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1 Overview

The remote software gives you full control of multiple Bosch Security Systems DVR4C digital video recorders via a PC. Remote live viewing, search, playback and system configuration are available. The software consists of three programs: Live Viewer, Playback Viewer, and Configuration Tool. By installing the DVR4C remote software on a Windows PC you can monitor real-time and recorded images via a LAN, a WAN, a telephone line (with limited functionality*) or the Internet. To manage multiple DVR4Cs easily, the DVR4C remote software supports camera lists and group modes. An Archive Player is also provided so that archived video recordings can be viewed without requiring the remote software to be installed.

1.1 Minimum PC requirements

	Minimum	Recommended
CPU	Intel Pentium III 600Mhz	Intel Pentium IV 2Ghz
Memory	128MB	256MB
VGA	16MB	64MB
Resolution	1024x768	1024x768
Disk space	10MB	10MB
OS	Windows 2000 Professional, XP	Windows 2000 Professional, XP
Network	10/100 BaseT	10/100 BaseT
Others		DirectX 8.1 or higher

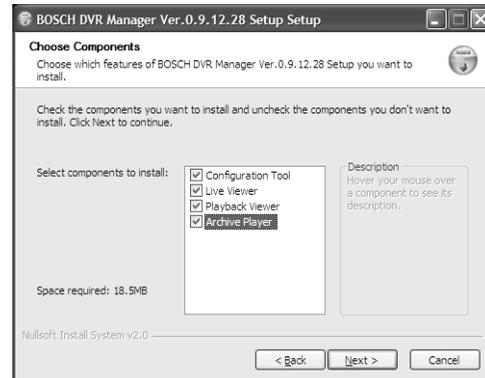
Before installing the programs, check the PC specifications. The DVR4C remote software may not perform correctly if the PC does not meet the minimum requirements. Other programs running on the PC may affect the performance of the remote software.

* PSTN telephone lines have limited bandwidth, so to improve overall performance the following features are changed:

- Only one DVR4C can be connected
- Only one channel can be viewed at a time
- Image update rate is very low
- Audio streaming is not available

2 Installing the program

1. Click the **Setup.exe** file on the remote software setup CD.
2. Choose a language and click **I Agree** to accept the license.
3. Click **Next** and then select the program modules you wish to install.



4. Click **Install**. The default directory is:
C:\Program Files\BoschSecuritySystems\DVR4C
To choose a different directory, click browse and choose a different location.
5. When installation is complete, click **Close**.

3 Live Viewer

When installation is complete, double-click the Live Viewer icon on your desktop to start the program. Alternatively, select the Live Viewer program via the Start button on the Task bar and the Programs menu item.

3.1 DVR list and log-in

The DVR list is shown on the right side of the window. To register a DVR:

1. Click  or right click the mouse and select **Add New DVR**.
> The **Add New DVR** screen appears.
2. Enter a DVR name for local use, a User name and a Password.
> The name can be up to 30 characters long.
> To have the system remember the password for subsequent log-ins, place a check mark in the **Save Password** box.
3. Select either a Ethernet or dial-in connection for the DVR you want to register.

4. Enter an IP Address and a Port number or click **Auto-detect** and select an IP address from the list.
5. Click **OK**.

You can log in to multiple DVRs if you wish.

3.1.1 Editing DVR information

Click  or right click the mouse and select **Edit DVR**.

> DVR information is applicable for the Live Viewer, the Playback Viewer, and the Configuration Tool screens.

3.1.2 DVR status

 Connected normally

 Fail to connect

3.1.3 Deleting a DVR

1. Select a DVR, then click  or select **Delete** by right clicking the mouse.
2. Click **Yes** to confirm.



3.1.4 Folders

You can use folders and subfolders to organize your list of DVRs. To create a folder:

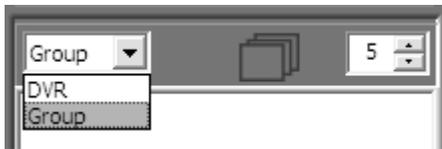
1. Right click the mouse in the DVR list window and select **New Folder**.
 - > The **New Folder** screen appears.
 - > To create a subfolder right click on an existing folder in the list.
2. Enter a name for the folder and click **OK**.
3. Drag and drop DVRs from the list into the folders and subfolders you have created.

3.1.5 Viewing live images

To see a live image, click a DVR to open it. If required, fill-in a user name and password. If not shown, click on a camera to view.

3.2 Group mode

Click the arrow next to the **DVR** box on the upper right of the screen and select **Group** from the drop-down menu.



3.2.1 Registering a group

1. Click  or move the mouse to the group list, right click and select **Add Group**.
2. Enter a group name and select the cameras to include in the group.
 - > The selected cameras are grouped and shown in the group list.
 - > Each group is limited to sixteen cameras.

Edit group information by selecting a group. Click  or select **Edit** by right clicking the mouse.

3.2.2 Deleting a group

1. Select a group, then click  or select **Delete** by right clicking the mouse.
2. Click **OK** to confirm.

3.2.3 Viewing group images

Click the group icon to monitor images. The cameo display mode is automatically selected according to the number of cameras within the group.

3.3 Assigning cameos

A cameo is a single camera picture in a multiscreen display. To assign a camera to a cameo:

1. Click one of the camera view icons  to select a multiscreen view.
2. Click on a DVR.
3. Click on the + beside the DVR name.
 - > A list of connected cameras appears.
4. Click on the cameo where you want that camera picture to be shown.
 - > A border appears around the cameo.
5. Click on a camera.
 - > The camera picture appears in the cameo.

You can change the position of a cameo by dragging and dropping it around the viewing area.

3.4 Camera views

To switch the display mode, click one of the camera view icons  to change the cameo display configuration.

- > Single, Quad, 3x3, 12+1 and 4x4 multi-image display modes are available.
- > 3x3, 12+1 and 4x4 multi-image display modes are used for viewing images from multiple DVR4Cs.

Click  or press **Alt+Enter** for full-screen viewing. To go back to the previous mode, press **Esc** or **Alt+Enter**.

- > Double-click an image within any multi-image display to see it in full-screen mode. To go back to the previous mode, double-click again.

3.5 Sequencing

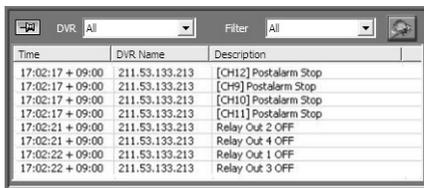
1. Set dwell time by clicking .
2. Click the sequence icon .
3. To stop the sequence mode, click  again.
 - > In sequence mode, the time duration can be set between 5 and 60 seconds. Default value is 5 seconds.
 - > In full-screen mode, cameras are sequenced; in Quad mode, DVRs are sequenced.

3.6 Instant Recording

To quickly record a live image to a local or network disk, place the mouse cursor on the image and right click. Click **Rec Start** for instant recording. **REC 00:03** appears in the upper right of the image. To stop recording, click **REC Stop**. If you do not stop recording manually, it stops automatically after ten minutes. The recording is stored on the disk and in the directory set in the options menu.

3.7 Event Log

The log screen displays changes in status for each DVR registered in the list of DVRs. If a DVR is deleted from the list, the corresponding log will no longer be displayed.



Time	DVR Name	Description
17:02:17 + 09:00	211.53.133.213	[CH12] Postalarm Stop
17:02:17 + 09:00	211.53.133.213	[CH9] Postalarm Stop
17:02:17 + 09:00	211.53.133.213	[CH10] Postalarm Stop
17:02:17 + 09:00	211.53.133.213	[CH11] Postalarm Stop
17:02:21 + 09:00	211.53.133.213	Relay Out 2 OFF
17:02:21 + 09:00	211.53.133.213	Relay Out 4 OFF
17:02:22 + 09:00	211.53.133.213	Relay Out 1 OFF
17:02:22 + 09:00	211.53.133.213	Relay Out 3 OFF

If a new event is received, it is added at the bottom of the list which scrolls down automatically. To stop scrolling, click .

3.7.1 Viewing an event log

- To view an event log for a specific DVR, select the DVR in the **DVR** drop-down list.
- To view a specific type of event, select the appropriate filter in the **Filter** drop-down list.
 - > Logs can be viewed as ALL, MOTION, INPUT ALARM, ERROR, STATUS and TEXT.

3.7.2 Viewing live event log images

Double-click an event on the event log list to view live images associated with that event.

3.7.3 Viewing the recorded event log images

Select an event from the event log list and click . The Playback Viewer program opens and the images are played back.

3.8 Options

Click  to open the option window with **Display** and **Instant Recording** menu tabs.

In the **Display** tab, set whether DirectX is to be used for viewing images and set the caption information for the images. Select the time and date format to be used for the caption display.

- > DirectX must already be installed on your PC before you can select it for use.
- > Using DirectX improves performance by 30%.
- > If the screen flickers when using DirectX, disable it.

In the **Instant Recording** tab, select the drive and directory for storing quick recordings. Select the format type for the recording file.

3.9 AUDIO



Use the drop-down list to select the audio input channel.

The icon  is normally blue but flashes when audio is received. Click the icon to mute the audio. Use the volume control  to set the audio level.

3.10 Relay Out

Use the drop-down list to select a DVR.



An output relay can be turned on or off by clicking .

4 Playback Viewer

To open the Playback Viewer program, double-click the Playback Viewer icon on your desktop. Alternatively,

click the  icon in the Live Viewer program. The Playback Viewer program can only work with one DVR at a time. Click  to log into the DVR.

To open the Live Viewer program from the Playback Viewer program click the Live Viewer program icon

 at the bottom of the screen.

To guarantee performance, Playback Viewer access is limited to two remote users.

4.1 Search

4.1.1 Timeline overview

The bottom of the screen shows a timeline with information on the playback video. Blue indicates that there are recordings. Red indicates Input Alarm recording and yellow indicates Motion Alarm recording. Light blue indicates no recordings.

4.1.2 Selecting a channel for full-screen

Select a channel for full-screen viewing by clicking one of the following icons , or double-clicking the image itself.

4.1.3 Time line scale

Adjust the time line scale by clicking one of the following icons . This sets the scale of the time-line overview.

4.1.4 Calendar search

Click  to open the calendar pop-up window. Select a date and time. Click **GO** to display recorded video from that date and time.

4.1.5 Event search

1. Click .
 - > The event list shows all events.
2. To see specific types of event, select the type in the drop-down list.
 - > Event types are ALL, MOTION, INPUT ALARM and TEXT.
3. Double-click an event.
 - > Playback of the event starts.

4.1.6 Text search

1. Click the text button  to open a window which displays the text from a text device.
2. Click the **Save** button.
 - > Text is saved to the designated directory as a **.txt** file.



4.2 Playing video

4.2.1 Play control buttons

- Backward Step**  Backwards replay of images frame by frame.
- Backward Play**  Backwards replay.
- Pause**  Freezes playback.
- Play**  Play forward.
- Forward Step Speed**  Replay frame by frame. Select playback speed (0.5x, 1x, 2x, 4x, 8x, 16x, 32x, ALL). **ALL** plays back every image one-by-one regardless of actual time duration. Playback speed can be affected by network bandwidth.

4.2.2 Playing Audio

Audio can be played back only at **1X** speed. If audio is being received,  flashes. Use  to control the volume. Click the audio button to mute the audio.

4.3 Controlling zoom

- Select a cameo.
 - > The image appears in the upper right portion of the playback screen.
- Click on the image in the upper right of the playback screen and drag the mouse.
 - > Digital zoom of the image appears on the screen.
- To control image zoom, use the + (expansion) or - (reduction) button on the keyboard.

4.4 Saving a still image

You can capture a still image from the full-screen or cameo display of a camera and save it to the PC hard disk in a bitmap format. To save an image from the active cameo to the PC hard disk:

- Select the images from one camera.
- Click the pause button to freeze the image.
- Click  to save the selected image as a bitmap file.
- If required, you can add additional comments to the image being stored.

4.4.1 Printing an image

Click  to print the selected image; a note can be attached to the image.

- > Default printing is for A4 size paper.
- > The note can be a maximum of 5 lines; each line limited to 45 characters.
- > All text two seconds before and after the image appears on the print-out with the image.

4.5 Archiving video

- Click  to archive video from the DVR to a PC drive.
- Enter the archive period (date and time), channel, file split and file name.
- If required, select a different directory.
- Select the copy file format either **.DV4** or **.AVI**.
 - > The **.DV4** format is the proprietary file format of Bosch and can only be played back with the supplied viewer software (Archive Player). To play the Bosch **.AVI** format you can use a normal Windows compatible MPEG-4 player such as Media Player with anXVID codec.
- Click **Start**.
 - > The file split divides up data for easy storage. For example, if you want to burn the images onto a CD, the file can be split to fit onto two or more CDs.

4.6 Authentication function

- Click  to authenticate recorded video.
- Enter a period to check (date and time) and select a channel.
- Click **Start**.
 - > A bar indicates the progress of the authentication process.
 - > If corrupt images are found, they are shown in the result box.

4.7 Hard disk information

The disk usage bar shows the percentage of the hard disk that has been used for recordings on the DVR. The window below shows the disk size and the remaining free space. The date and time of the earliest (From) and latest (To) recordings on the disk are also shown in this window.

5 Configuration Tool

The Configuration Tool allows an administrator to configure the DVRs connected to the network and their associated cameras.

5.1 Registering a DVR

1. Click the **Add** button in the left bottom corner.
2. Enter a DVR Name for local use, a User name, and a Password.
 - > The name can be up to 30 characters long.
 - > The default values of User name/Password are **admin/admin**.
3. Select either a Ethernet or dial-in connection for the DVR you want to register.
 - > A phone number is required for a dial-in connection.
4. Enter an IP Address and a Port number or click **Auto-detect** and select an IP address from the list.
5. Click **OK**.

5.2 Login and configuration

1. Select a DVR in the list of DVRs.
2. Enter the password and click **Login**.
 - > The Configuration Tool requires administrator rights to log on to a DVR. The administrator ID is always **admin**. The

password is set in the **Connectivity** menu of the DVR4C.

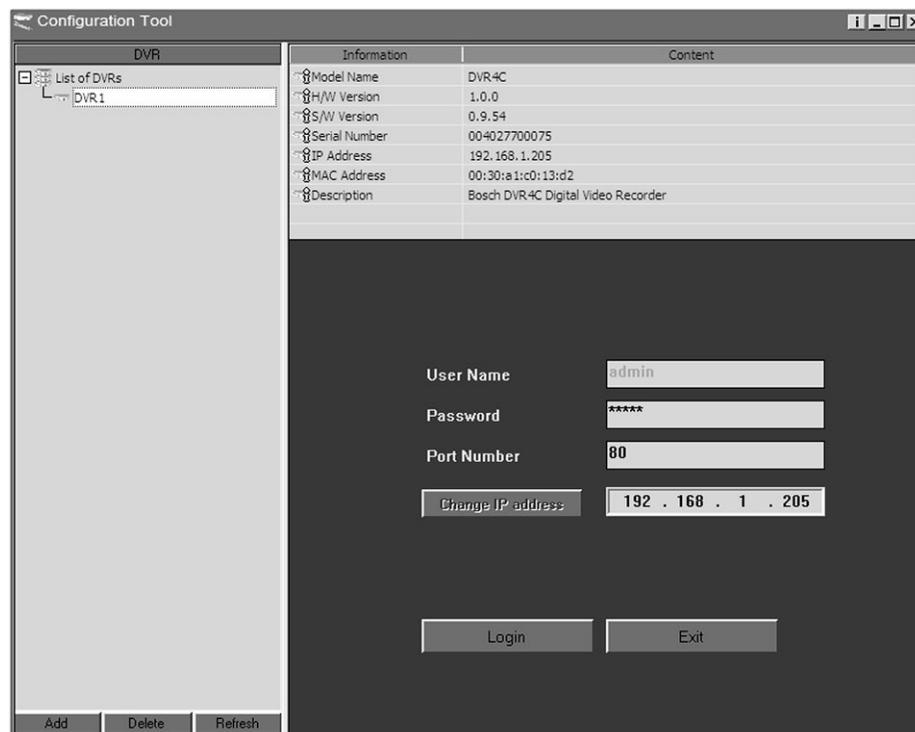
- > If a DVR's configuration menu is activated or remote setup is configured as **Disable**, login is blocked.

When you log in, nine tabs are shown:

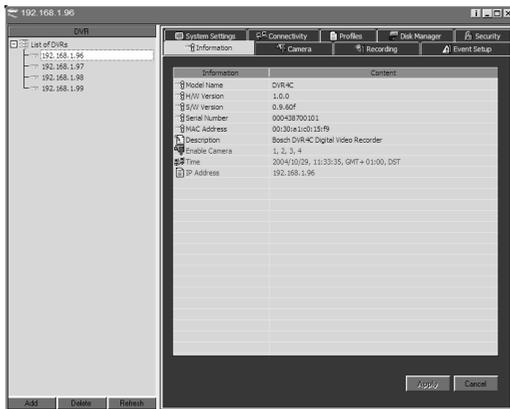
- Information
- Camera
- Recording
- Event setup
- Profiles
- System settings
- Connectivity
- Disk manager
- Security

Each of these tab pages allows you to configure different functions of the selected DVR. When you change the value of an item in any of the tabs, click the **Apply** button to confirm the change. Click the **Cancel** button to discard changes.

For more information on the settings that can be changed, refer to the DVR4C Installation Manual.



5.2.1 Information tab



The Information tab shows basic information about the DVR.

5.2.2 Camera

Use this tab to set the video gain, brightness, and contrast for the cameras connected to the DVR.

5.2.3 Recording

Use this tab to set the Normal Recording and Event Recording parameters.

5.2.4 Event setup

Set the configuration of alarm inputs and the motion detection in this tab.

5.2.5 Profiles

Use this tab to set the applicable periods for Weekday / Weekend and day / night. Up to 30 exception days can be configured.

5.2.6 System Settings

Use this tab to configure the various system settings.

5.2.7 Connectivity

Use this tab to set the DVR's network information; Ethernet IP address, xDSL, PSTN and port settings.

- > For more information, refer to the Network settings menu of the DVR4C manual.

5.2.8 Disk manager

Disk setup

- When the Recording mode is set to Continuous (default), the DVR overwrites older images when the hard disk is full. When set to Linear, the DVR stops recording when the hard disk is full and the administrator has to delete video manually.
- Set a disk full warning percentage from 1 to 100% (default 95%). A warning message is generated when the used disk space exceeds the percentage set.

Block playback

- To block the playback of video that is older than a certain time, select a period from the drop-down list. This function is disabled by default.

5.2.9 Security tab

Use this tab to control access to the DVR. If you select IP filtering, you can set up to ten IP address ranges that are allowed or denied access to the DVR. The values you set will normally depend on your network setup.

The IP address can be within a range from 000.000.000.000 to 255.255.255.255.

6 Archive Player

When you archive stored data from the DVR, the Archive Player software program is copied together with the data. This program allows you to playback the copied images without having to install the remote software.

The Archive Player does not need to be installed on the PC. Just run the program and retrieve the copied data for playback. To enhance the image quality, you can use DirectX. To enable or disable DirectX, right click the image and select DirectX.



To run the Archive Player, double-click the icon from the location where the data was stored. Click the **Open file** button  of the Archive Player, select a file for playback and click **OK**. The start and end time of the file are shown on the status bar at the bottom of the window.

If the archived file is in .dv4 format, there can be upto four video streams in the file. The first channel is displayed by default. To select a different channel, right click the image and move the cursor onto **Channel**. You can now choose one of the available channels from the list.

Click the audio icon  to turn the sound on and off. Adjust the volume  as required.

The remaining function buttons are **Play**, **Reverse Play**, **Pause**, **Backward Step**, **Forward Step**, **Save**, **Print**, **Authentication check**.

- **Play:**  Replay the copied file.
- **Reverse Play:**  Play Reverse
- **Pause:**  Pause the playback
- **Backward Step:**  Backwards replay of images frame by frame
- **Forward Step:**  Replay frame by frame
- **Save:**  Store the currently displayed image as a still image. Before the capture, you can add a comment to the image.
- **Print:**  Print the currently displayed image as a still image. Before printing, you can add a comment to the image.
- **Authentication check:**  Click to authenticate the recorded video. If corrupt images are found, they are shown in the result box.

