front panel or on the IR Remote Controller. The PTZ mode is also accessible through the Quick Menu (4.5.1)
	Playback the video recording.		Digital Zoom mode. This icon is displayed in the top right corner of the screen when the Digital Zoom button is pressed on the DVR front panel or on the IR Remote Controller.
	Play the video recording one frame at-a-time.		Click to fast-forward the video recording. Click again to increase the fast-forward speed: x2, x4, x8, x16, and x32.



Alarm. This icon is displayed on the taskbar, when the Sensor (Alarm Input) is triggered.



Digital Zoom mode

When an alarm occurs in the connected channel, the Alarm () icon will appear on the right bottom side of the screen. To find out which camera had alarm activation, check color (Red) for channel on task bar.

4.3 Real time Live Mode

4.3.1 Real time Live Mode

After the system startup, the Live (Real-time) mode is displayed on the screen.

The Live mode can also be accessed from the Playback or P/T/Z modes through the Quick menu. Quick menu is accessible through mouse right-click.

The following are the main areas of the PIP (Picture-In-Picture) screen division in the Live Mode:

4.3.1.1 Channel Name/Recording Status

Display the camera title. Please refer to the Camera (Title & Security) section (6.2.2) for instructions on how to edit the camera title. The color of the camera title indicates the current recording status.

- White: No video is recorded
- Yellow: Video recording in progress
- Red: Alarm video recording (Motion/Sensor alarm)
- Green: Ready for Motion/Sensor recording. When the Motion/Sensor is triggered and the video recording is being made, the camera title will turn yellow.

4.3.1.2 Live video: Live video is displayed

4.3.1.3 Date & Time

Display the current date and time. When in playback mode, the date and time of recording are displayed. Please refer to the section Time & Date (6.1.2) for instructions on how to adjust the system time and date.

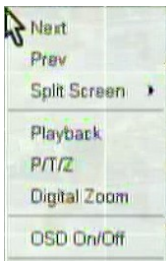
4.3.1.4 PIP (Picture-In-Picture)

The smaller screen in the PIP mode displays the selected video channel of user's choice. The PIP screen division will be also displayed in the Digital Zoom mode.



NOTE: In a Picture-In-Picture (PIP) mode, use Pan (Left-Right) buttons on the IR Remote Controller or the DVR front panel to display previous/next channel in the larger screen, use Tilt (Up-Down) buttons to display previous/next channel in the smaller screen.

4.3.2 Quick Menu



Next: Display the next channel (1, PIP modes) or set of channels (4, 9, 10 modes).

Previous: Display the previous channel (1, PIP modes) or set of channels (4, 9, 10 modes)

Split Screen: Choose the desired split screen mode from the list

Playback: Switch to the Playback mode

P/T/Z: Switch to the P/T/Z mode

Note: Right-click the desired channel before choosing P/T/Z from the menu.

Digital Zoom: Switch to the Digital Zoom mode.

OSD On/Off: Turn on/off OSD in screen when it is live mode.

Note: Right-click the desired channel before choosing Digital Zoom from the menu.

4.4 Recording Image Playback Mode

4.4.1 Playback Mode

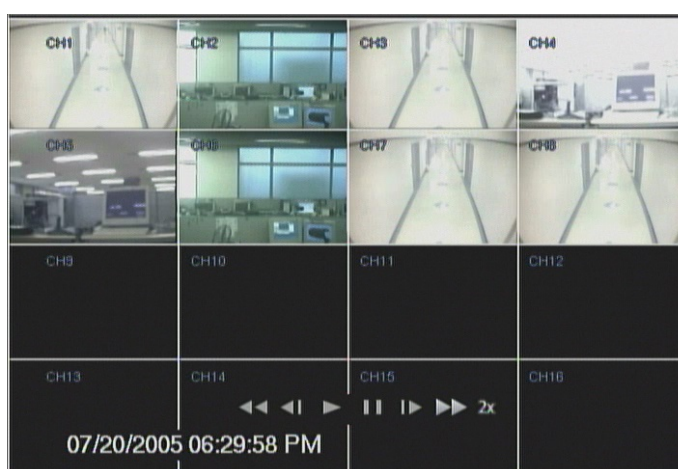
To access the playback mode, right-click the main screen and choose the Playback option in the Quick Menu. Playback mode is also accessible by pressing the Playback/Pause button on the DVR front panel or the IR Remote Controller. Please refer to the section Time & Date (6.1.2) for searching recorded image.

When in Playback mode, the Control (Playback) bar is displayed on the screen:



To playback the video,

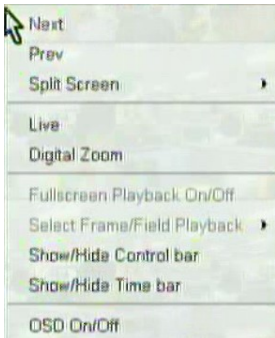
- Click the playback buttons on the screen
- Use the playback buttons on the front panel/IR Remote Controller
- Click the Rewind/ Fast-Forward button on the screen to increase the Rewind/Fast-forward speed.
- When rewinding/fast-forwarding, the speed is displayed on the screen.
- Use the Shuttle/Jog dial on the front panel



The speed of the fast-forward is x2.

4.4.2 Quick Menu

In the Playback Mode, right-click the main screen to access the Quick Menu.



Next: Display the next channel (1, PIP modes) or set of channels (4, 9, 10 modes).

Previous: Display the previous channel (1, PIP modes) or set of channels (4, 9, 10 modes)

Split Screen: Choose the desired split screen mode from the list

Live: Switch to the Live mode

Digital Zoom: Switch to the Digital Zoom mode.

Note: Right-click the desired channel before choosing Digital Zoom from the menu.

Show/Hide Control bar: Show or hide the Playback (Control) bar in the Playback mode

Show/Hide Time bar: Show or hide Time bar in the Playback mode.

Fullscreen Playback On/Off: This function toggles fullscreen playback or original size playback in 352x240(NTSC)/352x288(PAL) recording mode. In fullscreen playback mode, original images are enlarged about 4 times to fit in full screen. This function is only for 352x240(NTSC)/352x288(PAL) mode and it does not work in higher recording

mode of 704x240 or higher.

Select Frame/Field Playback: This function selects frame playback or odd/even field playback only for

704x480(NTSC)/704x576(PAL) recording mode. Frame playback is used to see full resolution of recorded images.

Field playback is used to remove feathering artifact of moving objects due to interlacing of video by showing only single field. The only drawback of field playback is that the vertical resolution is half of frame playback. Either odd field or even field can be selected for field playback. The default playback mode is frame playback.

OSD On/Off: Turn on/off ODS in screen when it is Playback mode.

4.5 P/T/Z Mode

4.5.1 P/T/Z Mode

To access the PTZ mode, click the PTZ button on the DVR front panel or the IR Remote Controller.



PTZ mode is also accessible through the Quick Menu.

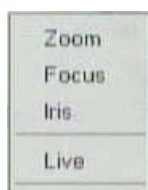
While working in the PTZ mode, the following icon is displayed in the top right corner of the main screen:

In the PTZ mode, the user can:

1. Zoom In/Out.
2. Adjust camera focus.
3. Increase/Decrease aperture.

The PTZ camera settings can also be adjusted through the Quick Menu. In the PTZ mode, right-click the main screen to access the Quick Menu.

4.5.2 Quick Menu



Zoom

When the Zoom option is selected in the Quick Menu, or when in Digital Zoom mode, the following icon is displayed in the top right corner of the main screen: With the mouse cursor, click the plus sign ("+") to Zoom In. Click the minus sign ("-") to Zoom Out.

OR Use the buttons ZOOM IN/OUT on the DVR Front panel/IR Remote Controller.

Focus

When the Focus option is selected in the Quick Menu, the following icon is displayed in the top right corner of the main screen:

With the cursor, click the plus sign ("+") to Focus Near. Click the minus sign ("-") to Focus Far. OR Use the buttons FOCUS Near/Far on the IR Remote Controller.

Iris

When the Iris option is selected in the Quick Menu, the following icon is displayed in the top right corner of the main screen:

With the cursor, click the plus sign ("+") to brighten the image (Increase aperture). Click the minus sign ("-") to darken the image (decrease aperture). OR Use the buttons IRIS+/- on the DVR Front panel/IR Remote Controller.

Live

Switch to the Live mode

4.6 Digital Zoom Mode

4.6.1 Zoom Mode

Digital Zoom mode is used to digitally zoom into the video image.

To access the Digital Zoom mode, right-click and choose the Digital Zoom option in the Quick Menu.

Digital Zoom mode is also accessible by pressing the PTZ button on the DVR front panel/IR Remote Controller. The Digital Zoom mode is displayed in the PIP split screen mode, where the smaller screen is the navigator window, and the larger screen is the zoomed image.



While working in the Digital Zoom mode, the following icon is displayed in the top right corner of the main screen:

The following are the main areas of the PIP (Picture-In-Picture) screen division in the Digital Zoom Mode:

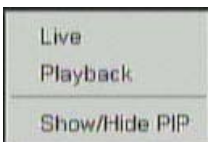
1. Screen: Shows enlarged image of the selected camera.
2. PIP Screen: Enlarged area is indicated with the white rectangular.
3. Digital Zoom Icon: Digitally zoom in/out.
4. Move: Move the enlarged image vertically/horizontally



To navigate the Digital Zoom mode, do the following:

1. To zoom in, click on the plus sign ("+") on the Digital Zoom icon.
2. To zoom out, click on the minus sign ("-") on the Digital Zoom icon.
3. To move the zoomed image vertically, position the mouse cursor in the top/bottom part of the main screen until the cursor changes to the up-down double-sided arrow (↑↓). Click on the main screen until the desired results are achieved.

4.6.2 Quick Menu



In the Digital Zoom mode, right-click the main screen to access the Quick Menu.

Live: Switch to the Live mode

Playback: Switch to the Playback mode

Show/Hide PIP: Show or hide the PIP screen

4.7 Split Screen-Screen Divisions

The Split Screen modes allow customizing the main screen appearance in Live and Playback modes.

When a specific Split Screen mode is chosen, the corresponding number of cameras will be displayed on the main screen.

The following split screen modes are available:

1 (single/full screen), PIP (Picture-In-Picture), 4 (quad), 9, 10, and 16-screen divisions.

The available split screen modes follow the sequence: 1 > PIP > 4 > 9 > 10 > 16

The Split Screen mode can be changed in Live or Playback modes from:

1. The front panel by pressing the Split Screen button: Press again to switch to the next Split Screen mode in sequence.
2. IR Remote Controller by pressing the Split Screen button. Press again to switch to the next Split Screen mode in sequence.
3. Quick Menu by choosing Split Screen option: Choose the desired split screen mode from the list.

To navigate the split screen mode, do the following:

1. Use the Pan (left-right) buttons on the DVR front panel or IR Remote Controller to display the previous/next channel for a single (full screen) split screen mode.
2. Use the Pan (left-right) buttons on the DVR front panel or IR Remote Controller to display the previous/next channel in a larger screen of the PIP split screen mode. Use the Tilt (up-down) buttons to display the previous/next channel in a smaller screen of the PIP split screen mode.
3. Use the Pan (left-right) buttons on the DVR front panel or IR Remote Controller to display the previous/next set of channels for a 4, 9 and 10 split screen modes.



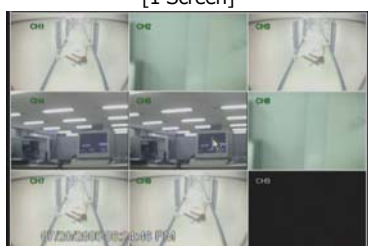
[1 Screen]



[PIP Screen]



[4 Screen]



[9 Screen]



[10 Screen]



[16 Screen]

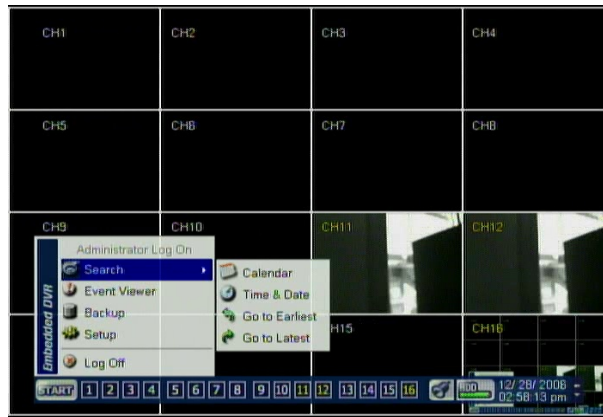
5. Task Bar

5.1 Task Bar

To access the Task Bar, position the mouse cursor at the bottom of the main screen. The Task Bar is also accessible by pressing the Enter button on the DVR front panel/ IR Remote Controller.

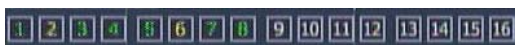
On the Task Bar, the user can:

1. View the recording status of each video channel.
2. View the triggered sensor (alarm), the amount of free space on the hard drive, and the current date and time.
3. Access the Start menu: Setup, Backup, Event Viewer and Search functions.



5.2 Channel Information

1. View the recording status of each connected video channel. The color of the channel number reflects the camera recording status.
2. View individual camera in the full-screen mode. To view individual camera in the full-screen mode, click the desired channel on the Camera panel or use the arrow buttons on the DVR Front Panel/IR Remote Controller.



The recording status is represented by the following colors:

In the parenthesis are the recording schedules that allow for the specified recording status. Please refer to the Schedule section (6.2.1) for detailed instructions.

- White: No video recording. No triggered alarm. (none, a).

The channel will be highlighted white if:

- a) it is not connected
- b) it is not configured for recording
- c) it is configured for alarm(sensor) recording, but no sensor has been triggered.

- Yellow: Continuous video recording. (c, ca).

The channel will be highlighted red if it is configured for continuous or continuous-alarm(sensor) video recording, but no sensor has been triggered.

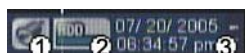
- Green: Awaiting alarm. (m, cm, ma).

The channel will be highlighted green if it is configured for motion, continuous-motion, or motionalarm(sensor) video recording, but no sensor has been triggered and no motion has been detected.

- Red: Alarm activated. (a, ca, m, ma).

The channel will be highlighted red if the it is configured for alarm(sensor), continuous-alarm(sensor), motion, or motion-alarm(sensor) video recording, and motion has been detected or sensor has been triggered.

5.3 Status Bar



1. Alarm: When Alarm is activated the icon turns red and is displayed on the main screen.
2. HDD: The HDD bar indicates how much space is taken by the existing video recordings and how much space still remains for the new video recordings.
3. Time/Date: Please refer to the Time & Date section (6.1.2) for detailed instructions on adjusting the current date and time.

5.4 Start Menu

5.4.1 Search

After the video has been recorded onto the hard drive, it can be searched based on Time and Date. To access more Search functions, click Start on the Task Bar. Once in the Start menu, select the Search option.

In the Search menu, choose from one of the following:

1. Calendar – allows selecting a specific day and time of the video recording for search
2. Time & Date – allows selecting a specific day and time of the video recording for search
3. Go to Earliest – rewinds to the earliest video recording
4. Go to Latest – fast forwards to the latest video recording

5.4.2 Calendar

The Calendar search option allows searching the video recordings based on date and time.

To search the video recordings with the Calendar search option, do the following:

1. The front panel/IR Remote Controller can also be used to navigate the menu. Click the Start button in the bottom left corner of the main screen.
2. Select the Search option from the menu.
3. Select the Calendar option from the list. The Calendar window will be displayed.

NOTE: For quick access to the Calendar search, press the Search button on the DVR front panel/IR Remote Controller.



4. To go to the previous/next month, click the Prev/Next buttons.
5. Click the desired day or recording in the calendar to select it.
6. Click the hour of the recording to select it (0~23).
7. Click the minute value of the recording to select it (0~55).
8. Click OK in the Calendar window. The Playback mode will be displayed on the main screen.
9. The video playback will start at the date and time configured in Steps 2-5.

NOTE: The days with the recorded video are highlighted blue; the days with no video recording are grayed out; the day selected for search is highlighted yellow.

5.4.3 Time & Date

The Time & Date search option allows entering the exact date and time of the video recording for search. DVR front panel/IR Remote Controller can also be used to navigate the menu.

To search the video recordings with the Calendar search option, do the following:

1. Click the Start button in the bottom left corner of the main screen.
2. Select the Search option from the menu.
3. Select Time & Date option from the list. The Edit Time & Date window will be displayed.



4. The Edit Time & Date window: configure the desired Date (MM / DD / YYYY) and Time (HH / MM / SS / AM/PM) by clicking the arrows up/down to increase/decrease values.
5. Click OK in the Edit Time & Date window. The Playback mode will be displayed on the main screen. The video playback will start at the date and time configured in the Step 4.

NOTE: If no video image was recorded during the selected time, the system will fast forward/rewind to the first available video recording.

- Go to the Earliest

Go to the first screen of the recorded image. This is the oldest image recorded.

- Go to the Latest

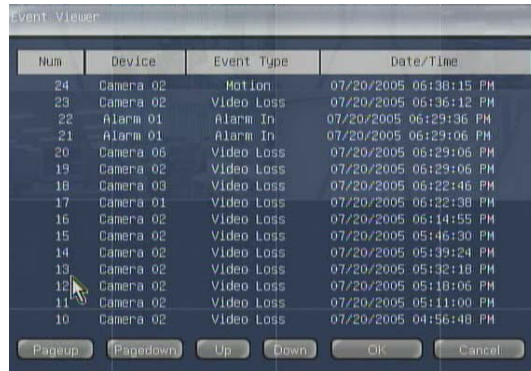
Go to the last screen of the recorded image. This is the latest image recorded.

5.4.4 Event Viewer

The Event Viewer function is used to browse through the log of events, such as detected motion, triggered alarm or video loss on a specific camera.

To access the Event Viewer, do the following:

1. Click the Start button in the bottom left corner of the main screen.
2. Select the Event Viewer option from the menu. The Event Viewer window will be displayed.



The screenshot shows the 'Event Viewer' window with a table of events. The table has four columns: Num, Device, Event Type, and Date/Time. The events listed are:

Num	Device	Event Type	Date/Time
24	Camera 02	Motion	07/20/2005 06:38:15 PM
23	Camera 02	Video Loss	07/20/2005 06:36:12 PM
22	Alarm 01	Alarm In	07/20/2005 06:29:36 PM
21	Alarm 01	Alarm In	07/20/2005 06:29:06 PM
20	Camera 06	Video Loss	07/20/2005 06:29:06 PM
19	Camera 02	Video Loss	07/20/2005 06:29:06 PM
18	Camera 03	Video Loss	07/20/2005 06:22:46 PM
17	Camera 01	Video Loss	07/20/2005 06:22:38 PM
16	Camera 02	Video Loss	07/20/2005 06:14:55 PM
15	Camera 02	Video Loss	07/20/2005 05:46:30 PM
14	Camera 02	Video Loss	07/20/2005 05:39:24 PM
13	Camera 02	Video Loss	07/20/2005 05:32:18 PM
12	Camera 02	Video Loss	07/20/2005 05:18:06 PM
11	Camera 02	Video Loss	07/20/2005 05:11:00 PM
10	Camera 02	Video Loss	07/20/2005 04:56:48 PM

At the bottom of the window, there are six buttons: Pageup, Pagedown, Up, Down, OK, and Cancel.

The following events will be logged in the Event Viewer:

1. Triggered sensor (Alarm In)
2. Detected motion (Motion)
3. Video Loss on a specific camera (Video Loss)

To view the video recording associated with each individual event, do the following:

4. Double-click the desired event from the list.
5. The Playback mode will be displayed on the main screen. The video playback will start at the exact time of the selected event's occurrence.

NOTE: Even if alarm input is properly set but it does not activate, check alarm connection on rear panel. Also check sensor input.

5.4.5 Backup

The system allows the backup of recorded video data to:

1. CD-RW/DVD-RW
2. USB storage device

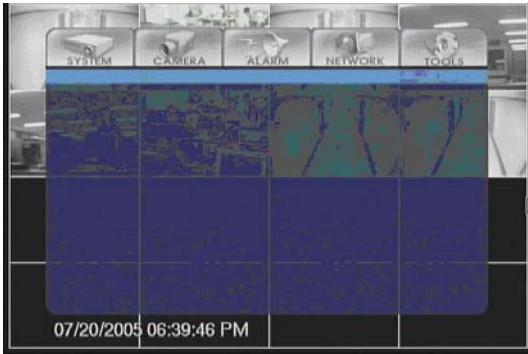
Refer to the Backup section (6.5.3) for detail explanation.



5.4.6 Setup

The Setup option gives the authorized users the access to the system settings. To access the system setup mode, click the Start button on the Task Bar and select the Setup option from the list. Refer to the System section (6.1) for detail explanation.

In the Setup menu, choose between the following categories:



1. System
2. Camera
3. Alarm
4. Network
5. Tools

NOTE: For quick access to the Setup page, press the Setup button on the front panel/IR Remote Controller.

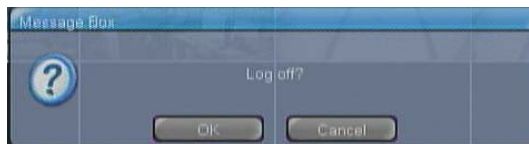
5.4.7 Log Off

The Log Off function allows the current user to log off, which prevents the unauthorized access to the system. While no user is logged into the System, the system settings become unavailable. In order to log in as a different user, the current user must log off first.

To Log off, do the following:

1. Position the mouse cursor in the bottom left corner to display the Task Bar.
2. Click the Start button.
3. Select the Log Off function from the list.
4. Click OK in the confirmation window to log off.

Please refer to the System Shutdown section (3.2.2) for the instructions on shutting the system down.



NOTE The system will continue recording the nvideo regardless of whether the user is currently logged in.

6. Setup

Please consult the table below for the overview of all available settings and default values. Please consult the corresponding section of the manual for advanced instructions on specific settings.

Main Classification	Sub Classification	Setting Category	Default
System	General	Resolution	352x240
		Sequence Dwell	3
		Spot Dwell	3
		IR Remote Controller ID	00
		Language	English
	Time & Date	Time & Date	
		Date Format	MM/DD/YYYY
		Time Format	AM/PM
		Daylight Saving	None
		Time Sync Server	
	Password	Admin	
		User1~4 / Default	
	Import/Export Setup	Device	None
		Import/Export Current	Import
		New	
	Shutdown		
Close Menu			
Camera	Recording	Record	ON
		IPS	7
		Quality	Standard
		Sensitivity	80
		Area	Select All, (Tracking : Off)
		Auto Del	0
	Schedule	Select Camera	
	Time & Security	Title	
		Security Mode	
		Show Title	
	Color	Bright	50
		Contrast	50
		Color	50
		Tint	50
		Sharp	50
		AGC	On
		Adjust	
	P/T/Z	Protocol	None
		Address	0
		Camera Speed	Standard
Audio	Audio Record	None	
	Audio On/Off	Off	
	Two-Way Audio	None	
Alarm	Alarm Input	On/Off	Off
		Camera	None
		IPS	30
		Pre-Alarm	0
		Type	N/O
	Alarm Output	Alarm Out	None
		Mode	Set
		Dwell(sec)	5
Main Classification	Sub Classification	Setting Category	Default
Alarm	Motion Alarm	Motion Alarm	Off
		IPS	30
		Pre-Alarm	0
		Alarm Out	None
		Dwell(sec)	5
	Video Loss Alarm	On/Off	Off
		Pre-Alarm	0
		Alarm Out	None
		Dwell(sec)	5
	Miscellaneous	On/Off	On

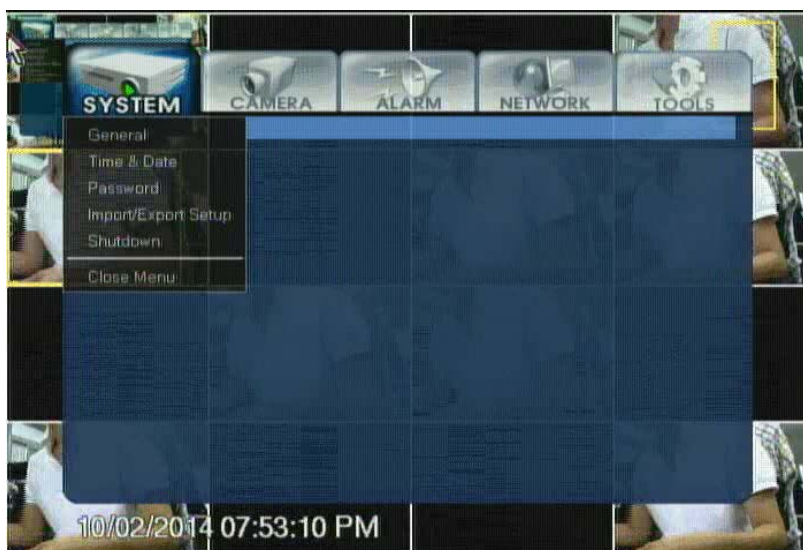
		Alarm Out	None
		Dwell(sec)	1
Network	IP Setting	Type	LAN
		IP Address	192.168.000.XXX (The lowest value of MAC Address)
		Subnet Mask	255.255.255.000
		Gateway	192.168.000.001
		Mac Address	
		Band Width Limit	
	Dynamic IP Server	Dynamic IP Server	220.73.179.38
		TCP Port	43300
		UDP Port	11000
	Event Notification	Auto Event Connection	
		E-mail Notification	
		From	
To			
SMTP Server			
SMTP ID			
System	System Information	Signal System	NTSC
		Software Version	
		Firmware Version	
		Disk Usage	
		IP Address	
		MAC Address	
	System Log	Log Number	
		Log Type	
		Date/Time	
	Backup	Device	
		From/To	
		Camera	
		Size	
		Media	
		Progress	
	System Upgrade	Upgrade From	CD-RW or USB
		Device	
		Host Address	
		Current Version	
		New Version	
	Format	Hard Disk	
Size			
Progress			
Factory Default			

6.1 System

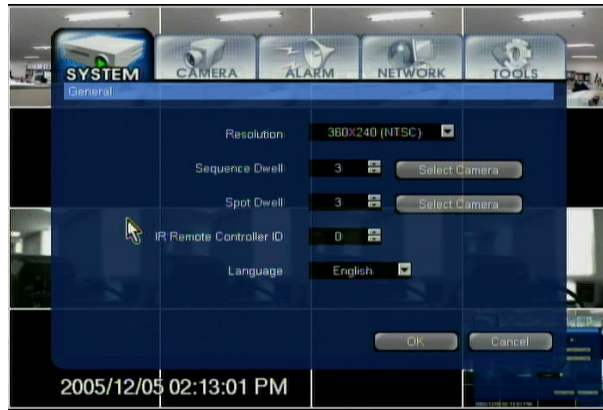
In the System setup, the user can change the settings pertaining to the system.

The following sub-categories are available:

1. General
2. Time & Date
3. Password
4. Import/Export Setup
5. Shutdown
6. Close Menu



6.1.1 General



6.1.1.1 Resolution

In the resolution field, choose from the available resolutions:

Resolution Average	Frame Size Maximum	IPS Supported (NTSC/PAL)
a) 352 x 240 (default)	3-5 KB	10 ips/100 ips
b) 704 x 480	5-10 KB	60 ips/50 ips
c) 704 x 480 (DVD-quality)	10- 0 KB	30 ips/ 5 ips

The higher the resolution, the higher the quality of the recorded video, and the more hard drive space the video recording will take. Please consider these factors when configuring the system resolution. If the best quality is a priority, choose higher resolution. If the objective is to keep the video recordings on the hard drive for the long periods of time, choose lower resolution.

NOTE: The storage capacity for the same image will differ. That is, images per byte is a ratio of the image dimensions (horizontal x vertical), thus 704x240 is twice the size of 320x240 and 704x480 takes about 4 times the storage capacity.

Therefore, when high resolution is selected for the same period, the storage capacity taken up will be larger, and the storage period will be shorter on the same Hard disk capacity.

6.1.1.2 Sequence Dwell

The Sequence mode can be initiated in the live mode via the Quick Menu or via SEQ button on the front panel/IR Remote Controller. The automatic sequencing works on a single, PIP, 4, and 9 screen divisions. Sequence Dwell time refers to the time between each screen sequence.

The Sequence Dwell time can be set between 1 and 60 seconds.

To exclude/include certain cameras in the sequence, click the Select Camera button next to the Sequence Dwell field.

e.g. Cameras 1-16 are selected for sequencing, the Sequence Dwell is set to 5 seconds, and the live mode is set to quad (4) screen division. When the Sequence Mode is initiated, the following sequence will be displayed on the main screen: Cameras 1-4 (for 5 seconds), Cameras 5-8 (for 5 seconds), Cameras 9-12 (for 5 seconds), Cameras 13-16 (for 5 seconds). This sequence then will be repeated until interrupted by the user.

6.1.1.3 *Spot Dwell*

Spot Dwell time refers to the time between each screen sequence on the connected spot monitor. The Spot Dwell time can be set between 1 and 60 seconds.

6.1.1.4 *IR Remote Controller*

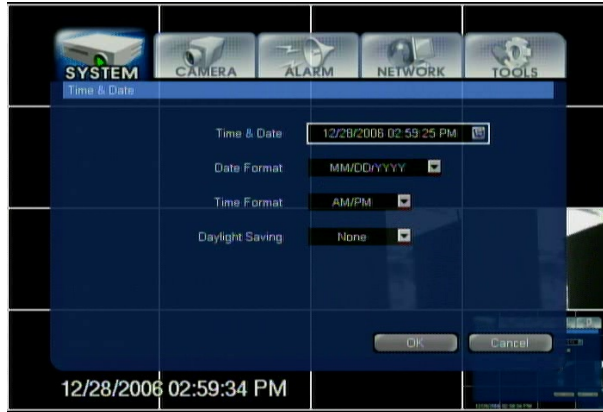
Set the ID for the IR Remote Controller (00~99). Please refer to the Setting ID on IR Remote Controller section (2.2) for detailed instructions.

6.1.1.5 *Language*

The system support multi-languages. According to the environment, the user can select several languages. Select the language and the entire menu will change to the selected language.

6.1.2 Time & Date

Set the date and time of system.



6.1.2.1 Time & Date

To edit system Time & Date, click the Time & Date field. The Edit Time & Date window will be displayed.



Caution:

It is important to configure the system time since all consequent video recordings have the time stamp, which cannot be changed once the video is recorded.

Select the Time Format from the drop-down menu between AM/PM (1 -hour clock) and a 24 Hour clock. When adjusting the system time backward, be aware that the old video recording with the same time stamp will be overwritten by the new video recording. The old video recording with the same time stamp will no longer be accessible.

User is required to set time & date regularly more than once a month to maintain accurate time and date.

6.1.2.2 Date Format

Select the Date Format from the drop-down menu between three available format settings: MM/DD/YYYY; DD/MM/YYYY; YYYY/MM/DD

6.1.2.3 Time Format

Select the Time Format from the drop-down menu between AM/PM (1 -hour clock) and a 24 Hour clock.

6.1.2.4 Daylight Saving

Choose the country in Daylight Saving drop-down menu to configure your daylight saving zone. The system will follow the daylight saving time schedule of the specified country to keep the current date & time up-to-date.

The following countries are supported by the system:

No.	Country	Region	No.	Country	Region
1	None	GMT	2	Australia	Australia/Melbourne
3	Austria	Europe/Vienna	4	Belgium	Europe/Brussels
5	Brazil	Brazil/East	6	Canada	Canada/Eastern
7	Denmark	Europe/Copenhagen	8	Egypt	Egypt
9	Finland	Europe/Helsinki	10	France	Europe/Paris
11	Germany	Europe/Berlin	12	Greece	Europe/Athens
13	Israel	Israel	14	Italy	Europe/Rome
15	Mexico	Mexico/General	16	Holland	Europe/Amsterdam
17	Norway	Europe/Oslo	18	Poland	Europe/Warsaw
19	Portugal	Portugal	20	Russia	Moscow
21	Slovakia	Slovakia	22	Spain	Europe/Madrid
23	Sweden	Europe/Stockholm	24	Switzerland	Europe/Zurich
25	UK	Europe/London	26	US	US/Eastern

6.1.3 Password

Set the system passwords and permission for <Admin> and <User>. <Admin> can do the setting for the password only.



6.1.3.1 User Accounts

Each system allows one Admin account and up to 4 individual User accounts. By default, admin account has access to all system settings; the level of access for four user accounts can be configured individually.

The system also allows for one Default account that does not require any password – the user of this account will only be able to view the assigned video channels and will have no access to any other system functions / settings.

A unique password can be assigned to each account, including the administrative account. To prevent the unauthorized access to the system settings, make sure to create a unique administrative password. Each user account should have a distinctive password.

NOTE: Only administrator account has an access to Password setup. If the non-admin user attempts to access the Password setup, the admin password will be requested.

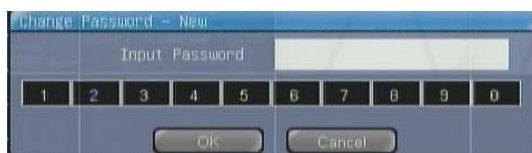
Do not assign the same password to the administrator and User/Default accounts.

6.1.3.2 Changing Passwords

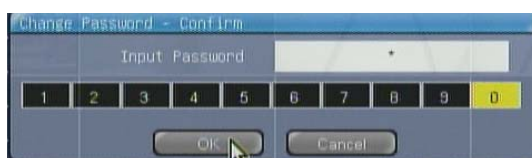
The DVR front panel/IR Remote Controller can also be used to navigate the menu.

To change the password for the administrative or user account, do the following:

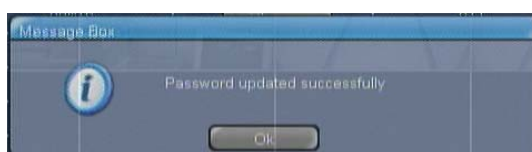
1. Click the Change button next to the specific account in the Password column.
2. In the Change Password – New window, enter the new password and click OK. Each password will consist of up to 4 numerals.



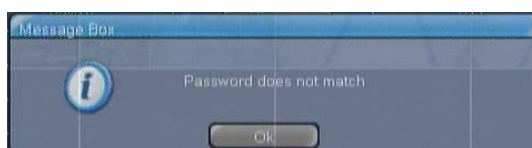
3. Confirm the password in the Change Password – Confirm window and click OK.



4. After the password is successfully assigned / changed, a confirmation message will be displayed:



5. An error message will appear when the password is inputted incorrectly. After setting the password, do not forget to inform other users.



Note: Admin password must be different from user/default accounts.
The default account does not have a password.



Caution:

Please keep the created passwords for your record. If the user password is lost, log in as administrator and change the user password. If the administrator password is lost, contact your dealer for assistance.

6.1.3.3 Changing Permission

The DVR front panel/IR Remote Controller can also be used to navigate the menu. By default, administrator account has access to all the system settings, the permissions for the Admin, therefore, cannot be changed. The permissions for each user account can be configured individually.

To change permissions for the User account, do the following:

1. Click the Change button next to the specific account in the Permissions column.
2. Password > Permission window will be displayed. Note that in parenthesis the specific account name can be seen. In the example below, the Permissions for User 1 are displayed.



3. In the Password > Permission window,
 - In the System category
 - Check off the Power Off checkbox to allow the user to shut down the system.
 - Check off the Playback checkbox to allow the user to playback video recordings.
 - In the Setup category, check off all setup categories that the user will have an access to.
 - In the Camera category, check off all video channels that the user will be allowed to view.
4. Once the permissions are configured, click OK.

NOTE: Non-admin users will not be able to access Password setup even if they have access to the System setup category.

NOTE: The unchecked cameras become hidden from the specified user. Hidden video channels are displayed in the live mode as a black screen marked "Security Mode". Please see the Show Title section (6.2.2) for more information.

6.1.3.4 Default

To change permissions for the Default account, do the following:

1. Click the Change button next to the specific account in the Permissions column.
2. The Password > Permission window will be displayed.
3. Check off all video channels that the user will be allowed to view.



NOTE: The default user account has the access to the live mode only.

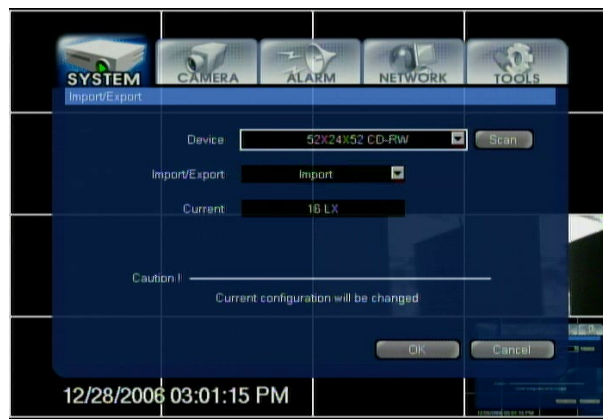
6.1.4 Import/Export

The Import/Export function allows saving or overwriting the existing system settings.

The DVR front panel/IR Remote Controller can also be used to navigate the menu.

To Import/Export the system settings, do the following:

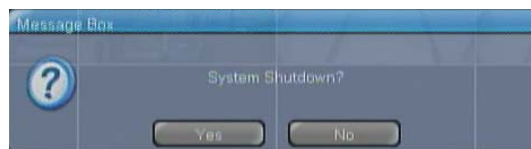
1. Click the Scan button to detect existing USB devices.
2. In the Device field select the desired device.
3. In the Import/Export drop-down menu, select the action between Import and Export. When Import is selected, the existing settings will be overwritten with the settings imported from the USB storage device. When Export is selected, the existing settings will be copied to the USB storage device.
4. In the Current field note the version of software used. In the example below, the software version is 16LX. This means that the settings from this specific the system can only be used on other systems with 16LX software and vice versa.
5. In the New field the version number of the new setting profile will be displayed.
6. Click OK to proceed with Import/Export.



6.1.5 System Shutdown

It is not advisable to shutdown the system, since no video is recorded when the system is off. Only authorized users can turn the system. Please refer to the Password (User Accounts) section (6.1.3) for more information on permissions.

Shutdown function will normally be used in case the system needs to be relocated, otherwise it is recommended to keep the system on at all times. Please refer to the System Shutdown section (6.1.5) for more instructions.

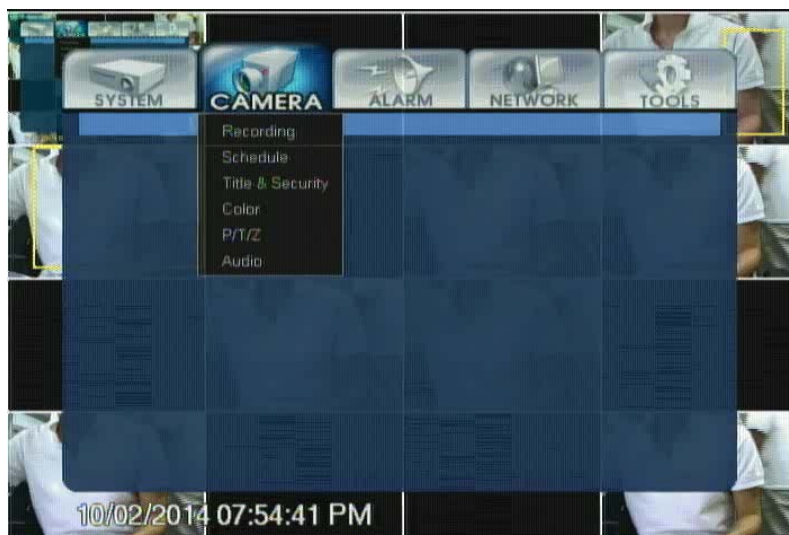


6.2 Camera

In the Camera setup, the user can change the settings pertaining to the each individual camera.

The following sub-categories are available:

1. Recording
2. Schedule
3. Title & Security
4. Color
5. P/T/Z
6. Audio



6.2.1 Recording

Recording setup allows configuring the recording settings for each connected video channel.

The DVR front panel/IR Remote Controller can also be used to navigate the menu.

Configure the following settings for all connected video channels:

1. Recording (On/Off)
2. FPS (1~30)
3. Quality (Low, Standard, High, Highest)
4. Sensitivity (10-100)
5. Area for motion detection
6. Auto Del (0~60)

Settings for the first 8 cameras are displayed on the screen. If more than 8 cameras are connected to the system, click the CH 9-16 button to display the settings for the remaining video channels. Click the CH 1-8 button to return to the settings for the first 8 cameras.



6.2.1.1 Record

Turn the recording on the connected cameras On/Off. While the camera may still be physically connected and available for live viewing, the user may choose not to record the incoming video signal from a specific video channel to save hard drive space. By default, the recording is turned On for all connected video channels.

6.2.1.2 IPS

Configure the image rate for the corresponding video channel. To achieve the live video recording, set the IPS number to 30. The higher the IPS (images-per-second) value, the more life-like does the video recording appear and the higher is the size of the video recording.

The system supports the maximum of 120 IPS; this number will vary depending on the resolution.

Please refer to the Resolution (6.1.1.1) for more information. By default, the IPS number for each connected video channel is 7. Watch the remaining number of IPS in the bottom of the screen. The remaining IPS number will decrease whenever the image rate is increased for each camera. In the example above, the remaining number of available IPS is 8.

Take all these factors into consideration when setting the image rate. Increase the fps number for the cameras facing most important locations or locations, where most activity occurs.

6.2.1.3 Quality

Configure the recording quality for the corresponding video channel. In the Quality drop-down menu, select from: Highest, High, Standard, and Low recording quality. By default, the recording quality is set to Standard. The higher is the recording quality, the higher is the size of the video recording. The lower is the quality of video recording; the higher is the compression, and the lower the size of the video recording. Low recording quality (high compression) will result in the artifact phenomena.

Take all these factors into consideration when setting the recording quality. Increase the recording quality for the cameras facing most important locations or locations, where most activity occurs.

6.2.1.4 Sensitivity

Configure the sensitivity for the corresponding video channel from 10 to 100. By default, the Sensitivity value is set to 80. It is not advisable to change the default Sensitivity value. The lower the sensitivity value, the more frames are skipped during the recording process to extend the recording period. No frames are skipped with the higher sensitivity.

6.2.1.5 Area

The DVR front panel/IR Remote Controller can also be used to navigate the menu.

Configure the motion detection area for the corresponding video channel. By default, an entire area is selected for motion detection.



NOTE: The motion detection will only occur for the selected area. No motion detection will occur unless the motion detection area is configured.

<Tracking>

Traces and indicates the movement detected on the area set. A yellow box will be indicated on the screen, whenever there is movement on the live display screen. Recording will not be influenced even though the [Tracking] function is not used.

To set the area of motion recording, do the following:

1. To select/deselect an individual block for motion detection, click the individual blocks of the live view screen. (Figure 1)
2. To select an area within the live view screen, click the starting block to select it and then click the end block to select an entire area between the start and end blocks. (Figure 2)
3. To select/deselect an entire row/column for motion detection, click the blue blocks on the left and in the bottom of the live view screen. (Figure 3 / Figure 4)
4. To select/deselect an entire area for motion detection, click the blue block located in the left bottom corner of the live view screen. (Figure 5 / Figure 6)
5. Check off the Tracking checkbox to highlight the area, where motion has been detected, on the main screen. The use of this function is optional and does not affect the motion detection. By default, the Tracking feature is turned off.



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

6.2.1.6 Auto Del

Configure the number of days (0 to 30 days), after which the video recordings should be deleted for the corresponding video channel.

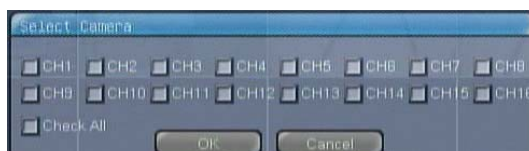
By default, the Auto Del value is set to 0, which means that all video recordings are stored as long as there is space on the hard drive and then are overwritten by newer video recordings.

NOTE: The recorded data will not be deleted until the disk space is full, when it is set as none.

6.2.1.7 Schedule

Each video channel can record continuously, based on alarm/motion or on a combination of these settings.

To configure the recording for individual camera, first select the camera number in the dialog window. Check off the Check All checkbox.



The schedule for the selected channel(s) is displayed on the screen. The schedule is represented in the form of the chart.

The following schedules are available:

Click to change the recording schedule. The schedule will be changed in the order below.

1. None: No video is recorded on this channel. It is not advisable to configure the channel for no recording.
2. Continuous (c): The video is recorded continuously 4-7.
3. Continuous-motion (cm): The video is recorded continuously, and the motion is detected.
4. Motion (m): The video is recorded only based on the detected motion.
5. Alarm (a): The video is recorded only based on the triggered alarms.
6. Continuous-alarm (ca): The video is recorded continuously, and the triggered alarms are detected.
7. Motion-alarm (ma): The video is recorded based on the detected motion or triggered alarm.

Please refer to the Channel Information (5.1) for more information.

To configure the schedule for the selected camera, do the following:

The front panel/IR Remote Controller can also be used to navigate the menu.

1. To set the schedule for the whole day, click the buttons representing the days the week (Sun, Mon, Tue, Wed, Thu, Fri, Sat, Hol) until the desired schedule is selected. The unique recording schedule can be configured for each day of the week; the list of holidays can be also configured.
2. To set the schedule for the specific hour regardless of the day of the week, click the buttons representing the hours until the desired schedule is selected. (e. g. The system can be configured to record continuously from 14:00 to 15:00 every day, regardless of the day of the week)
3. To set the schedule for the specific hour on the specific day of the week, click the corresponding box within the chart until the desired schedule is selected.
4. Click OK to save the configured recording schedule.



NOTE: If the recording is done with ca or ma, the recording will be recorded in continuous or in motion detection. When the alarm activates, concentrated recording will be done according to the set IPS on the alarm.

To configure the list of the holidays, do the following,

5. Click the Holiday Setup button to display the list of holidays.
6. To add the holiday to the list,
 - Set the desired month by clicking the arrows up/down.
 - Set the desired day by clicking the arrows up/down.
 - Click the Add button. The set date will appear in the chart on the right.
7. To browse through the list of configured holidays, click the Page Up and Page Down buttons.
8. To delete the specific holidays, find the desired holiday and click the corresponding Delete button.
9. Click OK to save the configurations and to close out of the Holiday menu. The configured holidays will obey the Hol schedule.



6.2.2 Title & Security

In this menu, the user can assign individual names (titles) to the connected video cameras. Specific cameras can be hidden from users in this menu.



6.2.2.1 Title

The entered camera title is displayed on the main screen in the top left corner. The camera title will also be indicated during playback. The default camera title is "CHn", where n is the channel number. The camera title can be a maximum of 15 characters long, capital/small letters, numbers, spaces and special characters can be used. Enter the title for each connected camera by clicking the Title field for a corresponding camera.

The dialog window below will be displayed:



The DVR front panel/IR Remote Controller can also be used to navigate the menu.

To enter the camera title, do the following:

1. Enter the camera title by clicking the appropriate characters on the on-screen keyboard.
2. Click the ← button to delete one character.
3. Click the Space button to insert an empty space.
4. Click the Clear button to clear the title entry.
5. Click OK to save the camera title and to close out of the Edit Title menu or click Cancel to exit without saving.

6.2.2.2 Security Mode

Set the Security mode On/Off for each video channel. When the Security mode is on, the specified channel is not displayed on the main screen – it is “hidden” from all users including administrator. By default, hidden video channels are displayed in the live mode as a black screen marked “Security Mode”. By default, the Security Mode is set to Off for all video channels.

NOTE: The camera will continue recording even if the Security mode is on. Ensure that the recording schedule is properly configured.

6.2.2.3 Show Title

In the Show Title drop-down menu, select from: Security, Show and Hide. By default, the Show Title is set to the “Security”. In the chart below, see the output on the main screen display based on the Security Mode and Show Title settings. (The camera title is “Camera 1”)

Security Mode Show Title Main Screen Display

- On Security “Security Mode”
- On Show “Camera 1”
- On Hide none
- Off Security “Camera 1”
- Off Show “Camera 1”
- Off Hide none



6.2.3 Color

Configure the Brightness, Contrast, Color, Tint, Sharpness and AGC (Automatic Gain Control) for each connected camera.



To adjust specific video channel appearance, do the following:

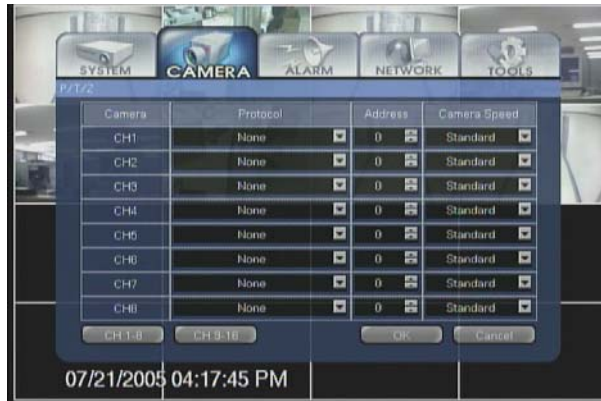
1. Click the Change button for the corresponding channel.
2. In the Adjust Color (Camera No.) window,
3. Increase/decrease the channel brightness as desired.
4. Increase/decrease the channel contrast as desired.
5. Increase/decrease the channel saturation as desired.
6. Adjust the channel hue as desired.
7. Increase/decrease the channel sharpness as desired.
8. Turn the Automatic Gain Control (AGC) On or Off. Automatic Gain Control amplifies the video signal, which improves overall appearance of the image.



NOTE: High Sharpness value will result in the low image quality.

6.2.4 P/T/Z

Configure the P/T/Z cameras connected to the systems.



To properly configure the P/T/Z camera, do the following:

1. Ensure that the P/T/Z camera is properly connected to RS-485 port.
2. Set the proper P/T/Z Protocol from the list of supported protocols. Ensure that the protocol used by the P/T/Z camera matches the one selected in the system setup menu. By default, the P/T/Z protocol is set to none.
3. Ensure that the baud rate used by the P/T/Z camera matches the one used by the selected Protocol.
4. Set the P/T/Z Address (Camera ID) 0~99. This value must match the ID set in the P/T/Z camera menu. By default, the P/T/Z camera Address is set to 0.
5. Set P/T/Z speed of the connected cameras from the following: Slowest, Slow, Medium, Fast, Fastest, and Standard. By default, the Camera Speed is set to Standard.
6. Click OK to save the P/T/Z configurations.

NOTE: Settings for the first 8 cameras are displayed on the screen. If more than 8 cameras are connected to the system, click the CH 9-16 button to display the settings for the remaining video channels. Click the CH 1-8 button to return to the settings for the first 8 cameras.

NOTE: The P/T/Z camera will not be properly working unless properly configured.

No.	Protocol	Baud Rate	Parity	Bit	Stop Bit
1	Ernitec	2400 baud rate	no parity	8bit	1 stop bit
2	Panasonic	19200 baud rate	no parity	8bit	1 stop bit
3	Pelco P	4800 baud rate	no parity	8bit	1 stop bit
4	Pelco D	2400 baud rate	no parity	8bit	1 stop bit
5	Scc-641	9600 baud rate	no parity	8bit	1 stop bit
6	Sensormatic	2400 baud rate	no parity	8bit	1 stop bit
7	Smart Scan	9600 baud rate	even parity	8bit	1 stop bit
8	VC_C4	9600 baud rate	no parity	8bit	1 stop bit
9	Vicon	4800 baud rate	no parity	8bit	1 stop bit
10	Kalatel	9600 baud rate	no parity	8bit	0 stop bit
11	Philips GS	9600 baud rate	even parity	8bit	0 stop bit
12	WDS-2308/2508	9600 baud rate	no parity	8bit	0 stop bit
13	SPX-100A	9600 baud rate	even parity	8bit	0 stop bit
14	SPX-100B	9600 baud rate	even parity	8bit	0 stop bit
15	MRX-1000	9600 baud rate	even parity	8bit	0 stop bit
16	SCC-93IT	9600 baud rate	even parity	8bit	0 stop bit
17	DRX-500	9600 baud rate	no parity	8bit	0 stop bit
18	AN200 RS-232C	9600 baud rate	no parity	8bit	1 stop bit
19	AN300 RS-232C	9600 baud rate	no parity	8bit	1 stop bit
20	Speed Dome Communication	19200 baud rate 9600 baud rate 4800 baud rate 2400 baud rate	no parity	8bit	1 stop bit
21	I3SD	4800 baud rate	no parity	8bit	1 stop bit

Set the address of P/T/Z controller for each channel after protocol is set.

6.2.5 Audio

Set the Audio Input for each connected video channel as desired. To use the audio function, connect audio devices (speakers/microphone) when the system is installed. It is recommended to use the audio amplifier device.



To configure the Audio setup, do the following:

1. In the Audio On/Off drop-down menu, turn the available audio inputs 'On' or 'Off'.
2. In the Two-way Audio drop-down menu, choose the audio channel to be used as the two-way audio. The two-way audio function is used to both send and receive the audio signal. Only one
3. Audio channel could be used for the two-way audio application.
4. In the Audio Record drop-down menu, select the audio channel for each corresponding video
5. Channel: By default, the audio channel is set to none.

NOTE: Settings for the first 8 cameras are displayed on the screen. If more than cameras are connected to the system, click the CH 9-16 button to display the settings for the remaining video channels. Click the CH 1-8 button to return to the settings for the first 8 cameras.

Speaker and microphone should be set up in the connecting system when setting up two-way audio.



Caution:

The audio signal from the two-way audio channel will NOT be recorded.

6.3 Alarm

In the Alarm setup, the user can configure motion and video-loss alarms as well as the alarm inputs and outputs connected to the system.

The following sub-categories are available:

1. Alarm Input
2. Alarm Output
3. Motion Alarm
4. Video-Loss Alarm
5. Miscellaneous



6.3.1 Alarm-Input

In the Alarm Input menu, configure the available alarm inputs (sensors) connected to the system. Associate the video channels with the desired alarm for alarm-activated recording.



1. In the On/Off drop-down menu, turn the desired alarm inputs (sensors) on or off. By default, the alarm inputs are off.
2. In the Camera drop-down menu, select the video channel that will be associated with the corresponding alarm input. When the specified alarm (sensor) is triggered, the associated video channel will start recording.
3. Set the emergency IPS (image-per-second) rate for desired cameras. Every time the specified alarm (sensor) is triggered, the associated video channel will start recording at the configured emergency image-per-second rate. By default, the emergency IPS number is set to 30.
4. Set the Pre Alarm time for each alarm input (sensor). 0~30 seconds. The system stores 30 seconds of video recording in a buffer which is continuously overwritten. If pre-alarm recording option is used, the video of the specified length from the video buffer is added to the beginning of the video recording.
5. e. g. Pre-Alarm is set to 20 seconds. If the alarm (sensor) is activated at 14:30:00, the video recording will start at 14: 29:40.
6. Set the alarm (sensor) type between N/O (Normal Open) and N/C (Normal Close).
7. An NC sensor is any sensor with an electrical circuit closed by default. e. g. A sensor on a closed door. When the door is opened, the electrical circuit is broken and the sensor is triggered.
8. An NO sensor is any sensor with electrical circuit open by default. e. g. the light in a refrigerator. The light is off by default. When the refrigerator door is opened, the circuit is closed and thus the sensor is triggered and the light goes on.

NOTE

Settings for the first 8 alarm inputs are displayed on the screen. If more than 8 alarm inputs are connected to the system, click the IN 9-16 button to display the settings for the remaining video channels. Click the IN 1-8 button to return to the settings for the first 8 alarm inputs.

The video channel must be configured for alarm recording; otherwise no video recording will occur, even if the alarm input is triggered. Please see Schedule section (6.2.2) for more information.

The proper alarm (sensor) type configuration is crucial to the proper functioning of the alarm (sensor).

6.3.2 Alarm-Out

In the Alarm Output menu, configure the available alarm outputs (controls) connected to the system. Associate the available alarm inputs (sensors) with the alarm outputs (controls).



To configure the Alarm Output setup, do the following:

1. In the Alarm Out drop-down menu, associate the desired alarm outputs (controls) with the corresponding alarm input (sensor) in the Alarm column (None, OUT1, OUT2, etc.)
2. By default, no alarm outputs (controls) are associated with alarm inputs (sensors). In the example above, the alarm inputs (sensors) 5-8 are associated with the alarm output (control) This means, that every time the sensors 5-8 are triggered, the control 1 will be turned on.
3. In the Mode drop-down menu, select the alarm output mode between Set and Duration.
4. a. If the Set mode is selected, the associated alarm output (control) will be turned on for the number of seconds specified in Dwell (sec) after the alarm input (sensor) activation.
5. b. If the Duration mode is selected, the associated alarm output (control) will be turned on as long as the alarm input (sensor) is activated.
6. Configure the Dwell (sec) time for the Set mode (1~300). The alarm output (control) will remain turned on for the number of seconds configured in this menu.

NOTE

Settings for the first 8 alarm inputs are displayed on the screen. If more than 8 alarm inputs are connected to the system, click the IN 9-16 button to display the settings for the remaining video channels. Click the IN 1-8 button to return to the settings for the first 8 alarm inputs.

The alarm input(s) (sensors) must be properly configured for this feature to work.

6.3.3 Motion Alarm

In the Motion Alarm menu, configure the motion alarm video recording settings for connected video channels.



To configure the Motion Alarm setup, do the following:

1. In the Motion Alarm drop-down menu, turn the motion alarm for the corresponding video channels on or off. By default, the alarm inputs are off.
2. Set the emergency IPS (image-per-second) rate for desired cameras. Every time the motion is detected on the associated video channel, the video will start recording at the configured emergency image-per-second rate. By default, the emergency IPS number is set to 30.
3. Set the Pre Alarm time for each video channel. (0~30 seconds) The system stores 30 seconds of video recording in a buffer which is continuously overwritten. If pre-alarm recording option is used, the video of the specified length from the video buffer is added to the beginning of the video recording. e.g. Pre-Alarm is set to 0 seconds. If the motion is detected at 14:30:00, the video recording will start at 14: 9:40.
4. In the Alarm Out drop-down menu, associate the desired alarm outputs (controls) with the corresponding video channel in the Camera column (None, OUT1, OUT2, etc.) By default, no alarm outputs (controls) are associated with video channels. Every time the motion is detected on the corresponding video channel, the associated alarm output (control) will be turned on.
5. Configure the Dwell (sec) time for the video recording based on motion detection (1~300). After the motion has stopped, the system will continue recording the video from the associated channel for the number of seconds specified in the Dwell (sec) menu.

NOTE: Settings for the first 8 cameras are displayed on the screen. If more than 8 cameras are connected to the system, click the CH 9-16 button to display the settings for the remaining video channels. Click the CH 1-8 button to return to the settings for the first 8 cameras.

NOTE: The configured video channels must be configured for motion alarm video recording. Please see Schedule section (6.2.1) for more information.

6.3.4 Video-Loss Alarm

In the Video Loss Alarm setup, associate the available alarm outputs (controls) with the connected video channels. Every time the video channel is disconnected / unplugged, the associated alarm output (control) will be activated.



To configure the Motion Alarm setup, do the following:

1. In the On/Off drop-down menu, turn the video loss alarm for the corresponding video channels on or off. By default, the video loss alarm is off.
2. Set the Pre Alarm time for each video channel (0~30 seconds). The system stores 30 seconds of video recording in a buffer which is continuously overwritten. If pre-alarm recording option is used, the system will store the video recording of the configured length from the buffer. e. g. Pre-Alarm is set to 0 seconds. If the video loss has been detected at 14:30:00, the video recording will start at 14: 9:40 and end at the time of the video loss.
3. In the Alarm Out drop-down menu, associate the desired alarm outputs (controls) with the corresponding video channel in the Camera column (None, OUT1, OUT2, etc.) By default, no alarm outputs (controls) are associated with video channels. Every time the motion is detected on the corresponding video channel, the associated alarm output (control) will be turned on.
4. Configure the Dwell (sec) time for the alarm output (1~300). After the video loss has been detected, the alarm output (control) will be turned on for the number of seconds specified in the Dwell (sec) menu.

NOTE: Settings for the first 8 cameras are displayed on the screen. If more than 8 cameras are connected to the system, click the CH 9-16 button to display the settings for the remaining video channels. Click the CH 1-8 button to return to the settings for the first 8 cameras.

6.3.5 Miscellaneous Alarm

In the Miscellaneous Alarm setup, configure the S.M.A.R.T. alarm. S.M.A.R.T. alarm pertains to the hard drive operation and is activated when the hard drive is about to fail.



To configure the Miscellaneous Alarm setup, do the following:

1. In the On/Off drop-down menu, turn the S.M.A.R.T. alarm on or off. By default, the video loss alarm is on.
2. In the Alarm Out drop-down menu, associate the desired alarm outputs (controls) with the
3. S.M.A.R.T. alarm (None, OUT1, OUT2, etc.): By default, no alarm outputs (controls) are associated with video channels. Every time the S.M.A.R.T. alarm is activated, the associated alarm output (control) will be turned on.
4. Configure the Dwell (sec) time for the alarm output (1~300). After the S.M.A.R.T. alarm has been detected, the alarm output (control) will be turned on for the number of seconds specified in the Dwell (sec) menu.

NOTE: If using the S.M.A.R.T. alarm function, it is advisable to assign a distinctive alarm output (control) for easy alarm identification.



Caution:

If the S.M.A.R.T. alarm is activated, shut down the System unit immediately and contact your dealer.

6.4 Network

In the Network setup, the user can configure the System network settings.

The following sub-categories are available:

1. IP Setting
2. Event Notification



6.4.1 IP Setting

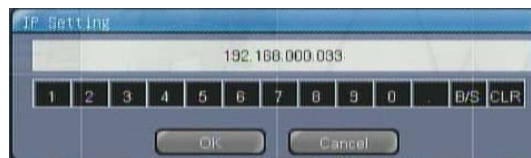
In the IP Setting setup, configure the type of network connection and the IP address settings.

NOTE: Remote connection via modem is not available.



To configure the IP Setting setup, do the following:

1. In the Type drop-down menu select the connection type between LAN (Local Area Network) and DHCP (Dynamic Host Configuration Protocol). LAN should be chosen when the static IP address is available. DHCP should be used when the Dynamic IP from the local server is used.
2. Click on the IP Address field, the IP Setting window will be displayed.



3. In the IP Setting window, enter the static IP for the System unit.
4. Click the Subnet Mask field, the IP Setting window will be displayed.
5. In the IP Setting window, enter the subnet mask address for the System unit. Please contact your network manager for the exact IP address. The default subnet mask IP address is 255.255.255.000.
6. Click on the Gateway field, the IP Setting window will be displayed.
7. In the IP Setting window, enter the gateway IP address. The gateway has to be set for the remote connection via the external router. Please contact your network manager for the exact IP address.
8. Check off the Enable checkbox to enable the Bandwidth Limit feature. Uncheck to use all the available connection speed to transfer data.
9. Set the Bandwidth Limit feature value (100~1000 Kbps) to limit the transfer speed.

NOTE: The audio quality may be affected when the Bandwidth Limit feature is used.

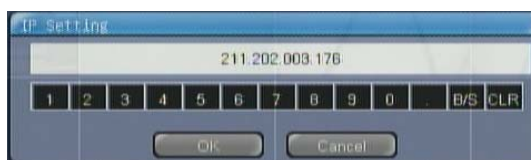
6.4.2 Dynamic IP Server

Set the network environment of the system.

Use number button of the arrow button or remote controller to input number. Firstly, check [On/Off].



1. Dynamic IP Server: Input the IP address of Dynamic IP Server. (Default: 211. 202. 3. 176)

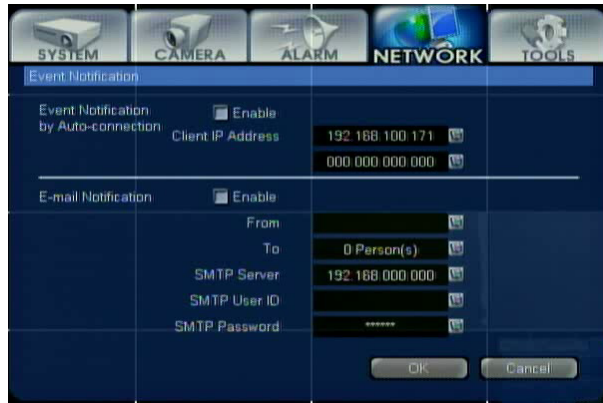


2. TCP Port: Input TCP port number to communicate with Dynamic IP Server. (Default: 43300)
3. UDP Port: Input UDP port number to communicate with Dynamic IP Server. (Default: 11000)

NOTE: IP address of Dynamic IP server is changeable. Contact to your vendor about detail IP address or port number when the default is set but the system is not activated.

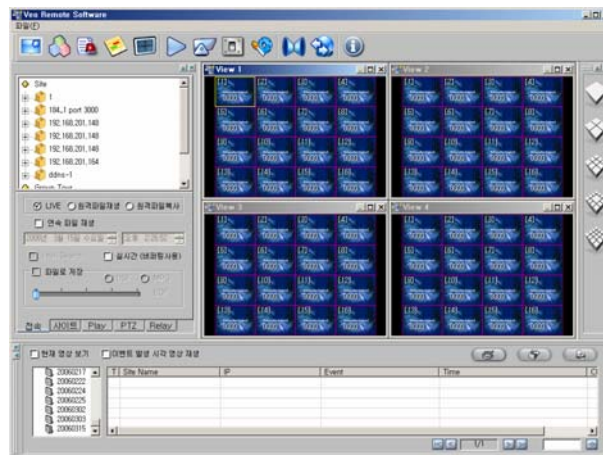
6.4.3 Event Notification

In the Event Notification setup, configure the remote IP address and/or user email address, where the notification will be sent in case of event, such as the alarm input activation, motion detection or the video loss alarm.



To configure the IP Setting setup, do the following:

1. Check off the Enable checkbox for the Auto Event Connection to send the video image to the Remote agent in case of the event occurrence.
 - Click on the Client IP Address field, the IP Setting window will be displayed.
 - In the IP Setting window, configure the Remote agent IP address. Up to two IP addresses can be configured. In case of the event occurrence on the System server side, the event image will be sent to the Remote agent on the client's remote PC.



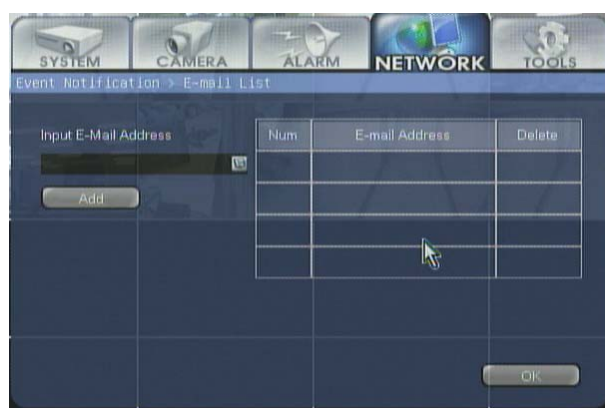
2. Check off the Enable checkbox for the Email notification to send an email notification to the configured email address in case of the even occurrence.

- Click on the 'From' field to enter the System unit name to distinguish between the email event notifications sent from multiple System units.

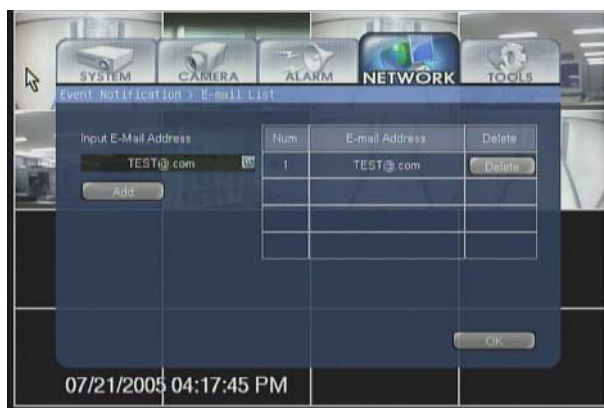


- Enter the System unit name by clicking the appropriate characters on the on-screen keyboard.
- Click the ← button to delete one character.
- Click the Space button to insert an empty space.
- Click the Clear button to clear the title entry.
- Click OK to save the System unit name and to close out of the menu or click Cancel to exit without saving.

3. Click on the field to configure the recipient's email addresses. The Event Notification → Email List window will be displayed.



- Click on the Input E-Mail Address field to enter the recipient's email address.
- Event Notification → Edit Email Address (To) window will be displayed.
- In the Event Notification → Edit Email Address (To) window, enter the recipient's email address.
- Repeat steps i-v in the Step 2.
- Click the Add button to add the entered email address to the list on the right.
- Up to 4 email addresses can be added.
- Click the Delete button next to the desired email address to delete it from the list of addressees.



- Click on the SMTP Server field to enter the outgoing server.
- Obtain this information from the Internet provider.
- Check off the Login checkbox if the login for the SMTP Server is required.
- Click on the SMTP User ID field to display the Event Notification → Edit SMTP User ID window.
- In the Event Notification → Edit SMTP User ID window, enter the user login name.
- Repeat steps i-v in the Step 2.
- Click on the SMTP Password field to display the Event Notification → Edit SMTP User Password window.
- In the Event Notification → Edit SMTP User Password window, enter the user login name.
- Repeat steps i-v in the Step 2.

NOTE: If there are many users, the SMTP server can be used without an ID and Password. Tick off [Login] before entering the SMTP IP.

6.5 Tools

In the Tools setup, the user can obtain the System System Information, view system log, perform the video backup, upgrade the System software version, or set the System configurations to the factory defaults.

The following sub-categories are available:

1. System Information
2. System Log
3. Backup
4. System Upgrade
5. Format
6. Factory Default



6.5.1 System Information

In the System Information menu, the user can obtain the following information:

NOTE: The details in the information screen can be different, based on the model number and the system environment.



1. Signal System. The type of the video signal (NTSC/PAL) is displayed. In the example above, the system records in the NTSC format.
2. Software Version: The software version installed on the Veo unit is displayed.
3. Hardware Version: The firmware version installed on the Veo unit is displayed.
4. Disk Usage: The remaining hard drive space available for the video recording and total hard drive space is displayed. In the example above, 3.9 GB (6.9%) of the total 56.4 GB hard drive is used.
5. IP Address: The IP address used by the Veo unit is displayed.
6. MAC Address: Network card address used by the Veo unit is displayed.

6.5.2 System Log

In the System Log menu, the user can see view the system log. The events such as System Time Change, Setup access, etc. are logged by the system along with the event date and time. To scroll through the log pages, click the Page Up and Page Down buttons.



The screenshot shows a web interface with a navigation bar at the top containing icons for SYSTEM, CAMERA, ALARM, NETWORK, and TOOLS. The 'System Log' menu is open, displaying a table of log entries. The table has three columns: Log Number, Log Type, and Date/Time. Below the table are buttons for 'Page Up', 'Page Down', and 'OK'. At the bottom of the screen, the current date and time are shown as '07/21/2005 04:17:45 PM'.

Log Number	Log Type	Date/Time
214	Setup Begin	07/21/2005 04:17:44 PM
213	Setup End	07/21/2005 03:55:51 PM
212	System Time Change	07/21/2005 06:07:23 PM
211	Setup Begin	07/21/2006 03:55:23 PM
210	Setup End	07/21/2006 03:12:27 PM
209	System Time Change	07/21/2006 04:23:59 PM
208	Setup Begin	07/21/2005 03:12:18 PM

The following events are logged by the system:

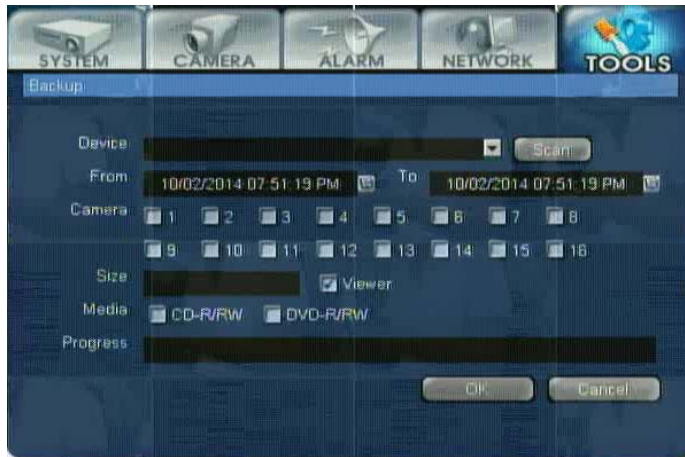
1. Change setting value
2. Start System (Power on), Close System (Power off)
3. Change Date and Time
4. Log-on information and authorization (Normal and admin. Connection)
5. Log-Off information

6.5.3 Backup

There are two ways to backup a recorded date in the system. The first method is using the CD-RW Drive (selected specs) to backup by CD/DVD. The second method is using the USB external storage device for backup.

Use the CD-RW/DVD-RW Drive or USB Device attached to the system to backup the recorded images. Press the [Backup] button on the IR Remote Controller and the following screen will appear.

NOTE: Indicates differently according to models of CD-RW drive. Refer to the manual for the installed CD-RW drive for detail information.



An error message will appear when the CD-RW is not installed or not properly connected.

NOTE: Consult with your vendor if more detailed information on the CD-RW is required.

The following is a list of media supported in the internal CD-RW of the VCD series.

CD-R :

Acer, AMT, CMC, Kodak, LeadData, Maxell, Mitsubishi Chemical, Mitsui, Nan Ya, Philips, Princo, Prodisc, Ricoh, Ritek, Sony, Taiyo Yuden, TDK, Verbatim, Yamaha

CD-RW :

Acer, AMT, CMC, Digimaster, Maxell, MaxMax, Melody, Mitsubishi Chemical, Philips, Plextor, Prodisc, Ricoh, Ritek, Sony, TDK, Traxdata, Verbatim, Yamaha

Recommend 24X CD-R/RW or above, 4X DVD-R/RW or above.

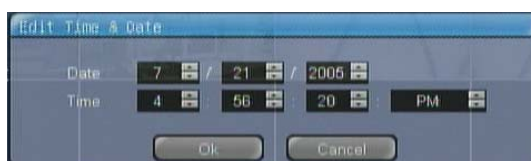
To access the backup feature, do the following:

* The front panel/IR Remote Controller can also be used to navigate the menu.

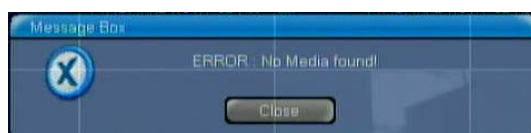
1. Click the Start button in the bottom left corner of the main screen.
2. Select the Backup option from the menu. The Backup window will be displayed.



3. Click the Scan button to scan for all available backup devices.
4. Click the arrow icon next to the Scan button to scroll through available backup devices. Select the desired device from the list.
5. Position the mouse cursor over the From field and click it. The Edit Time & Date window will be displayed.



6. In the Edit Time & Date window, click the up/down arrows in the Day menu to increase/decrease the value by one day.
7. Repeat the Step 4 for to configure the Month, Year, Hours, Minute, Second, AM/PM menus.
8. Make sure to set the start time before the end time. If the backup start and end time are set incorrectly, the following error message will be displayed.



9. Click OK to save the entered value or press Cancel to close without saving.
10. Position the mouse cursor over the To field and click it. The Edit Time & Date window will be displayed.
11. Repeat steps 4-6.
12. In the Camera field, use the mouse cursor to select and the left mouse button to check off the checkboxes for camera that will be backed up.
13. Use the mouse cursor to select and the left mouse button to check off the Viewer checkbox.
14. When checked off, the Veo Viewer software will be copied to the media.
15. When backing up to a CD-R/RW or DVD-R/RW, check off the corresponding checkbox for the appropriate media in the Media field. (When backing up to a USB drive, this option is disabled)

NOTE: Please ensure that there is media in the backup device: e.g. CD-R/DVD-RW, USB flash drive. If no media is detected, an error message will be displayed.

16. Click OK to proceed with the backup (click Cancel to close the Backup window).
17. A message will be displayed with the calculated Backup size. Click OK to proceed or Cancel to cancel the backup.



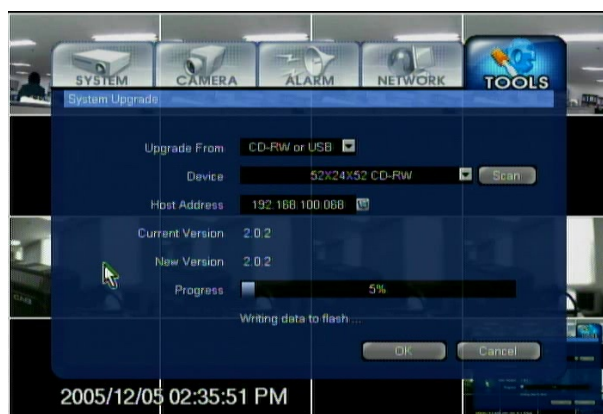
18. The backup progress will be shown on the Progress bar.



NOTE: Please ensure that the size of the backup file does not exceed the available media, otherwise the backup process will not proceed. To resolve this issue, use larger media or reduce the length of the backup video recording.

6.5.4 System Upgrade

In the System Upgrade menu, the user can upgrade the software to the latest available version. The system software can be upgraded from the CD-RW, USB or LAN.



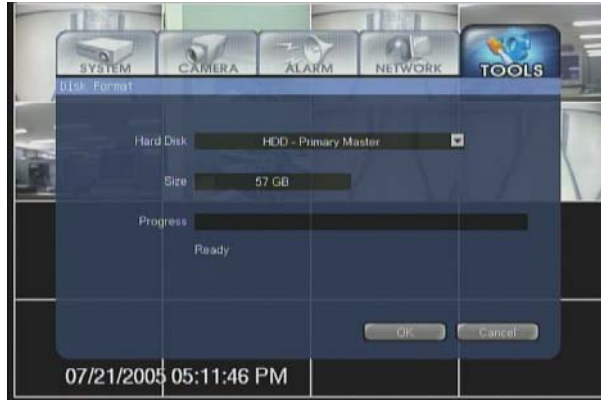
1. In the Upgrade From drop-down menu, select the CD-RW or USB option
2. Insert the software upgrade CD-RW into the CD-ROM drive or connect the USB storage device with the software upgrade to the USB port.
3. Click the Scan button to scan for all available backup devices.
4. Click the arrow icon next to the Scan button to scroll through available backup devices. Select the desired device from the list.
5. In the Current Version field, the current version of the software is displayed.
6. Click OK to proceed with the software upgrade.
7. In the New Version field, the new version of the software will be displayed.
8. Wait while the software is upgrading. When the upgrade is successfully completed, the Veo system will restart.

6.5.5 Format

Support format of the HDD that is being used in the system. Also support format when HDD is newly installed.

NOTE: When HDD is formatted, the data will be deleted. Therefore, format HDD after checking backup.

When [Disk Format] is selected, the below screen is shown.



Select formatted HDD and check the capacity. Press [OK] button and then the system will be in the process of formatting.

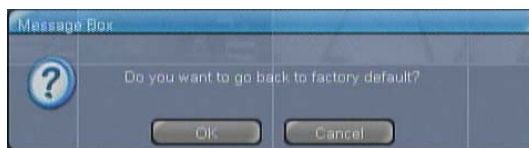
When there is one HDD, you cannot format HDD. However, you can format when HDD is initially installed. Check the state of HDD if you find the error message below.



6.5.6 Factory Default

Go back to factory default.

All the setting values except network setup and password will go back to factory default after [Yes] button is pressed.

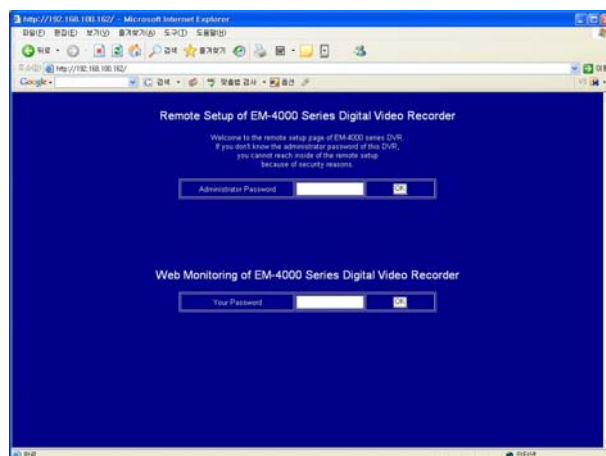


NOTE: All setting will be lost after restoring factory defaults.

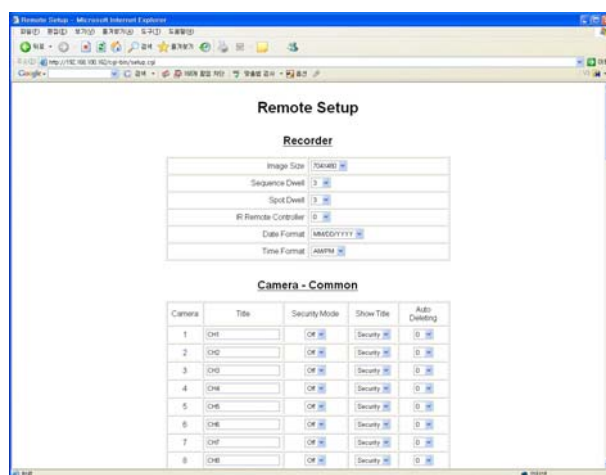
7. Remote Setup

7.1 Remote System Setup

If the system is connected to the network, the system setting can be changed from remote sites, using the web browser. Enter the IP address of the system on the domain of the web browser and log-in screen appears.



The picture below is the first screen that appears for the system's remote setup. The screen will be slightly different, according to the user window environment.



Caution

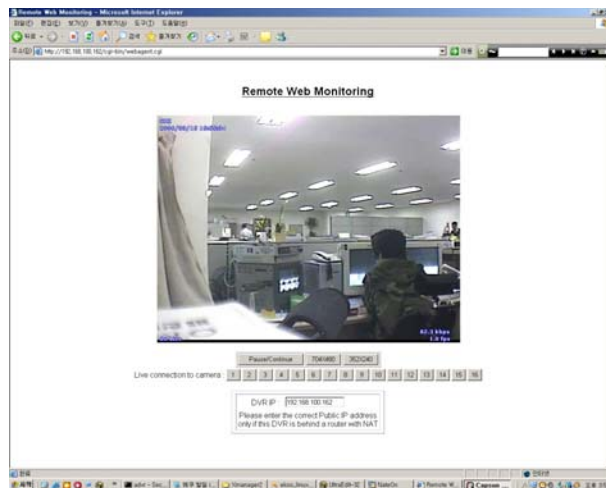
The remote setting function will not activate when the local system is in the [Setting] menu or while it is upgrading. Note, there can be a problem if the local system is operated while remotely connected.

7.2 Remote Web Viewer

The image of the system can be monitored without using the Remote on the web browser, by entering the IP address of the system. This function is only for monitoring.

The user can choose the image size among 704x480 / 352x240, according to the PC environment.

NOTE: There would be slight problem to send the image according to the user network environment.



8. Appendix

8.1 System Specification

		EDNS2000 4ch	EDNS2000 8ch	EDNS2000 16 ch
Hardware	CPU	X86 CPU		
	RAM	64MB		
	HDD	Max. 3HDD (2HDD + CD-RW)		
OS		Embedded Linux		
Video Input		4 ch	8 ch	16 ch
Loop-OUT		4 ch	8 ch	None
Video Signal		NTSC / PAL Selectable		
Display Speed (NTSC/ PAL)		480/400fps		
Screen Modes (Live Display)		4/1/PIP	8/4/1/PIP	16/10/9/4/1/PIP
Recording Speed (NTSC/ PAL)	352x240/288	120/100fps		
	704x240/288	60/50fps		
	704x480/288	30/25fps		
Video Output		Main monitor output (Composite, S-Video, VGA) / Spot output (Composite)		
Recording Resolution		NTSC: 352x240, 704x240, 704x480 / PAL : 352x288, 704x288, 704x576		
Byte Size per Image at Standard Quality (NTSC/PAL)		3~5Kbyte @352x240/288 5~10Kbyte @704x240/288 10~20Kbyte @704x480/576		
Recording Modes		Supports Setting of Motion Sensitivity & Area per Camera		
Recording schedule		Setting Recording Schedule per Camera		
Motion Detection		Support the Setting of Motion Sensitivity per Camera		
Sensor/ Camera/ Alarm I/O		M: N Mapping		
Audio Input/ Output		4 input / 1 output (ADPCM)		
Sensor/ Alarm		4 Dry Contact Input / 2 Relay Output		
P/T/Z Control and Port		Pan/Tilt/Zoom/Focus/Iris, RS-485 Port		
LAN		10 Ethernet		
Transmission Speed		Same as Recording Speed for each Channel(Max 16ch Connection)		
Remote Transmission		Multi-to-Multi connection, Multi-channel transmission Live Viewing, Remote Playback and File Backup at the same time (Triplex-on-Remote)		
Remote Control		Remote Pan/Tilt/Zoom/Focus/Iris control		
Remote management		Remote Software Upgrade		
CD-RW		Internal CD-RW (Option)		
External Backup Device		Supported (Front USB Ports)		
System Recovery after Power Failure		Auto-Rebooting and Journaling File System Auto-Scan and Recovery for Data		
System Operation		Button on Front panel / IR Remote Controller / Jog & Shuttle		
Advanced Functions		Auto Page Sequencing, Event Log Viewer, Access control by Password LED indicator for Various status Pre-alarm, Multi Channel Playback, Digital Zoom		
Storage Temperature and Humidity		-20~60°C / 20~95%RH		
Operating Temperature and Humidity		0~40°C / 20~80%RH		
Power		Single Phase AC100~240V, 60-50Hz, 1.0-0.5A (select Switch)		
Dimension and Weight		380(W) x 66(H) x 370(D) mm, 6kg		
Remote S/W		RemoteAgent64 7.0		
Standard Authentication		FCC, CULUS, CE (EMC/LVD) – Class A		

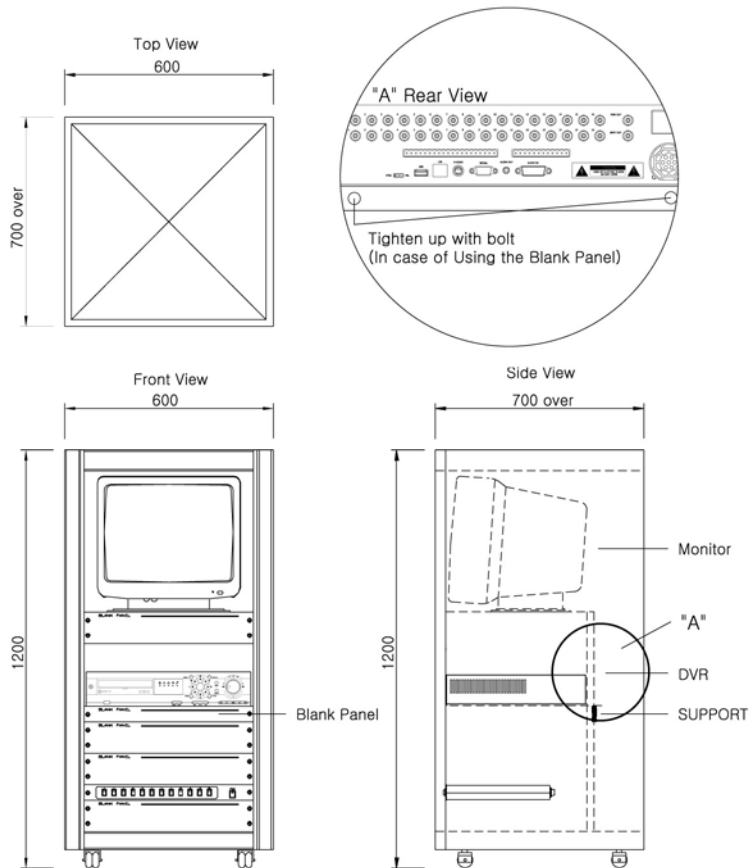
* The system specification can be modified without notification. December 1, 2005

8.2 Installing Rack

User must install the recommended Rack by the vendor when multiple DVRs are installed. It keeps balance for the system and makes the system to use safely.

Install supporter on the bottom of each system to prevent from losing balance of system. Contact to your vendor about installation of Rack and the detail information.

The below picture shows when the recommended Rack is installed.



NOTE: The above picture may differ according to the system that users purchase and installing environment.

WEEE Symbol Information

English



Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Italiano



Corretto smaltimento del prodotto (rifiuti elettrici ed elettronici)

(Applicabile in i paesi dell'Unione Europea e in quelli con sistema di raccolta differenziata)

Il marchio riportato sul prodotto o sulla sua documentazione indica che il prodotto non deve essere smaltito con altri rifiuti domestici al termine del ciclo di vita. Per evitare eventuali danni all'ambiente o alla salute causati dall'inopportuno smaltimento dei rifiuti, si invita l'utente a separare questo prodotto da altri tipi di rifiuti e di riciclarlo in maniera responsabile per favorire il riutilizzo sostenibile delle risorse materiali.

Gli utenti domestici sono invitati a contattare il rivenditore presso il quale è stato acquistato il prodotto o l'ufficio locale preposto per tutte le informazioni relative alla raccolta differenziata e al riciclaggio per questo tipo di prodotto.

Gli utenti aziendali sono invitati a contattare il proprio fornitore e verificare i termini e le condizioni del contratto di acquisto. Questo prodotto non deve essere smaltito unitamente ad altri rifiuti commerciali.

Español



Eliminación correcta de este producto (material eléctrico y electrónico de descarte)

(Aplicable en la Unión Europea y en países europeos con sistemas de recogida selectiva de residuos)

La presencia de esta marca en el producto o en el material informativo que lo acompaña, indica que al finalizar su vida útil no deberá eliminarse junto con otros residuos domésticos. Para evitar los posibles daños al medio ambiente o a la salud humana que representa la eliminación incontrolada de residuos, separe este producto de otros tipos de residuos y reciclelo correctamente para promover la reutilización sostenible de recursos materiales.

Los usuarios particulares pueden contactar con el establecimiento donde adquirieron el producto, o con las autoridades locales pertinentes, para informarse sobre cómo y dónde pueden llevarlo para que sea sometido a un reciclaje ecológico y seguro.

Los usuarios comerciales pueden contactar con su proveedor y consultar las condiciones del contrato de compra. Este producto no debe eliminarse mezclado con otros residuos comerciales.

Republic of Ireland (Gaelic)



Diúscairt Cheart an Táirge Seo (Trealamh Leictreach agus Leictreonach Dramhaíola)

Léiríonn an mharcáil seo atá ar an táirge nó sa litríocht a thagann leis, nár chóir é a dhíúscairt le dramhaíl tí eile ag deireadh a shaoil oibre. Chun cosaint i gcoinne dochar don chomhshaoil nó do shláinte an duine, a d'fhéadfadh bheith mar thoradh ar an ndíúscairt dramhaíola neamhthoeranta, scar an dramhaíl seo ó chineálacha eile dramhaíola le do thoil agus déan athchursáil fhreagrach air chun athúsáid inmhharthana na hacmhainní ábhartha a chur chun cinn.

Ba chóir dóibh siúd a úsáideann an trealamh sa bhaile dul i dteagmháil leis an díoltóir ónar cheannaigh siad an táirge seo, nó lena n-óifig áitiúil Rialtais, ar mhaithe le sonraí a fháil faoi cá háit agus cathain is féidir athchursáil atá slán ó thaobh an chomhshaoil de a dhéanamh ar an táirge seo.

Ba chóir dóibh siúd a úsáideann an trealamh seo ina ngnó dul i dteagmháil leis an soláthróir agus téarmaí agus coinníollacha an chonartha ceannaigh a sheiceáil. Níor chóir an táirge seo a chur le dramhaíl eile tráchtála agus diúscairt á déanamh.

Slovakia



Správna likvidácia tohoto výrobku (Elektrotechnický a elektronický odpad)

Toto označenie na výrobku alebo v sprievodnej brožúre hovorí, že po skončení jeho životnosti by nemal byť likvidovaný s ostatným odpadom. Prípadnému poškodeniu životného prostredia alebo ľudského zdravia môžete predísť tým, že budete takéto typy výrobkov oddeľovať od ostatného odpadu a vrátite ich na recykláciu.

Používatelia v domácnostiach by pre podrobnejšie informácie, ako ekologicky bezpečne naložiť s týmto výrobkom, mali kontaktovať buď predajcu, ktorý im výrobok predal, alebo príslušný úrad v okolí ich bydliska.

Priemyselní používatelia by mali kontaktovať svojho dodávateľa a overiť si podmienky kúpnej zmluvy. Tento výrobok by nemal byť likvidovaný spolu s ostatným priemyselným odpadom.

Deutsch
**Korrekte Entsorgung dieses Produkts
(Elektromüll)**

(Anzuwenden in den Ländern der Europäischen Union und anderen europäischen Ländern mit einem separaten Sammelsystem)

Die Kennzeichnung auf dem Produkt bzw. auf der dazugehörigen Literatur gibt an, dass es nach seiner Lebensdauer nicht zusammen mit dem normalen Haushaltsmüll entsorgt werden darf. Entsorgen Sie dieses Gerät bitte getrennt von anderen Abfällen, um der Umwelt bzw. der menschlichen Gesundheit nicht durch unkontrollierte Müllbeseitigung zu schaden. Recyceln Sie das Gerät, um die nachhaltige Wiederverwertung von stofflichen Ressourcen zu fördern.

Private Nutzer sollten den Händler, bei dem das Produkt gekauft wurde, oder die zuständigen Behörden kontaktieren, um in Erfahrung zu bringen, wie sie das Gerät auf umweltfreundliche Weise recyceln können.

Gewerbliche Nutzer sollten sich an Ihren Lieferanten wenden und die Bedingungen des Verkaufsvertrags konsultieren. Dieses Produkt darf nicht zusammen mit anderem Gewerbemüll entsorgt werden.

Français
**Comment éliminer ce produit
(déchets d'équipements électriques et électroniques)**

(Applicable dans les pays de l'Union Européen et aux autres pays européens disposant de systèmes de collecte sélective)

Ce symbole sur le produit ou sa documentation indique qu'il ne doit pas être éliminé en fin de vie avec les autres déchets ménagers. L'élimination incontrôlée des déchets pouvant porter préjudice à l'environnement ou à la santé humaine, veuillez le séparer des autres types de déchets et le recycler de façon responsable. Vous favoriserez ainsi la réutilisation durable des ressources matérielles.

Les particuliers sont invités à contacter le distributeur leur ayant vendu le produit ou à se renseigner auprès de leur mairie pour savoir où et comment ils peuvent se débarrasser de ce produit afin qu'il soit recyclé en respectant l'environnement.

Les entreprises sont invitées à contacter leurs fournisseurs et à consulter les conditions de leur contrat de vente. Ce produit ne doit pas être éliminé avec les autres déchets commerciaux.

Netherlands
**Correcte verwijdering van dit product
(elektrische & elektronische afvalapparatuur)**

Dit merkteken op het product of het bijbehorende informatiemateriaal duidt erop dat het niet met ander huishoudelijk afval verwijderd moet worden aan het einde van zijn gebruiksduur. Om mogelijke schade aan het milieu of de menselijke gezondheid door ongecontroleerde afvalverwijdering te voorkomen, moet u dit product van andere soorten afval scheiden en op een verantwoorde manier recycelen, zodat het duurzame hergebruik van materiaalbronnen wordt bevorderd.

Huishoudelijke gebruikers moeten contact opnemen met de winkel waar ze dit product hebben gekocht of met de gemeente waar ze wonen om te vernemen waar en hoe ze dit product milieuvriendelijk kunnen laten recycelen.

Zakelijke gebruikers moeten contact opnemen met hun leverancier en de algemene voorwaarden van de koopovereenkomsten nalezen. Dit product moet niet worden gemengd met ander bedrijfsafval voor verwijdering.

Denmark
**Korrekt affaldsbortskaffelse af dette produkt
(elektrisk & elektronisk udstyr)**

Mærket på dette produkt eller i den medfølgende dokumentation betyder, at produktet ikke må bortskaffes sammen med almindeligt husholdningsaffald efter endt levetid. For at undgå skadelige miljø- eller sundhedspåvirkninger på grund af ukontrolleret affaldsbortskaffelse skal dette produkt bortskaffes særskilt fra andet affald og indleveres behørigt til fremme for bæredygtig materialegenvinning.

Hjemmebrugere bedes kontakte forhandleren, hvor de har købt produktet, eller den lokale myndighed for oplysning om, hvor og hvordan de kan indlevere produktet med henblik på miljøforsvarlig genvinding.

Erhvervsbrugere bedes kontakte leverandøren og læse betingelserne og vilkårene i købekontrakten. Dette produkt bør ikke bortskaffes sammen med andet erhvervsaffald.

Portugal
**Eliminação Correcta Deste Produto
(Resíduo de Equipamentos Eléctricos e Electrónicos)**

Esta marca, apresentada no produto ou na sua literatura indica que ele não deverá ser eliminado juntamente com os resíduos domésticos indiferenciados no final do seu período de vida útil. Para impedir danos ao ambiente e à saúde humana causados pela eliminação incontrolada de resíduos deverá separar este equipamento de outros tipos de resíduos e reciclá-lo de forma responsável, para promover uma reutilização sustentável dos recursos materiais.

Os utilizadores domésticos deverão contactar ou o estabelecimento onde adquiriram este produto ou as entidades oficiais locais para obterem informações sobre onde e de que forma podem levar este produto para permitir efectuar uma reciclagem segura em termos ambientais.

Os utilizadores profissionais deverão contactar o seu fornecedor e consultar os termos e condições do contrato de compra. Este produto não deverá ser misturado com outros resíduos comerciais para eliminação.

Hungary
**A termék megfelelő leadása
(Elektromos és elektronikus készülékek hulladékkezelése)**

A terméken vagy a hozzá tartozó dokumentáción szereplő jelzés arra utal, hogy hasznos élettartama végén a terméket nem szabad háztartási hulladékkal együtt kidobni. Annak érdekében, hogy megelőzhető legyen a szabálytalan hulladékleadás által okozott környezet- és egészségkárosodás, különítse ezt el a többi hulladéktól, és felelősségteljesen gondoskodjon a hulladék leadásáról, a hulladékhanyagok fenntartható szintű újrafelhasználása céljából.

A háztartási felhasználók a termék forgalmazójától vagy a helyi önkormányzati szervektől kérjenek tanácsot arra vonatkozóan, hová és hogyan vihetik el ez elhasznált terméket a környezetvédelmi szempontból biztonságos hulladékleadás céljából.

Az üzleti felhasználók lépjenek kapcsolatba a forgalmazóval, és vizsgálják meg az adásvételi szerződés feltételeit. A terméket nem szabad leadni kereskedelmi forgalomból származó egyéb hulladékkal együtt.

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Lithuania

**Tinkamas produkto atliekų tvarkymas
(atitarnavusi elektros ir elektronikos įranga)**

Šis ženklas, pateikiamas ant produkto ar jo dokumentacijoje, nurodo, kad pasibaigus produkto tarnavimo laikui, jo negalima išmesti kartu su kitomis buitinėmis atliekomis. Kad būtų išvengta galimos nekontroliuojamo atliekų išmetimo žalos aplinkai arba žmonijai sveikatai, ir siekiant skatinti aplinką tausojančių antrinių žaliavų panaudojimą, pašom atskirti jį nuo kitų rūšių atliekų ir atiduoti perdirbti.

Informacijos, kur ir kaip pristatyti šį produktą saugiai perdirbti, privatiūs vartotojai turėtų kreiptis arba į parduotuvę, kurioje šį produktą pirkė, arba į vietines valdžios institucijas.

Verslo vartotojai turėtų kreiptis į savo tiekėją ir peržiūrėti pirkimo sutarties sąlygas. Šis produktas tvarkant atliekas negali būti sumaišytas su kitomis atliekomis.

Czech Republic

**Správná likvidace tohoto produktu
(Zničení elektrického a elektronického zařízení)**

Tato značka zobrazená na produktu nebo v dokumentaci znamená, že by neměl být používán s jinými domácími zařízeními po skončení svého funkčního období. Aby se zabránilo možnému znečištění životního prostředí nebo zranění člověka díky nekontrolovanému zničení, oddělte je prosíme od dalších typů odpadů a recyklujte je zodpovědně k podpoře opětovného využití hmotných zdrojů.

Členové domácnosti by měli kontaktovat jak prodejce, u něhož produkt zakoupili, tak místní vládní kancelář, ohledně podrobností, kde a jak můžete tento výrobek bezpečně vzhledem k životnímu prostředí recyklovat.

Obchodníci by měli kontaktovat své dodavatele a zkontrolovat všechny podmínky koupě. Tento výrobek by se neměl míchat s jinými komerčními produkty, určenými k likvidaci.

Sweden

**Korrekt avfallshantering av produkten
(elektriska och elektroniska produkter)**

Denna markering på produkten och i manualen anger att den inte bör sorteras tillsammans med annat hushållsavfall när dess livstid är över. Till förebyggande av skada på miljö och hälsa bör produkten hanteras separat för ändamålsenlig återvinning av dess beståndsdelar.

Hushållsanvändare bör kontakta den återförsäljare som sålt produkten eller sin kommun för vidare information om var och hur produkten kan återvinnas på ett miljösäkert sätt.

Företagsanvändare bör kontakta leverantören samt verifiera angivna villkor i köpekontraktet. Produkten bör inte hanteras tillsammans med annat kommersiellt avfall.

Finland

**Tämän tuotteen turvallinen hävittäminen
(elektroniikka ja sähkölaitteet)**

Oheinen merkintä tuotteessa tai tuotteen oheismateriaalissa merkitsee, että tätä tuotetta ei tule hävittää kotitalousjätteen mukana sen elinkaaren päätyttyä. Hallitsemattomasta jätteenkäsittelystä ympäristölle ja kanssaihminen terveydelle aiheutuvien vahinkojen välttämiseksi tuote tulee käsitellä muista jätteistä erillään. Jäte on hyvä kierrättää raaka-aineiksi kestävän ympäristökehityksen takia.

Kotitalouskäyttäjien tulisi ottaa yhteyttä tuotteen myyneeseen jälleenmyyjään tai paikalliseen ympäristöviranomaiseen, jotka antavat lisätietoja tuotteen turvallista kierrätyksmahdollisuuksista.

Yrityskäyttäjien tulisi ottaa yhteyttä tavarantoimittajaan ja selvittää hankintasopimuksen ehdot. Tätä tuotetta ei tule hävittää muun kaupallisen jätteen seassa.

Norway

**Korrekt avhending av dette produkt
(Avfall elektrisk og elektronisk utstyr)**

Denne merkingen som vises på produktet eller dens dokumentasjon, indikerer at den ikke skal kastes sammen med annet husholdningsavfall ved slutten av sin levetid. For å hindre mulig skade på miljøet eller menneskelig helse fra ukontrollert avfallsavhending, vennligst atskill dette fra andre typer avfall og resirkuler det ansvarlig for å fremme bærekraftig gjenbruk av materielle ressurser.

Husholdningsbrukere bør kontakte enten forhandleren de kjøpte produktet av, eller lokale myndigheter, for detaljer om hvor og hvordan de kan frakte denne artikkelen for miljømessig trygg resirkulering.

Forretningsbrukere bør kontakte sin leverandør og undersøke vilkårene i kjøpekontrakten. Dette produktet skal ikke blandes med annet kommersielt avfall som skal kastes.

Poland

**Prawidłowe usuwanie produktu
(zużyty sprzęt elektryczny i elektroniczny)**

Oznaczenie umieszczone na produkcie lub w odnoszących się do niego tekstach wskazuje, że produktu po upływie okresu użytkowania nie należy usuwać z innymi odpadami pochodzącymi z gospodarstw domowych. Aby uniknąć szkodliwego wpływu na środowisko naturalne i zdrowie ludzi wskutek niekontrolowanego usuwania odpadów, prosimy o oddzielenie produktu od innego typu odpadów oraz odpowiedzialny recykling w celu promowania ponownego użycia zasobów materialnych jako stałej praktyki.

W celu uzyskania informacji na temat miejsca i sposobu bezpiecznego dla środowiska recyklingu tego produktu użytkownicy w gospodarstwach domowych powinni skontaktować się z punktem sprzedaży detalicznej, w którym dokonali zakupu produktu, lub z organem władz lokalnych.

Użytkownicy w firmach powinni skontaktować się ze swoim dostawcą i sprawdzić warunki umowy zakupu. Produktu nie należy usuwać razem z innymi odpadami komercyjnymi.

Slovenia

**Ustrezno odstranjevanje tega izdelka
(odpadna električna in elektronska oprema)**

Oznaka na izdelku ali spremljevalni dokumentaciji pomeni, da ga na koncu uporabne dobe ne smemo odstranjevati skupaj z drugimi gospodinjstvenimi odpadki. Da bi preprečili morebitno tveganje za okolje ali zdravje človeka zaradi nenaadzovanega odstranjevanja odpadkov, izdelek ločite od drugih vrst odpadkov in ga odgovorno reciklirajte ter tako spodbudite trajnostno ponovno uporabo materialnih virov.

Uporabniki v gospodinjstvih naj za podrobnosti o tem, kam in kako lahko odnesejo ta izdelek na okolju varno recikliranje, pokličejo trgovino, kjer so izdelek kupili, ali lokalni vladni urad.

Podjetja naj pokličejo dobavitelja in preverijo pogoje nabavne pogodbe. Tega izdelka pri odstranjevanju ne smete mešati z drugimi gospodarskimi odpadki.

Estonia

**Õige viis toote kasutusest kõrvaldamiseks
(elektriliste ja elektrooniliste seadmete jäätmed)**

Selline tähistus tootel või selle dokumentidel näitab, et toodet ei tohi kasutusaja lõppemisele kõrvaldada koos muude olemajätmetega. Selleks, et vältida jäätmete kontrollimatu kõrvaldamisega seotud võimaliku kahju tekitamist keskkonnale või inimeste tervisele ning edendada materiaalseid vahendite säästvat taaskasutust, eraldage toode muudest jäätmetest ja suunake taasinglusse.

Kodukasutajad saavad teavet keskkonnaohutu ringlussevõtu kohta kas toote müüjalt või keskkonnaametist.

Firmad peaksid võtma ühendust tarnijaga ning kontrollima ostulepingu tingimusi ja sätteid. Toodet ei tohi panna muude hävitamiseks mõeldud kaubandusjäätmete hulka.

Latvia

**Izstrādājuma pareiza likvidēšana
(nolietotas elektriskās un elektroniskās ierīces)**

Uz izstrādājuma vai tam pievienotajās instrukcijās dotais marķējums norāda, ka to nedrīkst likvidēt kopā ar citiem sadzīves atkritumiem pēc tā ekspluatācijas laika. Lai novērstu viedei un cilvēku veselībai iespējamo kaitējumu, kas ir saistīts ar nekontrolējamu atkritumu likvidēšanu, tas jānošķir no citiem atkritumiem un jāpārstrādā, lai sekmētu materiālo resursu atbildīgu atkārtotu lietošanu.

Mājsaimniecības lietotājiem jāsazinās vai nu ar veikalu, kurā šis izstrādājums ir pirkt, vai ar pašvaldību, lai iegūtu informāciju par to, kā un kur var nodot šo izstrādājumu, lai garantētu ekoloģiski drošu reciklēšanu.

Rūpnieciskajiem lietotājiem jāsazinās ar piegādātāju un jāpārbauda pirkuma līguma nosacījumi. Šo izstrādājumu nedrīkst sajaukt ar citiem likvidējamiem rūpnieciskajiem atkritumiem.

Greece

**Σωστή Διάθεση αυτού του Προϊόντος
(Απορρίμματα Ηλεκτρικού & Ηλεκτρονικού Εξοπλισμού)**

Τα σήματα που εμφανίζονται επάνω στο προϊόν ή στα εγχειρίδια του το συνοδεύουν, υποδεικνύουν ότι δεν θα πρέπει να ρίπτεται μαζί με τα υπόλοιπα οικιακά απορρίμματα μετά το τέλος του κύκλου ζωής του. Προκειμένου να αποφευχθούν ενδεχόμενες βλαβερές συνέπειες στο περιβάλλον ή την υγεία εξαιτίας της ανεξέλεγκτης διάθεσης απορριμμάτων, σας παρακαλούμε να το διαχωρίσετε από άλλους τύπους απορριμμάτων και να το ανακυκλώσετε, ώστε να βοηθήσετε στην βιώσιμη επαναχρησιμοποίηση των υλικών πόρων.

Οι οικιακοί χρήστες θα πρέπει να έλθουν σε επικοινωνία είτε με τον πωλητή απ' όπου αγόρασαν αυτό το προϊόν, είτε τις κατά τόπους υπηρεσίες, προκειμένου να πληροφορηθούν τις λεπτομέρειες σχετικά με τον τόπο και τον τρόπο με τον οποίο μπορούν να δώσουν αυτό το προϊόν για ασφαλή προς το περιβάλλον ανακύκλωση.

Οι επιχειρήσεις-χρήστες θα πρέπει να έλθουν σε επαφή με τον προμηθευτή τους και να ελέγξουν τους όρους και τις προϋποθέσεις του συμβολαίου πώλησης. Το προϊόν αυτό δεν θα πρέπει να αναμειγνύεται με άλλα συνηθισμένα απορρίμματα προς διάθεση.