Video Client

Version 1.6

BOSCH

en Software manual

Table of contents

1   Introduction

Video Client is a computer application for live viewing, control, search and playback facilities for any camera connected to the network.

Remote control functions include pan, tilt, and zoom control of cameras (including full AUTODOME control). The on-line status of the connected units is provided and you can access the Configuration Manager application to set up a unit or configure your system.

The Forensic Search tool, which is an integral part of Video Client, provides a powerful means of searching through recorded material based on video content analysis (VCA) algorithms like IVA (Intelligent Video Analysis).

1.1   System requirements

Operating platform: A computer running Windows XP SP3, Windows Vista SP2, Windows 7 or Windows 8 with .NET 3.5 installed.

The recommended computer requirements are:

– Processor: Intel Pentium DualCore, 3.0 GHz or comparable
– RAM memory: 4096 MB
– Free hard disk space: 10 GB
– Graphics card: NVIDIA GeForce 8600 or higher
– Video memory: 256 MB
– Network interface: 100/1000 Base-T

1.2   Software installation

1. Insert the product disk into the optical drive of the computer.
   The installation program should start automatically.
2. If installation does not start automatically, locate the **BVC-...-Installer.exe** file on the disk and double-click it.
3. Follow the instructions on the screen to complete the installation.

Note:
Software updates are released periodically. Check the Bosch Security Systems website for the latest version.

Logging support for VRM
To integrate VRM logs into the Video Client logbook, carry out the following steps:

1. Copy **VrmLogMonitor.exe** and **VrmLogService.exe** from the Video Client installation folder (default C:\Program Files\Bosch\Video Client) to a folder on the computer running VRM.
2. Open a command shell on the VRM computer. Note that you have to run it as administrator.
3. Go to the folder containing **VrmLogMonitor.exe** and **VrmLogService.exe**.
4. Install the service by typing: `VrmLogService.exe -i`
5. Start the service by typing: `VrmLogService.exe -s`
   The log monitor service now reports all current VRM logs to all connected Video Client applications (starting 15 minutes in the past).

The service is automatically started every time the system boots.

– To stop the service, type: `VrmLogService.exe -k`
– To completely remove the service, type: `VrmLogService.exe -u`

1.3   Conventions used in the application

Interpreting icon colors
–   Disabled functions are shaded.
–   Active selections are highlighted in orange in live mode and in blue in playback mode.

Calendar window
The calendar window is displayed after clicking the calendar icon in windows where a date
must be filled in.
–   Click the arrow keys to change months.
–   Click a date to return to the date box with the selected value filled in.
–   Press Esc on the keyboard to leave the window without changing the date.

Lists
–   In lists, click a column header to sort the list according to that column item.
–   Click a second time to sort the list in reverse order.
–   Use the scroll bars to scroll long lists.

Expand/collapse tree nodes

In various panels, the tree structure shows ⊞ or ⊟ next to a node icon. Click ⊞ to expand

the node; click ⊟ to collapse the node.

Show/hide panes
Panes that provide various panels for information and operation are available. Each pane has a
handle with a double-arrow icon:
–   Place the pointer over the double-arrow icon to show the desired pane. The icon changes
     to a pin. The panel is hidden automatically when you move the pointer to another section
     of the user interface.
–   Click the double-arrow icon to show the desired panel permanently. The arrows point to
     the opposite direction.
–   Click the double-arrow icon again to hide the panel.

Multiple selection
To select multiple items, click a single item, and then hold down the **CTRL** key while you click
other items that you want to select.

2   Start-up and configuration

The following chapters provide general information on the application and on the setup of a system.

2.1   System overview

Video Client consists of the following components:
–   Video Client
    Live viewing and playback application
–   Configuration Manager
    System configuration application
–   Export Player
    Optional application for viewing video exports on a nonsystem computer (for example if used as evidence)

2.1.1   Video Client

This application provides two modes; one for live viewing and camera control, and one for playback of recordings and exports.

Directly log on to a device using its IP address or URL. Or set up a monitoring system upfront via the Configuration Manager application. By default, Video Client supports up to 16 cameras. Various licenses are available to expand the system.

See also
–   *Configuring with Configuration Manager, page 8*
–   *How to log on, page 8*
–   *Installing licenses, page 12*

2.1.2   Configuration Manager

Use the Configuration Manager application to configure general Video Client settings like the default path for workstation recording or the use of an IntuiKey keyboard.

If you decide to work with a pre-configured monitoring system, use the Configuration Manager application to set up your monitoring system:
–   Easily configure basic system settings with the integrated configuration wizard
–   Manage user groups and rights
–   Add devices to your system and arrange them in groups
–   Convert a group into a site to limit the number of simultaneous connections
    By default, when you start Video Client all cameras in the system that are not belonging to a site are connected automatically. The connection to a site and its devices is established in an extra step. It is only possible to connect to one site at a time.
–   Assign access rights to cameras, digital inputs and alarm outputs

The administrator can open the Configuration Manager application via the ![icon] icon in Video Client. On first-time start, click **Start setup** in the logon window to open the application.

2.1.3   Export Player

This application is intended as a viewer for exported video tracks. Install the application on any computer with access to the export files. Thus you can show the tracks on nonsystem computers, for example to use them as evidence. The Export Player application is easy to use and comes with an integrated application help.

2.2   Start-up

Starting the program

When installation is complete, double-click the [icon] icon on the desktop to start the
program. Alternatively, start the application via the **Start** button and the **Programs** menu
(path: Start/All Programs/Bosch Video Client/Bosch Video Client).

Command line start
The program can also be started from the command line with additional parameters.

See also
–   *Command line start, page 57*

2.3   How to log on

When the application is started, the logon window appears. The logon window offers the
possibility to log on directly to a device or to log on to a pre-configured monitoring system.
Pre-configuration is done with the Configuration Manager application.
When started for the first time, all boxes are blank and the **Start setup** button is shown. Either
click this button to start the Configuration Manager application or log on directly to a device.

To log on directly to a device:
1.   In the **Connect to** box, enter the URL or the IP address of the device you want to log on
      to. It is also possible to use a DDNS address if the device is configured accordingly.
2.   Type the corresponding user name and password.
3.   Click **Log on directly**.
      Check with the administrator if access is denied.

To log on to a pre-configured monitoring system:
1.   Leave the **Connect to** box empty.
2.   Type your user name and password. If the system is not password-protected, log on using
      the user name **administrator** and no password.
3.   Click **Log on**.
      Check with the administrator if access is denied.

To log off and exit the application:

1.   In the toolbar, click [icon] to log off.
2.   In the logon window, click **Exit** to exit the application.
      Note that the button is not available if **Kiosk mode** is selected in the user preferences.

See also
–   *Configuring with Configuration Manager, page 8*
–   *Setting user preferences, page 19*

2.4   Configuring with Configuration Manager

Use the Configuration Manager application to configure general Video Client settings like the
default path for workstation recording or the use of an IntuiKey keyboard.
If you decide to work with a pre-configured monitoring system, use the Configuration Manager
application to set up your monitoring system:

–   Easily configure basic system settings with the integrated configuration wizard
–   Manage user groups and rights
–   Add devices to your system and arrange them in groups
–   Convert a group into a site to limit the number of simultaneous connections
       By default, when you start Video Client all cameras in the system that are not belonging
       to a site are connected automatically. The connection to a site and its devices is
       established in an extra step. It is only possible to connect to one site at a time.
–   Assign access rights to cameras, digital inputs and alarm outputs

The administrator can open the Configuration Manager application via the [icon] icon in
Video Client. On first-time start, click **Start setup** in the logon window to open the application.

2.4.1   Video Client setup

Define default settings for your application. Note that components like cameras are only listed
once you have added devices to your system. Use the configuration wizard to do so or refer to
the Configuration Manager documentation for details.

To change the default settings for Video Client:
1.   Click the **Preferences** tab.
2.   Under **Applications**, click **Video Client**.
Use the following settings to configure Video Client:
–   In the **User Management** group tab, set user accounts, user passwords, and access rights
       if required.
–   In the **Cameras** group tab, verify that the correct cameras are selected and that they are
       in the correct order, and assign access rights.
–   In the **Digital Inputs** group tab, verify that the correct inputs are selected and that they
       are in the correct order, and assign access rights.
–   In the **Alarm Outputs** group tab, verify that the correct alarm outputs are selected and
       that they are in the correct order, and assign access rights.
–   In the **Application** group tab, configure workstation recording and the use of the
       keyboard, and manage licenses.

Implementing user administration
It is possible to run your system without password protection. But even in that case, once the
Configuration Manager application was run on your computer, logon to Video Client is only
possible entering **administrator** as user name if you do not use direct logon.
Nevertheless, we strongly recommend that you protect your system by implementing a user
management that suits your needs.

To create users and define user rights:
1.   Select the **User Management** group.
2.   To create an additional user, click **Add...**.
       A dialog box appears.
3.   Enter the user name and password.
4.   To define individual user rights, select the relevant entry from the list of created users.
       Under **Rights**, select the check boxes of the required options.
5.   To remove a user, select an entry in the list of created users and click **Remove**.

Selecting components
1.   Depending on the group for which you want to select components, select the **Camera
       Order**, **Digital Input Order** or **Output Order** tab under the respective group.

2.   Check those components you want listed in Video Client.
      The sort order of these lists matches that in Video Client.
3.   Click the **Top**, **Up**, **Down** and **Bottom** buttons to change the position of a selected
      component within the list.

Assigning component access rights
1.   Depending on the group for which you want to assign access rights, select the **Camera
      Access**, **Digital Input Access** or **Output Access** tab under either the respective group.
      Each user is assigned the highest authorization level by default.
2.   To change a user's access rights, left-click the relevant table cell until the desired
      authorization level is selected.
      Alternatively, right-click the table cell and select the desired authorization level from the
      list.
3.   To assign a user the same authorization level for all components, or vice versa, right-click
      the relevant column or row header and select the desired authorization level.

Configuring workstation recording and the use of IntuiKey
1.   Select the **Application** tab of the **Application** group.
2.   Select the path for workstation recordings. If you do not enter anything here, the
      following default setting is used:
      - **Windows XP**:
      %current user%\My Documents\Bosch\Video Client\Recording
      - **Windows 7/Windows 8/Windows Vista**:
      %current user%\Documents\Bosch\Video Client\Recording
      Define the maximum hard disk space in GB to be used for workstation recordings. If you
      do not enter anything, **10** is used.
      To have recordings deleted automatically once the defined hard disk space is used, select
      the check box.
3.   Select the IntuiKey communication port if you have activated the use of the keyboard.

Licenses
On the **Licenses** tab of the **Application** group you can find information on the licensing of
camera channels in Video Client. A Video Client installation has 16 camera channels as
standard. You can enable additional channels by purchasing a license.
The host ID displayed here is needed to install a license for additional camera channels. The
number of enabled camera channels is shown. Click **Add License...** to open a dialog box for
the installation of additional licenses.

See also
–   *Installing licenses, page 12*

2.4.2   Saving the configuration
When finished:

1.   Click to save the configuration.
2.   Close the Configuration Manager application.

2.4.3   **Configuration wizard**

On the **Tools** menu of the Configuration Manager application, click **Configuration Wizard…** to start a wizard that helps with the initial configuration of a monitoring system. The configuration wizard is a quick way of setting up the most important parameters for the monitoring system for a first-time installation.

When the wizard opens it guides you through the configuration process in a few steps. Click **Next >** and **< Back** to navigate through the wizard.

Passwords

Enter (and confirm) universal, system-wide passwords for up to 3 authorization levels (leave the boxes empty if you do not wish to do this).

The default user names of these authorization levels in the Configuration Manager application are mapped automatically to those of the Bosch devices in the system. When accessing a device, for example, the Configuration Manager password for **administrator** is used for access level **service**.

Authorization level	Default user names	
	Configuration Manager	**Bosch video devices**
Highest	administrator	service
Medium	operator	user
Lowest	live	live

Recorder

Select whether to record locally on the devices (for example, to an SD card) or to use a VRM recorder.

To record using a recorder, enter the relevant IP address or select the address of a configured recorder from the list.

Device Selection

All devices detected in the network are listed. If you think that a device is missing click **Update**.

All devices with a check mark will be configured (allocated an IP address). If you do not wish to configure a device using the wizard, click the box to remove the check mark.

Devices marked with a green square are already allocated to a VRM recorder. If these are deselected the allocation is broken and the associated recordings are deleted.

Not all devices support IP address configuration via DHCP. If required, configure these devices manually.

Network

Select **Use DHCP** if all devices support DHCP and you want to assign IP addresses automatically.

Alternatively, enter an IP address range. This range must provide sufficient IP addresses for all the devices to be configured.

Date and Time

Select whether the date and time are to be taken from the settings on your computer or from an SNTP server. If necessary, reset the system time and date on your computer or enter the IP address of an SNTP server.

Video Quality

Use the slider to determine the quality of the video for all devices. The relevant settings for each device are made automatically. Set a bandwidth limit if required.

Recording

Create a uniform recording scheduler for all devices. Define three recording profiles (**Day**, **Night** and **Weekend**) by selecting a recording mode (**Continuous**, **Motion** or **Off**) and setting the quality slider. Fill the weekly recording calendar with these profiles. If no recordings are to be scheduled, you must select **Off** mode for every recording profile.

Summary

A summary of the selected settings is displayed. If you want to change the settings, click **<** **Back** to go back step by step in the wizard.

Click **Apply** to configure the devices according to the selected settings; click **Cancel** to cancel the wizard.

2.4.4   Installing licenses

Follow these steps to install a license for Video Client:

1. Order a license - you will receive an authorization code.
2. On the **Licenses** tab of the Configuration Manager application, determine the host ID of your computer.
3. Log on to the Bosch license manager (https://activation.boschsecurity.com/) using your authorization code.
4. Fill-in and submit the license activation data (including your host ID).
5. Enter an e-mail address to receive the activation code.
6. Save the license key file from the received e-mail to your hard disk.
7. On the **Licenses** tab of the Configuration Manager application, click **Add License...**.
8. Navigate to the license key file on your hard disk and click **Open**.
9. Check that the license has been activated.
10. Save your configuration and restart Video Client.

See also
–   *Video Client setup, page 10*

3   User interface

Video Client provides a live and a playback mode. The user interface has the same layout for both modes. It just offers different tools and panels to support the respective features.

3.1   Live mode

In the toolbar, click   to switch to live mode. In live mode, this button and active selections are highlighted in orange.

What you can do in live mode:
–   View live video
–   Select different cameo layouts
–   Set up favorite views
–   Assign cameras to cameos
–   Start an instant playback of the active cameo
–   Manually record a video clip to the computer's hard disk
–   Capture a still frame screenshot of the active cameo
–   Configure a monitor wall
–   Control cameras
–   Monitor device status and alarm conditions
–   View stored screenshots

3.2   Playback mode

In the toolbar, click   to switch to playback mode. In playback mode, this button and active selections are highlighted in blue.

What you can do in playback mode:
–   Select a single or a quad cameo layout
–   Assign recorded tracks or backups to playback cameos
–   Search through recordings
–   Control playback
–   Export selected video sequences to your computer's hard disk
–   Capture a still frame screenshot of the active playback cameo
–   View stored screenshots and video clips

3.3   Basic overview
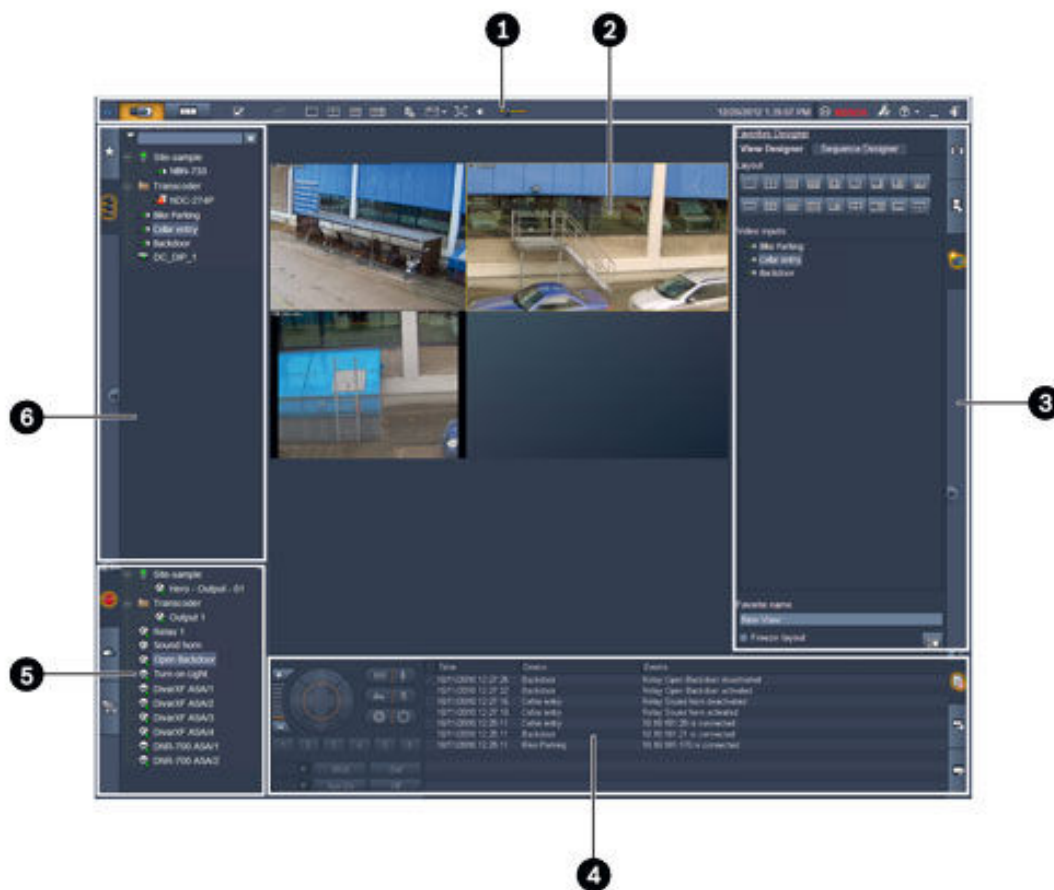
Figure 3.1: User interface layout (sample screenshot of an application in live mode)

1	Toolbar	4	Information and operation pane
2	Cameo area	5	Accessories and archive pane
3	Task pane	6	System pane

Toolbar
Contains icons for various functions (see below for details).

Cameo area
Displays the single viewlets called cameos that are used to show the video. There can be one or many cameos in this area. The area can be dragged to a second monitor, if installed.

Task pane
Click the tabs to open the panels for the respective mode.

– In both modes:

 Cameo capture panel

– In live mode:

 Instant playback panel

 Favorites designer panel

If a monitor wall is configured, an additional tab is displayed:

 Monitor wall panel

– In playback mode:

 Event search panel

 VCA search panel

If a Divar 700-connected camera is allocated to the system, an additional tab is displayed:

 Text search panel

Information and operation pane

Click in the bottom right of the window to open the pane. In the left part, it offers a console to control cameras or playback. In the right part, click the tabs to open the panels for the respective mode.

– In live mode:

 Logbook panel

– In playback mode:

 Timeline panel

– In both modes:

 Export jobs panel

 Cameo calibration panel

Accessories and archive pane

Click in the bottom left of the window to open the pane. Click the tabs to open the panels for the respective mode.

– In live mode:

 Alarm outputs panel

 Alarm inputs panel

– In playback mode:

 Exports panel

– In both modes:

 Screenshots panel

System pane
Click the tabs to open the panels.

– **Favorite views** panel

– **Video device list** panel

For a list of the icons shown in these panels see below.

3.4   Toolbar icons

	Live mode	Switches the Video Client application to live mode (orange highlighting).
	Playback mode	Switches the Video Client application to playback mode (blue highlighting).
	User preferences	Displays a dialog box for setting user preferences.
	Start/stop sequencing (only in live mode)	Starts and stops a sequence of cameo views (only active if you have selected a sequence or multiple views in the **Favorite views** panel or multiple cameras in the **Video device list** panel).
	Quick views	Some layouts are offered to quickly arrange the cameo area. The icon on the button represents the layout. The number of buttons differs between live and playback mode.
	Open text viewer pane	Opens the **Text viewer** pane (in live mode only available if a Divar 700-connected camera is allocated to the system).
	Select cameo decoration	Selects how the cameos are displayed: add additional information in a top bar or as overlay. Furthermore, you can overlay the cameo with a time stamp and VCA data.
	Maximize cameo area	Maximizes the cameo area to the size of the Video Client window. Press Esc to switch back to normal mode.
	Audio on/off	Switches audio off and on.
	Change volume	Adjusts the audio volume.
	Start Configuration Manager	Opens the Configuration Manager application in a separate window.
	Show help index	Opens the help index offering a list of available help files.

	Minimize	Minimizes the Video Client window to the task bar.
	Log off	Logs off the current user and returns to the logon window.

The date and time, and the CPU usage bar are also displayed on the toolbar. Hover over the CPU usage bar to see the CPU usage as a percentage.

Double-click the toolbar to maximize the application window to fill the screen. Double-click it again to return to normal mode.

4   Setting user preferences

These settings are saved for the user who is logged on and are applied each time this user logs on with the same computer.

1.   In the toolbar, click [checkbox icon] to open the **User preferences** dialog box.
2.   Click the desired tab and configure the settings as described below.
3.   Click **OK** to save changes and close, or **Cancel** to close the dialog box without change.

Settings tab
1.   Select the **Bring to foreground on alarm** check box if you want the application window to maximize in case of alarm.
2.   Select the check box for the alarms and errors items to be activated.
      The computer beeps on the specified alarms or errors.
3.   By default, the time of the Video Client application is displayed for the optional time stamp in the cameos. Select the **Show local device time** check box if you prefer the actual time set on the device to be displayed.
4.   Select the **Kiosk mode** check box to expand the Video Client window permanently to full screen. When in kiosk mode a user cannot resize the Video Client window or exit the application.
      The check box is only available to the administrator. This feature requires a restart for it to take effect.
5.   Select a sequence dwell time from the list to determine how long a sequenced view remains displayed.
6.   Select a time offset from the list for instant playback.
7.   If you have multiple monitors set up in Windows, select the **Enable second monitor** check box to use one of these monitors as a second monitor. Select the monitor you wish to use in the box below.

Directories tab
1.   Enter the locations that will be monitored for exported video. All files in these locations will be listed in the **Exports** panel in the accessories and archive pane (only available in playback mode).
2.   Enter the locations that will be monitored for captured images. All files in these locations will be listed in the **Screenshots** panel in the accessories and archive pane.
The location for workstation recordings is displayed for information. It is set in the Configuration Manager application. Add the path to the list of monitored export locations if you want to access such recordings in playback mode.

Monitor wall tab
You can only set up a monitor wall if you have added decoders to your system. The available decoders are listed in the **Decoders** box. Decoders that belong to a site are only listed if the site is connected.
Note that this tab is not available if you have used direct logon.
1.   Drag a decoder from the **Decoders** box to a free position on the monitor wall grid.

      Alternatively, select a decoder and a free position and click [>> button].
2.   Drag a decoder in the grid to a new position to rearrange the grid.

3.   To free a position, select it and click . The decoder is removed from the grid and listed in the **Decoders** box.

See also

–   *Video Client setup, page 10*

5   Working with cameos

Cameos are single viewlets used to show live video, recordings, exported video clips and archived screenshots. They are displayed in the cameo area.

5.1   Making quick views

A quick view is the fastest way to display video. Decide for a cameo layout and populate the cameos with the desired video.
In live mode, the settings for each quick view are saved for the user who is logged on. They are applied each time this user logs on with the same computer. Thus, if you log on again any quick view shows its most recent video-to-cameo assignments.
In playback mode, assignments are only valid during the running session.

To decide for a cameo layout:
Frequently used cameo layouts are provided as quick view buttons. The icon on the button represents the layout. The number of available buttons is different for live and playback mode.

▸   In the toolbar, click a quick view button to change the layout of the cameo area:

–   Single cameo

–   2×2 cameos

–   3×3 cameos (only in live mode)

–   4×3 cameos (only in live mode)

Once you have populated the cameos, clicking a button displays the corresponding quick view with the most recent video-to-cameo assignments.

Populating cameos
In live mode, you can view video from any active camera listed in the system pane.
In playback mode, video recordings created by cameras that have on-board storage (a memory card), or direct iSCSI or VRM storage, or DIVAR storage can be viewed. Devices with such tracks or VRM backups show ⊞ next to the device icon.
The cameras of a site are only available in the list if the site is connected. Note that you can only have cameras from one site in a view since you can only connect to one site at a time.
If you have assigned cameras of a different site to another quick view the site will automatically be connected if you change to that view.

Ways to populate a single cameo:
–   In live mode:
      –   Select the cameo and double-click the desired camera in the system pane.
      –   Drag a camera from the system pane to a cameo.
      –   Right-click the cameo and select a video input from the list.
–   In playback mode:

      Locate the devices that show ⊞ next to the device node in the system pane. Expand the device node to see if the device offers more than one track or backup.
      –   Select the cameo and double-click the desired track or backup.
      –   Drag the desired track or backup to a cameo.

–   Right-click the cameo and select the desired track or backup from the list of video inputs.

The video is displayed in the cameo. The aspect ratio of the cameo adapts to the aspect ratio of the video.

Ways to populate multiple cameos:
–   In live mode:
    –   Select multiple cameras and drag them from the system pane to a cameo.
–   In playback mode:

    Locate the devices that show next to the device node in the system pane. Expand the device node to see if the device offers more than one track or backup.
    –   Drag a device with multiple tracks or backups to a cameo.
    –   Mark multiple devices with tracks or backups and drag them to a cameo.
    –   Mark multiple tracks or backups from different devices and drag them to a cameo.

The cameo to which you have dragged your selection has a colored border to mark it as selected. It shows the video of the topmost entry of your selection. The other cameos are filled from left to right and top to bottom. The aspect ratio of the cameo column adapts to the aspect ratio of the camera.

To reorder the cameo positions:

1.   In the toolbar, click and select **Title bar**.
2.   To reorder cameos, drag the title bar of a cameo to the new position.

To clear a cameo:
–   Click the delete icon in the header of the selected cameo.
–   Alternatively, right-click a cameo and select **Stop display**.

5.2   Calibrating the cameo

The **Cameo calibration** panel shows the settings for brightness, sharpness, contrast, and the gamma correction value for the various color channels of the selected cameo. Adapt the values to your needs.

1.   In the information and operation panel, click to open the **Cameo calibration** panel.
2.   To see the values for a specific color channel, click the rectangle of the respective color.

To calibrate the cameo:
1.   Click the tricolored rectangle if you want to change the settings for all color channels simultaneously. Otherwise, click the rectangle of the respective color.

    As soon as you change one of the values, the icon is displayed in the cameo to indicate that the image calibration settings for the cameo differ from the original settings for the camera image.
2.   Click to decrease the brightness, or click to increase the brightness for the cameo.
3.   Click to decrease the contrast, or click to increase the contrast for the cameo.

4. Click to decrease the gamma correction value, or click to increase the gamma correction value for the cameo.
5. Click to decrease the sharpness, or click to increase the sharpness for the cameo.
6. Click **Set as default** to save the settings for the cameo.
7. Click **Reset** to reset the values to the original settings for the camera image.

5.3   Configuring cameo decorations

In the video, overlays generated by the device itself are displayed, like camera names, alarm messages, times and dates. Such overlays are configured in the Configuration Manager application. Furthermore, video image overlays provide important status information. Nevertheless, you can also configure the cameo to show specific information.

1. In the toolbar, click to open the menu.
2. If you want to display the camera name along with the device icon in the cameo, select the desired decoration type:
    –   **Title overlay**
        Displays the information as an overlay.
    –   **Title bar**
        Adds a title bar with the information to the cameo. In multi-cameo layouts, drag and drop the title bar to rearrange the cameos.
3. Select **No decoration** if you don't want the camera name to be displayed.
4. Select **Display time** to add a time stamp overlay.
    By default, the time of the Video Client application is displayed as shown in the toolbar. In the **User preferences** dialog box, you can define to show the local time of the device, instead.
5. Select **Display VCA data** to have information from the video content analysis shown as an overlay, if available.

See also
–   *Setting user preferences, page 19*
–   *Video image overlays, page 58*

5.4   Cameo context menu

Right-click a cameo to display the context menu. Not all commands are always available:
–   **Select video input**
    –   In live mode: lists available cameras
    –   In playback mode: lists cameras with tracks or backups available
–   **Start digital zoom/Stop digital zoom**
    Starts and stops the digital zoom
–   **Start workstation recording/Stop workstation recording** (only in live mode)
    Starts and stops workstation recording
–   **Maximize cameo/Restore cameo size**
    Switches active cameo to single-cameo view and back
–   **Stop display**
    Clears the cameo

– **Show**

Lists the streams offered by the device; allows to select another stream for display than the preferred one that is set for the camera in the system pane (only valid until you change the stream or video input selection)

– **Capture screenshot**

Opens the **Cameo capture** panel with a screenshot of the active cameo

– **Open instant playback** (only in live mode)

Opens the **Instant playback** panel to display instant playback, if available

– **Properties**

– In live mode: opens a dialog box with the properties of the video input

– In playback mode: opens a dialog box with the properties of the track or backup

– **Intelligent tracking** (only in live mode)

Allows to switch on intelligent tracking if supported by the device

In live mode, **Send to monitor** and **Send view to monitor** commands are also available if a monitor wall is configured.

See also

– *Digital zoom, page 38*

– *Workstation recording, page 44*

– *Saving and viewing screenshots, page 43*

– *Instant playback, page 39*

– *Setting user preferences, page 19*

– *Populating a monitor wall, page 40*

6   Working with the system pane

Two side tabs are located on the top left of the Video Client window:

–   Click [star icon] to open the **Favorite views** panel.

It is empty until you have set up your own favorite views (see below for details).

–   Click [device list icon] to open the **Video device list** panel.

It shows all available cameras in your system:

–   With direct logon: all cameras belonging to the URL or IP address entered
–   With regular logon: all cameras of your system as configured with the Configuration Manager application

See also
–   *How to log on, page 8*
–   *Configuring with Configuration Manager, page 8*

6.1   System pane icons

Each entry in the panels of the system pane has an icon related to its type. Overlays and color marks give additional information on the status. Various combinations of icons and overlays are possible. Below you find lists with examples for the icons in the system pane.

Device icons
Device icons are used both in the **Favorite views** panel and in the **Video device list** panel.

[icon] Body camera not connected (grey dot)

[icon] Body camera connected (green dot)

[icon] Dome camera connected (green dot)

[icon] Body camera with video loss (red cross)

[icon] Body camera is in alarm mode (warning triangle)

[icon] Body camera with motion detected (walker)

[icon] Body camera with motion alarm (walker with warning triangle)

[icon] Body camera allocated via transcoder and connected (gem and green dot)

[icon] Body camera allocated via transcoder and in alarm mode (gem and warning triangle)
The gem indicating a device allocated via transcoder may also change color:
–   white: a transcoded stream is available
–   green: a transcoded stream is shown
–   red: no transcoded stream is available
Note:

If configured accordingly, DIVAR-connected cameras show the alarm mode overlay [icon] to indicate that the connection is interrupted:
–   Analog cameras are physically disconnected.
–   IP cameras are offline.

Video device list icons

With regular logon, additional icons are available in the **Video device list** panel, depending on how you set up the system with the Configuration Manager application:
– Group devices for better overview in the list
– Convert a group into a site to limit the number of simultaneous connections
  By default, when you start Video Client all cameras in the system that are not belonging to a site are connected automatically. The connection to a site and its devices is established in an extra step. It is only possible to connect to one site at a time.

 Site not connected (grey dot)

 Site connected but with some devices that are not accessible (yellow dot)

 Site connected with all allocated devices accessible (green dot)

 Group

The group icon is also used to group cameras connected to a transcoder that is added to your system.

Favorite views icons

The icons for the different views reflect the chosen cameo layout. Only some of the variants are listed here as examples.

 View with 3×3 cameos

 View with 4×3 cameos

 View with 1+12 cameos (centered) that includes a device of a connected site (green dot)

 View with 2×2 cameos that includes a device of a site that is currently not connected (grey dot)

 Sequences folder under which all defined sequences are listed; this folder automatically is added once you have defined a sequence

 Sequence

The sequence icon not only marks the sequence itself, but is also used as an overlay to mark the currently active view or device of a running sequence:

 View with 2×2 cameos currently shown in the running sequence

 Body camera currently shown in the running sequence; note that other overlays (for example the red cross for video loss) are not visible while the sequence overlay is displayed

6.2   Video device list panel

The **Video device list** panel shows all configured devices.

Working with the Video device list panel
– To filter the list, type a search string into the input box on top of the panel.
  The video device list is filtered on-the-fly hiding all entries that do not match the string.
  The filter is not case-sensitive and ignores white spaces.

- If a group or site name matches, all devices allocated to it are listed.
- If an allocated device matches, it is listed together with the corresponding group or site but the non-matching devices of that group or site are hidden.
- Click ⊞ to expand a group or connected site and see the cameras assigned to it. Click

  ⊟ to collapse the group or site.
- Double-click a site to connect to it. Note that you can only connect to one site at a time.
- Right-click an entry to open a context menu.

Device context menu
Right-click a device to display the context menu. Not all commands are always available:
- **Connect**
  Establishes a connection
- **Disconnect**
  Terminates the connection
- **Sequence**
  Starts a sequence with the selected devices (at least 2 devices must be selected)
- **Send to monitor**
  Lists the available monitors for selection (main, second, or wall if set up)
- **Preferred stream**
  Lists the streams as provided by the device; select the default stream for display in a cameo
- **Properties**
  Opens the corresponding dialog box

Site context menu
Right-click a site to display the context menu. Not all commands are always available:
- **Connect**
  Establishes a low-bandwidth connection to the site; by default, this is the connection type if you double-click the site icon
- **Disconnect**
  Terminates the connection

6.3   Favorite views panel

In live mode, the **Favorite views** panel shows the various views and sequences that have been made in the **Favorites designer** panel. In playback mode, the sequences are not shown.

Note:
If the application was started from the command line with the "-sites" parameter, then the **Favorite views** tab is replaced by the **Site connector** tab.

Working with the Favorite views panel
- In live mode, double-click a view to see it in the cameo area. If the view includes a camera belonging to a site, the site is automatically connected.
- In playback mode, you cannot show a view in the cameo area. But you can expand the

  entries to locate devices with recordings (⊞ next to the device icon).
- Click ⊞ to expand an entry:
  - For a view, you see the cameras assigned to it
  - For the sequence folder, you see the sequences that are available

–   For a sequence, you see the views and cameras belonging to the sequence
–   Click ▭ to collapse the entry.
–   Right-click an entry to open a context menu.

Device context menu
Right-click a device to display the context menu. Not all commands are always available:
–   **Connect**
     Establishes a connection
–   **Disconnect**
     Terminates the connection
–   **Sequence**
     Starts a sequence with the selected devices (at least 2 devices must be selected)
–   **Send to monitor**
     Lists the available monitors for selection (main, second, or wall if set up)
–   **Preferred stream**
     Lists the streams as provided by the device; select the default stream for display in a
     cameo
–   **Properties**
     Opens the corresponding dialog box

View context menu
Right-click a view to display the context menu. Not all commands are always available:
–   **Sequence**
     Starts a sequence with the selected views (at least 2 views must be selected)
–   **Send to monitor**
     Lists the available monitors for selection (main, second, or wall if set up)
–   **Save view**
     Saves any changes to the view like a new video-to-cameo assignment or a rearrangement
     of cameos
–   **Delete view**
     Deletes the view from the list without further notice; if the view was displayed in the
     cameo area it remains there until you select a different view
–   **Rename view**
     Allows to type a new name for the view
–   **Properties**
     Opens the corresponding dialog box

Sequence context menu
Right-click a sequence to display the context menu. Not all commands are always available:
–   **Sequence**
     Starts a sequence with the selected sequences (at least 2 sequences must be selected)
–   **Send to monitor**
     Lists the available monitors for selection (main, second, or wall if set up)
–   **Delete sequence**
     Deletes the sequence from the list without further notice; if the sequence was running in
     the cameo area it remains there until you select a different sequence
–   **Rename sequence**
     Allows to type a new name for the sequence

–   **Properties**
Opens the corresponding dialog box

See also
–   *Command line start, page 57*

6.4   Setting up favorites

It is recommended that you take the time to set up a collection of favorite views and
sequences. A view is a collection of video-to-cameo assignments that can be recalled for
instant live viewing. Such views can be included into favorite sequences together with single
cameras. You can set up favorites only in live mode.

▶   In the task panel, click to open the **Favorites designer** panel
On the **Favorites designer** panel you find two tabs:
–   Click the **View designer** tab to set up and save favorite views.
–   Click the **Sequence designer** tab to define and save favorite sequences.

6.4.1   Making a favorite view

Use the **View designer** tab to make your favorite views. Camera views can be grouped in a
logical way; for example, all cameras showing an entrance to a building.

1.   Click a layout button in the **View designer** tab to select it. The layout appears in the
       cameo area.
       If you continue to click a button for an asymmetrical layout, the layout orientation
       changes.
2.   Drag cameras from the **Video inputs** list to the cameos.
       The cameras of a site are only available in the list if the site is connected. Note that you
       can only have cameras from one site in a view since you can only connect to one site at a
       time.
3.   In the **Favorite name** box, enter a name for the new view.
4.   Select the **Static layout** check box so the aspect ratio of the cameos does not change on
       re-assignment.
5.   Click .
       The view is stored in the **Favorite views** panel.
You can drag alarm outputs and alarm inputs to a view in the **Favorite views** panel to create
system overviews.

6.4.2   Making a favorite sequence

Use the **Sequence designer** tab to make your favorite sequences. Select favorite views and
single cameras and put them into the desired order.
The sequence dwell time is set in the **User preferences** dialog box.

To set up a favorite sequence:
1.   In the **Views** box, select a view or a device.
       The cameras of a site are only available in the list if the site is connected. You can have
       cameras of different sites in one sequence. The respective site will be connected
       automatically while the corresponding camera view is displayed in the sequence.

2. Click [icon] to add the selection to the **Sequence list** box. Continue doing this until your list is complete.

3. To remove an entry from the sequence list, select it and click [icon] .

4. To rearrange the entries in the sequence list, select one or more entries and click the move up [icon] or move down [icon] buttons.

5. In the **Sequence name** box, enter a name for the new sequence.

6. Click [icon] .

The sequence is stored in the **Favorite views** panel in the **Sequences** folder.

To modify a favorite sequence:
You can easily modify sequences or use them as starting point for a new sequence.

1. To load the list of an existing sequence, click [icon] in the **Sequence designer** tab.
   The **Select sequence** dialog box appears.

2. Select the desired sequence.

3. Click **OK**.

The components of the selected sequence are listed in the **Sequence list** box and can be rearranged as desired.

See also
– *Setting user preferences, page 19*

7   Viewing live and recorded video

Both in live and playback mode, the video is displayed in the cameo area. Depending on the configuration of the cameos and of the device configuration, additional information is displayed. Furthermore, video image overlays provide status information (see below for details).

To view live video:
1. Set up a collection of quick views and favorite views to suit your needs.
2. Start the display of the desired view:
    –   In the **Favorite views** panel, double-click a pre-defined view.
        Alternatively, drag the view to the cameo area.
    –   In the toolbar, click one of the quick view buttons to display the corresponding quick view with its most recent video-to-cameo assignments.
3. To quickly change a video-to-cameo assignment, drag another camera from the system pane to the cameo:
    –   For a quick view, the new assignment is retained until you assign another camera.
    –   A favorite view turns back to the original assignment whenever you call it up unless you right-click the view and select **Save view** from the context menu.

To view recorded video:
In playback mode, no favorite views can be called up. Quick views retain the video-to-cameo assignment only for the time of the running session.
1. In the toolbar, click a quick view button to select the desired cameo area layout.
2. Populate the cameos with tracks or backups as described above.
3. To quickly change a video-to-cameo assignment, drag another track or backup from the system pane to the cameo.
    The assignment is retained until you assign another track or backup.

Viewing transcoded streams
If you are displaying a transcoded stream in a cameo, placing the pointer over the cameo provides you with additional options:

–   Use the slider to decide for higher frame rate ⬚ or for better image quality ⬚. The better the image quality the lower the frame rate and vice versa. Refer to the image in the cameo to decide which setting suits your needs.

–   Click ⬚ to refresh the display.

See also

7.1   Starting sequences

In live mode, Video Client allows for automatic switching between different views or cameras. The quickest way to start a sequence is using the corresponding button in the toolbar as described below. Such sequences are not stored and have to be set up again any time you want to use them.

Another possibility is to set up favorite sequences in the **Sequence designer** panel. These sequences are saved in the **Favorite views** panel.

Whenever a sequence switches to the next display, the corresponding name of the camera or view is shown briefly in the top of the cameo area for information.

The sequence dwell time is set in the **User preferences** dialog box.

To start a sequence:

In the toolbar, the sequence icon is available once you have selected multiple entries.

– In the **Video device list** panel, select multiple cameras and click the sequence icon to start sequencing the selected cameras.
– In the **Favorite views** panel, select a multi-cameo view and click the sequence icon to start sequencing the cameras within that view in a single-cameo display.
– In the **Favorite views** panel, select multiple views and click the sequence icon to start sequencing between the views and not within the views.
– In the **Favorite views** panel, select a sequence and click the sequence icon to start. Alternatively, double-click the entry to start the sequence.

Click the icon again to stop automatic switching.

See also
– *Making a favorite sequence, page 29*
– *Setting user preferences, page 19*

7.2   Going into detail

With Video Client, viewing details in the video is not limited to using the camera zoom. Enlarge single cameos or the entire cameo area or use the digital zoom.

To enlarge a single cameo:
– In multi-cameo layout, double-click a populated cameo to switch to single-cameo layout and back again.
– Alternatively, click in the header of the selected cameo to enlarge it to fill the cameo area. Click to turn back to multi-cameo layout.
  Note that if you have not activated the title bar, the icons are only visible if the pointer is in the cameo.

To enlarge the cameo area:
– Close any pane that you do not need. The cameo area fills the available space enlarging the single cameos.
– In the toolbar, click to maximize the cameo area to the size of the application window. Click the button again on the auto-hide toolbar or press Esc to switch back to normal mode.

To enlarge the application window to fill the full screen:
– Press F11 to maximize the application window to fill the full screen. Press the key again to switch back (for a list of shortcut keys see below).
– As administrator, select the **Kiosk mode** check box in the **User preferences** dialog box to permanently set the application window to full-screen view.

See also
– *Digital zoom, page 38*
– *Standard keyboard shortcut keys, page 52*
– *Setting user preferences, page 19*

7.3   Controlling cameras

You can control controllable cameras by using the mouse on the corresponding cameo or by using the controls on the information and operation pane.

7.3.1   Camera controls

Use the camera controls to control the camera in the selected cameo. Make sure to have the correct cameo selected before starting (indicated by the orange frame).
For more information on the digital zoom, see below.
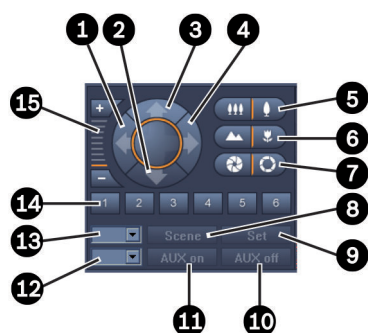
Figure 7.1: Camera controls

1	Pan left button	9	**Set** button
2	Tilt down button	10	**AUX off** button
3	Tilt up button	11	**AUX on** button
4	Pan right button	12	Box for AUX command number
5	Zoom out/ in buttons	13	Box for scene number
6	Far/near focus buttons	14	Scene selection buttons
7	Close/open iris buttons	15	Digital zoom buttons
8	**Scene** button		

To pan and tilt:
– Click and hold the up and down arrows for tilt.
– Click and hold the left and right arrows to pan.
– Release the mouse button to stop camera movement controls.

To control zoom, focus, and iris:

– Click and hold [icon] to zoom out; click and hold [icon] to zoom in.

– Click and hold [icon] to focus on far objects; click and hold [icon] to focus on near objects.

–   Click and hold to close the iris; click and hold to open the iris.
–   Release the button to stop camera adjustment controls.

To move the active camera to a scene:
A scene is a stored camera position with defined pan, tilt and zoom settings. The available number of such scenes depends on the camera type.
1.   Enter a scene number in the box next to the **Scene** button.
2.   Click **Scene** (or press ENTER) to move the active camera to the selected scene.
Alternatively, click buttons 1 to 6 for immediate positioning to one of the first 6 scenes.

To store the current position of the camera as a scene:
1.   Position the camera as desired.
2.   Enter a scene number.
3.   Click **Set** to store the active scene under the selected number.

To control AUX functions:
AUX functions are special commands for controlling cameras that support such commands.
1.   In the box next to the **AUX on** button, enter the number of the desired AUX command.
2.   To switch on the AUX command, click **AUX on** (or press ENTER).
3.   To switch off the AUX command, click **AUX off**.

See also
–   *Digital zoom, page 38*

7.3.2   Mouse control

If you have a controllable camera in use, in-window controls are provided in the cameo to control the camera with the mouse.
1.   Click the cameo of the camera to make it active.
2.   Place the pointer on the active cameo. It changes to a direction arrow.
3.   With the direction arrow pointing to the desired direction, click and hold the left mouse button.
      The camera moves in the direction indicated.
4.   Pan and tilt speed depends on the position of the pointer on the cameo. Click closer to the edge of the cameo to increase the speed; click closer to the center to decrease the speed.
5.   Release the button when the camera is positioned.
6.   Rotate the mouse wheel to zoom in or out.

Panoramic cameras
The video image of panoramic cameras exceeds the cameo. Therefore, in-window controls are provided in the cameo to allow you to move to another section of the image similar to the digital zoom (see below for details).

See also
–   *Digital zoom, page 38*

7.4   Controlling playback

In the information and operation pane, use the playback controls and the **Timeline** panel to control playback of recorded video. Controlling is valid for all populated cameos.

7.4.1   Playback controls

With the playback controls on the information and operation pane you mainly control playback speed and direction or move to points of interest within the recordings.
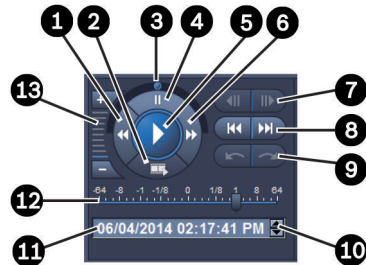For more information on the digital zoom, see below.

Figure 7.2: Playback controls

1	Decrease playback speed and play reverse button	8	Go to earliest/latest recording buttons
2	Export button	9	Go to previous/next event buttons
3	Jog dial	10	Arrow buttons to increase/decrease the selected value in the date/time box
4	Pause button	11	Date/time box
5	Play button	12	Playback speed slider
6	Increase playback speed and play forward button	13	Digital zoom buttons
7	Move one frame back/forward buttons		

To control the playback:

1.   Click [▶] to start playback for all cameos.
     The handle of the speed slider is set to 1 (real-time playback).
2.   Playback speed and direction can be selected in different ways:
     –   Drag the jog dial to the left or right to play back in reverse or forward. The more you drag the jog dial the higher the playback speed. Releasing the jog dial pauses the playback.
     –   Click [▶▶] to increase the playback speed or click [◀◀] to decrease it. With each click the handle of the speed slider is moved further once.
     –   Drag the handle of the speed slider to the desired value:
          1 = real-time playback
          0 = pause
          > 1 to 64 = increasing fast-forward
          < 1 to 0 = slow-motion forward
          0 to -64 = increasing reverse motion
3.   Click [❚❚] to pause playback.

To move to points of interest:

– Click [◀II] to move back one image; click [II▶] to move forward one image. Hold the button to display the next image every 0.5 seconds.
The buttons are only available when playback is paused.

– Click [◀◀I] to move to the earliest recording; click [I▶▶] to move to the latest recording.

– Click [↰] to move to the previous search event; click [↱] to move to the next search event.
The buttons are only available if a search was performed successfully. The events are marked by little icons in the recording indicator bar.

Date and time box
In the box, the date and time of the hairline position are shown.
1. Click one of the values to activate it, for example the day or the seconds.
The background color for the activated value changes.

2. Click the up or down button [▲▼] to count up or down the activated value by one.
Alternatively, type the desired value.
– If a recording is available for the entered value for one of the cameos, the hairline jumps to this time. The corresponding image is displayed in the cameo.
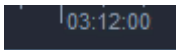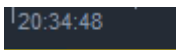– If no recording is available for the entered value, nothing happens.

See also
– *Digital zoom, page 38*
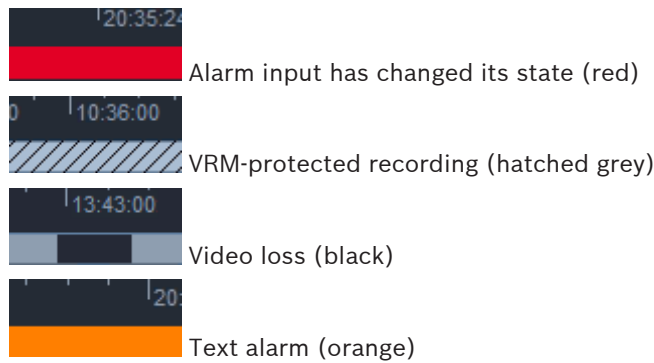– *Searching through recordings, page 47*

7.4.2   Timeline panel

The **Timeline** panel offers additional information on the recordings in the cameo area and a context menu. It helps to quickly navigate through recordings.
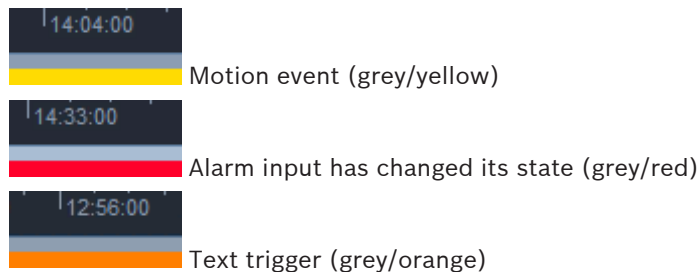
▸ In the information and operation pane in playback mode, click [▤] to open the **Timeline** panel.
A timeline scale is shown with a recording indicator bar for each of the populated cameos. All cameos are synchronized to the same playback time.
The recording indicator bar marks a recording in light grey. Additional colors are used to mark special events. Place the pointer on a colored segment for further information.

Color codes in the recording indicator bar:

03:12:00

Recording without further events (grey)

20:34:48

Motion event (yellow)

Alarm input has changed its state (red)

VRM-protected recording (hatched grey)

Video loss (black)

Text alarm (orange)

Some events from Divar 700-connected cameras only color the bottom half of the indicator bar:

Motion event (grey/yellow)

Alarm input has changed its state (grey/red)

Text trigger (grey/orange)

Search results for event and VCA searches are marked in the recording indicator bar by little icons:

To change the timeline scale:

– Click the ▬ or ✚ buttons to adjust the timeline scale.
  Alternatively, place the pointer on the timeline scale and rotate the mouse wheel.
  The selected interval value is displayed between the two buttons, for example 3 minutes
  or 1 week. The shorter the indicated interval the more you zoom in on the timeline.
– To show the full timeline for an entire recording, click until **All** is displayed between the buttons.

To navigate in the timeline:

– To move back and forward in time, use the arrow buttons above the timeline scale or drag the timeline scale.
– Click anywhere below the timeline scale.
    – If a recording is available for that point in time, the hairline jumps there.
    – If no recording is available the hairline jumps to the beginning of the next available recording.
– The corresponding images are displayed in the cameo area. Use the playback control console for the required playing option.

To select a time period:

You can select a time period and use this selection for further tasks such as exporting video data.

– Drag the bottom arrow handles of the hairline to select a time period.
    – Drag the left or right edge of the selection to change the size of the selection.

–   Drag the bottom of this selection to move the selection.
–   Alternatively, drag the pointer over any section below the timeline scale that includes a
     recording.
–   Right-click the selection to open context menu for further tasks.

Timeline context menu
The commands available in the context menu depend on where you have clicked in the
Timeline panel. Some commands for example are only available if you right-click a selection.
When you click a context menu command that is not available for all cameos, the command is
executed only on the cameos that have this option available.
–   **Center at playback time**
     Moves the timeline scale to center the current playback time
–   **Center at selection**
     Moves the timeline scale to center the current selection (only available if you click outside
     a selection)
–   **Authenticate**
     Checks the authenticity of the selected video
–   **Delete**
     Deletes the selected video (recorders only)
–   **Delete until**
     Deletes all recorded video for all cameos up to the end time of the selection (recorders
     only)
–   **Export**
     Opens the **Export** dialog box for the selected video
–   **Backup**
     Makes a backup of the selected video (VRM only)
–   **Protect**
     Protects the selected video (VRM only)
–   **Unprotect**
     Unprotects the selected video (VRM only)
–   **Show event search results**
     Displays results of the event search (no other search results can be displayed at the same
     time)
–   **Show text search results**
     Displays results of the text search (no other search results can be displayed at the same
     time)
–   **Show VCA search results**
     Displays results of the IVA search (no other search results can be displayed at the same
     time)
–   **Clear selection**
     Removes the selection

7.5   Digital zoom

The digital zoom allows you to magnify a section in the cameo for viewing. You can use it both
in live and playback mode, on video and screenshots. It does not affect the zoom of a
controllable camera.

1. With the pointer in a cameo, rotate the mouse wheel forward to zoom in.
    Alternatively, right-click a cameo and select **Start digital zoom** from the context menu.
    The pointer changes to a direction arrow and in the upper left of the cameo, a dark grey
    box appears including a light grey box that represents the zoom area in relation to the full
    picture.

2. Rotate the mouse wheel to zoom in and out, or click the [+] and [−] buttons of
    the controls on the information and operation pane.

3. Click the cameo to move to another section in the direction of the arrow.
    Alternatively, drag the light grey box to the desired position.

4. If you zoom out completely, the digital zoom function switches off automatically.

7.6   Controlling audio

If audio is available, you can hear it for the selected cameo both in live and in playback mode if
you have enabled audio output.

–   In the toolbar, click [◄×] to enable audio output. The audio of the selected cameo is
     heard, if available.

–   Click [◄)] to disable audio output.

–   Move the slider [—|—] to the right to increase the volume.

7.7   Instant playback

In live mode, use instant playback to view the preceding seconds of recorded video for a
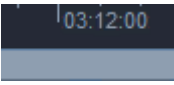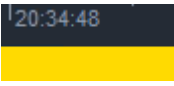particular camera. The camera must, of course, have recording facilities.
The offset time for instant playback is set in the **User preferences** dialog box.

To view instant playback:
1. Right-click a cameo and select **Open instant playback** from the context menu.
    The **Instant playback** panel opens.

2. Click [▶] to start playback.

3. Click [II] to pause playback.

4. Click [↻] to restart playback of the currently selected cameo with the offset time
    defined in the **User preferences** dialog box.
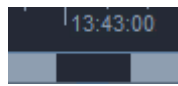A timeline scale is shown with a recording indicator bar below it.

Color codes in the recording indicator bar:

03:12:00

Recording without further events (grey)

20:34:48

Motion event (yellow)

20:35:2

Alarm input has changed its state (red)
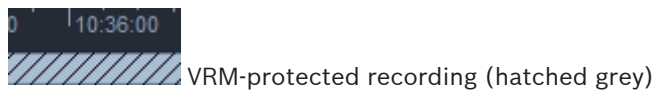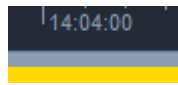
VRM-protected recording (hatched grey)
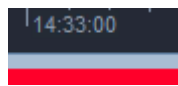
Video loss (black)

Text alarm (orange)

Some events from Divar 700-connected cameras only color the bottom half of the indicator bar:

Motion event (grey/yellow)

Alarm input has changed its state (grey/red)

Text trigger (grey/orange)

To control instant playback:

1. When paused, click ◀‖ to move back one frame; click ‖▶ to move forward one frame.
2. Drag the timeline scale to move it in time.
3. Right-click the indicator bar to center the timeline on the hairline that indicates the playback position.
4. Drag the hairline to move playback to a point within a recording.
5. Enter the date and time in the time box to move the hairline to that point of the timeline.

See also
– *Setting user preferences, page 19*

7.8   Populating a monitor wall

With Video Client, you can configure live viewing on a monitor wall. Before you can populate a monitor wall you have to set up the grid in the **User preferences** dialog box. Otherwise, the **Monitor wall** panel is not available in the task panel.

1. In the task pane in live mode, click ⊞ to open the **Monitor wall** panel.
    In the upper section, the grid is shown as set up in the **User preferences** dialog box.
    Positions that have a decoder assigned are marked with a darker grey border.
    If you have assigned decoders belonging to different sites, only the decoders for the currently connected site are available.
2. Move the pointer over a position. The border color changes to orange and the corresponding decoder is displayed in the lower section of the panel.
3. Right-click a position in the upper section to select the layout via the context menu. In the lower section, the decoder accordingly offers 1 or 4 cameos.
4. Drag a camera from the system panel to a decoder cameo in the lower section of the **Monitor wall** panel.
    Alternatively, use the context menu of the camera or cameo to assign it.

5.   Right-click a decoder cameo to open the context menu. Not all commands are always available:

–   **Select video input**
Lists available cameras

–   **Clear cameo**
Cancels the current video-to-cameo assignment

–   **Stop sequencing**
Stops running sequences

See also

8   Controlling inputs and outputs

In the accessories and archive pane in live mode, the inputs and outputs of all devices in your system are displayed according to the settings in the Configuration Manager application.
If the devices belong to a site, the inputs and outputs are only available while the site is connected.

To control alarm outputs:

1.   In the accessories and archive pane in live mode, click to open the **Alarm outputs** panel.
2.   If you want to show the alarm outputs of a disconnected site, right-click the site to establish a connection via the context menu.
3.   Double-click a connected alarm output to toggle its state.
4.   Right-click an alarm output to toggle its state or view its properties via the context menu.

Connected alarm outputs like relays are indicated by a green overlay dot. The icon shows the state of the alarm output:

 A closed alarm output icon indicates an active output.

 An open alarm output icon indicates an inactive output.

To control alarm inputs:

1.   In the accessories and archive pane in live mode, click to open the **Alarm inputs** panel.
2.   If you want to show the alarm inputs of a disconnected site, right-click the site to establish a connection via the context menu.
3.   Right-click an alarm input to view its properties via the context menu.

Connected alarm inputs are indicated by a green overlay dot. The icon shows the state of the input:

 A red alarm input icon indicates an active input.

 A grey alarm input icon indicates an inactive input.

9 Saving and viewing screenshots

Capture still images from a camera and save them as screenshots to the computer's hard disk. The default locations for these screenshots are defined in the **User preferences** dialog box. Saved screenshots are accessible via the **Screenshots** panel in the accessories and archive pane if the location is listed in the **User preferences** dialog box.

To save a screenshot to the computer's hard disk:
1. Click a cameo to select it.
2. In the task pane, click to open the **Cameo capture** panel.
   The **Cameo capture** panel opens with the still image of the selected cameo displayed. Identification information is shown under the image.
3. To update the image, click on the bottom left of the panel.
4. To change the storage location, click the drop-down arrow. Either select a different default location or click **Browse...** to enter a new path.
5. If you have entered a new path, select the check box to add the new location to the monitored directories. Thus, you make sure that the file is displayed in the **Screenshots** panel in the accessories and archive pane for easy access.
6. To change the file name, type the new name for the file.
7. To change the image format, click the drop-down arrow and select the desired format.
8. Click to save the image.
   The screenshot has the same resolution as the camera image.
9. Click to capture a new still image from the currently active cameo.

To display screenshots:

1. In the accessories and archive pane, click to open the **Screenshots** panel.
2. The list of archived screenshots is displayed for all locations that you have defined in **User preferences > Directories > Monitored capture locations**.
3. Right-click a file to view its properties via the context menu. Other menu options are:
   – **Rename screenshot**
      Allows to type in a new name for the file
   – **Delete screenshot**
      Deletes the selected file without further warning
4. To display a screenshot, double-click it or drag it to a cameo.

See also
– *Setting user preferences, page 19*

10 Exporting video clips

Export video clips from live video or from recordings to your computer's hard. You can view the stored files in playback mode or with the Export Player application.

See also
– *Viewing stored clips, page 46*

10.1 Workstation recording

In live mode, use workstation recording to manually export a video clip to your computer's hard disk. Such a workstation recording is limited to 10 minutes and only 2 workstation recordings can be active at the same time. Date and time overlays are not saved.
The location for workstation recordings is set in the Configuration Manager application. It is displayed for information in the **User preferences** dialog box. You can view the exported files in playback mode if the path is added to the list of monitored locations in the **User preferences** dialog box.

1. Place the pointer over a cameo.

2. Click the **Start workstation recording** icon that appears in the bottom left of the cameo.
    Alternatively, right-click the cameo and select **Start workstation recording** from the context menu.
    The recording starts and the **Export jobs** panel is shown.

3. To stop workstation recording, either click in the cameo or click in the **Export jobs** panel.

See also
– *Setting user preferences, page 19*

10.2 Exporting video clips from recordings

In playback mode, export the video clips of a selected period for up to 4 recordings simultaneously to your computer's hard disk. The file size for exports is limited to 2 GB.

1. Click the **Export** button on the playback control console to open the **Export** dialog box.
2. To change the default location, browse to the location in the computer's file system where the export file is to be stored.
3. If you have entered a new path, select the check box to add the new location to the monitored directories. Thus you make sure that the folder is displayed in the **Exports** panel in the accessories and archive pane for easy access.
4. To change the file name, type the new name for the file.
5. Enter new values in the **From** and **To** boxes to change the selection start and end date/time.
    Alternatively, click the calendar icons to pick a date.
6. By default, all cameras from the cameo area are listed for export. If you have assigned different tracks from one camera, these are listed as separate entries. Clear the check box to exclude an entry from export.

7. Select the **Export format** option to define the format of the exported file.
8. The estimated size of the export file is shown. Ensure that there is sufficient space to store the export.
    Note that the maximum file size for exports is 2 GB. Adjust your export settings if the limit is exceeded.
9. Click **Export**.
    The **Export jobs** panel opens and shows the progress bar for the export.
10. To cancel the export, click in the **Export jobs** panel.
The export job runs in the background, so you can continue using Video Client for live viewing, playback, search or other export tasks.

10.3   Export jobs panel

The **Export jobs** panel shows the progress of workstation recording and video export jobs.

1. In the information and operation pane, click to open the **Export jobs** panel.
    In the first column, an icon defines the job type:

    –   workstation recording

    –   video export

2. To stop a workstation recording or a video export job, click .

3. To remove a stopped or completed job from the list, click again.

A log of all exports can be found at the following locations:
–   **Windows XP**:
    C:\Documents and Settings\All Users\Application Data\Bosch\Video Client\ExportLog.txt
–   **Windows 7/Windows 8/Windows Vista**:
    C:\Program Files\Bosch\Video Client\ExportLog.txt
    With 64-bit operating systems:
    C:\Program Files (x86)\Bosch\Video Client\ExportLog.txt

11   Viewing stored clips

In playback mode, view exported video clips and workstation recordings stored on your computer's hard disk and recordings on memory cards.

Playing back exported video clips

1.   In the accessories and archive pane, click [icon] to open the **Exports** panel.
2.   The list of exported file sets is displayed for all locations that you have defined in **User preferences > Directories > Monitored export locations**.
3.   To list the clips stored in a file set, click [icon].
4.   To play back a clip, double-click it or drag it to a cameo.
If you drag a file set with multiple clips to a cameo in multi-cameo view, the first 4 clips of the file set are assigned to the cameos and playback starts.

Note:
Exports in ASF format will not play within Video Client. ASF files can be played using standard Windows media players.

Context commands
–   Right-click a file set to view its properties via the context menu. Other menu options are:
   –   **Rename export**
      Allows to type a new name for the file set
   –   **Delete export**
      Deletes the selected export without further warning
–   Right-click a clip to view its properties via the context menu. The other menu option is:
   –   **Authenticate**
      Checks the authenticity of the selected clip

Playing back recordings on memory cards
You can access tracks recorded on a memory card that has been removed from a device.
1.   Insert the memory card into the card reader of your computer.
2.   Enter the path to the memory card in **User preferences > Directories > Monitored capture locations**.
3.   In the accessories and archive pane, click [icon] to open the **Exports** panel.
   The list of files suitable for playback is displayed.
4.   To display a file, double-click it or drag it to a cameo.

See also
–   *Setting user preferences, page 19*

12   Searching through recordings

In playback mode, the task pane on the right offers panels to search through recordings:
–   The **Event search** panel allows to search for specified events.
–   The **VCA search** panel allows to search based on video content analysis (VCA) algorithms.
A third search panel is available for Divar 700-connected cameras:
–   The **Text search** panel allows a search through recordings for defined text.

The search is performed for the recordings in the cameo area. Note that the layout automatically changes to a single cameo when you open the **VCA search** panel since this kind of search is only possible for one recording at a time.

Search results
When the search is completed, a list with the search results is displayed in the cameo area. This list shows the latest recordings at the top, the earliest at the bottom.
1.   Click a column header to sort the list according to that column item. Click a second time to sort the list in reverse order.
2.   Use the scroll bar to examine the full list.
3.   Click an entry in the list to select it. The images for that entry are displayed in the corresponding cameo.
4.   Use the playback control console to adjust playback speed and direction.
5.   Click to close the list.
6.   In the search panel, click to reopen the list.
7.   In the search panel, click to clear the list.

Search results for event and VCA searches are marked in the recording indicator bar by little icons:

See also
–   *Controlling playback, page 34*

12.1   Searching for events

1.   In the task pane in playback mode, click to open the **Event search** panel.
2.   To set the search period, enter the date and time in the **From** and **To** boxes. Alternatively, select a period in the **Timeline** panel.
3.   All tracks in the cameo area are listed under **Track selection**. Deselect the tracks that you want to exclude from the search.
4.   To specify the events to search for, select the desired type:
       –   **Alarm input**
       –   **Motion**
       –   **Text**
              (only for recordings from Divar 700-connected cameras with an appropriate license)
       –   **Video loss**

– **System events**
– **Alarms only**

5.   To start the search, click [icon] .

6.   To cancel the search, click [icon] .

12.2   VCA search

A search based on video content analysis (VCA) algorithms can only be performed for one recording at a time. Therefore, the cameo area layout automatically switches to single cameo view when you open the **VCA search** panel.

It depends on the selected recording, if and what search algorithms are available. Help files for various algorithms are available via the help index in the toolbar or the help button in the **VCA search** panel. For further information, refer to the documentation for the respective algorithm.

Save up to 4 frequently used **VCA search** configurations as presets. Thus, you can reload the configuration of the respective search with a click, for example to search through different recordings or different periods with the same settings.

To perform a VCA search

1.   In the task pane in playback mode, click [icon] to open the **VCA search** panel.
2.   In the drop-down box, the available algorithms for the recording are listed. Select the algorithm for the search.
     The parameters of the selected algorithm are shown in the panel.

3.   Change the desired parameters. Click [icon] to open the help file for the selected algorithm.
4.   To set the search period, select the period in the **Timeline** panel.

5.   To start the search, click [icon] .

6.   To cancel the search, click [icon] .

To save and reload search presets:
1.   Make sure the configuration of the selected algorithm is completed.
2.   In the drop-down box, select a preset number.
3.   Enter a name for the preset.

4.   Click [icon] to save your choices.
     The preset is available for all recordings that support the respective algorithm. It is saved unless you overwrite the preset number with a different configuration.

5.   To reload a saved configuration, select the desired preset number and click [icon] .

12.3   Searching for text

Text search is only supported for recordings from Divar 700-connected cameras with an appropriate license installed.

1. In the task pane in playback mode, click to open the **Text search** panel.
2. To set the search period, enter the date and time in the **From** and **To** boxes. Alternatively, select a period in the **Timeline** panel.
3. All tracks in the cameo area are listed under **Track selection**. Deselect the tracks that you want to exclude from the search.
4. Type the string you wish to search for.
5. Select the **Case-sensitive search** check box if you want the search result to exactly match your search string.
6. To start the search, click .
7. To cancel the search, click .

13   Using the Text viewer pane

The **Text viewer** pane displays text from a Divar 700-connected camera. The line number and date stamp are shown in front of the text.

Note that in live mode the icon to open the **Text viewer** pane is only available if a Divar 700-connected camera is allocated to the system.

In playback mode, the icon is available but the pane will only show text associated with a Divar 700-connected camera recording.

1.   To open the **Text viewer** pane, click in the toolbar.

2.   To clear the **Text viewer** pane, click .

3.   To close the **Text viewer** pane, click .

To export text:

1.   In the **Text viewer** pane, click to freeze the text.

2.   Click to copy the text to the clipboard, or click to save the text to a file.

14   Getting status messages

In the **Logbook** panel, status messages for the system are listed such as device logon actions or events.

▸   In the information and operation pane, click [icon] to see the **Logbook** panel.

Some messages have an icon in the first column. Double-click such an entry to acknowledge it:

[icon] Alarm event

[icon] Alarm event acknowledged

[icon] Contact activated

[icon] Contact activation acknowledged

[icon] Motion event

[icon] Motion event acknowledged

[icon] Video loss

[icon] Video loss acknowledged

[icon] Text message

[icon] Text message acknowledged

Note:

To see VRM status messages, install the patch delivered with Video Client at the computer running the respective VRM application.

See also

–   *Software installation, page 5*

15   Appendices

The following chapters provide additional information on various topics.

15.1   Standard keyboard shortcut keys

The following tables list the functions that can be controlled by shortcut keys on a standard computer keyboard. Note that some shortcut key functions differ according to what you focus in the user interface. If you use a shortcut key to focus on a panel, the pointer is centered over that panel.

General shortcut keys

Action	Key
Show application help	F1
Switch live mode/playback mode	F2
Log off	F4
Exit application	ALT+F4
Show **User preferences**	F5
Switch audio on/off	F7
Turn audio on and increase volume	F8
Turn audio on and decrease volume	SHIFT+F8
Show **Text viewer**	F9
Maximize cameo area to size of application window (and back to normal)	F10
Maximize application window to full screen (and back to normal)	F11
Focus on cameo area	CTRL+V
Show **Favorite views** panel	CTRL+F
Show **Video device list** panel	CTRL+D
Show **Screenshots** panel (only with expanded accessories and archive pane)	CTRL+S
Show **Export jobs** panel (only with expanded information and operation pane)	CTRL+J
Show **Cameo capture** panel	ALT+C
Set cameo area layout to single view	CTRL+1
Set cameo area layout to quad view	CTRL+2
Set no cameo decorations	ALT+1
Set title overlay cameo decorations	ALT+2
Set title bar cameo decoration	ALT+3
Toggle VCA overlay cameo decoration	ALT+4

Cameo area shortcut keys

Action	Key
Select cameo to the left	LEFT ARROW
Select cameo to the right	RIGHT ARROW
Select cameo above	UP ARROW
Select cameo below	DOWN ARROW

Live mode shortcut keys

Action	Key
Show **Alarm outputs** panel (only with expanded accessories and archive pane)	CTRL+R
Show **Alarm inputs** panel (only with expanded accessories and archive pane)	CTRL+C
Show **Instant playback** panel	ALT+P
Show **View designer** panel	ALT+V
Show **Monitor wall** panel	ALT+M
Show **Logbook** panel (only with expanded information and operation pane)	CTRL+L
Set cameo area layout to 3×3 view	CTRL+3
Set cameo area layout to 4×3 view	CTRL+4

Video device list and Favorite views panel shortcut keys

Action	Key
Select previous list entry	UP ARROW
Select next list entry	DOWN ARROW
Select first entry in the displayed part of the video device list	PAGE UP
Select last entry in the displayed part of the video device list	PAGE DOWN
Select first list entry	HOME
Select last list entry	END
Expand selected list entry	RIGHT ARROW
Collapse selected list entry	LEFT ARROW

Filter input line shortcut keys in the Video device list panel

Action	Key
Go to next character	RIGHT ARROW
Select next character	SHIFT+RIGHT ARROW
Go to previous character	LEFT ARROW
Select previous character	SHIFT+LEFT ARROW
Go to first character	HOME
Go to last character	END
Delete next character	DEL
Delete previous character	BACKSPACE

Playback mode shortcut keys

Action	Key
Go to playback control console (only with expanded information and operation pane)	CTRL+P
Show **Timeline** panel (only with expanded information and operation pane)	CTRL+T
Show **Exports** panel (only with expanded accessories and archive pane)	CTRL+X
Show **Event search** panel	ALT+E
Show **VCA search** panel	ALT+I
Show **Text search** panel	ALT+T

Playback control console shortcut keys

Action	Key
Switch play forward (speed: 1)/pause	SPACEBAR
Switch play reverse (speed: -1)/pause	SHIFT+SPACEBAR
Gradually increase playback speed	PLUS SIGN
Gradually decrease playback speed	MINUS SIGN
In pause mode: move back 1 frame	LEFT ARROW
In pause mode: move forward 1 frame	RIGHT ARROW

Timeline shortcut keys

Action	Key
Move timeline left	CTRL+LEFT ARROW
Move timeline right	CTRL+RIGHT ARROW

Action	Key
Gradually move timeline left	SHIFT+LEFT ARROW
Gradually move timeline right	SHIFT+RIGHT ARROW
Center timeline at beginning of selection or jump to beginning of first recording if there is no selection	HOME
Center timeline at end of selection or jump to end of last recording if there is no selection	END
Zoom in on timeline	PAGE UP
Zoom out on timeline	PAGE DOWN

15.2 Using an IntuiKey keyboard

Our IntuiKey keyboard can be used to control a limited number of functions in live and playback mode. Make sure the keyboard has installed firmware version 1.96. The keyboard is connected to the computer via an RS-232 connection.

Refer to the IntuiKey documentation for more information on installing and general operating principles.

When the IntuiKey keyboard is controlling Video Client, several functions of the application are disabled, so it is necessary to ensure that the application is set up correctly for IntuiKey operation.

Note that the use of the IntuiKey keyboard is not supported if you work with the "-sites" command line parameter.

15.2.1 Before installing the IntuiKey keyboard

Before installing the IntuiKey keyboard configure Video Client taking the following points into account:

– User name and password may only consist of numbers as you can enter no characters using the numeric keypad of the IntuiKey keyboard.
– Set up all the favorite views you will require (at least one layout must be defined).
– Set up sequences.

Tip:

If you precede a favorite group with a number in square brackets (for example, [300]), the items in that group will be numbered sequentially based on that number ([301], [302], etc.).

The **View designer**, **Monitor wall**, and **Cameo calibration** panels will not be available.

In the toolbar, the following functions will be unavailable or limited:

☑	**User preferences** (limited)
⧉	**Start/stop sequencing**
▭	**Select cameo decoration** (limited)
🔧	**Start Configuration Manager**

⑦ ▾	**Show help index**
—	**Minimize**

15.2.2 Setting up the IntuiKey keyboard

Connect the IntuiKey keyboard to the computer. In the Configuration Manager application, set the communication port number of the computer and enable **Use keyboard**.

When the IntuiKey keyboard is installed, restart Video Client. On connection, press the **Prod** button and then press the softkey next to **Terminal**.

To log on to the application, enter the user name and password using the numeric keypad and the enter key ⏎ .

Video Client opens with a compact user interface.

Note that direct logon is not possible with the IntuiKey keyboard.

15.2.3 Controlling with the IntuiKey keyboard

Initially, the softkey display shows the available functions for live mode.
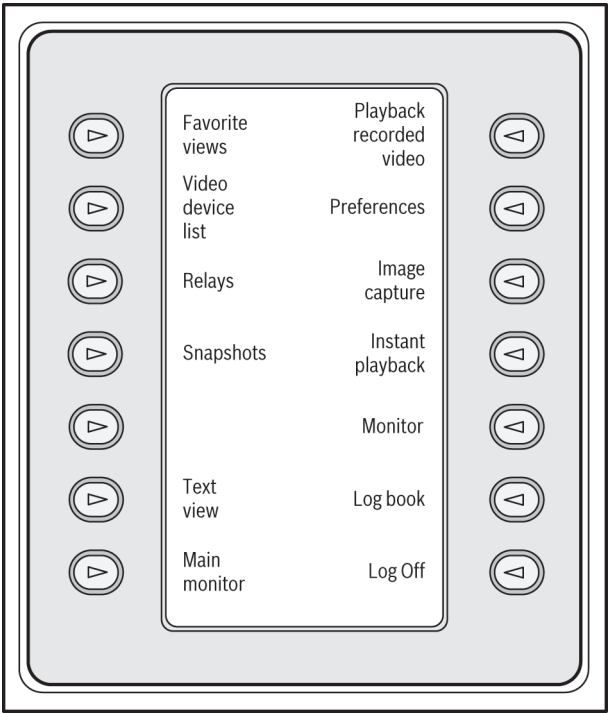

Figure 15.1: Live mode view of sample English softkey display

Press the associated softkey to select a function. Continue using the softkeys to select the items in the submenus.

The favorite views, alarm inputs, sequences and alarm outputs are displayed in the application preceded by a number in square brackets. Enter this number on the numeric keypad and press the enter key ⏎ to select the function.

Use the **Mon** key to select a cameo.

Playback mode
If you select **Playback mode** in live mode the following is displayed:

Figure 15.2: Playback mode view of sample English softkey display

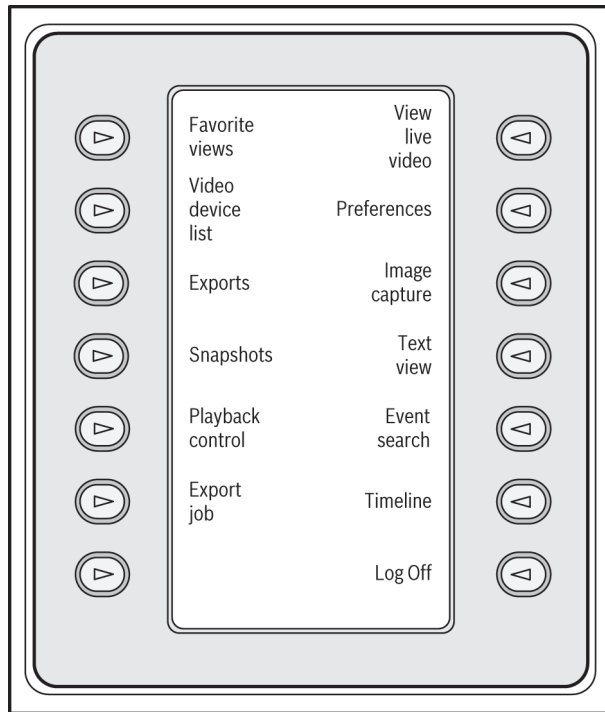You can also use the joystick to control playback and timeline actions.

Exiting the application

To exit the application, select **Log off**.

15.3   Command line start

The program can also be started from the command line with additional parameters.

To open a help with more information about the parameters that can be used, add the "-?" parameter to the command line, for example:

C:\Program Files (x86)\Bosch\Video Client\videoclient.exe -?

Sites parameter

If you use the "-sites" parameter, you must specify the path to an xml file which describes the devices at the different sites. For example:

C:\Program Files (x86)\Bosch\Video Client\videoclient.exe -sites D:\sites_file.xml

Note that the use of the IntuiKey keyboard is not supported if you work with the "-sites" command line parameter.

XML file structure

The xml file has a simple structure as is shown in the following example:

```xml
<?xml version="1.0" encoding="utf-8"?>
<sites>
    <showFilter>True</showFilter>    <!-- Element is optional - default value is: True -->
    <site>
        <devices>
            <device>10.10.181.131</device>
            <!-- Enter devices typing the IP address, the default device type is Divar 700 -->
            <device>10.10.181.130:8080</device>
            <!-- Also supported: <ip address>:<port number> -->
            <device>http://DIVARs.no-ip.org:10080</device>
            <!-- Also supported: http://<URL>:<port number> including DDNS addresses -->
            <device type="Divar 700">10.10.181.129</device>
            <!-- Optional attribute to define device type as Divar 700 -->
            <device type="Divar 400">10.10.181.128</device>
            <!-- Optional attribute to define device type as Divar 400 -->
            <device type="Divar 600">10.10.181.127</device>
            <!-- Optional attribute to define device type as Divar 600 -->
            <device type="DVR-3000">10.10.181.126</device>
            <!-- Optional attribute to define device type as DIVAR AN 3000 -->
            <device type="DVR-5000">10.10.181.125</device>
            <!-- Optional attribute to define device type as DIVAR AN 5000 -->
            <device type="Storage Manager">10.10.181.124</device>
            <!-- Optional attribute to define device type as VRM, including DIVAR IP 2000 and DIVAR IP 6000 -->
        </devices>
        <description>Test devices on Bosch premises</description>
    </site>
    <site>
        <devices>
        <description>Divar700</description>
    </site>
    <site>
        <devices>
        <description>Single</description>
    </site>
    <site>
    <site>
    <site>
</sites>
```

A sample editable xml file can be found on the Bosch web site.

Site connector panel

The **Site connector** panel in the system pane shows the devices that have been listed in the start-up xml file.

To log on to a device:
1.   If required, enter text in the filter area to reduce the number of sites listed.
2.   Select a device and enter its user name and password.

3.   Click [icon] to log on to the device and obtain the list of cameras connected to it.

15.4   Video image overlays

Various overlays in the video image provide important status information. The overlays provide the following information:

[icon] **Decoding error**

The frame might show artifacts due to decoding errors.

[icon] **Alarm flag**

Indicates that an alarm has occurred.

[icon] **Communication error**

A communication error, such as a connection failure to the storage medium, a protocol violation or a timeout, is indicated by this icon.

Gap

Indicates a gap in the recorded video.

Watermark valid

The watermark set on the media item is valid. The color of the check mark changes according to the video authentication method that has been selected.

Watermark invalid

Indicates that the watermark is not valid.

Motion alarm

Indicates that a motion alarm has occurred.

Storage discovery

Indicates that recorded video is being retrieved.

Intelligent tracking active

Intelligent tracking is active (only available for cameras supporting intelligent tracking).

Intelligent tracking idle

Intelligent tracking is idle waiting for an object to track (only available for cameras supporting intelligent tracking).

Intelligent tracking paused

Intelligent tracking is paused because of a user interaction (only available for cameras supporting intelligent tracking).

Intelligent tracking recovering

Intelligent tracking has lost the tracked object and is trying to rediscover it in the video image (only available for cameras supporting intelligent tracking).