



SANTEC

USER MANUAL

HD-CVI digital video recorder

Models:

SCVR-2411K

SCVR-2411TK

SCVR-2812TK



SCVR-2411K



SCVR-2411TK



SCVR-2812TK

Dear customer,

Thank you for purchasing a high quality SANTEC device.

We recommend that you read this manual thoroughly before operating your new system for the first time. Please follow all instructions and observe the warnings contained in this manual.

Please contact your local dealer or SANTEC directly if you have any questions or if you wish to claim for a service or warranty.

You will find further information on our website:

www.santec-video.com

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1. General

Please read this user manual carefully before starting to operate this device. Please retain this user manual for future reference.

1.1 Safety instructions and precautions



Overcharge

Never expose the power socket or the power cord to electrical overcharge. This may lead to fire and life-threatening shocks.

Thunderstorms

If there is a thunderstorm or if the device has not been in use for a longer period of time, please always disconnect the device from the power source. Disconnect the power cord. This protects the device from lightning damages or overcharging.

Entry of liquids or items

Never poke with metallic items in the ventilation slots of the device. You may touch dangerous live power items which may lead to an electronic shock, a short circuit or fire.

Lithium battery

Risk of explosion if the lithium battery is not installed correctly or if it is replaced by an incorrect type. Only use batteries which are compatible to the device and are recommended by the manufacturer. Dispose of used batteries only in accordance with local regulations.

1.2 CE compliance

This appliance complies with the CE guidelines.

If you require an EC Declaration of Conformity for this device, please send a request to: CE@santec-video.com

Attention:

Any changes or modifications to this appliance which have not been explicitly approved of by the respective regulatory authority, may lead to a prohibition of usage of this appliance.

Important: Legal note



Monitoring, recording and storage of video surveillance data (images, audio), is subject to strict legal regulations. Please respect the Data Privacy Act which applies to your country.

1.3 Important general note

Please read the following instructions carefully.

1.3.1 Assembly and installation

- On-site installation should only be performed by qualified maintenance personnel and must meet local specifications and regulations.
- Never operate the equipment without the respective protective cover near water, in dusty rooms or extremely humid rooms. The equipment could be seriously damaged.
- The openings on the equipment are intended for ventilation purposes and protect from overheating. Never cover or close off these openings. Rack mounting is only permissible if sufficient ventilation can be ensured. Overheating may damage the equipment or result in fire due to short-circuit.
- Power cables and other cables should be run so as to avoid being stepped on or potential damage from falling objects. Damaged cables may result in short-circuit and equipment damage as well as potentially fatal electrical shock.
- When connecting the supply voltage please note correct polarity. Faulty connections may damage or destroy the equipment.
- Only use the power source specified on the nameplate. Please consult your electrician if you are unsure whether the power supply on site is appropriate. Only use the supplied power cables or power adapters or the specified recommended power supplies.

1.3.2 Maintenance and repair

- Shut off and unplug the equipment from the power receptacle prior to every cleaning. Only clean the equipment with a slightly dampened cloth. Do not use harsh cleaners or spray cans. Using harsh solvents such as thinner or petrol may damage the housing surface.
- Immediately shut off the equipment and promptly disconnect it from the operating voltage. The following damages must be handled by an authorized service centre:
 - Damage to the power supply cable
 - If a liquid spilled onto the equipment or an object penetrated the equipment
 - If the equipment was exposed to water or another liquid
 - If the equipment is not functioning properly despite observing the instructions in these operating instructions. Only the controls specified in these operating instructions may be adjusted. Incorrect settings to the other controls may damage the equipment.
 - If the equipment fell to the floor or the housing was damaged
 - If the equipment performance is substantially the required performance
- Never attempt to maintain the equipment yourself, as this may expose you to hazardous voltages. Maintenance work should always be performed by qualified personnel only.

**Attention:**

Opening the appliance will result in loss of warranty. Do not try to repair the appliance yourself but contact your local distributor or specialist.

- For digital recorders, it is mainly the HDD which is subject to natural attrition. HDD attrition may happen after approx. 8,000 to 10,000 hours of operating time which may lead to malfunctions. We thus recommend to replace the HDD in specific intervals in order to ensure a smooth operation of the appliance. Moreover, we recommend to clean the built-in fan regularly from dust and dirt to avoid interferences caused by overheating. Please do not hesitate to contact us in case of further questions.



Attention: Attrition of mechanical parts

We explicitly point out that any type of recording device, no matter if it is an analogue or digital device, is subject to natural attrition. Every recording device contains mechanical parts which – like any other device – need to be maintained and checked regularly. This is particularly important for appliances which run non-stop.

1.3.3 Spare parts and accessories

- Only use auxiliary devices which are recommended by the manufacturer. Non-recommended devices may influence the functionality and may cause electric shocks or fire caused by short circuits.
- Only use spare parts which are recommended by the manufacturer or which have identical characteristics. Non-approved spare parts may cause harm to people (electric shock) and may damage the device (fire).

1.4 Items included in the delivery

1x Recorder SCVR-2411K, SCVR-2411TK or SCVR-2812TK
1x Mouse
1x CD (configurations tool, quick installation guide)
1x Power adapter
1x Remote control (*only for SCVR-2812TK*)



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1.5 „Burg Cam“ App for P2P applications

Using the “Burg Cam” App, you can call-up and control the device by your smartphone or tablet. The following Apps are available for smartphones and tablets: the free-of-charge “Lite” version or the “Pro” version with costs.



App name	Burg Cam Lite	Burg Cam Pro	Burg Cam HD Lite	Burg Cam HD Pro
Device	Smartphone	Smartphone	Tablet	Tablet
Functions	Basic functions, e.g. image adjustment, snapshots, local recording	Advanced functions, e.g. image adjustment, stream quality, push notification	Basic functions, e.g. image adjustment, snapshots, local recording	Advanced functions, e.g. image adjustment, stream quality, push notification
Costs	Free-of-charge	With costs	Free-of-charge	With costs
System	iOS, Android	iOS, Android	iOS, Android	iOS, Android

You can download the Apps in the respective stores.

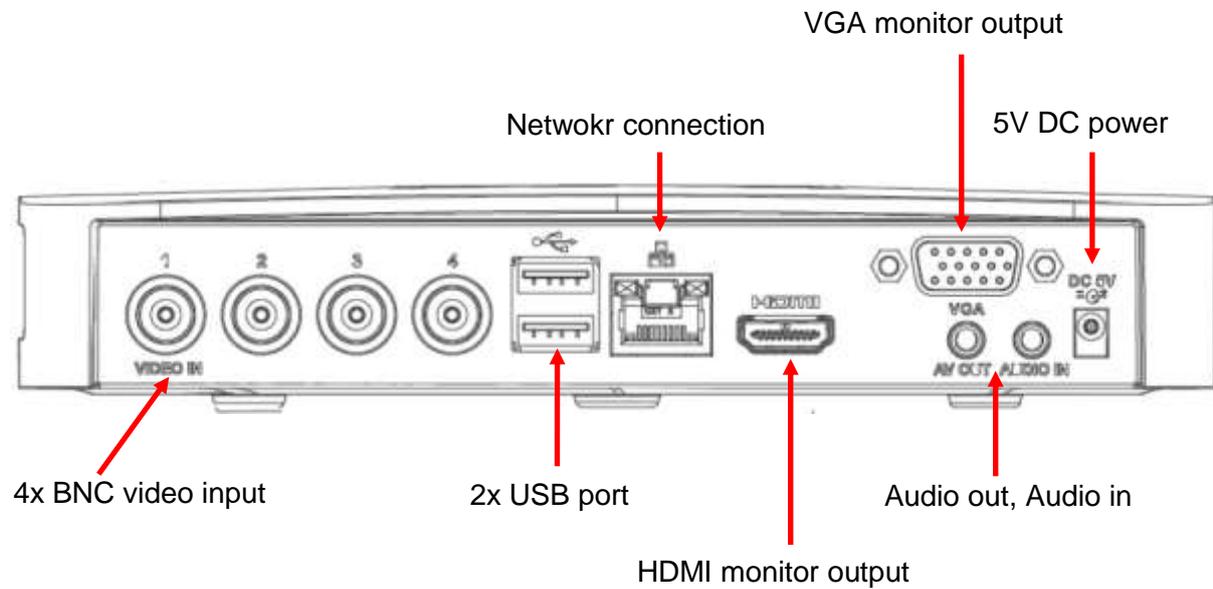
1.6 General note

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2. Control elements, indicators and connections

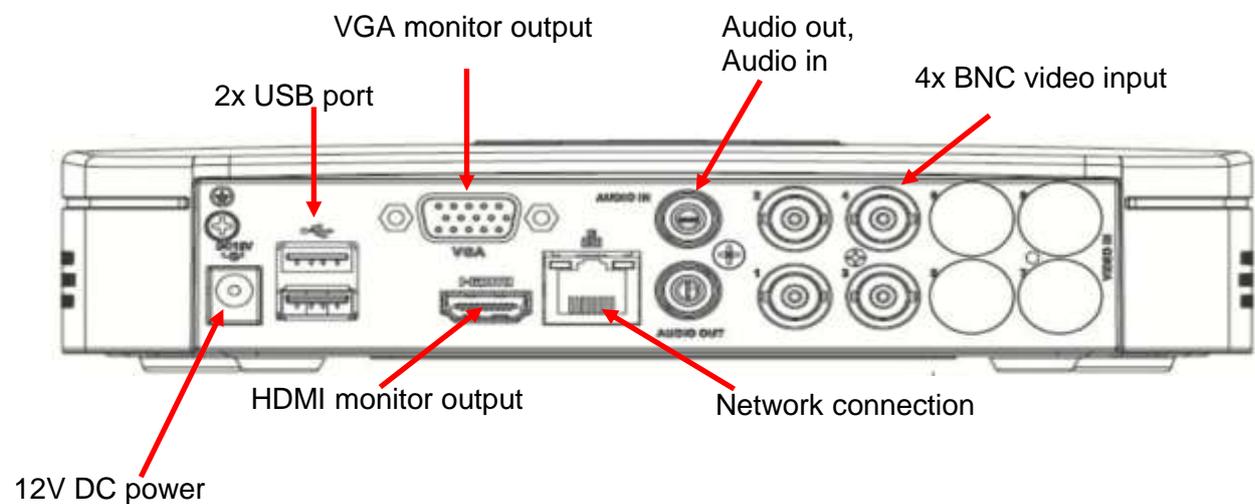
2.1 SCVR-2411K

Connections on recorder rear:



2.2 SCVR-2411TK

Connections on recorder rear:

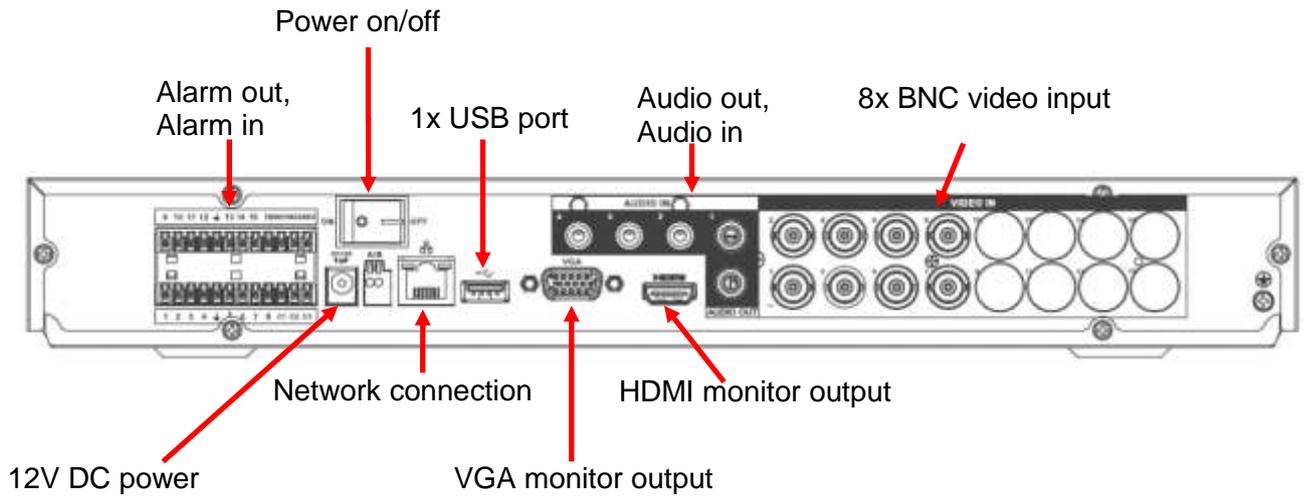


2.3 SCVR-2812TK

Control indicators on recorder front:

Indicator	Description
ALARM	Alarm
REC	Recording
HDD	Hard disk drive
NET	Network
ACT	Remote control
POWER	Power

Connections on recorder rear:



3. Quick start

3.1 Getting started

- Connect the mouse, the monitor, the network cable and the camera(s) with the recorder (notes on camera see chapter 4).
- Connect the monitor and the camera to power by using the power adapters supplied with these devices
- Finally, connect the recorder to power by using the supplied power adapter.
- *For models SCVR-2411K and SCVR-2411TK:*
The recorder switches on automatically as soon as it is connect to power. During this phase a beep sounds.
- *For model SCVR-2812TK:*
Use the power on/off button on the recorder rear to switch the recorder on.
The LED indicator in the recorder front lights up.
- Depending on the settings, the live image of the camera(s) or the Startup Wizard is displayed (the Startup Wizard can be set here (see chapter 7.5.5.1):
Main menu → Setting → System → General → Startup Wizard
 - Startup Wizard:



- Click on „Next Step“ or „Cancel“ to go to the login page.
- Live image:
Left-click in the live image. The login window pops up.



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3.2 Login

Enter your user name and password. By default, the following user name and password are:

User name: admin
Password: 9999

Important note:

It is recommended to change the user name and password here: (see chapter 3.3 and chapter 7): Main Menu → Setting → System → Account → User

You are now logged in and have access to various functions.

Note on invalid login:

If you enter 3 times a wrong user names or passwords within 30 minutes, an alarm is triggered. If you enter 5 times wrong login details, your user account will be locked.

3.3 Calling-up the main menu

You have 2 options to call-up the main menu:

- To open the main menu, right-click into the live image and select „Main Menu“ from the displayed quick menu.
- Alternatively, you can open the main menu through the navigation bar which is displayed in the live image. This, however, requires that the navigation bar has previously been enabled. You can enable the display of the navigation bar here (see chapter 7.5.5.1):
Main menu → Settings → System → General → Navigation bar

3.4 Changing the menu language

- Open the main menu and select the following:
Main menu → Settings → System → General → Language
(see chapter 7.5.5.1)
- You can choose from English or German.

3.5 Logout and switching off the recorder

- Open the main menu and select the following (see chapter 7.3):
Main menu → Operate → Shutdown
- The recorder will shut down, but it is still in operation mode (the LEDs on the recorder front panel are still on).
- To finally switch off the recorder, use the power on/off button at the rear of the recorder.

Note:

Please always shut down the recorder prior to switching it off (see above) and don't switch it off while still running.



4. Notes on connected cameras

You can connect analogue or HD-CVI cameras (via coax or twisted pair) to this recorder.

For models SCVR-2411TK and SCVR-2812TK, IP cameras (ONVIF) can be connected, too.

Recommended SANTEC HD-CVI cameras:

- SCC-10KBIF
- SCC-10KEIF
- SCC-20KBIF
- SCC-20KEIF
- SCC-242KZNA
- SCC-221KDNM
- SCC-221KEIM
- SCC-221KEIMG
- SCC-220KLNN
- SCC-230KLNN
- SCC-241KDIA
- SCC-251KBIA

The camera configuration is described in chapter 7.5.1.

5. Controlling the recorder using the mouse

You can control the recorder using the supplied mouse. Connect the mouse to the USB port on the recorder.

Double left-click:

In live mode, double left-click in the respective camera image to display it as full screen. Double left-click again into the full screen to return to the previous split screen.

Note: This only works if the navigation bar is hidden. Double-right click.

Single left-click:

Use a single left-click to select a menu item or to start entering data.

Single right-click:

In live mode, single right-click into the live image to open the quick menu. Here you will find the following items:

- View (see chapter 6.3.2)
- Pan/Tilt/Zoom (see chapter 6.3.2)
- Color setting (see chapter 6.3.3)
- Search (see chapter 6.3.4)
- Manual control (see chapter 6.3.5)
- Main menu (see chapter 6.3.6 and chapter 7)

Single right-click into (e.g. into the live image) to close the quick menu.

Make entries using the virtual keyboard:

For some entry fields, a virtual keyboard is displayed if you click into the entry field. Using this virtual keyboard, you can enter letters, numbers or other characters.



Dragging with the left mouse button:

If you are in multi-split mode of the live image, you can switch the order of displayed channels. To do so, press and hold the left mouse button and drag the camera image to the desired position.

6. Live view

6.1 Event display

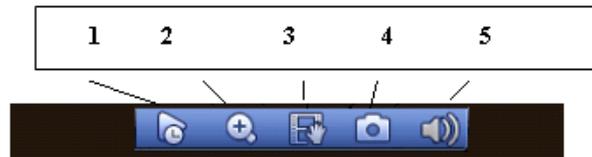


In the live view, small icons are displayed if one of the following events have been triggered:

Symbol	Description
	This channel is currently recording.
	Motion has been detected on this channel.
	Signal loss (video loss) on this channel.
	Camera locked/blocked.

6.2 Calling-up the menu bar

If you touch the upper edge of the respective channel with the mouse cursor, the following small menu bar is displayed:



Note: This only works if the navigation bar is hidden. Right-click to do so.

1. Real-time playback:

If you click on this symbol, the last 5-60 minutes of recorded videos on this channel will be displayed. If there are no recordings at this time, a corresponding message is displayed.

You can define the time (5-60 minutes) here:

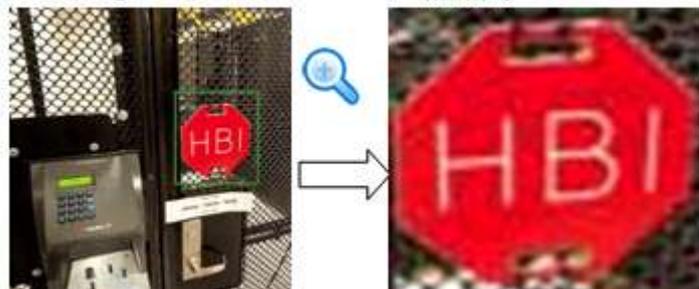
Main menu → Settings → System → General → Real-time play

2. Zoom:

If you click on this symbol, a small tickmark appears.

You can zoom this channel having the following 2 options:

- a. Press and hold the left mouse key to draw a frame into the live image which you wish to zoom.
- b. Use the mouse wheel to zoom the live image.



Right-click to return to the original view.

3. Real-time Backup:

If you click on this symbol, the manual recording will start. Click again on this symbol to stop the recording. These video data can be stored on a connected USB device (e.g. a USB stick).

4. Snapshot:

If you click on this symbol, you can make a snapshot of the current image. This snapshot can be stored on a connected USB device (e.g. USB stick) or HDD.

5. Silent :

This function is only available if the camera supports audio function and the corresponding devices are connected.

Note:

Sound is only active if the respective channel is displayed as full screen (in multi-split mode, audio is not active).

6.3 Access the quick menu by right-click

In live mode (no matter if in split mode or full screen mode), single right-click into the live image to open the quick menu. Here you will find the following items:

- View
- Pan/Tilt/Zoom
- Color setting
- Search
- Manual
- Main menu

Single right-click into (e.g. into the live image) to close the quick menu.

6.3.1 View

Here you can select a channel to be displayed as full screen or select split view.

6.3.2 Pan/Tilt/Zoom control

6.3.2.1 Overview

This function is only available if a PTZ capable camera is connected to the recorder. If you select "Pan/Tilt/Zoom", the following control panel is displayed:



Speed:

Here you can set the PTZ speed (1-8). Click into the speed field and enter the speed value using the virtual keyboard.

Zoom, focus, iris:

Use the plus/minus buttons to adjust the zoom, focus and iris values.

PTZ directions:

You may use the 8 direction buttons (arrows) for PTZ control by clicking on them.

In the center of the direction buttons, there is another button.

If you click here, the camera image is displayed in full screen. Press and hold the left mouse key to draw a frame into the image. This are can be displayed at 16x speed. The smaller the selected frame/area, the higher the speed.



Setting presets, tours, patterns, etc:

If you click on the arrow at the right hand side of the PTZ menu, the menu is extended as follows:



Symbol	Function	Symbol	Function
	Preset		Flip
	Tour		Reset
	Pattern		Aux config.
	Autoscan		Aux on/off
	Autopan		Enter menu

6.3.2.2 Aux configuration

Click on the Aux configuration symbol.
The following menu appears:



Preset:



- For preset settings, the direction buttons can be used to move the camera into the desired position.
- Enter the preset number.
- Save the settings by clicking on „Set“.
- Use „Del preset“ to delete the preset.

Tour:



- For tour settings, the direction buttons can be used to move the camera into the desired position
- Enter the preset number for this tour.
- Save these settings by clicking on “Add preset”.
- Use “Del preset” or “Del tour” to delete the preset or tour.

Pattern:

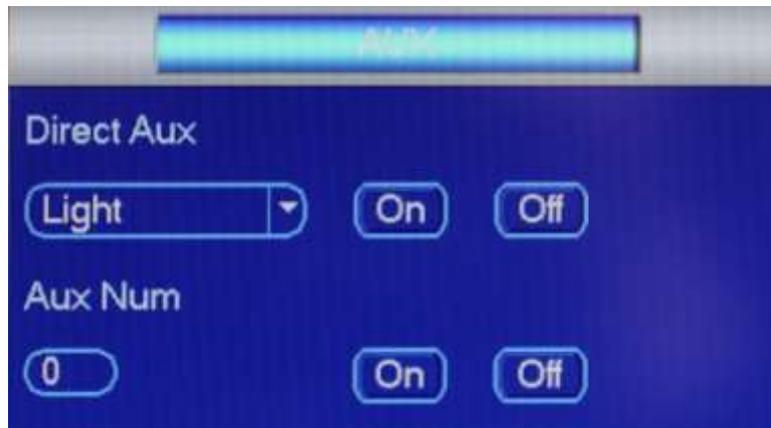
- For pattern settings, the direction buttons can be used to move the camera into the desired position.
- Enter the pattern number.
- Click on „Start“ and „End“.

Border:

For border settings, the direction buttons can be used. Use the left/right buttons to set the borders.

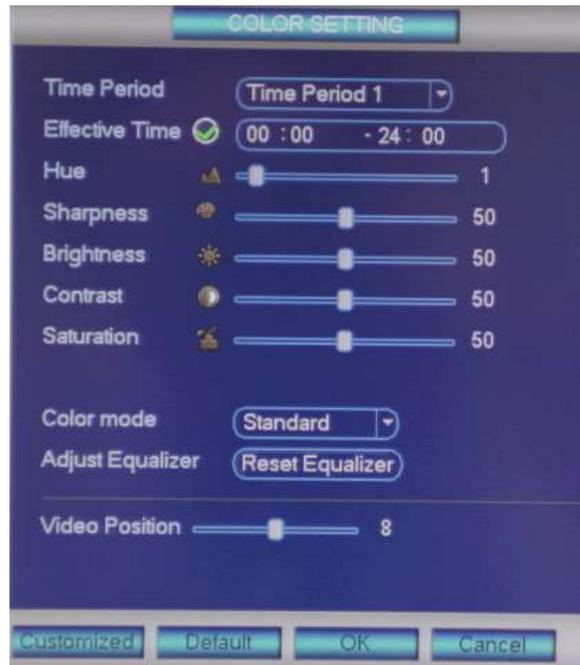
6.3.2.3 Aux

Click on the Aux symbol.
The following menu appears:



The here defined options depend on the selected protocol. "Aux Num" relates to the Aux on/off button of the decoder.

6.3.3 Color setting



Here you can make the following colour settings:

- Time period/Effective time:
You can define 2 independent time periods for which apply additional settings such as sharpness, brightness, etc.
- Hue:
Values 0-15.
- Sharpness:
Values 0-100. Especially applies to the image border. The higher the value, the sharper the image but also increased noise. Optimum values: 40-60.
- Brightness:
Values 0-100. The higher the value, the more brightness compensation but also increased noise. Optimum values: 40-60.
- Contrast:
Values 0-100. The higher the value, the more contrast. Optimum values: 40-60.
- Saturation:
Values 0-100. The higher the value, the more saturation. Optimum values: 40-60.
- Color mode:
Select the desired color mode.

6.3.4 Search

Please see chapter 7.1

6.3.5 Manual

Please see chapter 7.5.4.3

6.3.6 Main menu

Please see chapter 7

6.4 Calling-up the navigation bar

You have to first enable the navigation bar to display it in the live image.

You can enable the navigation bar here:

Main menu → Setting → System → General → Navigation bar

Once you have enabled the navigation bar, it is displayed in the live image if you left-click.



The main menu is opened by clicking on the house symbol.

Symbol	Description
	Calling-up the main menu. Also see chapter 7.
	Display mode: Full screen or split mode.
	Add or manage favorites (channel number, display mode)
	Start tour or tour is running.
	Calling-up the PTZ control. Also see chapter 6.3.2 and chapter 7.5.5.43
	Calling-up the colour settings. See chapter 6.3.3
	Calling-up the search functions. Also see chapter 7.1
	Calling-up the alarm status. Here status for devices and channels are displayed.
	Calling-up the channel information. For each channel, events are listed, e.g. motion detection, video loss, tampering, etc.
	Calling-up the network settings. Also see chapter 7.5.2
	Here you will find HDD information. Also see chapter 7.5.4.2
	Here you will find information on the USB manager, e.g. backup and upgrade.

6.5 USB Auto pop-up

If you connect a USB device (e.g. a USB stick) to the recorder, it will be detected and the following message appears:



You can choose to start a backup or an upgrade process using the USB device. Also see chapter 7.5.5.7 (Import/Export) and chapter 7.5.5.9 (Upgrade).

Note:

Only USB sticks with FAT32 formatting are recognized by the recorder.

7. Main menu settings

You have 2 options to call-up the main menu:

- To open the main menu, right-click into the live image and select „Main Menu“ from the displayed quick menu. See chapter 6.3
- Alternatively, you can open the main menu through the navigation bar which is displayed in the live image. See chapter 6.4



The main menu is structured as follows:

Operate:

- Search
- Backup
- Shutdown

Info:

- System
- Event
- Network
- Log

Setting:

- Remote
- Network
- Event
- Storage
- System

7.1 Main menu → Operate → Search



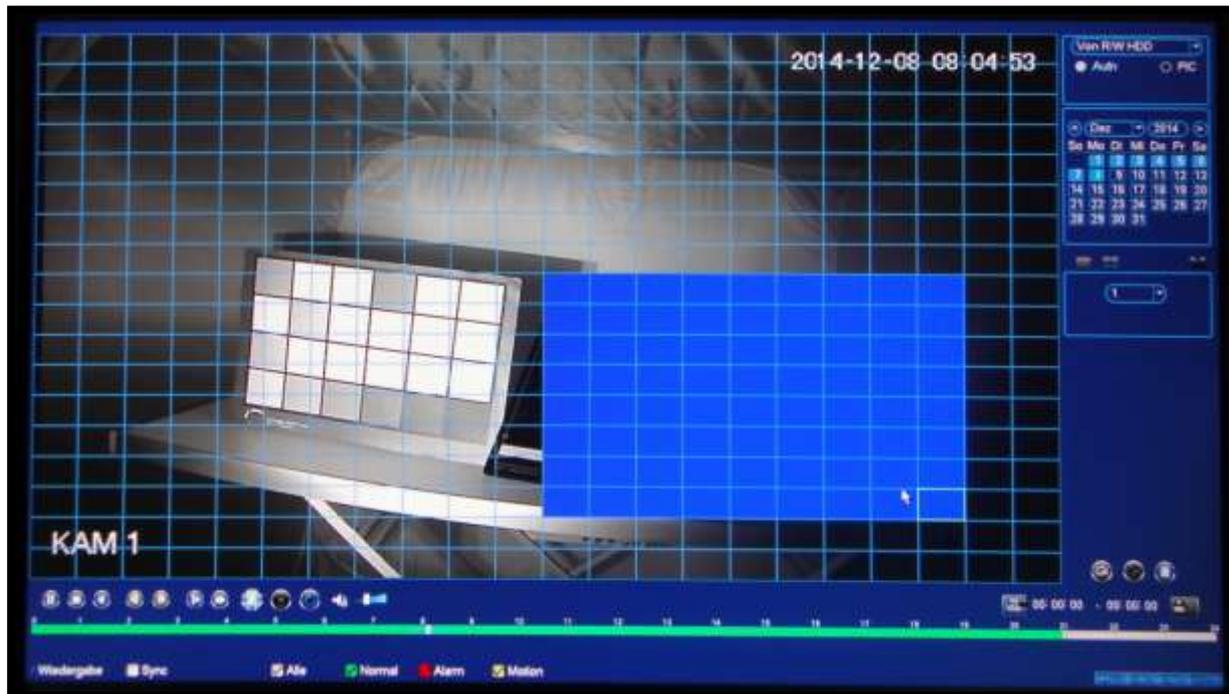
No.	Symbol	Function
1	Display window	The searched image or file is displayed here. At playback mode, full screen or split screen is supported.
2	Search type	Here you can select between: <ul style="list-style-type: none"> • From read/write HDD • From I/O device You can search for snapshots („pic“) or for videos („rec“). If you search for files/pictures from an I/O device, please make sure the respective device is connected to the recorder.
3	Calendar	Use the calendar to select a date for the search. If a date is colour-coded, this means that snapshots or video recordings are available for this date.
4	Display mode	Here you can select the display mode for each channel (full screen, split mode). Depending on the recorder model, different display modes are available.

5	Card record	<p>You can search for SD card recordings:</p> 	
6	Bookmark	<p>Here you can call-up the bookmark search for the respective channel. Also see chapter 7.1.</p>	
7	Detailed list	<p>A list of all recordings (snapshots, videos) for the specified day is displayed.</p> <p>Use the symbol „Locked info“  to lock files. Please note that files which are currently written or overwritten cannot be locked.</p> <p>Use the arrow  to go back to the calendar view.</p>	
8	Playback panel		<p>Play/Pause: You have the following options to start the playback:</p> <ul style="list-style-type: none"> • Click on the play symbol. • Double-click on the respective item in the time bar (see item 9). • Double-click on the desired file in the detailed list (see item 7). <p>Click on the play symbol to toggle between playback and pause.</p>
			<p>Stop</p>
			<p>Backward play: In playback mode, click on this symbol to to the previous file/image. Click again to pause going back.</p>
			<p>Back: In normal play mode, left-click the button, the file begins backward play. Click it again to pause current play.</p>
			<p>Play slow: In playback mode, click on this symbol to play forward (file or image).</p>
			<p>Fast forward: In playback mode, click on this symbol to play forward (file or image).</p>

			Smart search
			Volume setting for playback
			In full screen mode of the desired channel, click on this symbol to make a snapshot. The snapshot can be saved to a connected USB device (e.g. stick).
			Bookmark: See chapter 7.1.3
8	Time bar	<p>In full screen mode, only one time bar is displayed. In split mode (e.g. for channels), the corresponding number of time bars is displayed (e.g. 4). By default, the time bar starts at 0 and ends at 24. Click on the desired time in the colour-coded time bar to start the playback. Green = regular recording Red = Alarm recording Yellow = Motion recording</p>	
9	Time bar unit	<p>You can define the time unit for the time bar: 24 hours, 12 hours 1 hour, 30 minutes.</p>	
10	Backup	<p>Select the file(s) from the list you wish to backup. Click on the backup symbol. Select the backup path or create a new folder. Click on „Start“ to start the backup process. Only one backup can run at a time. This button also serves as “Save” button for a video clip (see item 11).</p>	
11	Clip	<p>You can cut out elements/parts from the video.</p> <ul style="list-style-type: none"> • Start the playback of the desired video. • Click on the scissor symbol once you have reached the desired situation/frame in the video. • Use the time bar to go to the desired end time. • Click again on the scissor symbol. • Use the backup symbol to save the video clip. 	
12	Record type	<p>The recording type is displayed.</p>	

7.1.1 Smart search

If you click on the „smart search“ symbol  the following window is displayed:



Left-click to define a search area.
Click again on the search symbol to start the smart search. Click again to stop the search.

7.1.2 Search by time

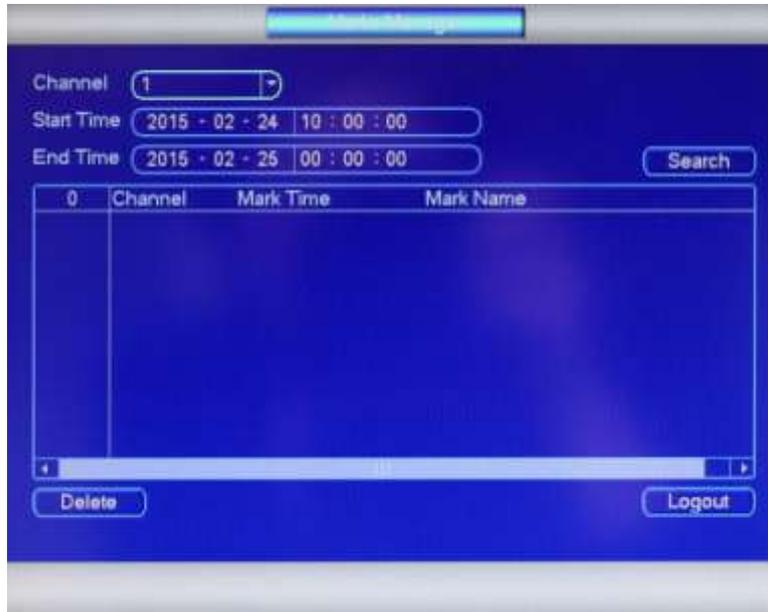


- Go to the detailed list. In the upper section, you can enter the exact search time in the time field.
- Then click on the search symbol 
- All recordings will be listed starting at the specified time.
- Double-click on the desired recording to play it.

7.1.3 Search by bookmark (marks manager)

In playback mode, you can assign a name to the selected item.

- Start the playback.
- Click on the mark symbol 
- The following window is displayed:



- Enter the mark time and the mark name.
- At a later point in time, you can search for this mark, either by mark time or by mark name.

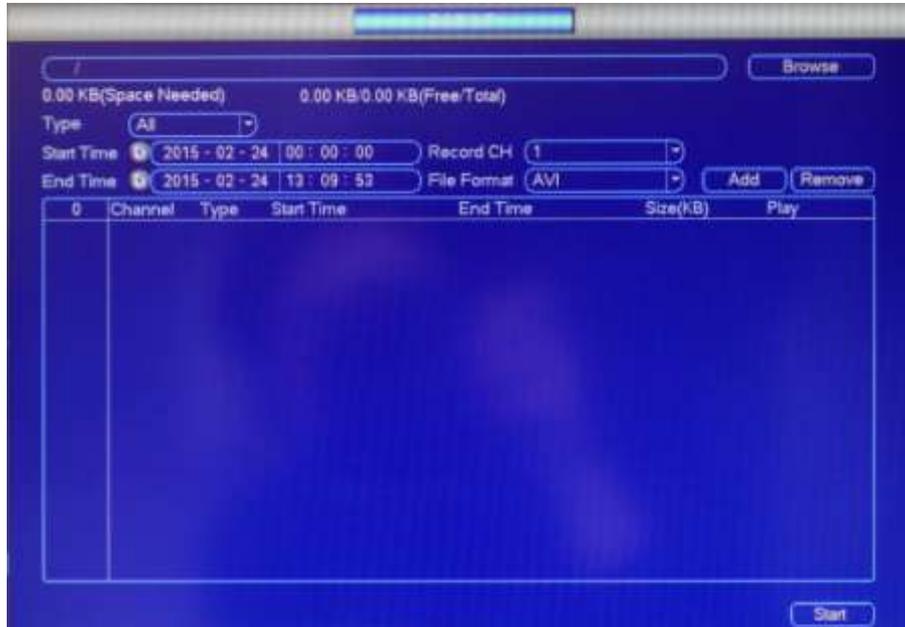
For mark search, click on the mark search symbol . Double-click on the desired file to play it

- If you click on the mark manager symbol  an overview of all files which are marked, will be listed.
- In this list, you can edit or delete marked files.

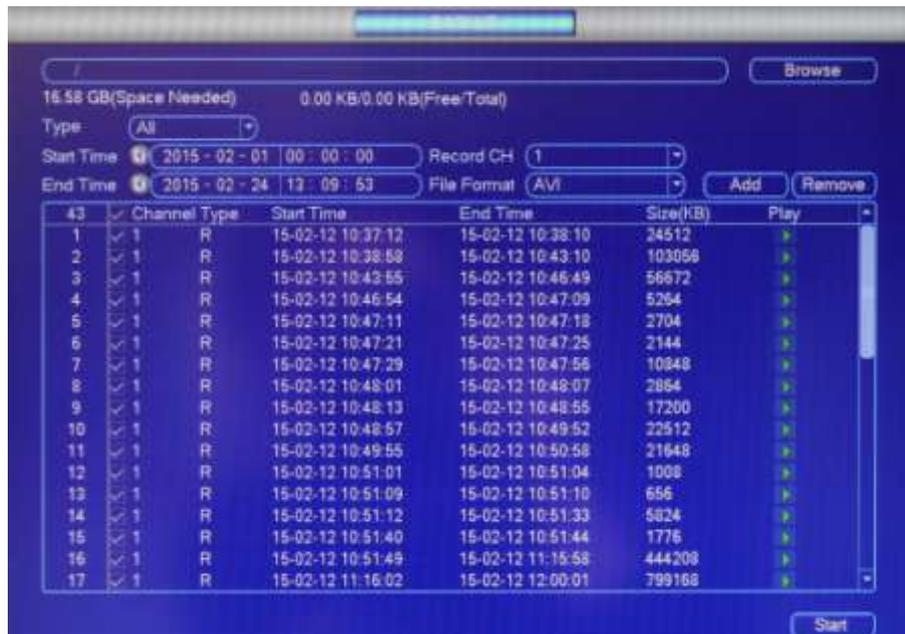
7.2 Main menu → Operate → Backup

There are various possibilities to backup data, e.g. via a USB device (e.g. USB stick) or HDD.

Open the main menu and select. The following window is displayed:



Here you can select the backup device, the start and end time of the recording, the camera name and the file format. Click on „Add“. A summary of your defined backups is displayed.



The recorder automatically calculates the required storage capacity for this backup.

- Tick each recording which you wish to backup.
- Click on „Start“ to start the backup.
- The remaining backup time is displayed.
- Once the backup has successfully been completed, a message is displayed.

Note:

If you cancel the backup before it is completed, only the data to this time are backed-up. If, for example, a total of 10 files are to be backed-up but you cancel the process after 7 files, only these 7 files are stored as a backup.

Note:

Only USB sticks with FAT32 formatting are recognized by the recorder.

7.3 Main menu → Operate → Shutdown

You can choose from:

- Shutdown (shutdown the recorder)
- Logout (e.g. to logout a user and to login a new user)
- Restart the recorder

It is highly recommended to always shutdown the recorder first. Only then switch off the recorder using the power on/off button on the recorder rear.

7.4 Main menu → Info

Here you can receive information on the recorder and the video data.

- System:
 - HDD: Double-click on a HDD to receive further information.
 - Recordings
 - BPS (video stream)
 - Version (e.g. system version, serial number, MAC address, etc.)
- Event:
Here you will receive status information on the recorder and the camera channels.
- Network:
 - Online user:
Here you can manage the users, e.g. blocking a user (for max. 65535 seconds).
Every 5 seconds, the information on this page will automatically be updated, e.g. to list new or blocked users.
 - Network load:
Network information are displayed here, e.g. sending or receiving speed, IP address, etc.
 - Network test:
Here you can test the connection to a specified IP address. Enter an IP address (IPv4) or a domain name and click on „Test“.
- Log:
Here you can call-up the log information. Enter the “type” and the desired time frame. All relevant log information will be listed. If you click on „Details“, you will receive further information on this log.

7.5 Main menu → Setting

Here you can adjust settings for:

- Remote (camera)
- Network
- Event
- Storage
- System

7.5.1 Main menu → Setting → Camera

Here you can adjust camera settings for:

- Image
- Encode
- Channel name
- Channel type

7.5.1.1 Main menu → Setting → Camera → Image

- **Channel:**
Select the channel number.
- **Saturation:**
Set the saturation (0-100). The higher the value, the brighter the colour. Optimum value: 40-60.
- **Brightness:**
Set the brightness (0-100). The higher the value, the brighter the image. Optimum value: 40-60.
- **Contrast:**
Set the contrast (0-100). The higher the value, the clearer the contrast. Optimum value: 40-60.
- **Hue:**
Set the colour hue (0-100).). The higher the value, the brighter the colour hue. Opti,i, value: 40-60.

7.5.1.2 Main menu → Setting → Camera → Encode

Here you can make adjustments for:

- Encode:
 - Channel number
 - Type (e.g. motion)
 - Compression (e.g. H.264)
 - Resolution
 - Frame rate
 - Bitrate
 - I-frame interval
 - Audio format
- Snapshot:
 - Snapshot number
 - Channel
 - Mode
 - Image size
 - Image quality
 - Snapshot frequency
- Overlay:
 - Channel selection
 - Cover area: Max. 4 masking areas per channel
 - Time display: Enable this function and click on „Set“ to display the time in the video image and to change its position.
 - Channel display: Enable this function and click on „Set“ to display the channel name in the video image and to change its position.
 - Copy: Copy the settings to other channels.



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7.5.1.3 Main menu → Setting → Camera → Channel name

Click into the name field to call up the virtual keyboard and assign a name to the individual cameras/channels.

7.5.1.4 Main menu → Setting → Camera → Channel type

Per channel define either „coax“ or „UTP“.
Models SCVR-2411TK and SCVR-2812TK also support IP cameras.

7.5.2 Main menu → Setting → Network

Here you can adjust settings for:

- TCP/IP
- Connection
- PPPoE
- DDNS
- IP-Filter
- E-mail
- FTP
- UPnP
- SNMP
- Multicast
- Register
- P2P setting
- Alarm center
- P2P

7.5.2.1 Main menu → Setting → Network → TCP/IP

Here you can adjust settings for IP version: IPv4 or IPv6

- MAC address (no changes possible)
- Mode: Static or DHCP
- IP address: Can only be assigned in static mode.
- Subnet mask: Can only be assigned in static mode.
- Default gateway: Can only be assigned in static mode.
- Preferred DNS: Enter IP address
- Alternate DNS: Enter IP address
- MTU: 1500 = Default
1492 = Recommended for PPPoE
1368 = Recommended for DHCP
- LAN download: 1.5x or 2x speed compared to regular download speed.

7.5.2.2 Main menu → Setting → Network → Connection

Here you can adjust settings for:

- Max. number of connection, i.e. users (max. 128)
- TCP Port
- UDP Port
- HTTP Port
- HTTPS Port
- RTSP Port

Note:

If you change one of the above mentioned ports and don't keep the default port value, you have to restart the recorder.

7.5.2.3 Main menu → Setting → Network → PPPoE

- Enable the PPPoE function and enter the user name and password (will be supplied by the Internet service provider).
- Click on "Apply" and "OK".
- Restart the recorder.
- After the reboot, the recorder automatically connects to the Internet.

7.5.2.4 Main menu → Setting → Network → DDNS

To setup the DDNS, you need a PC with DDNS software installed or a fix IP address in the Internet. The PC thus serves as a DNS (Domain Name Server).

- Click on "Enable".
- Select the DDNS type. The server IP will be assigned automatically.
- Enter the domain name which you have received from your Internet service provider.
- Click on „Apply“ and „OK“.
- Restart the recorder.
- After the reboot, open your Internet Explorer make the following entries:
 - http://(DDNS server IP)/(virtual directory name)/webtest.htm
 - Ex.: http://10.6.2.85/DVR_DDNS/webtest.htm.)
- At the recorder, open the menu Network → DDNS

Quick DDNS:

The DDNS function allows you to access the recorder via the registered domain name. The quick DDNS client has the same function as other DDNS client end. It realizes the bonding of the domain name and the IP address. DDNS server is for our own devices only. You need to refresh the bonding relationship of the domain and the IP regularly. There is no user name, password or the ID registration on the server



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Each device has a default domain name generated by MAC address for your option. You can also use customized valid domain name.

Before you use Quick DDNS, you need to enable the following:

- Server address: www.quickddns.com
- Port number: 80
- Domain name: Either default domain name or customized domain name
- User name: Is optional. You may enter e.g. your e-mail address.

Note:

The system may take back the domain name that is idle for one year. You will get a notification e-mail before the cancel operation.

Note on Quick DDNS:

Quick DDNS function depends on your network and may be blocked depending on your security installations.

7.5.2.5 Main menu → Setting → Network → IP-Filter

Here you can define max. 64 IP addresses (IPv4 or IPv6) as „trusted“ or „blocked“. Only the here defined “trusted” IP addresses can be used to access the recorder. The here defined “blocked” IP addresses cannot be used to access the recorder.

- Click on “Enable“.
- Select the “trusted“ or “blocked“ sites.
- Click on “Add“.
- Use the virtual keyboard to enter the IP address or the IP address range, i.e. a start and an end IP, and then click on “OK“.
- Click on “Apply” and “OK”.
- If you click on “Default“, all „trusted“ and all “blocked“ sites will be deleted and the list will be empty.

7.5.2.6 Main menu → Setting → Network → E-mail

Here you can define if, when and how an e-mail notification will be sent in case of an event.

- Click “Enable“.
- SMTP server, port: Please enter the IP of your e-mail SMTP server and its port.
- If you enable “Anonymous“, a user name and password are not required.
- User name, password: Please enter your login details to access your e-mail box.
- Receiver: E-mail address of the recipient (max. 3 e-mail addresses)
- Sender: E-mail address of the sender
- Subject: You can enter a reference line for the e-mail notification (max. 32 characters).
- Use “Attachment” to add a file to the e-mail (snapshot, video).
- Encrypt type: Please select, if required.

- Interval: Enter the seconds. 0 = no interval
- Enable health e-mail: Enable this box if you wish to send a test e-mail.
- Interval for health e-mail: Enter the interval in minutes to regularly send e-mail.

7.5.2.7 Main menu → Setting → Network → FTP setting

In order to use the FTP server function, you need to have one. If you don't have a FTP server yet, you have to install one, e.g. Serv-U FTP server.

Procedure:

- Purchase or download the Serv-U FTP server.
- Install the Serv-U FTP server on your PC.
- Start the server via: Start → Program → Serv-U FTP Server → Serv-U Administrator
- Enter the user password and the FTP directory.
- Enable the write function.



- Several recorders may be uploaded to the same FTP server. Several directories may be created.
- At the recorder, open the menu Network → FTP setting
- Activate "Enable".
- Here you can enter the server information. Use the same user name and password as for the FTP server.
- Use "Test" to verify your entries.

7.5.2.8 Main menu → Setting → Network → UPnP

The UPnP protocol establishes a connection between LAN and WAN. Please enter the router's LAN and WAN addresses.

Double-click on the respective service name in the list to enter additional port information:



Service Name	TCP
Protokoll	TCP
Int. Port	37777
Ext. Port	37777

Speichern Abbrechen

External port:

Please only enter ports from 1024 to 5000 to avoid port conflicts.

TCP resp. UDP protocol:

Internal and external port have to be identical.

7.5.2.10 Main menu → Setting → Network → Multicast

Multicast describes the transmission of information from one point to a group (one-to-many distribution). Information (data) is transmitted to several recipients or a group simultaneously. The information packet is sent only once even if it need to be delivered to a large number of recipients. Hence data packets can be sent efficiently to several recipients at the same time. This is done using special multicast IP addresses.

IP-address:

- Valid range for multicast group: 224.0.0.0 to 239.255.255.255 (for IPv4), i.e. you can use the following IP for multicast: 235.8.8.36
- Reserved ranges: 224.0.0.0 to 224.0.0.225, e.g.:
 - 224.0.0.1: All systems in the sub net
 - 224.0.0.2: All routers in the sub net
 - 224.0.0.4: DVMRP router
 - 224.0.0.5: OSPF router
 - 224.0.0.13: PIMv2 router
- Administrative addresses: 239.0.0.0 to 239.255.255.255: Cannot be used for Internet transmissions.

7.5.2.11 Main menu → Setting → Network → Register

Use this function so the recorder automatically connects to a proxy. The proxy serves as a switch.

Enter the IP, port and IP of the proxy and enable the box „Enable“.

7.5.2.12 Main menu → Setting → Network → Alarm center

Here you can define whether and when an alarm report is to be created.

7.5.2.13 Main menu → Setting → Network → P2P

Here you can scan the QR-code for P2P applications.



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7.5.3 Main menu → Setting → Event

7.5.3.1 Main menu → Setting → Event → Detect

Here you can adjust settings for:

- Motion detection
- Video loss
- Video masking

Motion detection:

- Select the channel by ticking “Enable“ to activate the motion detection function.
- Define the “Area” for the motion detection. Click into the grid to activate or de-activate specific areas.
- Use “Period“ to define the days and times for motion detection and for corresponding actions. This time frame is only valid for motion detection and not for other events such as video loss or tampering.
- Anti-dither time may vary from 5 to 600 seconds, indicating the duration of the alarm if a motion has been detected, e.g. buzzer, tour, PTZ activation, snapshot creation or recording. If, for example, you define the anti-dither time to 10 seconds, the buzzer, the tour, etc. will be running for 10 seconds.
- Define the type of action to be triggered in case of a detected motion: PTZ activation, tour, snapshot, buzzer or recording.

Video loss:

In case of a video loss specific actions can be triggered for a defined period of time – as this is the case for motion detection.

To define the tamper function, please proceed as described above for motion detection.

Video masking:

In case of a detected tampering (e.g. caused by manipulation of the camera, e.g. changing its position or covering it) specific actions can be triggered for a defined period of time – as this is the case for motion detection.

To define the tamper function, please proceed as described above for motion detection.

7.5.3.2 Main menu → Setting → Event → Abnormality

HDD:

Define the event type:

- No HDD
- HDD error
- Disk no space

For each event type define the action:

- Show message
- Alarm upload
- Send e-mail
- Buzzer

Network:

Define the event type:

- Network disconnected
- IP conflict
- MAC conflict

For each event type define the action:

- Show message
- Record channel
- Send e-mail
- Buzzer

7.5.4 Main menu → Setting → Storage

Here you can adjust settings for:

- Schedule
- HDD manage
- Record
- HDD detect

7.5.4.1 Main menu → Setting → Storage → Schedule

Here you can adjust settings for:

Record:

- Select the desired channel and define the pre-recording time (1-30 seconds).
- Redundancy: To be able to use this function, at least one HDD has to be defined as redundant. If a total of only one HDD exists, this function is not available.
- Define the event type by ticking the respective box:
 Green = Normal
 Yellow = Motion
 Red = Alarm
 Blue = Motion & alarm
- Enable the desired weekday or all days.
- You may define the schedule per day and per hour for each event type. There are 2 options to do so:
 - Enable the desired alarm type and click on the time bar of the respective day to enter the time or time frame.
 - Click on the wheel symbol and enter the time or time frame. 
- Use the eraser symbol to delete the respective alarm type for the specific day. 
- Max. 6 times or time frames per day can be defined for all event types.
- Use the copy function to copy the settings to other channels.

Snapshot:

To setup a schedule for snapshot creation, please proceed as described above for recordings.

The image attributes for a snapshot, e.g. image size, image quality, etc, are defined here



Main menu → Setting → Camera → Encode → Snapshot (see chapter 7.5.1.2)

7.5.4.2 Main menu → Setting → Storage → HDD

Here you can manage the HDDs. HDD information such as status or or available storage capacity are displayed.

7.5.4.3 Main menu → Setting → Storage → Record

For manual recording the following functions are available per channel: “Schedule“, “Manual“ and “Off“.

7.5.4.4 Main menu → Setting → Storage → HDD detect

You will get an overview on the HDD’s status, e.g. detected errors, storage capacity, etc.

7.5.5 Main menu → Setting → System

Basic settings for the recorder are made here:

- General
- Display
- Pan/Tilt/Zoom
- Text overlay
- Account
- Auto maintain
- Config backup
- Default
- Upgrade

7.5.5.1 Main menu → Setting → System → General

Here you can adjust settings for:

- General
- Date & time
- Holiday

General:

- Device ID:
Use the virtual keyboard to assign a device ID or a name.
- Device no.:
Use the virtual keyboard to assign a device number.
- Language:
Select the desired language. If you change the language setting, you have to reboot the recorder to apply the new language setting.
- Video standard:
PAL, NTSC



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- **HDD full:**
Define whether the data is to be overwritten or the recording to be stopped if the DD is full.
- **Pack duration:**
Define the pack duration (1-120 minutes).
- **Realtime playback:**
Define the realtime playback duration (5-60 minutes).
- **Auto Logout:**
Define the time (0-60 minutes) for auto logout, i.e. the current user will be logged out if he is idle for the here specified time. You need to re-login if you wish to continue to work with the recorder.
- **Navigation bar:**
Enable this box, if the navigation bar is to be displayed in the live image.
- **Startup Wizard:**
Enable this box, if the Startup Wizard is to be displayed at each recorder booting. If disabled, you will go directly to the login page.
- **Mouse speed:**
Define the speed of mouse movement.

Date & time:

Here you can define the system time, i.e. the time on the recorder. It is important to set the correct time, e.g. for event time searches.

You may also set the time format and daylight saving time.

Holiday:

In this list, all holidays or other days of absence are listed. To add new days, click on "Add holidays". Then define the date and the name for this holiday.

Click on "Add more" to add additional holidays to the list.

7.5.5.2 Main menu → Setting → System → Display

Here you can adjust settings for:

- Display
- TV adjust
- Tour setup
- Zero channel

Display: GUI (Graphical User Interface):

You can define what is to be displayed in the video image:

- Resolution:
If you change the resolution, you have to reboot the recorder.
- Transparency:
Define the transparency of the displayed menu in the video image. 0% means that the menu is not see-through and the live image cannot be seen here, i.e. the menu covers the live image.
- Time display, channel display:
Define whether the time or the channel name is to be displayed in the live image.
- Image enhance:
If enabled, the video image is displayed with less noise

TV adjust

Here you can make adjustments for the screen borders and brightness.

Tour setup:

- Enable the tour function here.
- Enter the tour interval (5-120 seconds).
- Define the window mode.
- In the channel group list, double-click on the respective group to edit it.
- Click on „Add“ to add a channel group to the list.
- Click on „Delete“ to delete a channel group from the list.
- Use the up and down buttons to scroll through the list.

Zero channel:

Enter the settings which are to be used if no camera is connected to the channel.

7.5.5.3 Main menu → Setting → System → Pan/Tilt/Zoom

If a PTZ camera is connected, the following functions are available.

- Channel
- Control mode
- Protocol
- Address
- Baud rate
- Data Bits
- Stop Bits
- Parity

7.5.5.4 Main menu → Setting → System → Text overlay

This function is mainly used for finance and cashier applications, e.g. to capture POS information in a supermarket. Enter the IP information and port.

7.5.5.5 Main menu → Setting → System → Account

- Here you can manage user and setup user groups.
- In the list you will find users and groups.
- Use the pencil symbol next to the respective user/group to edit it. Use the cross next to the respective user/group to delete it.
- Click on “Add user” resp. “Add group”.
- Max. 64 users and 20 groups can be created.

For each user/group the following can be defined:

- User name
- Define the password or assign a new password by using the virtual keyboard.
- Define whether a user belongs to a group
- „Recycle“: If enabled, several users can use the same account to login at the recorder.
- Define the user rights/authorizations:
 - Access to system functions, e.g. PTZ, camera, event, shutdown, etc.
 - Access to playback of individual channels
 - Access to monitor (display) of individual channels

7.5.5.6 Main menu → Setting → System → Auto maintain

Here you can define rules regarding the following::

- Automatic reboot:
Define the day and time for the recorder to automatically reboot. If you don't want to use this function, please select “Never”.
- Automatically delete old files:
Select “customized” to define the number of days after which existing files are to be deleted. The files (recordings) can be saved for max. 31 days before they are automatically deleted. If you don't want to use this function, please select “Never”.

7.5.5.7 Main menu → Setting → System → Import/Export

Here you can export or import data. This function is helpful if you wish to save the recorder configurations to a stick and then use the stick to copy these configurations to another recorder.

Please connect a USB device (e.g. stick) to the recorder.

The recorder identifies the stick and a window pops up with the following setting options:

- File backup
- Configuration backup
- Log backup
- System upgrade

Select the function you wish to execute.

- In the Import/Export menu, click on “Apply” so that the stick is listed under “Device name”. Then select the stick. Its content is shown in the list.
- Select the desired folder in the list and click on „Import“ or „Export“.
- Use “New directory” to create a new directory/folder.
- Use „Format“ to format the USB stick, i.e. its content will be deleted.

Note:

Only USB sticks with FAT32 formatting are recognized by the recorder.

7.5.5.8 Main menu → Setting → System → Default

Here you can reset individual or all settings to factory default settings. Tick the respective item:

- All
- Camera
- Event
- System
- Network
- Storage

Note:

Resetting the settings to factory default also includes colour, language, time, video format, IP address and user account.

7.5.5.9 Main menu → Setting → System → Upgrade

Please connect a USB device (e.g. stick) to the recorder which contains the data you wish to upload to the recorder (e.g. a new firmware).

Click on „Start“ to start the upgrade process. As long as the upgrade process is running, the recorder must not be switched off.

Once the update has been completed, please reboot the recorder.

8. Technische Daten

Model	SCVR-2411K	
Type	4-channel HD-CVI hybrid digital video recorder	
Video inputs	4x BNC (CVI)	
Supported video standards	CVI (max. 4), IP (max. 2)	
Audio inputs/outputs	1 / 1 (3.5 mm)	
Alarm inputs/outputs	0 / 0	
Number of internal HDD supported	1x SATA 2.5" up to 2TB	
Video norm	PAL, NTSC	
Operating system	Embedded Linux	
Monitor outputs	1x HDMI, 1x VGA	
Monitor resolution	1920x1080, 1280x1024, 1280x720, 1024x768, 800x600	
Display split	1/4	
Privacy zones	4	
Displays	Camera title, time, video loss, camera lock, motion detection, recording	
Compression	H.264/G.711	
Max. recording resolution	1080p (1920x1080) 720p (1280x720) 960H (960x576; 960x480) D1	4CIF (704x576; 704x480) CIF (352x288; 352x240) QCIF (176x144; 176x120)
Max. frame rate	<u>Main Stream: 25 fps:</u> 720p, 960H, D1, HD1, 2CIF, CIF <u>Main Stream 12fps:</u> 1080p	<u>Sub Stream:</u> 25 fps: QCIF 6 fps: CIF
Bit Rate	48 – 4096 Kbps	
Recording mode	Manual , schedule (regular, continuous), motion detection, stop	
Ethernet	RJ-45 Port (10/100 Mbit)	
Max. number of users	128	
Smartphone / Tablet	iPhone, iPad, Android	
USB Ports	2x USB 2.0	
Voltage	5 V DC	
Power consumption	10 Watt (without HDD)	
Operating temperature	-10° to +55°C	
Dimensions	190 x 130 x 35 mm	
Weight	300 g (without HDD)	

Subject to technical changes. Errors excepted.

Model	SCVR-2411TK	
Type	4-channel HD-CVI tribrid digital video recorder	
Video inputs	4x BNC	
Supported standards	CVI 1080p, CVI 720p, Analog 960H, IP 1080p ONVIF camera	
Audio inputs/outputs	1 / 1 (Cinch)	
Alarm inputs/outputs	0 / 0	
Number of internal HDD supported	1x SATA 3.5" up to 4TB	
Video norm	PAL, NTSC	
Operating system	Embedded Linux	
Monitor outputs	1x HDMI, 1x VGA	
Monitor resolution	1920x1080, 1280x1024, 1280x720, 1024x768	
Display split	1/4	
Privacy zones	4	
Displays	Camera title, time, video loss, camera lock, motion detection, recording	
Compression	H.264/G.711	
Max. recording resolution	1080p (1920x1080) 720p (1280x720) 960H (960x576; 960x480) D1	4CIF (704x576; 704x480) CIF (352x288; 352x240) QCIF (176x144; 176x120)
Max. frame rate	Main Stream: 25 fps: 1080p, 720p, 960H, D1	Sub Stream: 25 fps: CIF, QCIF 6 fps: D1
Bit Rate	96 - 6144 Kbs	
Recording mode	Manual , schedule (regular, continuous), motion detection, stop	
Ethernet	RJ-45 Port (10/100 Mbit)	
Max. number of users	128	
Smartphone / Tablet	iPhone, iPad, Android	
USB Ports	2x USB 2.0	
Voltage	12 V DC	
Power consumption	10 Watt (without HDD)	
Operating temperature	-10° to +55°C	
Dimensions	205 x 205 x 40 mm	
Weight	500 g (without HDD)	

Subject to technical changes. Errors excepted.

Model	SCVR-2812TK	
Type	8-channel HD-CVI tribrid digital video recorder	
Video inputs	8x BNC / 1x RJ45	
Supported standards	CVI 1080p, CVI 720p, Analog 960H, IP 1080p ONVIF camera	
Audio inputs/outputs	4 / 1 (Cinch)	
Alarm inputs/outputs	16 / 3	
Number of internal HDD supported	2x SATA 3.5" up to 2x 4TB	
Video norm	PAL, NTSC	
Operating system	Embedded Linux	
Monitor outputs	1x HDMI, 1x VGA	
Monitor resolution	1920x1080, 1280x1024, 1280x720, 1024x768, 800x600	
Display split	1/4/8/9	
Privacy zones	4	
Displays	Camera title, time, video loss, camera lock, motion detection, recording	
Compression	H.264/G.711	
Max. recording resolution	1080p (1920x1080) 720p (1280x720) 960H (960x576; 960x480) D1	4CIF (704x576; 704x480) CIF (352x288; 352x240) QCIF (176x144; 176x120)
Max. frame rate	Main Stream: 25 fps: 1080p, 720p, 960H, D1	Sub Stream: 25 fps: CIF, QCIF 6 fps: D1
Bit Rate	96 - 6144 Kbs	
Recording mode	Manual , schedule (regular, continuous), motion detection, stop	
Ethernet	RJ-45 Port (10/100/1000 Mbit)	
Max. number of users	128	
Smartphone / Tablet	iPhone, iPad, Android	
USB Ports	2x USB 2.0	
Voltage	12 V DC	
Power consumption	15 Watt (without HDD)	
Operating temperature	-10° to +55°C	
Dimensions	375 x 285 x 55 mm	
Weight	2.35 kg (without HDD)	

Subject to technical changes. Errors excepted.

9. Remote access: Access the recorder via the web

9.1 Establish a network connection

You can access the recorder remotely by using the web. In order to do so, please make the following preparations:

1. Start the recorder as usual.
2. Connect the recorder to the network using a LAN cable.
3. Open the main menu at the recorder:
Main menu → Setting → Network → TCP/IP
As „Mode“ please select „DHCP“. Click on “Apply”.
4. Open the main menu:
Main menu → Info → Network → Network test
The assigned IP address is displayed, e.g. 10.1.1.67
This recorder IP address is need when you access the recorder via the web.

9.2 Login via web

Once the above preparations have been made, open the Web Browser on your PC, e.g. Internet Explorer, Safari, Firefox. Proceed as follows:

- a. In the address field of your Web Browser, enter the recorder IP address (see above). Example: <http://10.1.1.67>
- b. If you access the recorder via the web for the first time, you will be prompted to install a plug-in. Please confirm the installation and execute it.

- c. The following web login window is displayed

A screenshot of a web login window. The window has a blue border and a light blue background. In the top left corner, there is a red circular icon. The title "Web Login" is displayed in a large, bold, black font. In the top right corner, there is a logo for "BURG WÄCHTER" in a green and yellow box, with the word "SANTEC" below it. The main area contains two input fields: "Benutzername:" and "Passwort:". Below the password field, there are two radio buttons labeled "LAN" and "WAN", with "LAN" selected. At the bottom, there are two buttons: "Login" and "Abbrechen". A faint gear icon is visible in the background on the left side.

As connection type, you can choose between „LAN“ and „WAN“.

Default login for web access:

User name: **admin**
Password: **9999**

Note:

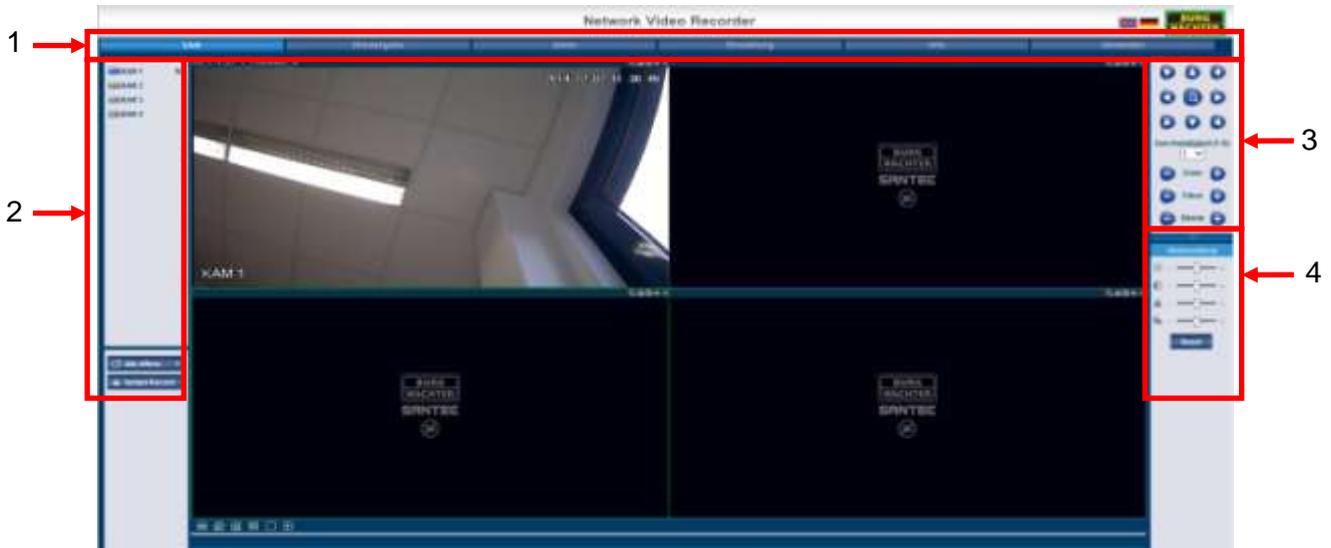
It is highly recommended to change the default user name and password. You can view, edit and delete the login details here:

Main menu → Setting → System → Account

The live view of the video image is displayed.

9.3 LAN connection

If you have selected the „LAN option on the login page, the following live view page of the connected camera(s) is displayed:

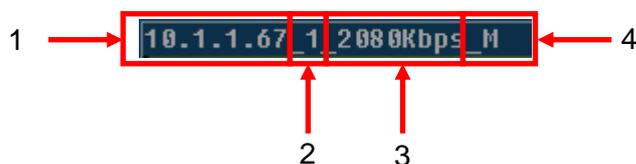


Double-click on a camera channel to display it as full screen.
 Double-click again on the full screen to return to the previous split view mode.

No.	Description
1	Menu item: <ul style="list-style-type: none"> • Live • Playback • Alarm • Setup • Info • Logout
2	Channels are listed here. If you move the mouse to one channel, a small menu opens next to it. Here you can define this channel to be „Main Stream“ or „Sub-Stream“ . Your selection is displayed by the letter M resp. S behind the camera name. If you click on “Open all”, all camera channels are displayed as main stream. The button then changes to “Close all”. If you click on “Instant record”, the manual recording will start or stop.
3	PTZ control
4	Image adjustment: <ul style="list-style-type: none"> • Brightness • Contrast • Saturation • Sharpness Use “Reset” to reset all settings to factory default settings.

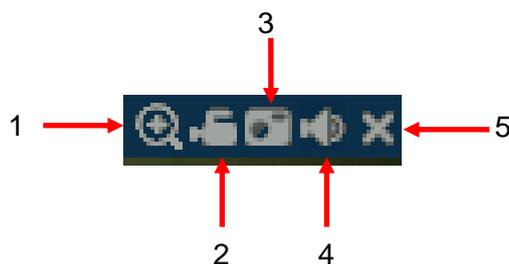
9.3.1 Displayed information in video image

In the upper left corner of each channel's live view image, the following information is displayed:



1. IP address of recorder
2. Channel number
3. Monitor bit stream
4. M = Main stream; S = Sub stream

In the upper right corner of each channel's live view image, the following functions are displayed:



1. Digital zoom:
 - Click on this symbol.
 - Then click in the live image and keep holding the mouse button to draw an area to be zoomed in.
 - Click and hold the left mouse button to move the zoomed image.
 - Click again on the symbol to return to the previous view. Alternatively, right-click into the zoomed image.
2. Local recording:

If you click on this symbol, it will change its colour from grey to white and the manual recording will start. Click again on the white symbol to stop the recording (the symbol turns grey again).
3. Snapshot:

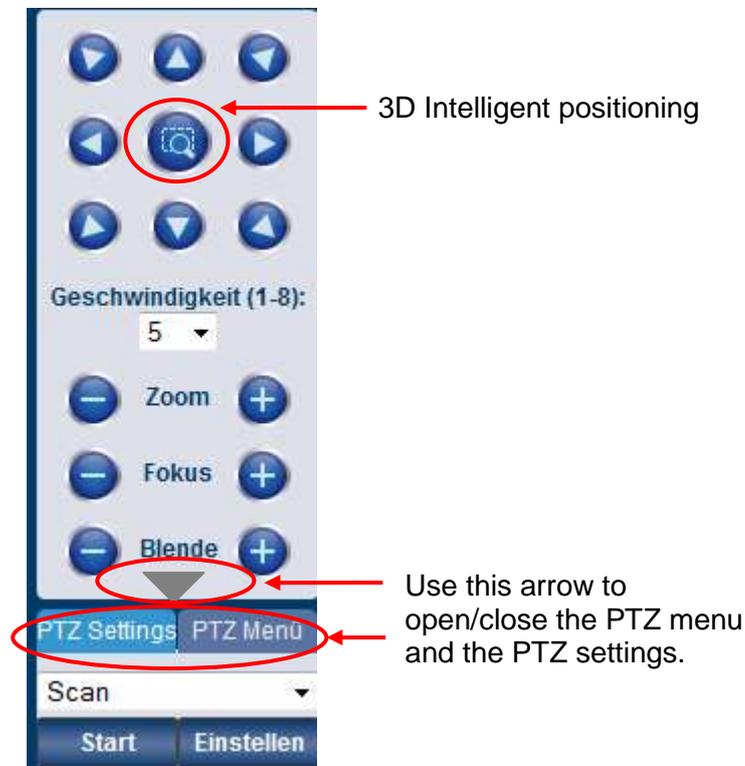
Click on this symbol to make a snapshot of the current video image.
4. Audio:

Click on this symbol to enable or disable the audio function (sound).
Note: This function is only available if suitable audio devices are connected.
5. Use the cross to close the video image.

9.3.2 PTZ control

When using the PTZ control function, please ensure that a suitable PTZ camera is connected to the recorder and that the corresponding configurations have been made (see chapter 6.3.2).

In the live view image on the right hand side, you will find a panel for PTZ control:



Direction buttons:

Use the 8 direction buttons to move the camera into the desired position.

3D intelligent positioning:

In the center of the 8 positioning buttons you will find this button.



Click on it and the channel will be displayed as full screen. Press and hold the mouse key to adjust the area size.

Speed:

Enter the PTZ speed (1-8).

Zoom, focus, iris:

Use the plus/minus buttons to adjust the values for zoom, focus and iris.

PTZ settings:

Make adjustments for:

- Scan:
Use "Setting" to define the left and right border.
Use the direction buttons to adjust the camera position and click on „Set left“.
Proceed in the same for "Set right".



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- **Preset:**
Use the direction buttons to adjust the camera position and enter a preset number. Click on „Add“.
- **Tour:**
Enter a preset number. Click on “Add” to add this preset to the tour. Proceed in the same way to add further presets to the tour. Use “Delete” to delete the respective preset from the tour.
- **Pattern:**
Enter a pattern number and click on „Start“ to start PTZ functions such as zoom, focus, iris, direction, etc. Click on “Add”.
- **Pan**
- **Light, wiper:**
Enable the light and screen wiper function (only available if the camera housing is equipped with a light and screen wiper).
- **Flip**
- **Reset:**
Reset to default settings.

9.4 WAN connection



On the login page, select „WAN“ connection.

The WAN setting options are basically the same as the LAN setting (see chapter 9.3), except for the following difference:

- By default, the first channel is displayed as main stream in full screen. Double-click to display the split view.
- The buttons “Open all” and “Close all” are not active.
- The recorder cannot display the live image and the playback image at the same time. If, for example, you use the search function in playback mode, the live image is automatically closed to save bandwidth and to speed-up the search.





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9.5 Additional web setting options

The setting options for the recorder using the web (thus remotely) are basically the same as the settings which you do directly at the recorder. Please read the respective chapters for direct recorder settings.

- Playback
- Alarm
- Setting
 - Camera:
 - Image
 - Encode
 - Channel name)
 - Network
 - TCP/IP
 - Connection
 - PPPoE
 - DDNS
 - IP-Filter
 - E-Mail
 - FTP
 - UPnP
 - SNMP
 - Multicast
 - Register
 - Alarm center
 - P2P
 - Event
 - Detect
 - Abnormality
 - Storage
 - Schedule
 - HDD manage
 - Record
 - HDD detect
 - System
 - General
 - Display
 - PanTilt/Zoom
 - Text overlay
 - Account
 - Auto maintain
 - Import/Export
 - Default
 - Upgrade
- Info
 - Version
 - Log
 - Online user
- Logout



Notes:



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Notes:



Notes:

Your local distributor:



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www.santec-video.com