

Operation Instruction

DIGITAL VIDEO RECORDER

CS4 (4-Channel)

CS8 (8-Channel)



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Copy Button

Pressing the  button allows you to copy video clips.

Esc Button

During menu setup, pressing the  button closes the current menu or setup dialog box.

Play/Stop Button

Pressing the  button enters the playback mode, and pressing the button again exits the playback mode. When entering the playback mode, video is paused. Pressing the  (Play/Pause) button plays back video at regular speed. The screen displays  when the DVR is in the Pause mode and the screen displays  when the DVR is playing back video.

Camera Buttons

Pressing the individual camera buttons will cause the selected camera to display full screen. Buttons 1 to 9 are also used to enter passwords.

Arrow Buttons

These buttons are used to navigate through menus and GUI. You can also use them to change numbers by highlighting a number in the menu and using the  and  arrow buttons to increase or decrease the number's value.

When in the PIP display format, pressing the  and  arrow buttons moves the position of the small screen counter-clockwise and clockwise, and pressing the  and  buttons changes the PIP screen size.

In the playback mode, pressing the  button plays video backward at high speed. Pressing the button again toggles the playback speed from  ,  and  , and the screen displays  ,  and  respectively. While playing video, pressing the  button plays video forward at high speed. Pressing the button again toggles the playback speed from  ,  and  , and the screen displays  ,  and  respectively. When in the pause mode, pressing the  button moves to the next image and pressing the  button moves to the previous image.

Play/Pause Button

In the live monitoring mode, pressing the  button freezes the current screen and the screen displays  icon. When in the playback mode, pressing the  button pauses playing video.

Pressing the  button selects a highlighted item or completes an entry that you have made during system setup.

HDD LED

The HDD LED flickers when the DVR is recording or searching video on the hard disk drive.

Power LED

The POWER LED is lit when the unit is On.

USB Port

A USB port on the front panel is provided to connect external hard disk or flash drives for video clip copying or system upgrades. Position external drives close enough to the DVR so that you can make the cable connections, usually less than 6 feet. Use the USB cable provided with the hard disk drive to connect it to the DVR.

A USB mouse (not supplied) can be connected to the USB port. You can use the mouse to navigate through the screens and menus much like you would on a computer.

A USB to Serial converter can be connected to the USB port. Multiple text-in devices can be used with a USB to Serial converter.

Remote Control Buttons

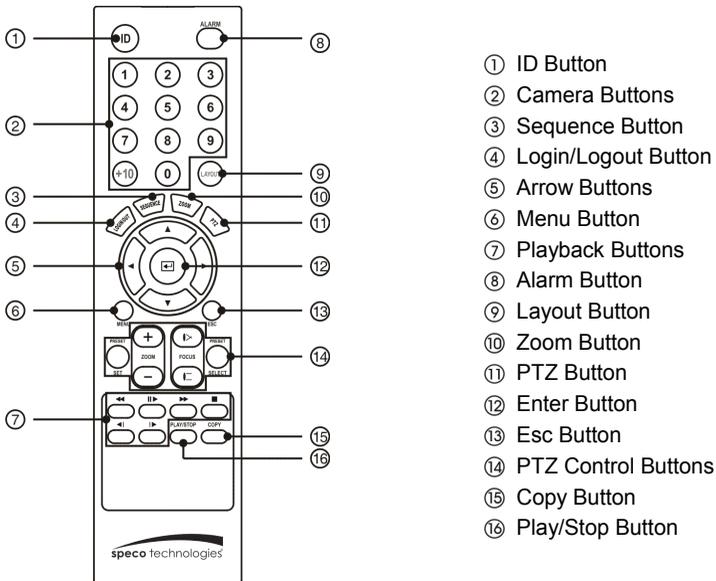


Figure 4 – Infrared remote control.

ID Button

If a DVR System ID is set to 0, the infrared remote control will control that DVR without any additional operations. (Refer to the *System Information* setup screen in this chapter for further information on setting the System ID.) If the system ID is 1 to 16, you must to press the  button and then press the number button (1 to 16 (+10 & 6)) in order to control that DVR. If the System ID of two or more DVRs is set to 0, those DVRs will react to the infrared remote control at the same time.

Camera Buttons

Pressing the individual camera buttons will cause the selected camera to display full screen. Buttons 1 to 9 are also used to enter passwords.

Sequence Button

When in the Live Monitoring mode, pressing the  button displays live channels sequentially.

Login/Logout Button

Pressing the  button displays the Login or Logout screen.

Arrow Buttons

These buttons are used to navigate through menus and GUI. You can also use them to change numbers by highlighting a number in the menu and using the **Up** and **Down** arrow buttons to increase or decrease the number's value.

When in the PIP display format, pressing the **Up** and **Down** arrow buttons moves the position of the small screen counter-clockwise and clockwise.

Pressing the **Left** and **Right** buttons moves through screen pages in the Live Monitoring mode and Search mode.

Menu Button

In the Live Monitoring mode and Search mode, pressing the  button displays the menu icons at the top of the screen.

Playback Buttons

- **Rewind:** Pressing the  button plays video backward at high speed. Pressing the button again toggles the playback speed from ,  and .
- **Play/Pause:** Pressing the  button plays back video at regular speed. The screen displays  when the DVR is in the Pause mode and the screen displays  when the DVR is playing back video.
- **Fast Forward:** Pressing the  button plays video forward at high speed. Pressing the button again toggles the playback speed from ,  and .

- **Stop:** Pressing the  button stops playback and enters the Live Monitoring mode.
- **Backward:** When in the pause mode, pressing the  button moves to the previous image.
- **Forward:** When in the pause mode, pressing the  button moves to the next image.

In the Live Monitoring mode, pressing any playback button enters to the Search mode.

Alarm Button

Pressing the  button resets the DVR's outputs including the internal buzzer during an alarm.

Layout Button

Pressing the  button toggles between different display formats. The available formats are: 3x3, 1P7, 1P5, 2x2 and PIP.

Zoom Button

Pressing the  button zooms the current image on the screen. A PIP with a rectangle temporarily displays showing what area of the screen has been enlarged. You can use the arrow buttons to move the rectangle to another area.

PTZ Button

Pressing the  button enters the PTZ (Pan/Tilt/Zoom) mode which allows you to control properly configured cameras.

Enter Button

The  (Enter) button selects a highlighted item or completes an entry that you have made during system setup. This button is also used to enter the Cameo mode in the Live Monitoring mode or Search mode (8-ch Model Only).

Esc Button

During menu setup, pressing the  button closes the current menu or setup dialog box.

PTZ Control Buttons

While in the PTZ mode, the  buttons are used to save Presets and load a Preset View, the  buttons are used to Zoom In and Zoom Out, and the  buttons are used for Near Focus and Far Focus.

Copy Button

Pressing the  button allows you to copy video clips.

Chapter 4 – Operation

NOTE: This chapter assumes your DVR has been installed and configured. If it has not, please refer to Chapters 2 and 3.

The DVR's controls are similar to a VCR. As with a VCR, the main functions are recording and playing back video. However, you have much greater control over recording and playing back video. You can establish recording schedules based on time of day and day of the week. The DVR allows you to search through the recorded video using much more sophisticated tools than those available with VCRs. Additional DVR features that are not available with VCRs are remote control and viewing, and recording video at the same time you are watching previously recorded video.

The front panel controls are described in *Chapter 3 – Configuration*.

Turning on the Power

Once you have installed the DVR following the instructions in *Chapter 2 – Installation*, it is ready to record.

Live Monitoring

As soon as the DVR completes its initialization process, it will begin showing live video on the attached monitor and playing live audio through the attached speaker. The default mode is to display all cameras at once. Pressing any camera button will cause that camera to display full screen. It displays live video and plays live audio until the user enters another mode.

While in the live monitoring mode, pressing the **MENU** button displays the following Live Monitoring menu at the top of the screen. Pressing the **ESC** button hides the menu. You can navigate through menus and items by pressing the arrow buttons.



- ① Display
- ② Freeze
- ③ Sequence
- ④ Camera Menu
- ⑤ Alarm
- ⑥ Digital Deterrent
- ⑦ Panic
- ⑧ Setup
- ⑨ Search Mode
- ⑩ Login/Logout

Figure 65 – Live Monitoring menu.

NOTE: The Live Monitoring menu also can be displayed by moving the mouse pointer to the top of the screen.

Live Monitoring Menu

Display

Selecting  (Display Menu) in the Live Monitoring menu displays the following Display Menu.



- **Camera:** Selecting **Camera** and choosing the camera number displays the selected camera full screen. It is the same as pressing the individual camera buttons on the front panel or clicking the left mouse button on a camera image when in one of the multiview formats (i.e., 2x2, 1P5, 1P7 or 3x3). Clicking the left mouse button on the screen again returns to the previous display mode.

- **Screen:** Selecting **Screen** and choosing the screen mode (PIP, 2x2, 1P5, 1P7 or 3x3) displays the cameras in the selected multiview screen mode. Selecting each display mode is the same as scrolling the mouse wheel up and down when in one of the multiview formats (i.e., 2x2, 1P5, 1P7 or 3x3).

NOTE: In the 1P5 or 1P7 display mode, the main channel indicates the channel displayed on the large screen which is displayed in the top-left. You can select the camera you want to display on the main channel screen. Select a channel on the screen and click the right mouse button to display the Camera Menu. Selecting **Go To Main** swaps the selected channel with the main channel. This function is supported only in the 1P5 and 1P7 display modes and can be activated from any of channel screens except the main channel screen.

NOTE: You can change the location of the PIP (Picture-in-Picture) counterclockwise or clockwise by pressing the Up and Down arrow buttons, and change its size by pressing the Left and Right arrow buttons. To change its location and size by using the mouse, select the PIP and then click the right mouse button to display the following menu. Select the options you want. You can also change the location of the PIP by clicking the left mouse button on the PIP window and dragging it to where you want it located, and change the size of the PIP by clicking the left mouse button at the corner of the PIP window and dragging it until it is the desired size.



- **Previous Group, Next Group:** Selecting Previous Group or Next Group moves to the previous or next page.
- **Edit Group:** Selecting Edit Group enters the cameo mode. Refer to the following Active Cameo Mode for details.
- **OSD:** Selecting OSD toggles OSD On and Off.

Freeze

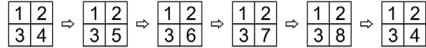
Selecting  (Freeze) in the Live Monitoring menu will freeze the current image on the screen until you select  again. It is the same as pressing the  (Play/Pause) button on the front panel. While in the Freeze mode, the icon  displays in bottom-left corner if Freeze is selected in the Display setup screen (OSD tab).

Sequence

Selecting  (Sequence) in the Live Monitoring menu causes the cameras to display sequentially. When in one of the multiview formats, selecting *Sequence* will cause the DVR to go through predefined screen layouts (Full Sequence). Or, the bottom, right screen will display live cameras sequentially (Cameo Sequence). For example, if you select  (Sequence) in the Live Monitoring in the 2x2 format, the 8-channel DVR changes pages as follows:



Full Sequence



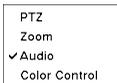
Cameo Sequence

Selecting  again in the Live Monitoring menu exits the Sequence mode. While in the Sequence mode, the  icon displays in bottom-left corner if Sequence is selected in the Display setup screen (OSD tab). If all the cameras in a page are Off, or have lost video or are set to Covert (unless the user has authority to view covert cameras), that page will be excluded from the sequence.

NOTE: The *Full Sequence* for the full sequence monitoring and the *Cameo Sequence* for the cameo sequence monitoring should be selected in the Display setup screen (Main Monitor tab).

Camera Menu

Selecting  (Camera Menu) in the Live Monitoring menu displays the following Camera Menu.



- **PTZ:** Selecting PTZ and choosing the camera number allows you to control the selected camera as long as it has Pan, Tilt and Zoom capabilities. Refer to the following *PTZ Mode* section for details.
- **Zoom:** Selecting Zoom and choosing the camera number zooms the current image of the selected camera on the screen. Refer to the following *Zoom Mode* section for details.
- **Audio:** Selecting Audio toggles audio output On and Off.
- **Color Control:** Selecting Color Control and choosing the camera number allows you to control brightness, contrast, hue and saturation for each camera for the selected camera if a user who has Color Control authority logs into the system. It is the same as pressing and holding a camera button for a few seconds.

NOTE: It is important that cameras and monitors are correctly installed and adjusted prior to making any image adjustments using the DVR's controls.

NOTE: Any image adjustments you make will be applied to both the live video on the monitors and the recorded video.

NOTE: The *Camera Menu* also can be displayed by clicking the right mouse button on the screen while in the live monitoring mode.

Alarm

Selecting  (Alarm) in the Live Monitoring menu resets the DVR's outputs including the internal buzzer during an alarm. It is the same as pressing any button on the front panel when the alarm is activated.

Zoom Mode

You can enlarge an area of the video by selecting  (Camera Menu) → Zoom in the Live Monitoring menu. For a few seconds after selecting  (Camera Menu) → Zoom from the Camera, a rectangle displays on the screen. A rectangle shows the area that will be enlarged. You can move the rectangle around using the arrow buttons. Pressing the  (Play/Pause) button in the Zoom mode enlarges the area in rectangle. Exit the Zoom mode by selecting  (Exit) in the Zoom menu displayed when pressing the  button. While in the Zoom mode, the icon  displays if Zoom is selected in the Display setup screen (OSD tab).

Event Monitoring

When an event occurs, the DVR will display the camera associated with the event if **Event Monitoring On** is selected in the Display setup screen (Main Monitor tab).

How the cameras are displayed depends on the number of cameras associated with the event. If one camera is associated with the event, the DVR will display the camera full screen. If two to four cameras are associated with the event, the DVR will display the cameras on a 2x2 screen. If five to eight cameras are associated with the event, the DVR will display the cameras on a 1P5, 1P7 or 3x3 screen.

Event monitoring lasts for the dwell time set for event recording. After the dwell time has elapsed, the monitor returns to the previous screen unless another event has occurred. If you want to return to the live monitoring mode before the dwell time has elapsed, press one of the camera buttons.

Covert Camera

If a camera is set up as **Covert 1** in the Camera setup screen (Settings tab), that camera will not be displayed unless a user with **Covert Camera View** authority logs into the system. However the camera title and status icons will be displayed on the monitor.

If a camera is set up as **Covert 2** in the Camera setup screen (Settings tab), that camera appears to be Off unless a user with **Covert Camera View** authority logs into the system. The camera title will be grayed out and status icons will not be displayed on the monitor.

NOTE: When a camera is set up as Covert 1, the DVR displays the camera title and status icons on the covert video. When set up as Covert 2, the DVR displays only the camera title on the covert video.

If a user who has **Covert Camera View** authority logs into the system, the user can view video from cameras set to **Covert 1** or **Covert 2** including the camera titles and status icons.

PTZ Mode

If a user who has **PTZ Control** authority logs into the system, the user can control PTZ cameras. The DVR will control cameras with Pan, Tilt and Zoom capabilities. Select  (Camera Menu) → PTZ in the Live Monitoring menu to display the PTZ camera menu and enter the PTZ mode. Selecting  (Exit) in the PTZ menu displayed when pressing the  button exits the PTZ mode.

Camera Buttons: Pressing the individual camera buttons will cause the selected camera to display full screen.

Arrow Buttons: Pressing the  button plays video backward at high speed. Pressing the button again toggles the playback speed from ,  and . Pressing the  button plays video forward at high speed. Pressing the button again toggles the playback speed from ,  and . When in the pause mode, pressing the  button moves to the next image and pressing the  button moves to the previous image.

Play/Pause Button: Pressing the  button plays back images at regular speed opauses playing video.

Play/Stop Button: Pressing the **PLAY/STOP** button enters the playback mode, and pressing the button again exits the playback mode. When entering the playback mode, video is paused. Pressing the  button plays back video at regular speed. The screen displays **||** when the DVR is in the Pause mode and the screen displays **▶** when the DVR is playing back video.

You can use a mouse for convenient playback control. Position the mouse pointer on the playback screen, and the following Record Table Search (Compact View Mode) screen will display. The individual controls on the toolbar perform the following functions as described below:



-  Go to the previous image
-  Play/Pause
-  Go to the next image
-  Fast backward play
-  Fast forward play

Searching Video

While in the search mode, pressing the **MENU** button displays the following Search menu at the top of the screen. Pressing the **ESC** button hides the menu. You can navigate through menus and items by pressing the arrow buttons.



- ① Display
- ② Search
- ③ Go To
- ④ Export
- ⑤ Camera Menu
- ⑥ Alarm
- ⑦ Digital Deterrent
- ⑧ Panic
- ⑦ Data Source
- ⑧ Exit

Figure 68 — Search menu.

NOTE: The Search menu also can be displayed by moving the mouse pointer to the top of the screen.

Search Menu

Display

Selecting  (Display Menu) in the Search menu displays the following Display Menu.



- **Camera:** Selecting **Camera** and choosing the camera number displays the selected camera full screen. It is the same as pressing the individual camera buttons on the front panel or clicking the left mouse button on a camera image when in one of the multiview formats (i.e., 2x2 or 3x3). Clicking the left mouse button on the screen again returns to the previous display mode.
- **Screen:** Selecting **Screen** and choosing the screen mode (PIP, 2x2 or 3x3) displays the cameras in the selected multiview screen mode. Selecting each display mode is the same as scrolling the mouse wheel up and down when in one of the multiview formats (i.e., 2x2 or 3x3).
- **Previous Group, Next Group:** Selecting **Previous Group** or **Next Group** moves to the previous or next page.
- **Edit Group:** Selecting **Edit Group** enters the cameo mode.
- **OSD:** Selecting **OSD** toggles OSD On and Off.

Search

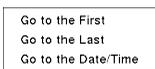
Selecting  (Search) in the Search menu displays the following Search menu. See the following *Event Log Search*, *Record Table Search*, *Motion Search* and *Text-In Search* sections for details.



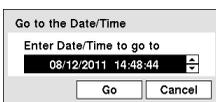
- **Event Log Search:** Selecting **Event Log Search** selects video from the event log.
- **Record Table Search:** Selecting **Record Table Search** selects using a recording table.
- **Motion Search:** Selecting **Motion Search** selects motion events.
- **Text-In Search:** Selecting **Text-In Search** selects text input strings.

Go To

Selecting  (Go To) in the Search menu displays the following GO TO menu.



- **Go to the First:** Selecting **Go to the First** displays the first recorded image.
- **Go to the Last:** Selecting **Go to the Last** displays the last recorded image.
- **Go to the Date/Time:** Selecting **Go to the Date/Time** displays the Go to the Date/Time screen.

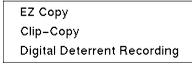


Move the cursor over the date and time and press the  (Play/Pause) button. You can use the Left and Right arrow buttons to highlight the year, month, day, hours, minutes and seconds. Use the Up and Down arrow buttons to change to the date and time you want to search for video.

Once you have set the date and time you want, press the  button. Then highlight **GO** and press the  button. The selected date and time will display. (If no video was recorded during the selected time, a message appears alerting you that no image was recorded at that time.) The  button and arrow buttons can now be used to review the surrounding video.

Export

Selecting  (Export) in the Search menu displays the following Export menu. See the following *Clip Copy* section for details.



- **EZ Copy:** Selecting EZ Copy will set the starting point of the video to be clip copied, and the  icon displays at the bottom-left corner of the screen. Selecting EZ Copy again will set the ending point of the video to be clip copied and displays the Clip-Copy screen.
- **Clip-Copy:** Select Clip-Copy, and the Clip-Copy screen appears to allow clip copy setup.
- **Digital Deterrent Recording:** Selecting Digital Deterrent Recording allows you to extract audio files from recorded audio on the DVR. Refer to *Chapter 3 – Configuration – Digital Deterrent* section for details.

Camera Menu

Selecting  (Camera Menu) in the Search menu displays the following Camera Menu.



- **Zoom:** Selecting Zoom and choosing the camera number zooms the current playback image of the selected camera on the screen.
- **Audio:** Selecting Audio toggles audio playback On and Off. Recorded audio will be played when the DVR displays a camera with recorded audio in full screen mode.
- **Enable De-Interlace:** Selecting Enable De-Interlace turns the de-interlace filters on.

NOTE: The video signal has a time difference of 1/60 second (1/50 second for PAL) between odd and even fields because it is composed of 60 interlaced fields per second (50 fields for PAL). When recording video with Very High (D1) resolution, video is made up of frame units combining two fields – one odd field and one even field. This can cause horizontal scan lines or flashes in areas with motion because of the time difference between the two fields. Turning on the de-interlace filter provides clearer video by eliminating these horizontal scan lines and flashes.

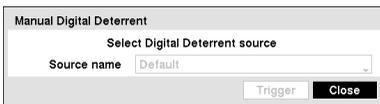
NOTE: The *Camera Menu* also can be displayed by clicking the right mouse button on the screen while in the search mode.

Alarm

Selecting  (Alarm) in the Search menu resets the DVR’s outputs including the internal buzzer during an alarm. It is the same as pressing any button on the front panel when the alarm is activated.

Digital Deterrent

Selecting  (Digital Deterrent) in the Search menu displays the following setup screen and allows the DVR to play manually.



Highlight the box beside Source name and press the  button to select the source file to play. Highlighting Trigger plays the selected file as the digital deterrent.



Clip-Copy

Video clips can be copied on an external USB hard disk or flash drive. The copied video clips can be viewed on computers running Microsoft Windows 98, ME, 2000, XP, Vista or 7. Refer to the *Appendix – USB Hard Disk Drive Preparation* for information on preparing the external drive for clip copy.

Selecting **EZ Copy** from the Export menu in the Search menu or pressing the **COPY** button during playback will set the starting point of the video to be clip copied, and the **Li** icon displays at the bottom-left corner of the screen. Selecting **EZ Copy** again from the Export menu in the Search menu or pressing the **COPY** button again will set the ending point of the video to be clip copied by displaying the **Clip-Copy** screen.

Select **Clip-Copy** from the Export menu in the Search menu, press the **COPY** button while in the Search mode, and the **Clip-Copy** screen appears to allow clip copy setup.

The screenshot shows the 'Clip-Copy' configuration window. It includes fields for 'From' and 'To' with date and time pickers, 'Channels' (1-8), 'Password' (<None>), 'Dest.' (1: Partition 1 [62 MB]), and 'File name' (08122011.exe). There is a checkbox for 'Include Text-In Data' and a progress bar. 'Start' and 'Close' buttons are at the bottom.

| | | |
|---|---|---------------------|
| From | <input type="checkbox"/> First | 08/12/2011 14:36:19 |
| To | <input type="checkbox"/> Last | 08/12/2011 14:36:19 |
| Channels | 1-8 | |
| Password | <None> | |
| Dest. | 1: Partition 1 [62 MB] | |
| File name | 08122011.exe | |
| | <input type="checkbox"/> Include Text-In Data | |
| Progress | [Progress Bar] | |
| <input type="button" value="Start"/> <input type="button" value="Close"/> | | |

Figure 73 – Clip-Copy screen.

You can search video from the first to last recorded images, or you can set the start and stop times and dates.

Highlight the box beside **From** and press the **⏮** (Play/Pause) button to toggle between On and Off. When set to Off, you can enter a specific Date and Time. When set to On, the search will be from the first recorded image.

Highlight the box beside **To** and press the **⏮** button to toggle between On and Off. When set to Off, you can enter a specific Date and Time. When set to On, the search will be to the last recorded image.

Highlight the box beside **Channels** and press the **⏮** button. You can select the cameras that you would like to include in your video clip.

Highlight the box beside **Password** and press the  button. A virtual keyboard appears allowing you to enter the password for reviewing the video clips.

Highlight the box beside **Dest.** and press the  button. You can select the storage device on which you would like to record the video clip.

CAUTION: The USB device for clip copy must be FAT 16 or FAT32 format.

The DVR automatically assigns a file name to the video clip. However, you can give the video clip file a different name. Highlight the box beside **File Name** and press the  button. A virtual keyboard appears. Enter a file name for the video you are backing up and select **Close**. The DVR will automatically add the camera number (for example "01") and ".exe" to the file name.

NOTE: When naming a file, you cannot use the following characters: \, /, :, *, ?, ", <, >, |.

Highlight **Include Text-In Data** and press the  button. This will toggle between On and Off. When this feature is On, you can include text-in data when copying video if the video was recorded with text-in data.

Once you have given the video clip a file name, highlight the **Start** button and press the  button. The confirmation screen displaying data size will appear. When the storage device does not have enough space, the DVR will ask if you want to copy as much of the video clip as possible in the available space.

Highlight the **Continue** button and press the  button to continue clip copy.

Once the clip copy starts, you can cancel it by selecting **Cancel** or hide the screen by selecting **Close**. When selecting **Close**, Clip Copy continues and a confirmation screen will display when complete.

NOTE: The file size for clip copy is limited to 30GB. When copying video clips larger than 2GB, the video clips will be save in units of 2GB. For example, 3 individual 2GB files will be created when saving a 6GB video clip.

You can use other functions on the DVR while video is being backed up. To do this, highlight the **Close** button and press the  button. You can return to the **Clip-Copy** screen at any time to check the progress.

You do not need to install any special software on your personal computer to review the video clips. Refer to the Speco Central Operation Instruction for instructions on how to review video clips you have copied.

NOTE: During Clip Copy, you cannot shut the system down, clear data on the storage device, or format the storage device.

CAUTION: Do NOT disconnect the USB cable or the power from the external drive while copying video clips. If the external drive is shut down or the USB cable is disconnected while copying video clips, THE DVR SYSTEM MAY NOT WORK NORMALLY OR THE EXTERNAL DRIVE COULD BE DAMAGED, and you will get an error message the next time you try to copy video clips. You will need to power down the DVR and restart it to get rid of the error message. Once the file system of the USB hard disk drive has been corrupted, this error message cannot be dismissed. Even after restarting the DVR it may automatically restart while preparing to clip copy. You must recover the file system using the recovery program, or you must reformat the hard disk drive.

Computer system requirements for using the Speco Remote program are:

- Operating System: Microsoft® Windows® XP x86 (32 Bit) (Service Pack 3), Microsoft® Windows® Vista x86 (32 Bit) (Service Pack 1), Microsoft® Windows® 7 x86 (32 Bit)
- CPU: Intel Pentium III (Celeron) 600MHz or faster
- RAM: 128MB or higher
- VGA: 8MB or higher (1024x768, 24bpp or higher)
- Internet Explorer: Version 6.0 or later

Start Internet Explorer on your local PC. You can run the Speco Remote program by entering the following information in the address field.

- “http://IP address:12088” (The DVR IP address and the Speco Remote port number (default: 12088) set in the Network setup screen (Speco Remote tab))
- Or, “http://DDNS.SPECOTECH.NET/YOURNAME” (The DVRNS server address and the DVR name registered on the DVRNS server)

NOTE: You will need to get the appropriate IP address for the DVR you want to connect to and the Speco Remote port number from your network administrator.

NOTE: Speco Remote only works with Microsoft Internet Explorer and will NOT Work with other browsers such as Google Chrome, Mozilla, Firefox, etc..



Select between the Remote Watch (Web monitoring) and Remote Search (Web search) modes. Entering ID and PASSWORD and clicking the [LOGIN] button logs in using the selected mode.

NOTE: Do NOT close the LOGIN window during the Speco Remote operation, otherwise, it will cause a script error when switching between Web monitoring and Web search modes and running the Speco Remote program again will be required.

NOTE: When running the updated Speco Remote for the first time, Internet Explorer might occasionally load the information of the previous version. In this case, delete the temporary internet files by selecting Tools ⇒ Internet Options ⇒ General tab, and then run Speco Remote again.

NOTE: There might be a problem that the bottom of Speco Remote page is cropped due to the address or status bars in Microsoft Internet Explorer 7.0. In this situation, it is recommended that websites open windows without address or status bars by changing the internet setting. (Go to the Tools⇒ Internet Options⇒ Security tab⇒ Click the Custom level... button ⇒ Select *Enable for the Allow websites to open windows without address or status bars* option)

NOTE: When running Speco Remote in the Microsoft Windows Vista or higher operating system, it is recommended to start Internet Explorer with elevated administrator permissions. Click the right mouse button on the Internet Explorer icon and select the *Run as administrator* option from the context menu. Otherwise, some functions of Speco Remote might be limited.

NOTE: There might be a problem with screen display or screen update due to low image transmission speed when using the Microsoft Windows Vista or higher operating system. In this situation, it is recommended you disable the Auto Tuning capability of your computer.

Run the Command Prompt with elevated administrator permissions (Go to the Start Menu → Accessories → *Command Prompt* → Click the right mouse button and select the *Run as administrator* option). Then enter “netsh int tcp set global autotuninglevel=disable” and hit the enter key. Restart your computer to apply the changes.

If you want to enable the Auto Tuning capability again, enter “netsh int tcp set global autotuninglevel=normal” after running the Command Prompt with elevated administrator permissions. Restart your computer to apply the changes.

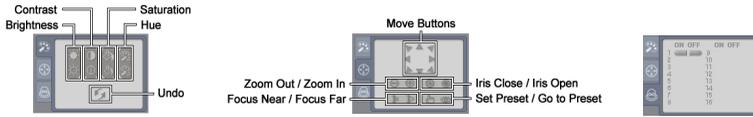
Web Monitoring Mode

Remote Watch is a remote web monitoring program that allows you to monitor live video transmitted in real-time from the remote DVR.



- ① Click the  to log out the Speco Remote program.
- ② Click the  to access to the web search mode.
- ③ Position the mouse pointer on the **WebWatch** logo to see the version of the Speco Remote program.
- ④ The DVR information window displays the login information of Speco Remote.
- ⑤ Click the screen format to select the desired display mode. When changing the screen format, the selected camera on the current screen will be located in the first cell of the new layout.
- ⑥ Click the camera button to select the camera to be viewed.
- ⑦ Click the  to adjust the brightness, contrast, saturation and hue of monitoring image.
- ⑧ Click the  to control pan, tilt and zoom of the camera from a remote site.

- ⑨ Click the  to control alarm out devices at the remote site.



- ⑩ Click the  to set up the image drawing mode and OSD display. You can adjust the display speed by changing the image drawing mode, and select OSD information to be displayed on the screen.
- ⑪ Click the  to save the current image as a bitmap or JPEG file format.
- ⑫ The event status window at the bottom displays a list of events that were detected from the remote site.
- ⑬ Selecting a camera on the screen and clicking the right mouse button displays the text menu screen.

| | |
|----------------------|---|
| Change Camera Title | |
| Enable Audio | |
| Aspect Ratio | ▶ |
| Deinterlacing | ▶ |
| Anti-Aliasing Screen | ▶ |

- **Change Camera Title:** Changes the camera name.
- **Enable Audio:** Enables audio communication with the remote site. When the audio control panel displays, click the  to send audio to the connected remote site and click the button again to stop sending audio. Click the  to monitor live audio from the connected remote site through the attached speaker and click the button again stop monitoring live audio. Clicking both  and  allows two-way communication. Clicking the  disables audio communication.

- **Aspect Ratio:** Changes the image aspect ratio.
- **Deinterlacing** Using a deinterlace filter for interlaced video enhances image display quality by eliminating horizontal scan lines and noise in areas with motion.
- **Anti-Aliasing Screen:** Enhances image display quality by eliminating stair stepping (aliasing) effects in the enlarged image.

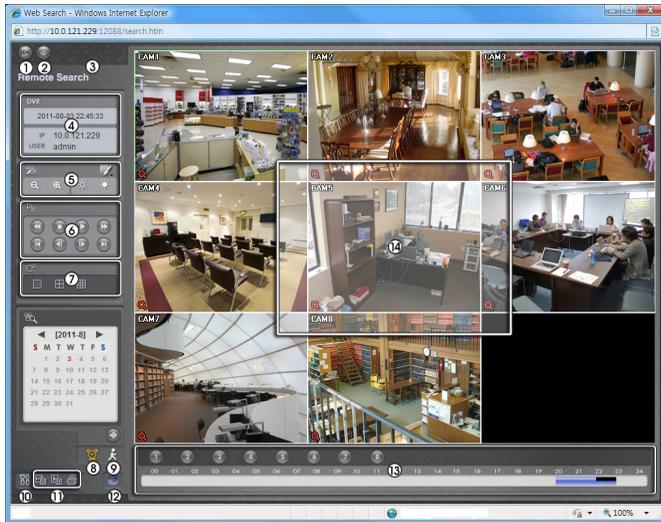
NOTE: A camera name change in the Remote Watch mode does not affect the camera name set up on the remote site. Leaving the Camera Title blank causes the camera name set up on the remote site to display.

NOTE: The  icon will display on each camera screen when audio communication is available between the Speco Remote system and a DVR.

Web Search Mode

Remote Search is a remote web search program that allows you to search recorded video on the remote DVR.

NOTE: The remote site connection in the Remote Search mode will automatically be disconnected if there is no activity for 30 minutes.



- ① Click the to log out the Speco Remote program.
- ② Click the to access to the web monitoring mode.
- ③ Position the mouse pointer on the WebSearch logo to see the version of the Speco Remote program.
- ④ The DVR information window displays the time information of recorded data on the remote DVR and login information of Speco Remote.
- ⑤ Click the to blur, sharpen, equalize and interpolate playback images. Click the to zoom out or zoom in the recorded image. Click the to adjust the brightness of the recorded images.

NOTE: Image processing works only in the pause mode.



- ⑥ The playback function buttons include fast backward, pause, play, fast forward, go to the first image, go to the previous image, go to the next image, and got to the last image.
- ⑦ Click the screen format to select the desired display mode.
- ⑧ Click the to enter the time-lapse search mode which allows you to search for recorded data by time and then play back images found within the time parameters. The Timetable window located at the bottom displays the time information for the image of the date selected on the calendar. If more than one video stream in the same time range, you can select the video stream you want to search. Clicking a specific time displays the image recorded at that time on the screen. Selecting the allows you to display an image from a specific time.
- ⑨ Click the to enter the event search mode which allows you to search for event log entries using specific conditions and play back the images associated with those event entries.
- ⑩ Click the to set up the image drawing mode and OSD display. You can change the display speed by adjusting the image drawing mode, and select OSD information to display on the screen.



- ⑪ Click the  to save any video clip of recorded data as an executable file, or click the  to save the current image in a bitmap or JPEG file format. Click the  to print the current image on a printer connected to your computer.
- ⑫ Click the  to reload the recording data.
- ⑬ The timetable displays recorded data of the selected camera by time (in hour segments).
- ⑭ Selecting a camera on the screen and clicking the right mouse button displays the text menu screen.

| | |
|----------------------|---|
| Change Camera Title | |
| Enable Audio | |
| Aspect Ratio | ▶ |
| Deinterlacing | ▶ |
| Anti-Aliasing Screen | |

- **Change Camera Title:** Changes the camera name.
- **Enable Audio:** Plays audio while playing back recorded video that has recorded audio. (Single-Screen Layout Only)
- **Aspect Ratio:** Changes the image aspect ratio.
- **Deinterlacing:** Using a deinterlace filter for interlaced video enhances image display quality by eliminating horizontal scan lines and noise in areas with motion.
- **Anti-Aliasing Screen:** Enhances image display quality by eliminating stair stepping (aliasing) effects in the enlarged image.

NOTE: A camera name change in the Remote Search mode does not affect the camera name set up on the remote site. Leaving the Camera Title blank causes the camera name set up on the remote site to display.

System Log Notices

| | |
|----------------------|--|
| Boot Up | Schedule Off |
| Shutdown Panic | On |
| Restart Panic | Off |
| Upgrade Clear | All Data |
| Upgrade Fail | Format Disk |
| Time Change | Disk Full |
| Time Zone Change | Disk Config Change |
| Time Sync | Disk 'No.' : 'serial number' |
| Time Sync Fail | Disk 'No.' : Removed |
| Disk Bad | Auto Deletion |
| Login Search | Begin |
| Logout Search | End |
| Setup Begin | Clip-Copy Begin |
| Setup End | Clip-Copy End |
| Remote Setup Change | Clip-Copy Cancel |
| Remote Setup Fail | Clip-Copy Fail |
| Setup Imported | Callback Fail |
| Setup Import Failure | Import Digital Deterrent file complete |
| Setup Exported | Import Digital Deterrent file error |
| Setup Export Failure | Export Digital Deterrent file complete |
| Setup Export Cancel | Export Digital Deterrent file error |
| Schedule On | |