4CH / 8CH / 16CH DIGITAL VIDEO RECORDER 960 H

DIGINASTER SERIES

DR-4FX1 / DR-8FX2 / DR-16FX2 / DR-8FX5 / DR-16FX5

OPERATION MANUAL

(FW Version 1015xx)

Before connecting, operating adjusting this product, read this instruction boolet carefully completely





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Start Up/ Shutdown

START

You can connect DVR to a PC in the same network and control or manipulate it on the PC monitor.

- 1. Connect the adaptor to the 12VDC power input port in the rear panel of DVR.
- ✓ Make connection when the power is not applied yet.
- 2. Connect AC cable to the power source. With a beep, the logo screen appears several seconds after the front LED turns on.
- 3. When the booting process is completed, the live screen then the login screen appears.

Log In

To manipulate or access the menus of DVR, you should have logged in.

- 1. When the system starts, the login screen appears.
- Select a user and provide the password.
 The default password of the "ADMIN" account is "1234".
- Click **<OK>**.

If the login information is correct and valid, you will see the live screen.

✓ For safe and secure use of the product, change the password after purchasing.



Log Out

To prevent unauthorized access, it is recommended to log out when you leave the screen.

- ✓ Hover the cursor near the bottom of the screen to display the menu.
- In the monitoring screen, click <MENU> in the bottom left corner of the screen to <LOG OUT>, or press the [LOGOUT] button on the remote control.
- While logged out, Search / Backup / System Setup / Record Setup / System Shutdown menus are restricted to use.



Monitoring

System Shutdown

You can connect DVR to a PC or mobile device in the same remote network and control or manipulate it on the monitor of the PC or mobile device

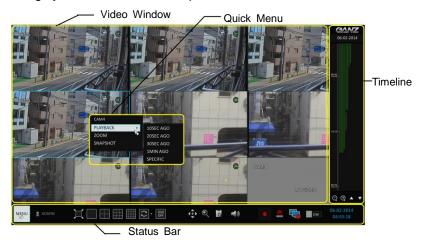
- In the monitoring screen, click <Menu> in the bottom left corner of the screen to <SHUTDOWN> the system, or press the [POWER] button on the remote control.
- 2. Use the virtual keyboard to enter the password.
- 3. Be sure to disconnect the power in the rear panel.



✓ If you turn off the system in an abnormal manner such as removing the power cord while the system is in operation, the disk will have or increase the bad sectors, causing data loss and shortened life cycle of the disk.

Live Screen At a Glance

The live screen largely consists of three components: video window, status bar and timeline zone.



Video Window

Icons used in the video window.

ITEM		Description
Camera ID	CAM1	Show the camera ID
		Displayed if an event recording is reserved.
Record Mode Icons	C	Display the status of the continuous recording.
	A	Display the recording status when an alarm occurs.
	M	Display the recording status when a motion event occurs
	P	Display the status of the emergency recording
Audio Icon		The audio signal of the connected camera is outputting.
Motion Detection Icon	7	A motion is detected by the connected camera.

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Monitoring

Status Bar

Press the ▼ button on the remote control, or place the mouse in the lower area of the screen to display the status bar.

ITEM		Description
Menu Button	MENU	Select one of the system setup, search and backup menu items before accessing it.
User ID	ADMIN	Show the ID of the user who has currently logged in.
Screen	I	Change the screen layout so that both status bar and timeline are displayed at all times.
Control		Select a split mode.
Buttons	○	Select Auto Sequence or Special Split Mode.
	OSD OFF	Display or hide the OSD menu on the screen.
PTZ	⊕	Move to the PTZ screen. You can control the PTZ operations of a PTZ-compliant camera on the PTZ screen.
Zoom	€	Move to the Digital Zoom.
Quick Log	Q	Display the log list of the recent recording events.
Audio Channel Selection Button	4 »	You can use the camera supporting the audio input to listen to the audio.
Panic Record	•	Start the panic recording.
Alarm Indicator		Turns on if an event occurs. It does not turn on if no reaction to the event is yet defined. Click this to check the information of the event that occurred.
Network Connection Status	<u> </u>	Check if network connection is made via an external PC or mobile device. Click this to view the details of the concurrent users and to check the network connection status. For more information, refer to "Network Setup". (page 40)
Disk Space	ow	Show the disk space information. If you have set the disk overwrite mode, it will be displayed "OW" (Over Write) from the start point of the overwriting. Click this to view the details of the disk status. For more information, refer to "Record Setup".
Date & Time	06-02-2014 04:55:18	Display the current time and date.

Timeline

Press the [▶] button on the remote control or move the cursor to the right of the screen to display the timeline. Double-click the timeline to move to the video screen. Drag and drop it to make backup or event search for the specified area.

ITEM		Description	
Timeline Date	06-02-2014	Display the date of the current timeline. Click this to select a desired date of the timeline.	
Expand/ Collapse the timeline	Q Q	Expand or collapse the timeline.	
Navigation through Timeline		Navigate through the timeline. You can also use the mouse wheel to do the navigation	
Timeline Bar	3.00	Display the recording data with time. The color of each bar indicates the following: ✓ Green : Continuous Recording ✓ Red : Alarm Recording ✓ Blue : Motion Recording ✓ Yellow: Panic Recording	

Quick Menu.

ITEM	Description
Channel No	Display the number of the current channel.
Play	Start playing the video of the selected channel from the specified time.
Zoom	Zoom the video of the selected channel.
Snapshot Capture	Capture the current live video and save it in the jpeg format. ✓ Then, you can save the captured image in the USB device.

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Using the status bar in the live mode

Selecting a split mode

Click a desired split mode from 1, 4, 9, 6, 8 and 16 split screen. Or press the **[DISPLAY]** button on the remote control until a desired split mode is displayed.

- √ 4CH DVR model support only 1 and 4 split screen modes.
- ✓ 8CH DVR model does not support 16 split screen modes.

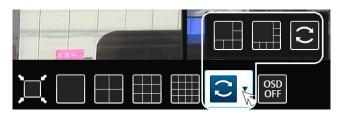


Auto sequence

Click the Sequence button in the status bar, or press the **[SEQ]** button on the remote control to perform the specified sequence mode.

You can configure the sequence settings in **<SEQUENCE>**.

For details, refer to "Sequence". (page 35)

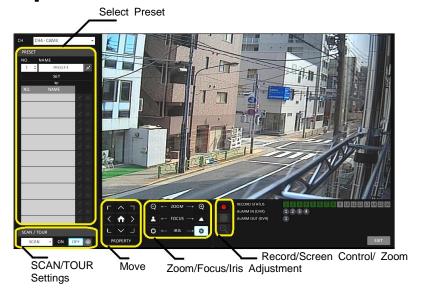


Controlling PTZ

You can control PTZ cameras connected to each channel. Use the mouse to click PTZ button on the status bar, or press the **[PTZ]** button of the remote control to initiate the predefined sequence.



In PTZ mode, use buttons on the screen to control PTZ or use **[ZOOM]**, **[FOCUS]** and **[PRESET]** buttons of the remote control.



Digital Zooming

You can enlarge the monitoring screen for better view.

Zooming will enlarge the video of the selected channel. If no channel is selected, channel 1 will be zoomed.

- Click Zoom in the status bar or move the cursor to a desired channel and right-click it to display the context menu. Select <ZOOM>.
 - You can also press the **[ZOOM]** button on the remote control.
- Move to the zoom control screen. When the menu bar appears in the right bottom, use the buttons to control the zooming.
- ♦ CHI-CAMI Select a channel to zoom in/out.
- Zoom out the current (enlarged) image step by step.
- ♦ Enlarge the current image step by step.

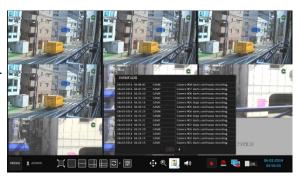
Zoom Box: Use the yellow box to move to or select a desired zooming area.

Exit the zooming screen and return to the live screen.

To check the event log

You can check the log of the events that occurred.

- Click Log to display the "EVENT LOG" window.
 The log list is sorted with the latest one on top.
- Double-click a desired log to display the event video.
 - You will move to the play screen of the selected log.



To select an audio input channel

Select a channel from which the audio signal will be received.

- >CHANNEL : Produces the selected channel's Audio, regardless of the split screen mode.
- >LINK TO FULL SCREEN :When switching the DVR display mode to view one channel, it Produces the selected channel's audio.





Monitoring

To check the alarm status

You can check the alarm status of each camera. Click **<OK>** to close the window



To check the network status

Shows connection status of camera and network devices. Click to display detailed information on current users and network connection Click **<OK>** to close the window.

 For more information, refer to "Network Status". (page 40).



To check the disk status

You can check the storage space of the current disk and check also if there is any problem with the disk. Click **<OK>** to close the window.

 ✓ For more information, refer to "Disk Information" (page 47)



Saving captured snapshots

You can capture the current video screen and save or export to a connected storage device.

 Select a channel first, and right click to open pop up menu, and select <SNAPSHOT CAPTURE> menu item, or press the [SNAPSHOT] button of the remote control.



- Connect a storage device, and click <EXPORT> button. To save the captured image onto the built-in HDD, press the <RESERVE> button.
 - Saved image can be found in the "Archive> Reserved data management" and can be backed up.



- 3. Enter the <TAG NAME> and <MEMO> and press <BURN> or <ERASE & BURN> button
 - > A progress bar appears and indicates the progress of exporting to storage device.
 - > BURN: Snapshot is stored in the connected USB storage device.
 - > ERASE & BURN : Deletes all files in the connected USB storage and then saves the snapshot.

To move to the System Setup menu

How to use the mouse



How to use the remote control 1



How to use the remote control 2

SETUP

1 2

Camera Setting

You can configure the display settings of: camera title, covert option, motion and camera type

CAMERA TITLE

You can change the camera ID that is displayed on the screen.

- 1. From <SYSTEM SETUP> <CAMERA>, select **<CAMERA TITLE>.**
- 2. Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to select a channel that you want to rename.

Alternatively, simply double-click the camera to rename from the top left corner.



- 3. Once the virtual keyboard appeared, select desired alphanumeric characters to complete your input, and press the **<OK>** button.
 - The **<SHIFT>** key toggles letter case.
- 4. To apply the change, click **<APPLY>** in the bottom of the screen.
- 5. When done, press the **[EXIT]** button on the remote control or click <CLOSE> button.

The confirmation message appears and you will return to the previous menu.

✓ Camera title allows up to 16 letters, combining numbers and upper/lower case alphabets.

Image Setup

You can adjust brightness, contrast, color and quality setting of each channel's camera.

- 1. From <SYSTEM SETUP> <CAMERA>, select <IMAGE SETUP>.
- 2. Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to set each option of the image menu.
- 3. To apply your changes, click **<APPLY>** button.
- 4. Once completed with setup, press **[EXIT]** button of the remote control or click **<CLOSE>** button on the bottom of the screen. A confirmation dialog appears and returns to the previous menu.
 - Press <PREVIEW> button for adjusting with preview image.





Crop Setting

You can cut out unnecessary region of channel's video.

- 1. From **<SYSTEM SETUP> <CAMERA>**, select **<IMAGE SETUP>-<CROP SETTING>**.
 - >CHANNEL: Select the channel to set cropping area.
 - >OPERATION: Set whether to use cropping or not.
 - >BOX COLOR: Select the box color to mark the cropping area.
 - >BOX POSITION: Set position and size of the cropping box.
- 2. To apply the change, click **<APPLY>** button.
- 3. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.



You can set to hide the camera video so that a specific user or user group cannot view. Set a channel(s) that you want to hide from a specific user or user group.

- 1. From **<SYSTEM SETUP> <CAMERA>**, select **<COVERT SETUP>**.
- Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to select a covert channel(s) from a specific user group.
 - >ADMIN, MANAGER, USER : Set them to **<ON>**.

The selected channel will be hidden from the applicable user account.

- >LOGOUT: Set it to **<ON>**. When the user logs out, the selected channel will not be displayed.
- 3. Select display title on live view screen for covert channel either "COVERT" or "NO VIDEO" To activate this settings, user need to logoff then login DVR again.
- 4. To apply the change, click **<APPLY>** button.
- 5. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu. To change the covert settings from user group to user, move to the **<USER>** menu and make necessary changes. (page 38)



Motion Sensor

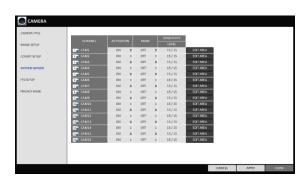
Set the motion sensor of the camera so that it can detect a motion event.

- From <SYSTEM SETUP> <CAMERA>, select <MOTION SENSOR>.
- Use the [▲▼◆/ENTER] buttons on the remote control or use the mouse to specify the use of each option item.
 - > ACTIVATION: turn on or off the motion sensor.
 - > MOTION MARK: Set it to **<On>**.
 - The video window will display the motion mark if a motion is detected.
 - > SENSITIVITY: Set the sensitivity level of the motion sensor to either Daytime or Nighttime.
 - > EDIT AREA: Specify the motion detection area.
- 3. To apply the change, click **<APPLY>** button.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.
 - ✓ The motion detection sensitivity may differ depending on the characteristics of the connected camera or installation environment.

Motion Area Setup

From the motion setup window, click **<EDIT AREA>** in the right corner.

- Click **<EDIT AREA>** to move to the motion area setup screen.
- 2. If using the remote control, press the **[ENTER]** button to mark the current position.
- Use the arrow buttons to move to a desired block and press [ENTER]. The area setup will begin. Then, use the arrow buttons to specify the area.
 - Alternatively, you can use the drag-and-drop method to specify or release the area using mouse.
- COMMENT TO ANY T
- 4. If you select the specified area again, it will be released.
- 5. Press the **[EXIT]** button on the remote control or right-click any area to display the popup window as in the right picture.



- While the popup window is displayed, selectSENSITIVITY> to set the detection sensitivity.
 - > CHANNEL : select a channel to set the motion Sensitivity.
 - > SENSITIVITY: 1(Low) ~ 15(High) The higher the number is, the more higher the sensitivity level becomes.
 - > DAYTIME : Specify the time period that will be considered as daytime.

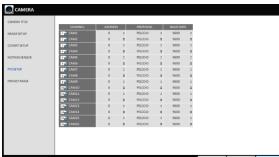


- NIGHTTIME : specify the **<SENSITIVITY>** for the nighttime.
- ✓ Images recorded in a low contrast scene such as at night cause severe noise, triggering the motion event too often.
- ✓ If unwanted events occur frequently at night, you may want to reduce the motion sensitivity for the night duty.

PTZ Setup

You can configure PTZ cameras connected to each channel. Set the camera ID, protocol, baud rate and PTZ control speed for each channel.

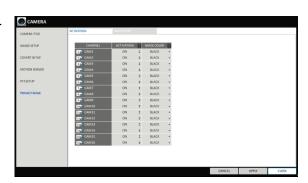
- 1. From <SYSTEM SETUP> <CAMERA>, select <PTZ SETUP>.
- 2.Use the [▲ ▼ ◆ /ENTER] buttons on the remote or mouse to set protocol and baud rate.
 - Refer to user's manual of the PTZ the camera or consult camera installer for further details on PTZ settings, such as camera address, protocol and baud rate.
- 3. To apply your changes, click **<APPLY>** button.
- Once the setup completed, press the [EXIT]
 button of the remote control or click <CLOSE> button
 on a confirmation dialog. Click <CANCEL> to return to the previous menu.



Privacy Mask

For privacy purposes, you can specify masking area for a selected camera's video.

- 1. From <SYSTEM SETUP> <CAMERA>, select <PRIVACY MASK>.
- Use the [▲ ▼ ◆ /ENTER] buttons on the remote or mouse to set channels enabled, mask color and its area.
 - > ACTIVATION: Turn on or off the privacy mask.
 - > MASK COLOR: Select the color of the masked area, which will be displayed on the monitor.
- 3. To apply your changes, click **<APPLY>** button.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button.



Privacy Mask Area Setup

You can specify privacy masking area.

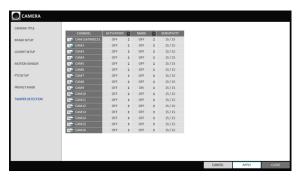
- 1. From **<AREA SETUP>** tab on the right side.
- 2. When using the remote, press the **[Select]** button to show the selector first.
- 3. Use direction key to move to the desired channel, and the press the **[Select]** button to begin area setup.
 - Use direction keys to set the masking area. When using mouse, hold the mouse left button and drag to set or cancel the masking area.
- 4. Selecting masked area again will exclude the corresponding block from the masking area.



Tamper Detection (Available on DR-8/16FX5)

You can set to detect tampering attempt to interfere monitoring operations by tampering the installed camera.

- 1. Select the **<TAMPER DETECTION>** form the **<CAMERA>** menu items in **<SYSTEM SETUP>**.
- Use the [▲▼◆/] buttons on the remote or the mouse to select <MARK, SENSITIVITY> and set the tampering detection condition appropriately.
- 3. For each channel, set the day/night sensitivity.



- 4. Set the activation of each channel, and set whether to display indicator on the screen.
 - >SENSITIVITY
 - -LEVEL: The detection sensor's sensitivity for each detection block. (Can be separately set for day/night modes)
 - > ACTIVATION : Set the detection for each channel to be enabled/disabled.
 - > MARK: Turns on or off the detection indicator to be displayed on the screen



- 5. To apply your changes, click **<APPLY>** button.
- 6. When done, press the [EXIT] button on the remote control or <CLOSE> in the lower screen. The confirmation message appears and you will return to the previous menu.

Display Setting

You can configure the display settings regarding the OSD, sequence monitor and SPOT output.

OSD

You can set Camera Name, Icon, Status Bar, Timeline, Borderline, User Name and Language

- From **SYSTEM SETUP> SPLAY>**, select **SPLAY>**.
- Use the [▲ ▼ ◆/ENTER] buttons on the remote control or use the mouse to set each option of the OSD item.
 - > CAMERA TITLE : specify the display of the camera title on the screen.
 - > RECORDING MODE ICON: specify the display of the record mode icon on the screen.
 - > AUDIO ICON : specify the display of the audio icon on the screen.

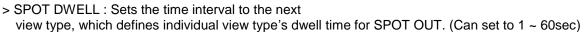


- > STATUS BAR ON FULL SCREEN MODE : select to show or hide the status bar in full screen mode.
 - AUTO HIDE : place the cursor in the lower area of the screen to display the status bar. If moving the cursor up, the status bar will disappear.
 - ALWAYS ON: The status bar will be displayed at all times.
 - 5 SEC ~1 MIN : If no mouse movement is detected for from 5 seconds to 1 minute, the status bar will disappear.
- > TIMELINE ON FULL SCREEN MODE: select to show or hide the timeline in full screen mode.
 - AUTO HIDE: place the cursor in the right corner to display the timeline. If moving the cursor to the left, the timeline will disappear.
 - ALWAYS ON: The timeline will be displayed at all times.
 - ALWAYS OFF: The timeline will not be displayed.
- > ZOOM PIP: Select to show or hide the Picture in Picture window on Digital Zoom.
 - -ALWAYS ON: PIP window will be displayed at all time.
 - -1/3/5 SEC: PIP window will disappear after selected time.
- > BORDER LINE: specify the display of the cross-border between channels in a split mode
- > BORDER COLOR: select a color for the border.
- > USER NAME : specify the display of the currently logged-in users on the status bar.
- > LANGUAGE : select a menu display language.
- 3. To apply the change, click **<APPLY>** button.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.

Monitor

If you change from monitoring mode to sequence, you will have to set the interval of the sequence.

- 1. From **<SYSTEM SETUP> <DISPLAY>**, select **<MONITOR>**.
- Use the [▲ ▼ ◆/ENTER] buttons on the remote control or use the mouse to set dwell for sequence mode and SPOT Out dwell.
 - > SEQUENCE DWELL: Sets the time interval to the next screen mode for Live monitoring, which defines individual screen mode □s dwell time in the Sequence. (Can set to 1 sec ~ 60 sec)



- > VIDEO ASPECT RATIO: Set aspect ratio for Live View image (16:9 / 4:3).
- > DISPLAY RESOLUTION: Set monitor output resolution. (Auto / 1920x1080 /1280x720 / 1280x1024)
- 3. To apply the change, click **<APPLY>** button.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.

Sequence

Select a split mode for the sequence, and also select a list of active items when the sequence is performed.

- 1. From **<SYSTEM SETUP> <DISPLAY>**, select **<SEQUENCE>**.
- Use the [▲▼◆/ENTER] buttons on the remote control or use the mouse to add a sequence or change the settings of the existing sequence.
 - >ACTIVATION: Select a list that you want to activate the sequence for.
 Only one list will become active.
 - >ADD: add a sequence.
- 3. To apply the change, click **<APPLY>** button.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>**button. The confirmation message appears and you will return to the previous menu.

To add a sequence

- 1. Click **<ADD>** in the bottom of the screen.
- 2. When the "ADD" dialog appears, enter a title using the virtual keyboard.
- 3. Enter the name of the sequence and click **<ADD>**.
- When the **<ADD VIEW TYPE>** dialog appears, click **<ADD>**.





- 5. When the "SEQUENCE SETUP" dialog appears, select a split mode that you want to add from **<VIEW TYPE>**.
- 6. If the selected split mode is displayed on <VIEW CONFIGURE>, select a channel you want to display in each split screen.
- 7. Click <CONFIRM>.

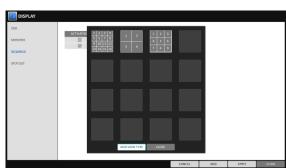
The set sequence mode is confirmed and will be added to the Add Sequence list in order

- 8. When done, click **<CLOSE>** in the bottom of the screen.
 - After the sequence type is saved, you will return to the previous screen.
- 9. Place your mouse cursor over desired tile of added sequence, right Right-click on it or press the [ENTER] button on the remote control to edit or delete it.



To edit a sequence

- 1. Select a sequence that you want to edit in the list.
- 2. The "EDIT" dialog appears.
- 3. Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to edit the selected sequence.
 - >SEQUENCE TITLE : enter a new sequence name.
 - >ACTIVATION : specify the use of the sequence.
 - >MODIFY: change the settings of the sequence mode.
 - >DELETE: delete the selected sequence list.
 - >CANCEL: cancel the changes.
- 4. Pressing the **<EDIT>** button will display the Edit Sequence window.
- 5. To change the existing settings, select a screen mode that you want to edit and right-click to display the context menu. Then, select **<EDIT>**.
- When done, click **<CLOSE>** to close the window.
- 7. To apply your changes, click <APPLY>.





SPOT OUT (1U Model)

Apart from the main screen display, you can configure the Spot Out to display a Live channel as needed in various live view types. You can set the live view type of display output through the **[SPOT]** terminal and activate / deactivate it.

- From **SYSTEM SETUP> SPOT OUT>.**
- Use [▲ ▼ ◆/ENTER] button of the remote control or mouse to edit Spot Out properties.
- >SPOT TITLE : Name the Spot Out setup.
- >ACTIVATION : Set whether to activate / deactivate the spot out setup.
- >MODIFY: Edit the view type of the spot output.
- >SAVE : Save the changes of spot output settings.
- 3. To apply your changes, click **<APPLY>** button.
- 4. Once completed with setup, press **[EXIT]** button of the remote control or click **<CLOSE>** button on the bottom of the screen. A confirmation dialog appears and returns to the previous menu.

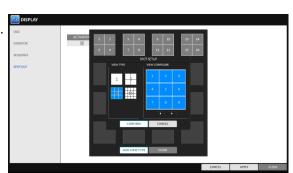
To add a View Type to a SPOT OUT

- 1. Select an item from the SPOT OUT list to be changed.
- 2. The "EDIT" window appears, click **<EDIT>** button.
- When the View Type selection window appears, click **<ADD VIEW TYPE>** button.
- Select the desired View Type and configuration, and click <OK> button.
- Complete adding and click **<CLOSE>** to close the edit window.
 - √ 9 and 16 split screen mode are available only for 16 channel model.

To edit or delete View type of the SPOT Out

- 1. Select an item from the SPOT OUT list to be changed.
- 2. The "EDIT" window appears, click <EDIT> button.
- When the View Type selection window appears, select the desired View Type to be edited or deleted, and press [ENTER] button of the remote control or right click on it.
- > MODIFY: Displays **"SPOT SETUP"** window for editing View Type and other properties.
- > DELETE : Deletes the selected View Type.
- 5. Complete editing and click **<CLOSE>** to close the edit window.





SPOT OUT (2U Model)

2U model has two types of SPOT output port.

AUX : Programmable. Support 1/4/9/16 display mode.

SPOT 1-4: Programmable. Supports 1/4 display mode.

1. From **<SYSTEM SETUP> - <DISPLAY>**, select **<SPOT -16DIVISION>** or **<SPOT-4DIVISION>**.

Setting menu is the same as 1U model on previous page.





Audio Setup

Choose whether to receive the live sound source and select an audio channel.

- 1. From **<SYSTEM SETUP> <AUDIO>**, select **<AUDIO>**.
- Use the [▲ ▼ ◆/ENTER] buttons on the remote control or use the mouse to select an item that you want to edit.
 - >DEFAULT LIVE AUDIO CHANNEL: select an Audio channel to monitor on the live screen.
 - >NETWORK AUDIO TRANSMISSION : decide if DVR transfers the audio signal to the remote client. DVR → PC(Remote client)
 - >RECEIVE NETWORK AUDIO : decide if DVR receives the audio signal from the remote client. PC(Remote client) → DVR

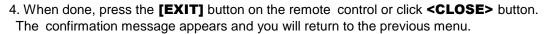


- 3. To apply the change, click **<APPLY>**button.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.

Buzzer output

You can set to output the buzzer if you manipulate the remote control.

- From **SYSTEM SETUP> SAUDIO>**, select **SBUZZER>**.
- Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to select an item that you want to edit.
 - > REMOTE CONTROL : specify the output of a beep when you press a button on the remote control.
- 3. To apply the change, click **<APPLY>** button/





User Setting

You can configure the settings regarding user management and user and group permissions.

Management

You can add a user account(s) that can be edited at a later time.

- 1. From **<SYSTEM SETUP> <USER>**, select **<MANAGEMENT>**.
- Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to add a user account or select an item that you want to edit.
- To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen.

The confirmation message appears and you will return to the previous menu.



To add a user account

- 1. Click **<ADD>** in the bottom of the screen.
- Use the [▲ ▼ ◆] buttons on the remote control and move to a desired item. Then, press [ENTER] to select the item.
 - > USER ID : enter the user ID using the virtual keyboard.
 - > PASSWORD : With the virtual keyboard, enter the password.
 - > GROUP: From **<ADMIN>**, **<MANAGER>** and **<USER>**, select a group that the user belongs to.



- > EMAIL: Type in the e-mail address to which you will receive notification of an event if it occurs.
- > EMAIL NOTIFY: Choose whether you will receive notification of an event if it occurs.
 - ✓ To use <EMAIL NOTIFY>, a send mail server and its port should be configured previously.
- > COVERT CHANNEL: You can set the channel to hide from a specific user.
 - ✓ < COVERT CHANNEL >, option hides the video of the selected channel from being displayed on the screen.
- 3. When done, click **<OK>**. The added user account will be listed.

To edit the user account information

- From the list of users, select a user account to edit and click **<EDIT>** next to it.
- 2. From the Edit window, make necessary changes and click **<OK>**.
- 3. To delete the user account, click **<DELETE>**.
 - √ The **<ADMIN>** account cannot be changed or edited



Group Authority

You can grant different user groups different permissions to a specific menu.

- 1. From <SYSTEM SETUP> <USER>, select <GROUP AUTHORITY>.
- Use the [▲ ▼ ◆ /ENTER] buttons or use the mouse to set the permissions for both
 - <MANAGER>and <USER> groups.
 - >SEARCH: Set the permissions for the Search menu.
 - >ARCHIVING : Set the permissions for the Backup menu.
 - >SYSTEM SETUP: Set the permissions for the System Setup menu.



- >RECORD SETUP: Set the Access Permissions for the Record Setup menu.
- >EVENT ACTION CONTROL: Set the permissions to output the alarm or control the buzzer if an event such as alarm occurs.
- >LISTEN TO AUDIO: Set the permission to listen to the audio.
- >REMOTE LOG IN: Set the permission to access remotely.
- >SHUTDOWN: Set the permission to shut down DVR from the System menu.
- √ The <ADMIN> account is the master account allowed for all permissions, which is not edited
 for individual permissions.
- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.

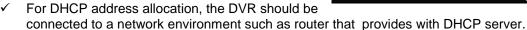
Network Setup

You can set IP address, DDNS and E-mail settings, and check network status.

IP Setup

Specify the IP address as well as the remote service port.

- From **SYSTEM SETUP> SETUPS**, select **SETUPS**.
- Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to specify each item of the network settings.
 - >DHCP: If it is checked, set the IP address of the DVR to Dynamic IP.



- 3. Deselect DHCP option to enable manual static address configuration. service.
 - >IP ADDRESS: Provide the IP address.
 - >GATEWAY: provide the gateway address.
 - >SUBNET MASK: provide the subnet mask address.
 - >1ST DNS SERVER: Enter the address of the primary DNS server.
 - >2ST DNS SERVER: Enter the address of the primary DNS server.
 - >RTSP SERVICE PORT: port number that the remote client receives the DVR video from.
 - >WEB SERVER PORT : port number used for connecting to the DVR with the web browser.
 - >PORT FORWARDING: If you are using a router, you can set the port forwarding so that external access to the DVR is enabled.

If the router does not support the uPnP protocol, you must set the port forwarding manually. For more information, contact your network administrator.

- >DELETE PORT : release the port forwarding settings for the router.
- >MAX TX SPEED: Limit the network transfer rate to access a remote client.

 The video signal may be transferred at a less rate than specified, which depends on the status of your network connection.
- 4. To apply the change, click **<APPLY>** button.
- 5. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.



DDNS

You can configure the DDNS settings so that remote users who are connected to the network can access remotely.

- ✓ DDNS is an IP redirection service in a dynamic IP environment that redirects (maps) the new IP address to a registered domain name each time the IP address is changed.
- 1. From **<SYSTEM SETUP> <Network>**, select **<DDNS>**
- Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to specify the use of DDNS and select a server.
- >DDNS: Specify the use of DDNS connection.
- >DDNS SERVER: Select a server to connect to.
- >DVR NAME : Enter the name of the DVR that you want to use as DDNS.



- >DDNS REGISTRATION TEST: Check if the <DVR NAME> can be set as DDNS. If there is a duplicate name in the server, the registration will fail. If this is the case, rename the <**DVR NAME>** and press Test to check if it works properly.
- >DVR ADDRESS : Provide the **<DVR NAME>** and press the **<DDNS REGISTRATION TEST>** button. The name will be added automatically.
- >DDNS CONNECTION TEST : Perform the connection test to check if DDNS is normally registered.
- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.

Email

You can register and test an email address so that an email notification is delivered at a specific interval or if an event occurs.

- From **<SYSTEM SETUP> <NETWORK>**, select **<EMAIL>**.
- Use the [▲ ▼ ◆/ENTER] buttons on the remote control or use the mouse to specify the use of email and select a server.
 - >SERVER : Set up the mail server. Set the mail Server that will be used for notification to the DVR.
 - >PORT : Enter the mail server port.
 - >SECURITY: If it is set to **<On>**, the email will be transferred in secure mode.
 - If it is set to **<Off>**, the email will be transferred to a server that does not support SSL.
 - >USER: Provide the email account (ID) of the sender.



- >PASSWORD: Provide the password of the sender.
- >TEST EMAIL ADDRESS: Enter an email address for the test purpose.
- >TEST: Send a test email and check if the test email is delivered normally.
- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.

Network Status

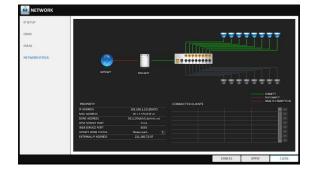
From the network map screen, you can check the internet connection status and camera connection status, and Check also the details of the connection status for each camera.

- 1. From <SYSTEM SETUP> <NETWORK>, select <NETWORK STATUS>.
- When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button.
 The confirmation message appears and you will return to the previous menu.

Network status

- > IP ADDRRESS : Indicates the internal IP address of the DVR.
- > MAC ADDRESS: Indicates the internal MAC address of the DVR.
- >DDNS ADDRESS: Indicates the internal DDNS address of the DVR.
- >RTSP SERVICE PORT: Indicates the network port of the video service. For remote service, the router must have set up the port forwarding.
- >WEB SERVICE PORT: Indicates the web service network port.

 For the remote service to be enabled, the corresponding port of the router should have set up the port forwarding.
- >EXTERNAL IP ADDRESS: Indicate the IP address for the internet, accessible from the DVR. The DVR can be granted access with the web browser at http://<External IP Address>:<Web Service Port>. The IP address can vary in a dynamic IP environment.
- >CONNECTED CLIENTS :Shows the list of clients that are currently connected. Press < > to terminate the connection of an unwanted client forcibly.
- ✓ Termination is limited to only users in a lower group than the current user.



You can configure the settings of date/time, system management, and keyboard controller.

Date/Time

Specify the current date and time.

- 1. From **<SYSTEM SETUP> <SYSTEM>**, select **<DATE/TIME>**.
- Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to change the time or set the options as necessary.
 - >DATE/TIME : Set the current time and date. Click< ♥ > to adjust the time manually.
 - >DATE FORMAT : specify the date format.
 - >TIME FORMAT : specify the time format.
 - >TIME SERVER: obtain the current time from the time server. Click < >> to get the current time.
 - >AUTO TIME SYNC : automatically synchronize the time with the time server at a specific time.
 - >SYNC AT: Set the time to sync with the time server.
 - >TIMEZONE : specify the GMT standard time for your local area.
 - >DST: You can set up or release the DST (Daylight Saving Time).
 - ✓ Both <TIME SERVER> and <AUTO TIME SYNC> will be enabled only if the DVR is connected to the Internet.
- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.





System Management

You can check, update or reset the system information.

- 1. From **<SYSTEM SETUP> <SYSTEM>**, select **<SYSTEM MANAGEMENT>**.
- Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to set each option of the system management.
- >FW UPDATE : you can update the current software with the latest version.
- >FACTORY DEFAULT : Return the DVR settings to the factory default.
 - ✓ If you proceed with the firmware upgrade or select to reset to the factory default, all current settings of the DVR will be erased. In such a case, you must configure the network, time and recording settings again.
- >SYSTEM DATA: Save the system settings or get the system information from other device.
- SAVE : Store the DVR settings to a storage device. Connect the storage device to the USB port of DVR.
- LOAD : Apply the settings of the storage device to the DVR. Connect the storage device to the USB port of DVR.
- >PASSWORD: Open or close the dialog box for settings of the menus: quit, system settings, record settings, backup, and search.
- If it is set to **<Off>**, note that the ADMIN account is only effective and access to all menus will be restricted.
- >EXPIRED TERM OF PASSWORD : You will be prompted to change the current password after a certain period of time.
- >AUTO LOGOUT: If there is no user input for a certain period of time, you can set to log out automatically.
- >WAIT TIME : Specify the waiting time for Auto Logout.
- 3. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen to return to the previous menu.







To perform the upgrade

- 1. Connect the USB storage device that contains the updatable files.
- 2. Click <USB>.
- Select one(s) from the updatable files LIST listed in <F/W >.



- 4. Click < UPGRADE>.
- 5. When the confirmation message appears, click **<OK>**.



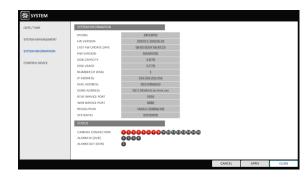
- 6. The progress bar displays the progress of the firmware upgrade process.
- 7. When the upgrade is complete, reboot the system.
 - ✓ During the updating, never turn off the DVR forcibly or disconnect the USB storage device to avoid serious damage to the product or data. If required, consult your nearest service center for professional assistance.



System Information

You can check the current system version and system-related settings.

- From **SYSTEM SETUP> SYSTEM>**,
 Select **SYSTEM INFORMATION>**.
- 2. Check the status of the current system.
- When done, press the [EXIT] button on the remote control or click <CLOSE> button.



Control Device

Configure the settings of the remote control and keyboard controller.

- 1. From **<SYSTEM SETUP> <SYSTEM>**, select **<CONTROL DEVICE>**.
- Use the [▲ ▼ ◆/ENTER] buttons on the remote control or use the mouse to set the connection options for the control device.
 - >SYSTEM ID : Set the ID of the DVR so that the keyboard controller can identify.
 - >PROTOCOL : Set up the protocol of the keyboard controller.
 - >BAUD RATE: Specify the RS485 communication speed.
 - >REMOTE CONTROLLER ID : Set the ID of the remote control.
- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.



Storage

You can configure the settings of and view information of the disk and external storage device.

2U model (DR8/16FX5) supports both **<INTERNAL>** and **<EXTERNAL STORAGE>**.

Disk Information

It will show information about the connected disk.

- From **SYSTEM SETUP> STORAGE>**, select **DISK INFORMATION>**.
- Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to check each connected peripherals.
 - >START / END TIME : show the start time and end time of data stored in each disk.
 - >STATUS: check if the connected disk is being used by the DVR. If you encounter a problem with the disk, the DVR will terminate the connection to the disk and mark it as 'Not In Use'.
 - >CAPACITY: show the capacity of the disk.
 - >MODEL: indicate the disk model.
 - >S.M.A.R.T STATUS: Read the S.M.A.R.T information of the disk and check to display if the current disk is in normal operation.
 - NORMAL: The disk is in a normal state.
 - CHECK: The disk has an error so that you need to check the disk or the connection cables of the disk. If you leave the problem unresolved, no recording may be enabled. So it is recommended that you replace the disk immediately.
 - ERROR: The disk fails or is unable to use due to an error of the disk or the cable. The disk should be replaced immediately. Contact the retailer or the customer service to replace the disk.
- 3. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen to return to the previous menu.





Disk Operations

You can set to delete the recording automatically and set the overwrite options, and you can also format the HDD recording data.

- From **SYSTEM SETUP> STORAGE>**, select **SETUPS**,
- Use the [▲ ▼ ◆/ENTER] buttons on the remote control or use the mouse to set the operation conditions of the disk.

>DISK WRITE MODE

- If it is set to **<OVERWRITE>**, the existing data will be overwritten by new recording data if the recording data size exceeds the free space of the HDD.
- If the option is set to **<ONCE>** and the HDD is full, the DVR will stop recording and output the beep or alarm that is pre-defined at **<EVENT>**.
- >RECORDING TIME LIMIT: The recording data will be deleted after a specific time of reservation. If it is set to **<OFF>**, this function will be disabled.
- >DISK FORMAT: format the hard disk.
- Note that formatting the HDD will delete all video data and logs.
- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.



S.M.A.R.T settings

You can check the S.M.A.R.T information of the disk and specify the check frequency.

- What is S.M.A.R.T information?
- S.M.A.R.T (Self-Monitoring, Analysis and Report Technology) is to detect a HDD that is likely to cause a problem in the future with a warning message.

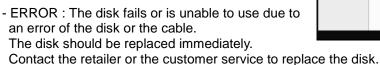
2U model (DR8/16FX5) supports both <INTERNAL> and <EXTERNAL STORAGE>.

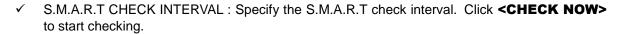
- 1. From **<SYSTEM SETUP> <STORAGE>**, select <S.M.A.R.T. SETUP>.
- 2. Use the **[**▲ ▼ ◆ **/ENTER]** buttons on the remote control or use the mouse to check the S.M.A.R.T operation and specify the check interval.
 - >S.M.A.R.T STATUS: Read the S.M.A.R.T information of the disk and check to display if the current disk is in normal operation.

Click **<DETAIL INFO>** to view the details.

- NORMAL: The disk is in a normal state.
- CHECK: The disk has an error so that you need to check the disk or the connection cables of the disk. If you leave the problem unresolved, no recording may be enabled.

So it is recommended that you replace the disk immediately.





- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.





Event Setup

Define various events, and specify the conditions to notify the user in various ways.

Alarm Out

Specify the alarm output conditions with the work schedule.

✓ Number of alarm output is different on each models.

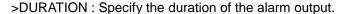
Model	Relay output	Alarm (TTL) output
DR-4FX1	1	N/A
DR-8FX2	1	N/A
DR-16FX2	1	N/A
DR-8FX5	4	4
DR-16FX5	8	8

- 1. From **<SYSTEM SETUP> <EVENT>**, select **<ALARM OUT>**.
- Use the [▲ ▼ ◆ /ENTER] buttons on the remote control or use the mouse to select
 <ALARM OUT> and configure the related settings.

>NAME: You can rename the alarm.

>OPERATION : Set the alarm output mode.

- N/O (Normal Open): It normally stays Open.
 If an event occurs, it will switch to Close.
- N/C (Normal Close) : It normally stays Close. If an event occurs, it will switch to Open.



- TRANSPARENT : Keep the alarm out for as much time as the event lasts.
- UNTIL KEY: Keep the alarm out until a mouse or remote control button is pressed.
- 5 ~ 300 SEC: Keep the alarm out for as long as specified.
- >TEST: Forcibly output the alarm for the test purpose.
- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.



System Setting

ON/OFF Schedule

You can activate or turn off the alarm output as scheduled.

- Use the [▲ ▼ ◆/ENTER] buttons on the remote control or use the mouse to select a <DATE> for the schedule.
- Drag the mouse to resize the cell or use the on the [▲ ▼ ◆] buttons to move to the cell, then press [ENTER].
- 3. Select a desired alarm output mode.
 - >ON: The alarm output is always turned on.
 - >OFF: The alarm output is always turned off.
 - >EVENT : Trigger the alarm output in sync with the event.
- Click **<COPY SCHEDULE>** to check the checkbox of the date that you want to copy the schedule at.
- 5. When done, click **<OK>** to apply the settings.
- 6. To apply the change, click **<APPLY>** button.
- 7. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.





Event Notification

Specify the methods of notification such as buzzer, video popup or email if an event occurs.

- 1. From <SYSTEM SETUP> <EVENT>, select <EVENT NOTIFICATION>.
- 2. Use the [▲ ▼ ◆] buttons on the remote control or use the mouse to select one from **<BUZZER>**, **<DISPLAY>** and **<EMAIL>**.
- 3. Use the [▲ ▼◆/ENTER] buttons on the remote control or use the mouse to set the output method and duration.
- 4. To apply the change, click **<APPLY>** in the bottom of the screen.
- 5. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** button. The confirmation message appears and you will return to the previous menu.

Buzzer output

You can notify the user of the event using the buzzer.

>DURATION

- TRANSPARENT : Keep the buzzer out for as much time as the event lasts.
- UNTIL KEY: Keep the buzzer out until a mouse or remote control button is pressed.
- 5 ~ 300 SEC : Keep the buzzer out for as long as specified.



Display

If an event occurs, you can display the video screen or a popup message to notify the user.

- >VIDEO POPUP: Display the video channel that is synchronized with the event on a single split screen. Set the DURATION of the single split screen.
- TRANSPARENT : Keep the video popup displayed for as much time as the event lasts.
- UNTIL KEY: Keep the video popup displayed until a mouse or remote control button is pressed.
- 5 ~ 300 SEC : Keep the video popup displayed for as long as specified.
- If multiple events occur at the same time, or if multiple event-related video channels exist, the video popup will be displayed in the maximum split screen mode rather than the single split screen mode.



- >OSD POPUP: This will notify the user of the event with a popup message if an OSD popup event occurs. You can adjust the duration of the popup message.
- UNTIL KEY: Keep the OSD popup displayed until a mouse or remote control button is pressed.
- 5 ~ 300 SEC : Keep the OSD popup displayed for as long as specified.

System Setting

Email

If an event occurs, this will notify registered users of the event by email. If you do not want to receive the email, uncheck the **<EMAIL NOTIFY>** option in **<USER>**, **<MANAGEMENT>**. (Page 38)

>ADD NEW EMAIL

If you want to add a new mail recipient beside the existing ones, click this to add the recipient.

>MINIMUM EMAIL FREQUENCY

Adjust the minimum frequency of sending the email. For example, even if you have set the frequency to one minute and another event occurs in less than one minute after the last email sending, the email for the new event will be sent one minute after.



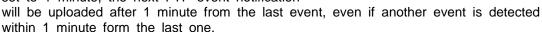
✓ Some email servers can block the email sending if the email delivery cycle is too short, and classify it as spam. Contact your email service provider to adjust the minimum delivery cycle so that the server does not classify the email as spam.

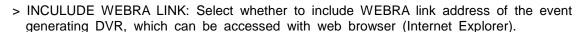
FTP

Upon events, uploads event notification onto the added FTP server.

- > FTP SERVER : Enter the FTP server address For event transfer.
- > DIRECTORY : Select or manually enter the destination folder of the FTP for event transfer.
- > FILE NAME : Select the uploading event file's format or manually set the file name.
- > MINUMUM FREQUENCY: Set the minimum recurrence delay for uploading event notification onto the FTP server.

For example, when the minimum recurrence is set to 1 minute, the next FTP event notification





- ✓ Check to playback the event footage.
- > INCULUDE SNAPSHOT IMAGE: Set whether to include snapshot (still image) or not.



Alarm Sensor

You can configure the settings of the alarm sensor and specify the operation of the sensor if an event occurs. Number of alarm sensor depends on the model,

Model	# of Alarm Sensor
DR-4FX1	4
DR-8FX2	4
DR-16FX2	4
DR-8FX5	8
DR-16FX5	16

- 1. From **<SYSTEM SETUP> <EVENT>**, select **<ALARM SENSOR>**.
- Use the [▲ ▼ ◆] buttons on the remote control or use the mouse to specify the sensor input method and operation.
 - >NAME : You can specify the name of the alarm sensor.
 - >OPERATION: You can specify the type of the alarm sensor.
 - N/O (Normal Open): Normally the sensor is left Open.
 If the sensor switches to Close, an event will be triggered.
 - N/C (Normal Close): Normally the sensor is left Close.
 If the sensor switches to Open, an event will be triggered.
 - >LINKED CAMERA: Set the camera to sync with the alarm sensor if it is triggered. If you have set the alarm recording and the sensor detects the recording, all synchronized cameras will start alarm recording.
 - >ALARM OUTPUT: Specify the alarm output channel if it is detected by the alarm sensor.
 - >BUZZER: Specify the output of the buzzer if an alarm is detected by the alarm sensor.
 - >VIDEO POPUP: Select to display the video popup if an alarm is detected by the alarm sensor. If there exist multiple **<LINKED CAMERA>**, the video popup will be displayed in the maximum split mode.
 - >OSD POPUP: Select to display the OSD popup message if it is detected by the alarm sensor.
 - >EMAIL: Select to send an email if detected by the alarm sensor.
 - >FTP: Select whether to upload event notification onto the FTP upon detected alarm event.
- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.

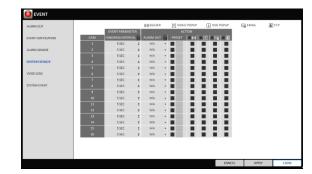


System Setting

Motion Sensor

You can set an action to execute when a motion is detected. For the settings of the motion sensor, move to <CAMERA SETUP>.

- 1. From **<SYSTEM SETUP> <EVENT>**, select <MOTION SENSOR>.
- 2. Use the **[**▲ ▼◆**]** buttons on the remote control or use the mouse to specify the ignorance interval and operation.
 - >IGNORING INTERVAL: Specify the minimum interval of the motion event occurrence. For example, even if you have set the minimum frequency to 5 seconds and another motion event occurs in less than 5 seconds after the last motion event occurred, the new event will be ignored.



If too many motion events occur, adjust to shorten the interval.

- Motion recording will be triggered immediately after the motion occurred regardless of the above settings.
 - >ALARM OUTPUT: Specify the alarm output channel if a motion is detected by the motion sensor.
 - >BUZZER: Specify the output of the buzzer if a motion is detected by the motion sensor.
 - >VIDEO POPUP: Select to display the video popup if a motion is detected by the motion sensor.
 - >EMAIL: Select to send an email if a motion is detected by the motion sensor.
 - >FTP: Select whether to upload event notification onto the FTP upon detected motion event.
- 3. To apply the change, click **<APPLY**> in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.

Video Loss

You can specify a reaction to the case where no video is received from the camera.

- 1. From **<SYSTEM SETUP> <EVENT>**, select <EVENT LOSS>.
- 2. Use the [▲ ▼ ◆] buttons on the remote control or use the mouse to specify the reaction to a video loss.
 - >ALARM OUTPUT: Specify the alarm output channel if a video loss occurs.
 - >BUZZER: Specify the output of the buzzer if a video loss occurs.
 - >EMAIL: Select to send an email if a video loss
 - occurs. >FTP: Select whether to upload event notification onto the FTP upon detected video loss
- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.



System Event

You can set any action to an event related to the disk, recording, network or system. Like the other events, you may notify the event to the user using the alarm/buzzer output, OSD pop-up or email.

- 1. From **<SYSTEM SETUP> <EVENT>**, select **<SYSTEM EVENT>**.
- Use the [▲ ▼ →] buttons on the remote control or use the mouse to specify the reaction to each event.
- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.

Disk

- >OVERWRITE START EVENT: if you set the disk write mode to **<OVERWRITE>**, this event occurs when the disk is full and the overwriting begins accordingly.
- >DISK FULL EVENT: if you set the disk write mode to **<ONCE>**, this event occurs when the disk is full (100%).
- >DISK SPACE EXHAUSTED EVENT: Event that is triggered if the disk is almost full.

 Click to specify the threshold percentage of usage to trigger the event.



- >S.M.A.R.T EVENT: Occurs if the disk causes the S.M.A.R.T error.
- >NO DISK EVENT : Occurs if no disk is recognized after the booting due to a disk failure or cable problem.
- To detect the disk error, it is recommended not to change the settings of the S.M.A.R.T event, no disk event and buzzer output.

Record

>PANIC RECORD START EVENT : Specify the action to perform when the panic recording begins.



System Setting

System

- >BOOTING EVENT: This event occurs when the DVR is booting.
- >LOGIN FAIL EVENT: This event occurs when the DVR fails to log in.
- You can specify the times of clicking < > to trigger the event.



Network

- >TROUBLE IN INTERNET CONNECTION: Occurs if the Internet connection to the DVR fails. If you do not want to connect the DVR to the network, leave the **<Action>** item blank.
- >FAIL IN REMOTE LOGIN: This event occurs if a remote client fails to log in due to an invalid ID or password.
 - You can specify the times of clicking < > to trigger the event.
- >FAIL IN DDNS UPDATE: This event occurs if the DVR tried to update the DDNS address but failed.
- ✓ If the DDNS address fails to be updated, the DVR may not connect to a remote client. If this is the case, enter the IP address from the client side to allow access from the DVR. This is just a temporary measure.
 - For the IP address, move to and check **EXTERNAL IP ADDRESS>** from the **<NETWORK>** window. Note that the **<EXTERNAL IP ADDRESS >** is subject to change if the DVR does not use the static IP.
- Note that the **<EXTERNAL IP ADDRESS>** can change at any time in a dynamic IP environment.



Tamper Event (Available on DR-8/16FX5 only)

You can set how to react upon a detected tampering event. Set the tampering event detection in <TAMPER DETECTION> for each channel.

From **<SYSTEM SETUP> - <EVENT>**, select **<TAMPER EVENT>**.

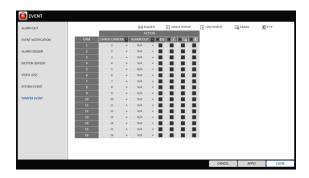
Use [▲▼◆] buttons on the remote or the mouse to set the detection action.

- >LINKED CAMERA : Select the camera to output the event action upon a tampering detection.
- >ALARM OUT : Set the alarm out channel for detected tampering event.
- >BUZZER : Sets whether to sound beeper upon a tampering detection.
- >VIDEO POPUP: Sets whether to display a video Popup upon a tampering detection.
- >EMAIL: Sets whether to send an email notification upon a tampering detection.

To apply the change, click **<APPLY>** in the bottom of the screen.

When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen.

The confirmation message appears and you will return to the previous menu.



Record Setting

You can configure the record settings for the DVR. Only authorized users can access the Record Setup menu.

To start the Record Setup menu

How to use the mouse



How to use the remote control 1



Record Setup

Operation Mode

You can set the recording options for Auto or Manual mode.

- 1. From <RECORD SETUP> menu, select <OPERATION MODE>.
- 2. Use the [▲ ▼ ◆] buttons or use the mouse to set <RECORDING CONFIGURATIONMODE> to <AUTO CONFIGURATION> or <MANUAL CONFIGURATION>.
- 3. Set the recording options for each selected Record mode.
- 4. To apply the change, click **<APPLY>** in the bottom of the screen.
- When done, press the [EXIT] button on the remote control or click <CLOSE>.

Auto Configuration

If you choose your preferred record mode, the DVR will recommend you the optimized settings for the selected record mode.

>ALWAYS HIGH VIDEO QUALITY: Recording will proceed in the best quality regardless of the event at all times.

As this option will always make recording in the best quality, the recording period is the shortest compared to the other record modes.

- >MOTION RECORD : Recording will proceed only if a motion is detected.
- >ALARM RECORD : Recording will proceed only if an alarm event occurs.
- >MOTION/ALARM RECORD : Recording will proceed only if a motion is detected or an alarm event occurs.
- >INTENSIVE MOTION RECORD : Normally recording will be performed in a low quality. However, the quality will switch to high if a motion is detected.
- >INTENSIVE ALARM RECORD : Normally recording will be performed in a low quality. However, the quality will switch to high if an alarm event occurs.
- >INTENSIVE MOTION/ALARM RECORD : Normally recording will be performed in a low quality. H owever, the quality will switch to high if an alarm event occurs or a motion is detected.

Manual Configuration

You can set the manual recording and panic recording options.

- >MANUAL CONFIGURATION OPTIONS: You can configure the recording settings by the time, date, and channel.
- SCHEDULE MODE : Set the recording schedule for a day (daily) or for a week (weekly).
- PRE RECORDING TIME: Set the pre-recording time.
- POST RECORDING TIME : Set the post-recording time.
- >PANIC RECORDING OPTIONS : Set the panic recording duration.

If it is set to **<MANUAL CONFIGURATION>**, recording will continue until you turn it off manually.





Record Setting

Continuous Recording

You can configure the settings of: continuous recording time, recording size, frame rate per second and quality.

- 1. From the <RECORD SETUP> menu, select <CONTINUOUS MODE>.
- ✓ From <OPERATION MODE>, you must set <RECORDING CONFIGURATIONMODE> to
 <MANUAL CONFIGURATION> before you can set the <CONTINUOUS RECORDING>.
- Use the [▲ ▼ ◆] buttons on the remote control or use the mouse to select either
 - <SIZE/FPS/QUALITY> or <SCHEDULE>.

Size/FPS/Quality Setting

1. Please select the day of the week to perform the continuous recording.

From **<OPERATION MODE>**, you must set the **<SCHENDULE MODE>** of the **<MANUAL RECORD >** to **<WEEKLY>** before you can specify the **<DAY>**.

Click a time cell from which you want to edit the SIZE/FPS/Quality and drag it to a desired cell.
 Or use the [▲ ▼ ◆] buttons on the remote control to move to the cell and press [ENTER].
 Then, use the [▲ ▼ ◆] buttons to move to a desired cell and press [ENTER] again.



- 3. When the cell selection is completed, the "SIZE/FPS/QUALITY" table appears.
- Specify the <RESOLUTION>, <FPS>, <QUALITY> and use of the <AUDIO> recording for each channel.
 - >RESOLUTION: set the size of the video recording.
 - >FPS: set the frame rate per second.
 - >QUALITY: set the recording quality.
 - >AUDIO: specify the use of the audio recording.
 - 4. When done, click **<OK>**.

You can check the recording size in the size table under the time selection bar.



Schedule Setting

- 1. Select a start day of the week on the schedule.
- Click a time cell from which you want to make the schedule and drag it to a desired cell.
 Or use the [▲ ▼ →] buttons on the remote control to move to the cell and press [ENTER].
 Then, use the [▲ ▼ →] buttons to move to a desired cell and press [ENTER] again.



- When the time selection is complete, you will be prompted to specify the use of recording in the Record Setup window.
- 4. To apply the change, click **<APPLY>** in the bottom of the screen.
- 5. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.

Motion Recording

Specify the recording size of the motion event if it occurs and make schedule for that recording.

- 1. From the **<RECORD SETUP>** menu, select **<MOTION RECORD>**.
- Use the [▲ ▼ ◆] buttons on the remote control or use the mouse to select either
 SIZE/FPS/QUALITY> or <SCHEDULE>.
- Set each item of <RESOLUTION>, <FPS>,
 <QUALITY> and use of the <AUDIO> for the motion recording.



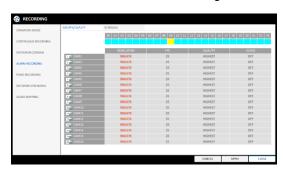
- ✓ For more information, see the "Continuous Recording". (page 59).
- 4. To apply the change, click **<APPLY>** in the bottom of the screen.
- 5. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.

Record Setting

Alarm Recording

Specify the recording size of the alarm event if it occurs and make schedule for that recording.

- 1. From the **<RECORD SETUP>** menu, select **<ALARM RECORD>**.
- Use the [▲ ▼ ◆] buttons on the remote control or use the mouse to select either
 SIZE/FPS/QUALITY> or <SCHEDULE>.
- Set each item of <RESOLUTION>, <FPS>,
 <QUALITY> and use of the <AUDIO> for the alarm recording.



- ✓ For more information, see the "Continuous Recording". (page 59)
- 4. To apply the change, click **<APPLY>** in the bottom of the screen.
- 5. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.

Panic Recording

In panic recording mode, you can specify the recording size and quality of the video.

- 1. From the **<RECORD SETUP>** menu, select **<PANIC RECORD>**
- Set each item of <RESOLUTION>, <FPS>,<QUALITY> and use of the <AUDIO> for the panic recording.
- ✓ For more information, see the "Continuous Recording". (page 59)



- 3. To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.

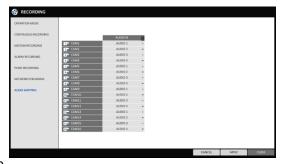
Network Streaming

You can specify the maximum size of network streaming for remote users and set the FPS.

- ✓ Even if you set the resolution and FPS to high for the network streaming, the DVR will reduce the size or FPS according to the network status (Speed) before transferring the recording video.
- 1. From the **<RECORD SETUP>** menu, select **<NETWORK STREAMING>**.
- 2. Use the [▲ ▼ ◆] buttons on the remote control or use the mouse to select an item that you want to edit.
- Set the <MAX RESOLUTION> and<MAX FPS> for each channel.
- 4. When done, click **<OK>**.
- 5. To apply the change, click **<APPLY>** in the bottom of the screen.
- 6. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.

Audio Mapping

- From the <RECORD SETUP> menu, select
 AUDIO MAPPING>.
- 2. Set the **<AUDIO IN>** for each channel.
- To apply the change, click **<APPLY>** in the bottom of the screen.
- 4. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.



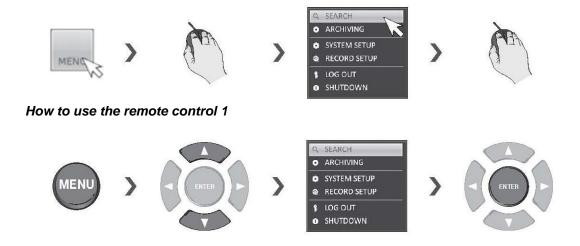


Search

You can configure the record settings for the DVR. Only authorized users can access the Record Setup menu.

To move to the Search menu while in monitoring

How to use the mouse



How to use the remote control 2



To move to the Search menu while in playback mode

How to use the mouse



How to use the remote control I

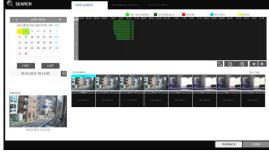


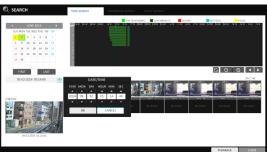
Time Search

With the calendar, you can search for the recording data by the recorded date.

- 1. From the **<SEARCH>** menu, select **<TIME SEARCH>**.
- Use the [▲▼◆] buttons or use the mouse to specify the search date and time from the calendar in the left corner of the screen.
 - >FIRST : The first date of recording is automatically selected.
 - >LAST : The last date of recording is automatically selected.
 - > : Press this to display the time selection menu where you can specify the time and date.
- 3. You can identify the type of the recording data by the color in the bar.

 - >Green (Continuous): The continuous recording is performed on the recording data.
 - >Red (Alarm): The alarm event recording is performed on the recording data.
 - >Blue (Motion): The motion event recording is performed on the recording data.
 - >Yellow (Panic): The panic manual recording is performed on the recording data.
- 4. Click to move to a desired start time in the time bar, or use the buttons at the bottom of the status bar to make search.
 - > : Recall the recording data.
 - > (a): Expand the timeline of the time bar to a greater unit of time.
 - > 2 : Collapse the timeline of the time bar to a smaller unit of time..
 - > : Use this to move to a previous time that is hidden in the time bar as it is expanded to a greater time unit.
 - > Lise this to move to a next time that is hidden in the time bar as it is expanded to a greater time unit.
- Click a thumbnail channel or use the [▲ ▼ ◆] buttons on the remote control to move to a desired channel and press [ENTER]. You can check the video in <PREVIEW>.
- Click to move to a desired time, or simply double-click a desired time in the time bar to play the video data on that time.
 - 6. Press the **[ENTER]** button again on the remote control with the mouse, or simply double-click on the channel. You will move to the playback screen.
 - 7. If you want to stop playing and return to the search screen, press **[EXIT]** or **[SEARCH]** on the remote control. You can also click **<MENU>** in the left corner and select desired menu.



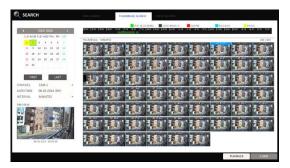


Search

Thumbnail Search

To improve your search, you will be provided with a list of thumbnails. Select Day, Hour or Minute to narrow down the search results.

- 1. From the **<SEARCH>** menu, select **<THUMBNAIL SERARCH>**.
- Use the [▲ ▼◆] buttons or use the mouse to specify the search date and time from the calendar in the left corner of the thumbnail search screen.
 - >FIRST : The first date of recording is automatically selected.
 - >LAST: The last date of recording is automatically selected.
 - >CHANNEL: Select a channel to search for.
 - >DATE/TIME : Specify the search date and time.
- ✓ The menus available differ depending on the selected interval mode.
 - >INTERVAL: Select a time interval of the thumbnail view.
- Double-click a desired play time in the recording data bar, or double-click a desired time image from the thumbnail list.
 You will move to the playback screen.
- 4. If you want to stop playing and return to the search screen, press [EXIT] or [SEARCH] on the remote control. You can also click <MENU> in the lower left corner and select a desired menu.



< "Minute" selection screen >



< "Hour" selection screen >



< "Day" selection screen >

Event Search

Search for events that occurred at the specified time and select an event to play from the list.

- 1. From the **<SEARCH>** menu, select **<EVENT SEARCH>**.
- Use the [▲ ▼ →] buttons or use the mouse to specify the <START> and <END> times in the left of the event search list.
- 3. Select a channel to search.
- Mark the checkbox of the event to search from The **<EVENT>** list.
- 5. Press the **<SEARCH>** button.

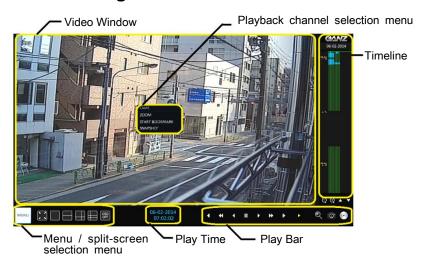
 The search results will be listed as shown.
 - >TYPE : displays the event type.
 - >TIME : displays the recording start time.
 - >CONTENTS: shows the details of the event found.
 - >ORDER BY: If you select **<OLDEST>**, the list will be sorted with the earliest one on top.
- 6. Double-click a desired event or click **<PLAY>** in the lower right corner to move to the play screen.
- 7. If you want to stop playing and return to the search screen, press **[EXIT]** or **[SEARCH]** on the remote control. You can also click **<MENU>** in the lower left corner and select a desired menu.



If you want to play

- 1. To play the searched data
 - You can search for and play a searched data.
- 2. To play with the live viewer
 - Simply double-click a desired time point in the right corner of the play screen.
- ✓ If you move the cursor to the rightmost, the "Timeline" bar will be displayed.
 - Select a desired channel in the live screen and right-click to select **<PLAY>** in the context menu. Then, select a desire play time.

Playback screen configuration



Video Window

Display the current video.

Timeline

Display the type of recording data.

The vertical bar in the timeline indicates the current point of playback. Double-click a desired point in the timeline to start playing the video from that point.

Once you drag to specify an area, you can perform the backup or event search for that area.

Menu/split-screen selection menu

For more information about how to use each button, refer to "Using the status bar in the live mode". (page 23)

Play Bar

You can start playing, stop playing or change the play speed of the current video.

Event Search

Search for events that occurred at the specified time and select an event to play from the list.

Playback channel selection menu

ITEM	Description
CAM1	Display the title of the selected channel.
Zoom	Zoom the video of the selected channel. (The zooming function is active only in '1'split screen.
Start bookmarking	The "Set bookmark" popup appears, and you can bookmark a play point for the backup purpose
Snapshot Capture	Capture the current video and save it in the jpeg format

Using the play bar

ITEM Description				
Jump	4	Move forward or backward.		
Reverse Fast Play	*	The video will be reversely played at the speed of $x64 > 32 > 16 > 8 > 4$ > 2 in this order.		
Reverse Play	4	Play the video in the reverse direction.		
Pause		Stop playing forward or playback temporarily.		
Play	Play Play the video forward.			
Fast Forward	The video will be played forward at the speed of x2 < 4 < 8 < 16 < 32 64 in this order.			
Zoom In	Q	Move to the zoom in/out screen of the selected channel.		
Snapshot	0	Capture the current video and save it in jpeg format. Then, you can save the captured video in the HDD or export it to an external USB memory device. While you perform the snapshot, the current video will be stopped playing.		
Start/end bookmark	•	Add a bookmark for the current playback screen. Press this to display the "SET BOOKMARK" window. Provide each entry and click Start. The arrow in the bookmark button blinks to indicate that the bookmarking is in process. If you press the Bookmark button again, the bookmarking stops and the current settings will be reserved. Then, the reserved data can be backed up in Archive menu or can be played in the "RESERVED DATA MANAGEMENT" menu.		

Play

Bookmarking

During playback, you can add a bookmark for reserving the video data.

You can view the bookmarked data in the Archive menu, which can be saved to a connected device for the backup purpose.

- 1. Provide a tag in the **<TAG>** item for data reservation.
- Provide the details of the reserved data in the **<MEMO>** input box.
- 3. Click **<START>**. You will return to the play screen with the backup progress.
- To stop the bookmarking, click
 <BOOKMARK(♠)>.
- To quit the bookmarking, click **<STOP>**.
 To continue with bookmarking, just click **<CONTINUE>**.
- Click **RESERVE>**. You can export the reserved data to a connected storage device using the **ARCHIVE>**menu.





✓ What is the **<RESERVE>** function?

With the **<RESERVE>** function, you can reserve data even in overwrite mode.

This is useful if you want to backup data but you have no backup device available such as USB memory.

If you use "Reserve", the recording days will be compromised.

When you have backed up the reserved data to an external device, it is recommended to delete the internal reserved data.

To start the Archive menu

Using the Archive menu during playback

- 1. During the playback, click **<NEW ARCHIVE**()>.
- 2. The "ARCHIVING SETUP" window appears where you can reserve the data.
- Click <MENU() > in the lower left corner and select the <ARCHIVE> menu.
- 4. Press the [ARCHIVE] button on the remote control.

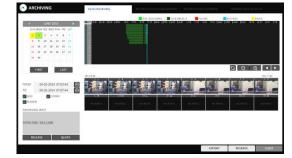
Using the Archive menu during monitoring

- 1. Click **<MENU**(MENU) > in the lower left corner and select the **<ARCHIVE>** menu.
- 2. Press the [ARCHIVE] button on the remote control.

Archive

You can archive the searched data or reserve it.

- From the **<ARCHIVE>** menu, select
 <NEW ARCHIVING>.
- Select a date for the archive from the calendar in the left.
- ✓ The date containing recording data will be marked in a colored box.
 - FIRST: The first date of recording is automatically selected.
 - LAST: The last date of recording is automatically selected.
- 3. Check the **<START>** and **<END>** times.
- ✓ Drag the timeline to specify the start and end time.
- 4. Mark the **<LOG>** and **<CODEC>** checkboxes and select to include the archiving.
- Click **QUERY>**. The results will be listed in **<ARCHIVING INFO>**.
- ✓ The maximum backup capacity for one time is 20GB.
- ✓ If the archiving request exceeds 20GB, the end time will be adjusted to within 20GB.
- If you want to import to a storage device, connect it to the DVR and click **EXPORT>**.



- If you just want to reserve the data, click <RESERVE>. If the <TAG NAME> dialog appears, enter the name and click <OK>. Click<RESERVE> to save it to the HDD.
- ✓ Using **<RESERVE>** will compromise the recording days available. When you have archived the reserved data to an external device, it is recommended to delete the internal reserved data.
- 8. To exit the Archive menu. click **<CLOSE>**.



Archiving

Reserved data management

You can search for the reserved data and delete or import it to a storage device.

- From the **<ARCHIVE>** menu, select **<RESERVED DATA MANAGEMENT>**.
 The reserved data will be listed.
- Select a data type form <AVI> and
 <Snapshot Capture>
 - >AVI : Searches AVI video files stored in the DVR.
 - >SNAPSHOT CAPTURE : Searches captured Snapshots stored in the DVR.
- If you want to play the data, double-click a desired data item or click it and select <PLAY>.



- If you want to import to a storage device, connect it to the DVR and click **EXPORT>**.
- 5. If you want to delete the reserved data, click < > next to the list. Click **<CANCEL ALL>** to cancel reserving the whole page at once.
- 6. To exit the Archive menu, click **<CLOSE>**.

Playing the archived data

You can search the storage device for the archived data and check the details of or play it.

- 1. Connect the storage device containing the archived data.
- When the storage device is recognized, click **SEARCH>**.
- To view the details, click < >> next to the list.
- Click **VERIFY INTEGRITY>** to check if the data is corrupt or incomplete.
- 4. Select an item to play from the lost and click **PLAY>**.
- 5. To exit the Archive menu, click **<CLOSE>**.





Archive Devices Setup

Provide the FTP server information for archiving data in the HDD before testing the transfer.

- From the < ARCHIVE > menu, select < ARCHIVE DEVICES SETUP>
- 2. Move to the FTP information box.
- 3. Fill in each item using a virtual keyboard.
- >HOST NAME : enter the address at which you can access the server.
- >PORT : enter the port number to which you can access the server.
- >USER NAME : enter the user ID with which you can access the server.
- >PASSWORD : enter the connection password.
- >DIRECTORY: specify the archiving path.



- 5. To apply the change, click **<APPLY>** in the bottom of the screen.
- 6. When done, press the **[EXIT]** button on the remote control or click **<CLOSE>** in the lower screen. The confirmation message appears and you will return to the previous menu.



What is the Web Viewer?

Web RA is a user-friendly software application that enables you to control the video data in connection with a remote DVR.

System Requirements

The following is the minimum h	nardware and operating system requirements to run Web RA.
Operating System	Windows Vista Home Baisc / Premium Window 7
Web browsers:	Internet Explorer 9.0 or later/Mozilla Firefox 3.6/Google Chrome 4.1/Opera 10 Some web browsers other than Internet Explorer may not fully function
CPU	Intel Pentium 2.0 GHz or Higer
Memory	512 MB
Display	16-bit 1024 x 768 High Color
Hard Disk Drive	50MB (space required for installing the web viewer) * Additional HDD space is required for saving your recordings. The file size of your recording may differ depending on the specified quality.

Connection

Open a browser and enter the IP address of DVR, or type the URL in the address bar.

To connect to the DVR from inside

✓ Check the "Network Status" and verify the <IP ADDRESS> and <WEB SERVICE PORT> of the DVR. (page 40)



✓ Enter the IP address and web service port in the address bar of the browser. Ex) http://192.168.1.116:8080/

To connect to the DVR from outside

Using the IP address

- ✓ Check the "Network Status" and verify the **EXTERNAL IP ADDRESS>** and **EXECUTE PORT>** of the DVR. (page 40)
- ✓ If using a fixed (external) IP, enter the external IP that is specified in the DVR in the address bar of the web browser. Ex) If the internal IP address is set to "http://222.112.4.48:8080" (192.xxx.xxx.xxx), no access from outside is allowed.

Using the URL

- ✓ Check the "Network Status" and verify the <DDNS ADDRESS> and
 - **<WEB SERVICE PORT>** of the DVR. (page 41)
- ✓ Enter the DDNS address and web service port in the address bar of the browser. Ex) http://001CB8123456.DVRLINK.NET:8080
 - In a router network, you have to set the "Port Forwarding" and "DMZ Setting" to allow access from outside.
 - For the necessary settings of the router, refer to the user manual of the router or contact the manufacturer of the router.

- 1. Provide the user ID and password.
- ✓ The default User name: ADMIN; the default password is 1234.



- 2. Click the warning bar to install the ActiveX.
- ✓ If you fail to download the ActiveX control, move to **Tools** → **Internet Options**→**Security**→ **Custom Level** → Download unsigned ActiveX control, and change its setting from "Disable (recommended)" to "Enable", and then click OK..
- 3. Click <Install>.

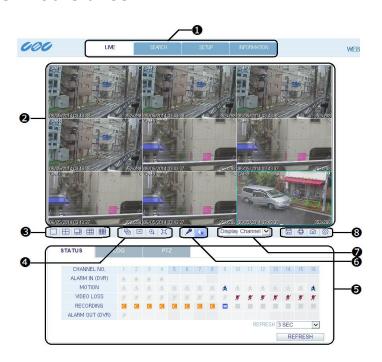
This website wants to install the following add-on: 'WebViewer Control' from 'CBC Co., Ltd.'. What's the risk?

4. When the installation is complete, you will see the live screen.



Live

Live Screen At a Glance



1

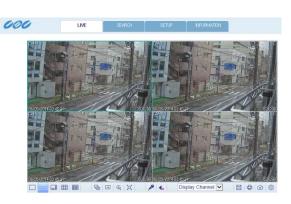
Item	Description
1.View selection tab	You can switch to the live, playback and setup screen and check the provided information.
2. Live	Display the live screen of the currently connected DVR.
3. Split Mode	Select and switch to a desired split-screen mode.
4. Sequence	Set the sequence mode, switch to the next camera or select the full screen mode.
5. Status	Show the connection status of each channel.
Log	Show the log.
Refresh Time	Set the interval at which the DVR Status is refreshed.
Reload	Load the DVR Status immediately.
6. Voice transmission	You can turn on or off the output of the voice signal to DVR.
7. Channel	Select a channel listed in the screen.
8. Save	Save the live video on the screen.
Print	Print out the current screen
Capture	Capture the selected image.
ActiveX Settings	Configure the ActiveX settings or specify the saving path of the captured image.

Switching the split mode

Click the Switch button to switch the mode as follows:



<1-split Mode>



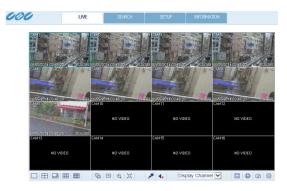
<4-split Mode>



<8-split Mode>



<9-split Mode>



<16-split Mode>

Web Viewer

To save the video

- 1. Click < | | > to start saving.
- 2. The video from the selected channel will be saved to the PC in the AVI format. (Default path: C:\SaveFolder) Click < | > again to stop saving. Click < ActiveX Setting> to display the context menu where you can change the saving path.

Print

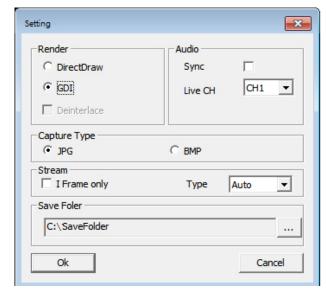
- 1. Click < > to start saving.
- 2. The current screen will be printed with the printer connected to the PC

Screen capture

- 1. Click < 🔯 >
- 2. The current screen of the selected channel will be saved to the path specified in the PC. (Default path: C:\SaveFolder)
 - Click **<ActiveX Setting>** to display the context menu where you can change the saving path.

ActiveX Settings

- 1. Click < 🔯 >.
- When the setup screen appears, you can change the settings of the render type, audio, capture and saving path as well as the video streaming.
 - >Render: DirectDraw is recommended in order to enable the hardware acceleration.
- If you want to change the saving path, click < (Save Folder) and specify a new path. The Windows Vista user cannot change the saving path.
- 4. Change the streaming settings according to the PC specification and network environment. Auto mode is recommended.
 - >Sync: If this option is set, the audio signal will be synchronized with the video signal. However, you may encounter a delay due to buffering for the synchronization.



- >Live CH: Set the audio signal to use in live monitoring mode.
- >I Frame Only: Only the I frames (key frames) will be transferred.

>Type:

- Auto: The DVR will optimize the quality and FPS to the network status and specification of the connected PC before transferring the data.
- Main: The video will be transferred in high definition (HD).
- Second: The video will be transferred in a medium definition (SD).
- 5. When done, click **<OK>** to save your settings.

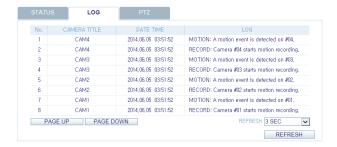
Status tab

Click **<Status>** at the bottom of the screen. You can check the event occurrence for each channel of the connected DVR.



Log tab

Click **<Log>** at the bottom of the screen. You can check the log of the connected DVR.



PTZg tab

Click **PTZ>** at the bottom of the screen. You can control the operations of a PTZ camera. Adjust the focus, zooming and iris of the camera. You can use the arrow buttons to control the operations of the camera.

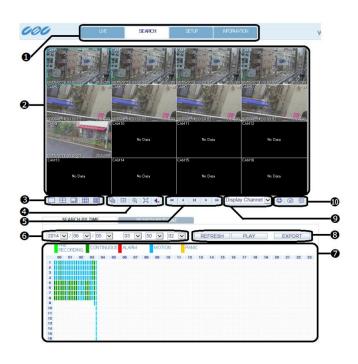


- > Pattern : You can configure various settings of the camera including the zooming and movement.(Applied to some PTZ cameras only)
- > PRESET : Move the camera in a predefined direction.
- > Swing: The camera will move back and forth to a set position.

Search

Click **<Playback>** to display the remote control screen for the DVR..

Search Viewer at a Glance



Itom	Description
Item	Description
1.View selection tab	You can switch to the live, playback and setup screen and check the provided information.
2.Playback Screen	Play the recording data.
3.Split Mode	Select and switch to a desired split-screen mode.
4.Sequence	Set the sequence mode, switch to the next camera or select the full screen mode. You can turn on/off the voice signal.
5.Play button bar	You can control the playback screen.
6.Time Selection	Specify the start time of playback.
7.Time Line	Indicates the status of the recorded data.
8.REFRESH	Reload the time line.
PLAY	Play the video that satisfies your search criteria.
Backup	Archive the video that satisfies your search criteria.
9.Channel Selection	Select a channel listed in the screen.
10. Screen	Print out the current screen.
Image Capture	Capture the selected image
ActiveX Settings	Configure the ActiveX settings or specify the saving path of the captured image.

Search by time

Use the timeline to search for the data recorded in the DVR.

- 1. Select a date that you want to search.
- 2. Click <REFRESH>.
- Check the existence of recording data in the bottom time line and specify the time range for your search.

You can specify the start time by moving the time bar.



>REFRESH: If your changes are not applied to the current screen, reload the changes.

>PLAY: Play the searched video.

>Backup : Archive the recorded video.



You can sort the recording data items by event to facilitate your search.

- Mark the checkbox of the event that you want to search for.
- 2. Specify the start and end dates and times for your log search.
- 3. Set the display order of the items found.
 - >LATEST: The most recent event will be listed on top.
 - >OLDEST: The earliest event will be listed on top.
- 4. Click **<SEARCH>**. You can check the log for your search at the bottom of the screen.
- 5. Select a log to play the recording data.





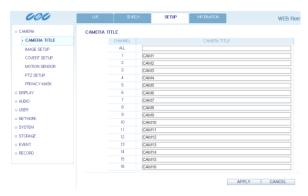
Setup

Click **<SETUP>** to display the remote control screen for the DVR.

When done, click **<APPLY>** to apply the changes to the remotely connected DVR.

- ✓ If the DVR is in process of system or record setting, the remote control will be disabled.
- II If you change the settings remotely at will, the major 'Record Settings' of the DVR may be changed, which is not recommended at all.

Setup Viewer at a Glance



Camera

Camera Title

You can name the camera title that is displayed on each channel screen. Select a channel to name and provide a new title. Then, click **<APPLY>** to apply it.

✓ You can enter up to 8 alphanumeric characters for the camera title.

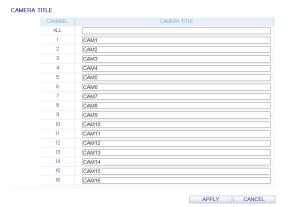


Image Setup

You can set the image of each channel. When done, click **<APPLY>** to apply the changes.

- ✓ The default color value is **<50>**.
 (Brightness, Contrast, Tint, Color)
- If you change the default settings, the video from the DVR or the video color may not be displayed properly.

CHANNEL	BRIGHTNESS	CONTRAST	HUE	COLOR
1	50	50	50	50
2	50	50	50	50
3	50	50	50	50
4	50	50	50	50
5	50	50	50	50
6	50	50	50	50
7	50	50	50	50
8	50	50	50	50
9	50	50	50	50
10	50	50	50	50
11	50	50	50	50
12	50	50	50	50
13	50	50	50	50
14	50	50	50	50
15	50	50	50	50
16	50	50	50	50

Web Viewer

APPLY CANCEL

Covert Setup

You can set to hide the video of a specific camera from a specific user. Set to hide the camera video so that a specific user or user group can not view. To change the covert settings from user group to user, move to the **<USER>** menu and make necessary changes.

When done, click **<APPLY>** to apply the changes.

COVERT SETUP

Motion Setting

Specify the use of motion detection and reaction for each channel and set also the daytime/nighttime options.

Select a channel. Set the Motion detection zone and specify the daytime range.

When done, click **<APPLY>** to apply the changes.

✓ For information about how to set the motion area, refer to "Motion Sensor". (page 30)





PTZ Setup PTZ SETUP

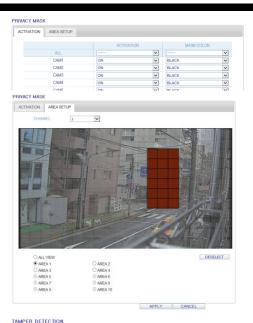
To make DVR utilize camera s PTZ functions, match the protocol and baud rate of connected cameras and DVR.

CHANNEL	ADDRESS	PROTOCOL		BAUD P	RATE
1	0	PELCO-D	~	9600	~
2	0	PELCO-D	~	9600	~
3	0	PELCO-D	~	9600	~
4	0	PELCO-D	~	9600	~
5	0	PELCO-D	~	9600	~
6	0	PELCO-D	~	9600	~
7	0	PELCO-D	~	9600	~
8	0	PELCO-D	~	9600	~
9	0	PELCO-D	~	9600	~
10	0	PELCO-D	~	9600	~
11	0	PELCO-D	~	9600	~
12	0	PELCO-D	~	9600	~
13	0	PELCO-D	~	9600	~
14	0	PELCO-D	~	9600	~
15	0	PELCO-D	~	9600	~
16	0	PELCO-D	~	9600	~

Web Viewer

Privacy Mask

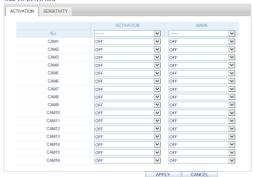
You can enable a camera channel's privacy masking function and set masking area.



Tamper Detection (Available on DR-8/16FX5)

You can set to detect tampering attempt to interfere monitoring operations by tampering the installed camera.

✓ For information about how to set the TAMPER, refer to "TAMPER DETECTION". (page 30)



Display

OSD Setting

Configure the settings for the time, title, boundary, icon and language that will be displayed on the screen. Make changes to each item of the OSD menu and click **<APPLY>** to apply the changes.

Monitor Settings

You can set the interval of an active sequence. Specify the interval and click **<APPLY>** to apply it.

Audio

Audio/Buzzer

You can configure the settings of the voice and audio signal.

 ✓ For details about each displayed item, refer to "Audio Setup". (page 36)



User

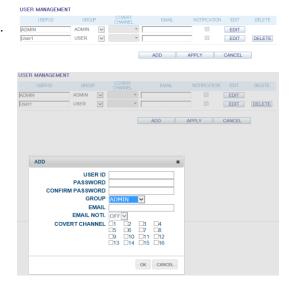
User Management

You can add a user account and change the password.

 ✓ For details about each displayed item, refer to "User Setting". (page 38)

To add a user, click **<Add>** and provide the user information.

If you want to delete the user click **** next to it. When done, click **<APPLY>** to apply the change.



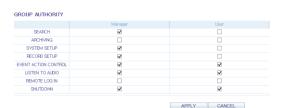
Group Authority Setting

You can grant different user groups different permissions to a specific menu.

Mark the checkboxes of the menu items accessible by the user group.

When done, click **<APPLY>** to apply the changes.

 ✓ For more information about the accessible menu items,refer to " Group Authority". (page 39)



Web Viewer

Network

IP Setup

You can check the network connection status and change the baud rate.

Change the maximum transfer rate and click **<APPLY>** to apply it.

 ✓ For more information about each network entry, refer to "IP Setup". (page 40)

DDNS Setting

You can configure the DDNS settings so that remote users who are connected to the network can access remotely.

Change the DDNS settings and click **<APPLY>** to apply the changes.



DHCP 🔽

Email Setting

You can register and test an email address so that an email notification is delivered at a specific interval or if an event occurs.

Provide the necessary information and click

<aPPLY> to apply it.

✓ For more information, refer to "Email". (page 41)

System

Date/Time Setting

Specify the current date and time.

When done, click **<APPLY>** to apply the changes.

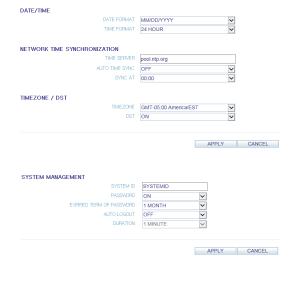
✓ For For more information about each of the time and date settings, refer to "Date/Time". (page 43)

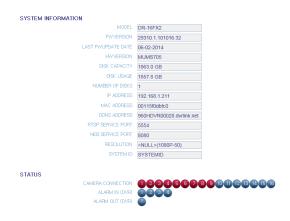
System Management

You can configure the access settings of: log in, log out, and auto logout.

System Information

You can check information of system firmware version, disk space, and network settings, as well as the status information of network connection and alarm I/O.





Control Device Setting

Set the connection of both the remote control and the keyboard control.

Change the communication settings and click

- **<APPLY>** to apply the changes.
 - ✓ For more information about each communication item, refer to "Control Device". (page 46)



Web Viewer

Storage

Device Information

Internal storage devices physically installed in the DVR and their recording time information are displayed.

Check Disk operation mode

You can check disk operation mode setting.



DISK OPERATIONS DISK WRITE MODE OVERWRITE FECOPOING TIME LIMIT OFF

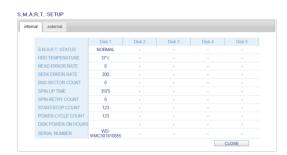
APPLY CANCEL

S.M.A.R.T Status

The detailed S.M.A.R.T information of each internal storage device is displayed.

✓ What is S.M.A.R.T?

This is a sort of HDD self-diagnosis tool
that detects any error on the system and
alerts the user if an error occurs.



Event

Alarm Output

Specify the alarm output conditions with the work schedule..

When done, click **<APPLY>** to apply the changes.

✓ For more information about the alarm output and ON/OFF schedule, refer to "Alarm Out". (page 49)



Event Notification

Specify the notification method using one of **BUZZER OUT>,<DISPLAY>,<E-MAIL>**against an event alarm that occurs.

Specify the buzzer output time, display time and email notification, and click **<APPLY>** to apply the changes.

 ✓ For more information about the event notification, refer to "Event Notification". (page 50)

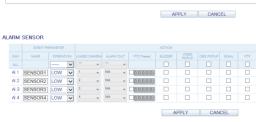


Alarm Sensor

You can configure the settings of the alarm sensor and specify the operation of the sensor if an event occurs.

When done, click **<APPLY>** to apply the changes.

 ✓ For more information about each of the alarm sensor actions, refer to "Alarm Sensor". (page 53)



Web Viewer

Motion Sensor

You can set an action to execute when a motion is detected.

When done, click **<APPLY>** to apply the changes.

 ✓ For more information about how to set the motion sensor, refer to "Motion Sensor". (page 54)

Video Loss

You can select an action for **<BUZZER>** and **<EMAIL>** and determine what to do on the alarm output port if no video is received from the camera. When done, click **<APPLY>** to apply the changes.

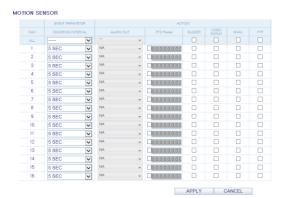
System Event

You can set which action to perform if an event related to the disk, recording, network or system happens.

You may want to notify the user of the event using the alarm output, buzzer, OSD popup and email.

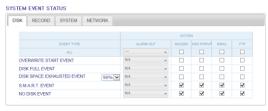
When done, click **<APPLY>** to apply the changes.

 ✓ For more information about how to set the system event, refer to "System Event". (page 55)



			ACTION			
CAM	ALARM OUT		PRESET	BUZZER	EMAIL	FTF
ALL	_	-				
1	NA	~	0,0,0,0,0,0,0,0,0,0,0,0			
2	NA	~	0,0,0,0,0,0,0,0,0,0,0,0,0			
3	NA	*	0,0,0,0,0,0,0,0,0,0,0,0,0			
4	NA	~	0,0,0,0,0,0,0,0,0,0,0,0,0			
5	NA	-	0,0,0,0,0,0,0,0,0,0,0,0			
6	NA	~	0,0,0,0,0,0,0,0,0,0,0,0,0			
7	NA	-	0,0,0,0,0,0,0,0,0,0,0,0,0			
8	NA	~	0,0,0,0,0,0,0,0,0,0,0,0,0			
9	NA	~	0,			
10	NA	~	0,0,0,0,0,0,0,0,0,0,0,0			
11	NA	-	0,0,0,0,0,0,0,0,0,0,0,0,0			
12	NA	-	0,0,0,0,0,0,0,0,0,0,0,0			
13	NA	¥	0,0,0,0,0,0,0,0,0,0,0,0,0			
14	NA	-	0,0,0,0,0,0,0,0,0,0,0,0,0			
15	NA	~	0,0,0,0,0,0,0,0,0,0,0,0,0			
16	NA	-	0,0,0,0,0,0,0,0,0,0,0,0,0,0			

VIDEO LOSS





SK RECORD SYSTEM NETWORK						
			ACTIO	IN		
EVENT TYPE	ALARM OUT		BUZZER	OSD POPUP	EMAIL	FTP
ALL		~				
BOOTING EVENT	N/A	w				
LOGIN FAIL EVENT RETRY 3 TIMES V	N/A	-				
FAN FAIL EVENT	N/A	w	✓	✓	✓	✓
TEMPERATURE FAIL EVENT	N/A	-	✓	✓	✓	✓

SK RECORD SYSTEM	NETWORK					
				ACTION		
EVENT 1	TYPE	ALARM	OUT	BUZZER	EMAIL	FTP
ALL			w			
TROUBLE IN INTERNET CON	NECTION	N/A	v			
FAIL IN REMOTE LOGIN	RETRY 3 TIMES V	N/A	w			
FAIL IN DONS UPDATE	RETRY 3 TIMES V	N/A	-			

APPLY CANCEL

APPLY CANCEL

Record Setup

Record Setting

You can set the recording options for Auto or Manual mode

When done, click **<APPLY>** to apply the changes.

 ✓ For more information about how to set each mode, refer to "Operation Mode". (page 58)



Continuous Recording

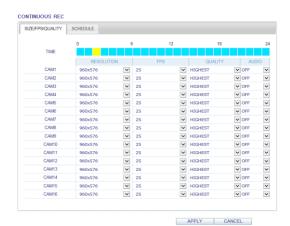
You can configure the settings of: continuous recording time, recording size, frame rate per second and quality.

Click <

✓ > next to each item to display the list of values available.

When you complete the recording size and schedule settings, click **<APPLY>** to apply your settings.

 ✓ For more information about the continuous recording size and schedule, refer to "Continuous Recording". (page 59)





Web Viewer

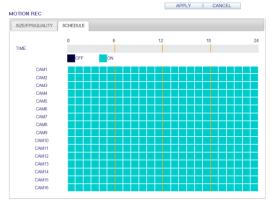
Motion Recording

Set the **<SIZE/FPS/QUALITY/AUDIO>** and the **<SCHEDULE>** to apply if a motion event occurs. Click **< >** > next to each item to display the list of values available.

MOTION REC SIZE/FPS/QUALITY SCHEDULE 960x576 HIGHEST CAM3 960x576 25 25 HIGHEST ~ HIGHEST 960x576 CAM5 960x576 25 25 HIGHEST > > > > > 960x576 HIGHEST CAM7 CAM8 960x576 ✓ HIGHEST ∨ OFF ✓ HIGHEST✓ HIGHEST CAM10 960x576 **v** 25 25 ∨ OFF CAM12 960x576 ✓ HIGHEST **∨** OFF 960x576 HIGHEST CAM14 960v576 ✓ HIGHEST 960x576 HIGHEST

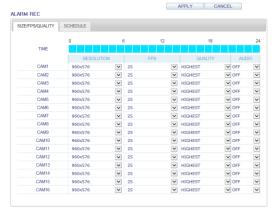
Complete setting the **<SIZE/FPS/QUALITY/AUDIO>** for the motion recording as well as the **<SCHEDULE>**, and click **<APPLY>** to apply the changes.

✓ For more information about the motion recording size and schedule, refer to "Motion Recording". (page 60)



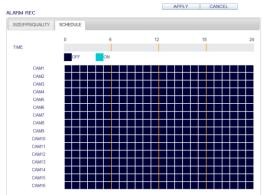
Alarm Recording

Set the **<SIZE/FPS/QUALITY/AUDIO>** and the **<SCHEDULE>** to apply if a motion event occurs. Click **< >>** next to each item to display the list of values available.



Complete setting the **<SIZE/FPS/QUALITY/AUDIO>** for the alarm recording as well as the **<SCHEDULE>**, and click **<APPLY>** to apply the changes.

✓ For more information about the alarm recording size and schedule, refer to "Alarm Recording". (page 61)



APPLY CANCEL

Panic Recording

From the **<PANIC RECORD>** menu, you can set the resolution, FPS, quality and audio settings to your preference.

When you have completed the manual record settings, click **<APPLY>** to apply the changes.

 For more information about the manual record settings, refer to "Panic Recording". (page 61)

PANIC REC 960x576 HIGHEST HIGHEST CAM4 960x576 HIGHEST **∨** OFF HIGHEST V OFF V OFF V OFF CAME 960x576 HIGHEST HIGHEST 960x576 HIGHEST 960x576 HIGHEST CAMID 960x576 HIGHEST ✓ OFF CAMII 960x576 HIGHEST V OFF V OFF V OFF 960x576 CAM15 960x576 APPLY CANCEL

Network Streaming

You can specify the maximum size of network streaming and video resolution form remote users and changes the FPS.can set

When done, click **<APPLY>** to apply the changes.

	MAX RESOL	UTION	MAX	
CAM1	960x576	~	25	~
CAM2	960x576	~	25	~
CAMS	960x576	~	25	~
CAM4	960x576	~	25	~
CAM5	960x576	~	25	~
CAM6	960x576	~	25	~
CAM7	960x576	~	25	~
CAMB	960x576	~	25	~
CAM9	960x576	~	25	~
CAM10	960x576	~	25	~
CAM11	960x576	~	25	~
CAM12	960x576	~	25	~
CAM13	960x576	~	25	~
CAM14	960x576	~	25	~
CAM15	960x576	~	25	~
CAM16	960x576	~	25	~

NETWORK STREAMING

AUDIO MAPPING

Setting the Audio Mapping

You can activate audio of a channel to communicate remote user.

Click < ≥ on the right side of each item to display audio channels available to select.

Click <APPLY> to complete and apply audio setup.

	AUDIO IN	~
CAM1	AUDIO 1	~
CAM2	AUDIO 2	~
CAM3	AUDIO 3	~
CAM4	AUDIO 4	~
CAM5	AUDIO 1	~
CAM6	AUDIO 2	~
CAM7	AUDIO 3	~
CAMB	AUDIO 4	~
CAM9	AUDIO 1	~
CAM10	AUDIO 2	~
CAM11	AUDIO 3	~
CAM12	AUDIO 4	~
CAM13	AUDIO 1	~
CAM14	AUDIO 2	~
CAM15	AUDIO 3	~
CAM16	AUDIO 4	~



APPLY CANCEL

GanzView

You can use the smart viewer to monitor the network on a remote site and play the monitoring video anytime anywhere.

GanzView specification

Minimum/ recommended specification

minimani, recommended specification					
os	Minimum specification	Recommended specification			
Android Phone	Processor :800 MHz or higher	Processor : 1 GHz or higher			
	Flash: 512 MB or higher	Flash: 512 MB			
	RAM: 512 MB or higher	RAM : 512 MB			
	SD Card: 4 GB or higher	SD Card : 16 GB or higher			
	OS: 2.0 or higher	OS : 2.1 or higher			
iPhone	iPhone 3G,	iPhone 3GS or higher			
	iPod touch 3rd Generation	iPhone OS 3.2 or higher			
	iPhone OS 3.1.3 or higher				

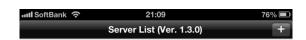
Using the GanzViewer on iPhone

How to download the iPhone-dedicated application

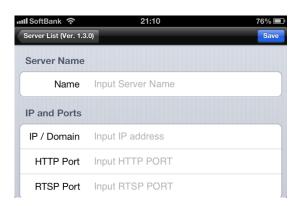
From your iPhone, access the App Store. Enter "GanzView" in the search bar to find it before downloading. Install the application on your iPhone. The GanzView supports the 1/4 split screen mode.

To connect to DVR with GanzView

- 1. Select and run the GanzView.
- 2. Click < > > in the top right corner of the DVR List to select and add a site to the list.



- Enter the server name and click <Save>.
- 4. Provide the IP address, HTTP port number and RTSP port number, and click **<Save>**.





Mobile Viewer

- Provide the access ID of the DVR as well as the password.
- 6. Specify the use of the Auto Login.
- 7. Click **<Save>**.



8. Select the site that you added in the DVR List.



9. Try to access the DVR.If connected successfully, you will see the screen as shown.



Split Mode

 Click any area on the screen.
 The main menu appears at the bottom of the screen.

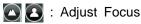


- 2. Click < > in the top left corner to switch to 1-split mode; click < + + + > to switch to Multi-split mode.
 - Use the mouse to scroll the screen to the left or right to move to the next camera video screen.



To use PTZ control

- 1. Click < 🙀 > in the top right corner.
- 2. Use buttons on the screen for PTZ control. (available only for cameras supporting PTZ functions.)



💽 🗐 : Zoom In/Out

: Select one from the listed presets to run the selected preset action stored in the camera.

: Activates Pan / Tilt toward the selected direction.

: Captures the real-time video and saves as a still image in the handset s image folder.



Mobile Viewer

To use Digital Zoom

- 1. Click < 🔣 > in the middle right corner.
- 2. Click < > for Zoom in, < > for Zoom out
- Touch the screen with two fingers and pinch open to zoom in, or pinch close to zoom out.

To View HQ (High Quality) Video

- 1. Click < HD/HQ > in the right corner
- 2. It switch to HQ video

Using the Log View

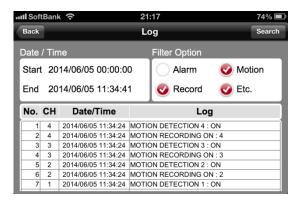
1. From the main menu, click < >.
You can check the log of the data stored.

Select one from Alarm, Motion, Record, Etc. and click < Search >.
 You will view the log of related items.





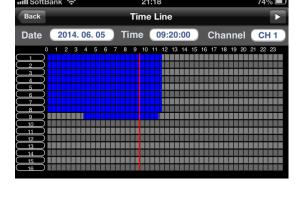




Using the Search function

- 1. From the main menu, click < >.

 You can view the history of the data stored.
- Select a desired time and date.You can use the vertical time bar to specify the start time.
- 3. Click < > to play the video recorded at the specified time.





4. Click any area to display the play bar with which you can control the playing direction and speed of the video.



Mobile Viewer

Using the Setup function

From the main menu, click < stup. >.
You will be connected to the web viewer site.

 ✓ For details about each displayed item, refer to "Setup". (page 81)



Using GanzView with Android

How to download the Android-dedicated application

From your smart phone, access the Play Store. Enter "GanzView" in the search bar to find it before downloading. Install the application on your Smart Phone.

✓ The GanzView supports the multi-split screen mode.

To connect to DVR with GanzView

- 1. Select and run the GanzView.
- 2. Use the Add button to select and add a site to the list.

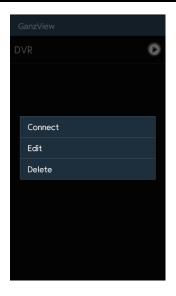


- 3. Please enter a Name.
- 4. Provide the IP address, HTTP port number and RTSP port number, and click **<Save>**.
- 5. Provide the access ID of the DVR as well as the password.
- 6. Select whether or not to save the ID and PW.
- 7. Click <Save>.



Mobile Viewer

8. Select the site that you added in the DVR List. Press and hold the mouse button to display the pop-up window.

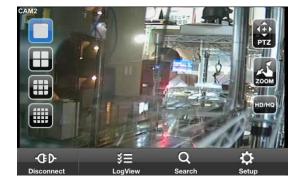


 Select <Connect> and try to access.
 If connected successfully, you will see the screen as shown.



Split Mode

 Click any area on the screen.
 The main menu appears at the bottom of the screen.



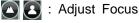
- 2. Click < > in the top left corner to switch to 1-split mode; click < + | | | | | > to switch to Multi-split mode.
 - Use the mouse to scroll the screen to the left or right to move to the next camera video screen.

CAM1 CAM2 CAM4 CAM4



To use PTZ control

- 1. Click < 🔛 > in the top right corner.
- 2. Use buttons on the screen for PTZ control. (available only for cameras supporting PTZ functions.)



🕣 🗐 : Zoom In/Out

: Select one from the listed presets to run the selected preset action stored in the camera.

: Activates Pan / Tilt toward the selected direction.

 Captures the real-time video and saves as a still image in the handset □s image folder.

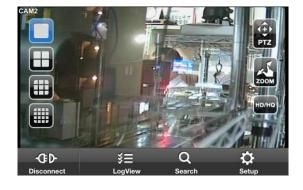
To use Digital Zoom

- 1. Click < 🔣 > in the middle right corner.
- 2. Click < > for Zoom in, < > for Zoom out
- Touch the screen with two fingers and pinch open to zoom in, or pinch close to zoom out.



To View HQ (High Quality) Video

- 1. Click < HD/HO > in the right corner
- 2. It switch to HQ video



Mobile Viewer

Using the Log View

1. From the main menu, click < >.

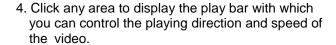
You can check the log of the data stored.

Select one from Alarm, Motion, Record, Etc. and click < Search >.
 You will view the log of related items.

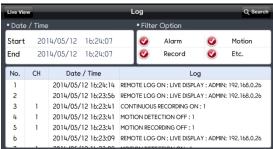
Using the Search function

- 1. From the main menu, click < >.

 You can view the history of the data stored.
- Select a desired time and date. You can use the vertical time bar to specify the start time.
- Click < > to play the video recorded at the specified time.













Using the Setup function

From the main menu, click < stup. >.
You will be connected to the web viewer site.

 ✓ For details about each displayed item, refer to "Setup". (page 81)

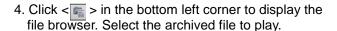


Archive Viewer

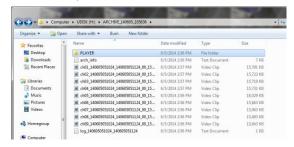
You can play the archived date w5th Backup player.

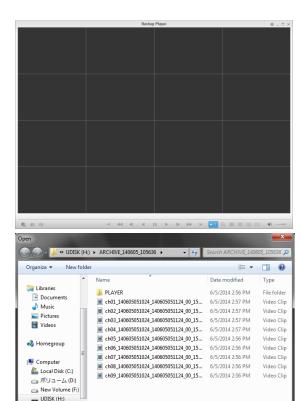
Getting started with the Backup Player

- 1. Connect the backup USB storage to your PC.
- 2. Open the folder saving the archived images.
- 3. Run the Backup Player.



- 5. Check the integrity of the archived file.
- When done, the archived file will be played on the screen.







File name

▼ All Supported Files (*.mul, *.avi, ▼

Backup Player At a Glance



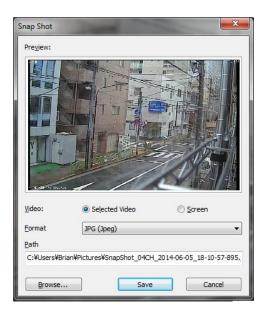
Item	Description			
1.Setup	Configure the environment settings.			
Minimize, Close	Minimize or close the Backup Player.			
2.Channel Information	Show the channel information and the video resolution.			
3.Play Time	Display the time of the current video image			
4.Play Time	Display the current playback time			
5.File Search	Open the file that you backed up			
Capture	Capture the current screen.			
Print	Print out the current screen.			
6.Playback Control	Control the playback direction and speed of the current video. For more information about how to use the playback control buttons, refer bar to "If you want to play ". (page 67)			
7.Digital Zoom	Zoom the video of the selected channel. (The zooming function is active only in '1'split screen.)			
8.Split Mode	Switch to 1-/4-/8-/16-split screen mode			
9.Audio Setting	Show the sound signal status and volume level			
10.Play Bar	Display the current playback position in the video.			

Archive Viewer

Video Capture

Click < to capture the current video image.

- > Selected Video : Capture the actual frame of the current video.
- > Screen : Capture the visible portion of the current video.
- > Format : Select a saving format. (BMP, JPG, PNG)
- > Path : Specify the saving path.
 - -Default location : My Documents\My Pictures



Print Out

Click < > > to print out the image When the "Print" window appears, check the preview and click < Print>



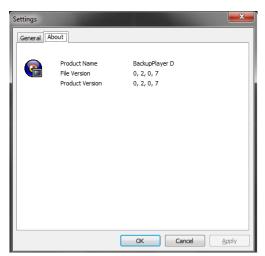
Settings

Click < ₹ > to configure the Backup Player settings. You can check the version of the Backup Player.

 Maintain image aspect ratio: Preserve the aspect ratio of the image.
 If you do not mark this option, the image will be adjusted to fit the screen.



✓ About : You can check the program information including the current version.



Specification

Item	DR-4FX1	DR-8FX2	DR-16FX2
VIDEO			
INPUT SIGNAL MAIN MONITOR SPOT OUT	NTSC / PAL HDMI / VGA Analog 1ch (1Vpp,75Ohm) x 1	NTSC / PAL HDMI / VGA Digital 1ch/4ch (1Vpp,750hm) x 1	NTSC / PAL HDMI / VGA Digital 1ch/4ch (1Vpp,75Ohm) x 1
LOOP THROUGH MOTION DETECTION	NO YES	NO YES	NO YES
AUDIO			
INPUT SIGNAL OUTPUT SIGNAL CODEC	4CH(10KOhm, 2.8Vpp) 1CH(600Ohm, 2.8Vpp) G.711	4CH(10KOhm, 1Vrms) 1CH(600Ohm, 1Vrms) G.711	4CH(10KOhm, 1Vrms) 1CH(600Ohm, 1Vrms) G.711
RECORDING			
CODEC REC.RATE REC.RESOLUTION	H.264 MAX. 120/100 FPS@960H CIF,2CIF,4CIF,960H	H.264 MAX. 240/200 FPS@960H CIF,2CIF,4CIF,960H	H.264 MAX. 480/400 FPS@960H CIF,2CIF,4CIF,960H
ALRM I/O			
ALARM INPUT	4CH, pulled up to 5V via 10KOhm	4CH, pulled up to 5V via 10KOhm	4CH, pulled up to 5V via 10KOhm
ALARM OUTPUT	1CH RELAY (5V,35mA)	1CH RELAY (5V,35mA)	1CH RELAY (5V,35mA)
STORAGE	4		
INTERNAL HDD (SATA) EXTERNAL STORAGE ODD	1 NO NO	2 NO NO	2 NO NO
INTERFACES			
USB(USB2.0) RS-485 RS-232 LAN REMOTE CONTROL	2 ports (Front) 1 NO 1 x 10/100 YES	2 ports (Front) 1 NO 1 x 10/100/1000 YES	2 ports (Front) 1 NO 1 x 10/100/1000 YES
ETC			. = 0
SIGNAL SWITCH WATCHDOG COOLINGFAN	YES YES NO	YES YES 1 x 40mm	YES YES 1 x 40mm
POWER			
POWER SUPPLY	12VDC, Adaptor 3.3A 100-240V AC, 50-60Hz	12VDC, Adaptor 3.3A 100-240V AC, 50-60Hz	12VDC, Adaptor 3.3A 100-240V AC, 50-60Hz
POWER CONSUMPTION	12W (with HDD, Seagate Pipeline 500GB)	25W (with HDD, Seagate Pipeline 500GB)	25W (with HDD, Seagate Pipeline 500GB)
ENVIRONMENT	. ,	· ,	. ,
HUMIDITY TEMPERATURE	10~90% NC 0 ~ 40degC (32~104degF)	10~90% NC 0~ 40degC (32~104degF)	10~90% NC 0~ 40degC (32~104degF)
CHASSIS			
DIMENSION(WEIGHT)	1U (2kg)	1U (3.5kg)	1U (3.5kg)
CERTIFICATION	F00.0F	F00.0F	F00.0F
	FCC, CE	FCC, CE	FCC, CE

Item	DR-8FX5	DR-16FX5
VIDEO		
INPUT SIGNAL MAIN MONITOR SPOT OUT	NTSC / PAL HDMI / VGA Digital 1/4ch (1Vpp,75Ohm) x 2 Digital 1/4/9/16ch (1Vpp,75Ohm) x 1	NTSC / PAL HDMI / VGA Digital 1ch/4ch (1Vpp,75Ohm) x 4 Digital 1/4/9/16ch (1Vpp,75Ohm) x 1
LOOP THROUGH MOTION DETECTION	8ch (1Vpp, 75Ohm) YES	16ch (1Vpp, 75Ohm) YES
AUDIO		
INPUT SIGNAL OUTPUT SIGNAL CODEC	8CH(10KOhm, 2.8Vpp) 1CH(600Ohm, 2.8Vpp) G.711	16CH(10KOhm, 2.8Vpp) 1CH(600Ohm, 2.8Vpp) G.711
RECORDING		
CODEC REC.RATE REC.RESOLUTION	H.264 MAX. 240/200 FPS@960H CIF,2CIF,4CIF,960H	H.264 MAX. 480/400 FPS@960H CIF,2CIF,4CIF,960H
ALRM I/O		
ALARM INPUT ALARM OUTPUT	10CH (8ch+2ch), pulled up to 5V via 10KOhm 4CH RELAY (5V,35mA)	18CH (16ch+2ch), pulled up to 5V via 10KOhm 8CH RELAY (5V,35mA)
OTODA OF	4CH TTL	8CH TTL
STORAGE INTERNAL HDD (SATA)	5	F
EXTERNAL STORAGE ODD	eSATA, NAS (FTP server for backup) NO	5 eSATA, NAS (FTP server for backup) NO
INTERFACES		
USB(USB2.0) RS-485 RS-232 LAN REMOTE CONTROL	3 ports (2 Front + 1 Rear) 2 1 1(WAN) x 10/100/1000 YES	3 ports (2 Front + 1 Rear) 2 1 1(WAN) x 10/100/1000 YES
ETC		
SIGNAL SWITCH WATCHDOG COOLINGFAN	YES (NTSC/PAL) YES 2 x 60mm	YES (NTSC/PAL) YES 2 x 60mm
POWER		
POWER SUPPLY	SMPS, 100W, 100-240VAC, 50-60Hz	SMPS, 100W, 100-240VAC, 50-60Hz
POWER CONSUMPTION	21W without HDD	24W without HDD
ENVIRONMENT		
HUMIDITY TEMPERATURE	10~90% NC 0~ 40degC (32~104degF)	10~90% NC 0~ 40degC (32~104degF)
CHASSIS		
DIMENSION (mm)	2U 430(W) x 367(D) x88.4(H)	2U 430(W) x 367(D) x88.4(H)
CERTIFICATION		
	FCC, CE	FCC, CE



English Disposal of your old appliance

- When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/ EC.
- All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
- For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

Français/French Élimination de votre ancien appareil

- Ce symbole, représentant une poubelle sur roulettes barrée d'une croix, signifie que le produit est couvert par la directive européenne 2002/96/EC.
- Tous les produits électriques et électroniques doivent être éliminés séparément de la chaîne de collecte municipale des ordures, par l' intermédiaire des installations de collecte prescrites et désignées par le gouvernement ou les autorités locales.
- Une élimination conforme aux instructions aidera à réduire les conséquences négatives et risques éventuels pour l'environnement et la santé humaine.
- Pour plus d'informations concernant l'élimination de votre ancien appareil, veuillez contacter votre mairie, le service des ordures ménagères ou encore le magasin où vous avez acheté ce produit.

Deutsch/German Entsorgung von Altgeräten

- Wenn dieses Symbol eines durchgestrichenen Abfalleimers auf einem Produkt angebracht ist, unterliegt dieses Produkt der europäischen Richtlinie 2002/96/EC.
- Alle Elektro- und Elektronik-Altgeräte müssen getrennt vom Hausmüll über die dafür staatlich vorgesehenen Stellen entsorgt werden.
- Mit der ordnungsgemäßen Entsorgung des alten Geräts vermeiden Sie Umweltschäden und eine Gefährdung der persönlichen Gesundheit.
- Weitere Informationen zur Entsorgung des alten Geräts erhalten Sie bei der Stadtverwaltung, beim Entsorgungsamt oder in dem Geschäft, wo Sie das Produkt erworben haben.

Italiano/Italian RAEE: SMALTIMENTO DELLE VOSTRE VECCHIE APPARECCHIATURE

- Quando il simbolo del "Cassonetto Barrato" è apposto su un prodotto, significa che lo stesso può ricadere nei termini previsti dalla Direttiva Europea nr. 2002/96/EC in funzione dell'attuazione definita dalla Legislazione dei singoli stati membri dell'Unione Europea.
- Tutti i prodotti elettrici ed elettronici dovrebbero essere smaltiti separatamente dai rifiuti municipali, tramite appositi contenitori, approvati dall'Amministrazione Comunale o dalle Autorità Locali.
- Il corretto smaltimento delle vostre vecchie apparecchiature, contribuirà a prevenire possibili conseguenze di impatto negativo sull' ambiente e per la salute dell'uomo.
- Per maggiori informazioni circa lo smaltimento delle vostre vecchie apparecchiature, siete pregati di contattare l'ufficio municipale della vostra città, il servizio di smaltimento rifiuti o il punto vendita nel quale avete acquistato il prodotto.

Polski/Polish Utylizacja starych urządzeń

- Kiedy do produktu dołączony jest niniejszy przekreślony symbol kołowego pojemnika na śmieci, oznacza to, że produkt jest objęty europejską dyrektywą 2002/96/EC.
- Wszystkie elektryczne i elektroniczne produkty powinny być utylizowane niezależnie od odpadów miejskich, z wykorzystaniem przeznaczonych do tego miejsc składowania wskazanych przez rząd lub miejscowe władze.
- Właściwy sposób utylizacji starego urządzenia pomoże zapobiec potencjalnie negatywnemu wpływowi na zdrowie i środowisko.
- 4. Aby uzyskać więcej informacji o sposobach utylizacji starych urządzeń, należy skontaktować się z władzami lokalnymi, przedsiębiorstwem zajmującym się utylizacją odpadów lub sklepem, w którym produkt został kupiony.

Português/Portuguese Eliminação do seu antigo aparelho

- Quando este símbolo de latão cruzado estiver afixado a um produto, significa que o produto é abrangido pela Directiva Europeia 2002/96/ EC.
- Todos os produtos eléctricos e electrónicos devem ser eliminados separadamente da coleta de lixo municipal através de pontos de recolha designados, facilitados pelo governo ou autoridades locais.
- A eliminação correcta do seu aparelho antigo ajuda a evitar potenciais consequências negativas para o ambiente e para a saúde humana.
- Para obter informaçõs mais detalhadas acerca da eliminação do seu aparelho antigo, contacte as autoridades locais, um serviço de eliminação de resíduos ou a loja onde comprou o produto.

Español/Spanish Cómo deshacerse de apa

Cómo deshacerse de aparatos eléctricos y electrónicos viejos

- Si en un producto aparece el símbolo de un contenedor de basura tachado, significa que éste se acoge a la Directiva 2002/96/EC.
- Todos los aparatos eléctricos o electrónicos se deben desechar de forma distinta del servicio municipal de recogida de basura, a través de puntos de recogida designados por el gobierno o las autoridades locales.
- La correcta recogida y tratamiento de los dispositivos inservibles contribuye a evitar riesgos potenciales para el medio ambiente y la salud pública.
- 4. Para obtener más información sobre cómo deshacerse de sus aparatos eléctricos y electrónicos viejos, póngase en contacto con su ayuntamiento, el servicio de recogida de basuras o el establecimiento donde adquirió el producto.

America

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Commack, NY 11725, U.S.A http://www.computarganz.com/

CBC AMERICA Corp. Los Angeles Division

21241 South Western Avenue, Suite #160 Torrance, CA 90501, U.S.A

http://www.computarganz.com/

CBC AMERICA Corp. Mexico Branch Office

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Hansaallee 191, D-340549 Düsseldorf, GERMANY

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CBC(POLAND) Sp. z o.o. Warszawa

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Via E. Majorana, 2 20834-Nova, Milanese (MB), ITALY

http://www.cbceurope.it/cctv

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15 Jalan Kilang Barat, No.04-03 Frontech Centre, SINGAPORE 159357

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China

CBC (BEIJING) Trading Co., Ltd. Beijing

Room B905-A, Tian Yuan Gang Center, No. C2 Dong San Huan Bei-Lu, Chaoyang District, Beijing CHINA 100027 http://www.cbc-china.cn/

CBC (HONG KONG) Co., Ltd. Hong Kong

Unit 901, 9/F., Tower 5, China Hong Kong City, 33 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong, CHINA http://www.cbc-china.cn/

CBC (SHANGHAI) Trading Co., Ltd. Shanghai

Room 1801, GIFC, No.1438 Hongqiao Road, Changning District, Shanghai, CHINA 200336

http://www.cbc-china.cn/

CBC (GUANGZHOU) Trading Co., Ltd. Guangzhou

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