DS-N4 - HD-SDI Video

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# Video DS-N4

# 4 HD-SDI channels



Manual for the installer and for the user

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# **Product description**

The DS-N4 digital video recorder has been developed for the management and recording of HD-SDI CCTV cameras.

The HD-SDI cameras allow to carry on a normal coaxial cable, the same type used in analog CCTV, a digital uncompressed video signal in resolution **Full HD 1080P** (1920x1080 pixels).



The HD-SDI technology and the latest addition in the CCTV industry and allows to combine the high resolution of IP systems with the simplicity and the absence of video latency analog systems.

Based on Linux operating system, DS-N4 is a simple and stable DVR but also very powerful. It 'able to record video and audio from 4 HD-SDI cameras with Full HD 1920x1080 resolution at 25 f / sec for a perfect real-time viewing.

This video recorder is also equipped with an Ethernet port for control via LAN or Internet. And 'possible remote access from PC and all mobile devices and tablets.

### main Functions

#### Real time display

The cameras are displayed in real time and in high resolution through the BNC analog video output, VGA output and HDMI output. You can connect to PC monitor, TV and CCTV monitor equipment. And 'possible to view each camera full screen, the cyclical scanning and quadrivisione 4 cameras simultaneously. The optimal video format is 16: 9 but you can also use the monitor in 4: 3.

#### registration

Recording with H.264 compression in continuous mode, motion, alarm, calendar. Each audio / video channel is compressed in real time by an independent hardware. The audio and video are synchronized stably.

#### **Backup Function**

Through the USB port you can be connected to external storage media such as USB flash drive, external hard drives, etc. and save the clips of interest

You can also back up your files remotely via the Internet.

### Hexaplex

The DVR is in degrees to continue recording or during playback of recorded files, while watching real-time, remote access, backup etc.

Playback allows modes: Slow motion, fast forward, reverse playback and frame by frame playback.

During video playback, the time and date can be displayed on screen.

#### **Network Features**

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Through the network port can be remotely monitored in real time, searching and playback of video stored remotely and control PTZ Speed Dome cameras. E 'can be accessed from a PC or cell phone.

### PTZ Control

The DVR supports PTZ control via RS422 / 485. Included are numerous protocols for the control of all speed dome cameras on the market. Use Pelco D for DSE cameras.

### intelligent operation

totally manageable graphical interface with mouse.

### Main technical data

	DC NA		
	DS-N4		
video Compression	H.264 baseline		
video Inputs	4 HD-SDI BNC connector		
audio Inputs	4 RCA		
alarm inputs	4		
alarm outputs	1		
video Resolution	CIF D1 352x288		
	704x288 1280x720 720P		
	1080p 1920x1080		
Frame rate display	25 f / sec per channel		
Frame rate recording	25 f / sec per channel		
Recording Mode	Schedule, manual, alarm, motion detection		
Masks privacy	Yes		
HDD	Max. 2 SATA HDD		
	Max. 3 TB		
Network port	RJ45 10 / 100M		
USB2 port	Mouse / Portable HDD / Flash Drive / DVD Burner		
port RS422	Protocol Pelco P / D, Samsung, Panasonic etc.		
video Backup	AVI format, IFV		
Supply	12VDC power supply provided		
Absorption	10-15W		
Temperature	- 10 + 40 ° C		
Humidity	10% -90% RH		
Dimensions mm.	400x310x55		

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### **Description of the front panel**



1 - IR sensor: IR receiver for the remote control. 2 - LED: They indicate the status of: (from left to right) alarm, recording, connection in progress, writing to disk, ignition. 3 Buttons 0-9: Press the buttons 0 ~ 9 to view the full-screen channel. These buttons are also used to enter the password to log in.

During playback (PLAYBACK) you can press the following keys: 4

★: Reverse playback 1X, 2X, 4X

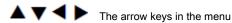
5: Normal playback. When pressed in recording opens the playback search window 6

■ lb: Pause Button 7

M: Reduces the 1/2, 1/4 speed playback, 1/8 8

: Increases the playback speed 2X, 4X, 8X 9

Q: Opens the search window for playback 10 **Multivision**. This button allows to pass from the vision of 4 cameras in quad-screen mode to the vision of a camera in full screen and vice versa. 11 **REC**: Starts and stops recording 12 **ESC**: outputs of button 13 **MENU / OK**: It opens or closes the control menu. When programming serves as the ENTER key to confirm **Navigation (arrows)**:



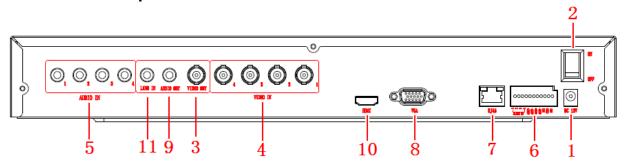
configuration are used to select menu options. In PTZ mode they are used to control the movements of the camera (PAN / TILT). 14-15 **USB**: There are 2 USB 2.0 ports. One to connect storage devices for video backup and to connect the mouse in the box.

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# **Back Panel Description**



1	Power connector	DC 12V / 5A		
2	Ignition Switch	POWER ON / OFF		
3	BNC video output	To connect analog TV or monitor (BNC). This output is in PAL resolution		
4	video Inputs	To connect the analog cameras 1 to 4 (BNC)		
5	audio Inputs	To connect the microphones on board chamber (RCA)		
	Alarm inputs	4 1-2-3-4 alarm inputs for connecting external alarm contacts		
6	Alarm output	Alarm output NO-COM to trigger external devices on alarm		
	RS 422	RS 422 for controlling speed dome PTZ cameras		
7	RJ 45	Ethernet connector		
8	VGA	VGA monitor connector for PC. This video output is in FullHD 1080p.		
9	audio Outputs	RCA connector for external speakers		
10	НДМІ	Connect to TV with HDMI input. This video output is in FullHD 1080p.		
11	LINE IN	External Audio Input for intercom system		

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### TV remote

Most of the buttons on the remote replication the keys on the DVR keyboard.

Description remote control buttons:

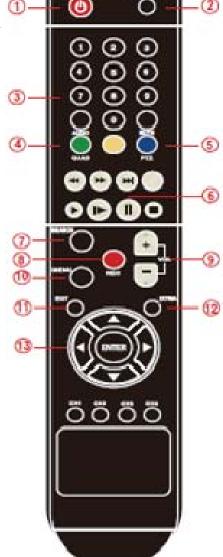
- 1. STANDBY: Enable or disable the STANDBY mode (ON / OFF). If you want to turn off the DVR
- 2. LOGIN / LOCK: No use at the time
- 3. Numbers / Channel buttons: In the menu, press these buttons to enter numeric values; while viewing live press them to open the desired channel to full screen.
- 4. QUAD: Swing into the contemporary live viewing of 4 channels to live viewing a full-screen channel.
- 5. PTZ: Opens the PTZ controller for moving the dome camera ..
- 6. Playback controls: These commands can be used during movie playback
- ★■: Back to normal 1x playback, fast 2X, 4X, 8X or slow 1 / 2x 1 / 4x, 1 / 8x.
- : Starts playback.
- >>: Increases the playback speed 2X, 4X, 8X. : Plays back frame by frame.

- : Pause. Stop playing on a frame.
- ■: Exits the playback.
- 7. SEARCH: Opens the search window.
- 8. RECORD: Start manual recording, press it again to stop recording.
- 9. + / : In the menu press the buttons to change the setting values.
- 10. MENU: Opens the main menu window.
- 11. EXIT: Close the main menu window.
- 12. EXTRA: For future use.
- 13. Navigation (arrows) / Enter:

▲ ▶◀▼ When pressing the menu

arrows to select the desired item and press Enter to confirm the selection; live display, press

Enter to open the menu bar.



### Making connections

Before turning on the VCR is necessary to arrange the connections with the peripheral units which we explain below.

### **Connect HD-SDI cameras**

The cameras are connected to the BNC Video IN. DS-N4 is not suitable for connecting analog or web cameras on the contrary, it is absolutely not able to play, but is designed to handle HD-SDI cameras in Full HD 1080p resolution. These cameras can be connected with the same RG59 coaxial cable and BNC connectors that are used for analog cameras. But we must pay attention to the fact that the HD-SDI signal is much more delicate analog video and requires high-quality coaxial cables

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to be conducted effectively. It is recommended to use RG59 coaxial cable or higher and not minicoassiali or coaxial cables. The cable must have full copper core, non-copper-plated steel and the largest possible cross section: in the case of RG59 the recommended section of the center conductor is at least 0.81 mm as our CV-RG59 model. It is recommended not to exceed 100 m in length in the video wiring and not to make joints or branches. A poor quality wiring or too long will result in the inability of the DVR to play the camera images.

#### Connect the main monitor

DS-N4 allows you to connect directly to different types of monitors.

The recommended monitor is a common computer monitor in 16: 9 to be connected to the VGA video at the back of the DVR. The DVR also is capable of supporting the monitor in other proportions. Alternatively, or in addition, it is possible to connect a TV via the HDMI port. In both options it comes to video outputs in high resolution FullHD able to make good the image quality of the HD-SDI cameras.

'Also available analog video output BNC to link a traditional CCTV monitor or external video input of a TV. But this is a video output in analog resolution, far below earlier and therefore to be used only for service purposes, or where it is necessary to bring a great distance from the DVR monitor. Without monitor the DVR can function being accessible from remote devices, but it is not possible to locally control their functions and programming.

#### hard disk installation

Because the DVR is capable of recording, you need to install the hard drive inside the equipment. The DVR is supplied without a hard disk, so the first necessary step is the install disk.

DS-N4 can accommodate 1 or 2 hard drives inside of SATA type and a maximum capacity of 3000 GB. Proceed with the installation of the hard disk as follows:

- Turn off the appliance open the VCR by removing the top cap unscrewing the lateral fixing screws.
- 2. Attach the hard disk unit in its seat by means of the fastening screws.
- 3. Connect the red SATA cable for data and power cable between hard drive and motherboard.
- 4. Close the device with the lid by screwing the screws.



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CAUTION: Before you start recording you must perform physical formatting the hard drive in the programming section MENU / HARD DISK. See the instructions later in this manual.

#### feeder Connection

Connect the power supply 220VAC / 12VDC supplied to the rear connector 12VDC

### 3.2 Other connections

#### Audio Input (AUDIO IN)

Camera equipped with separate microphone or microphones can be connected to the VCR through the AUDIO IN inputs. The inputs support standard analog audio 2Vp-p 600 Ohm. Use microphones active type.

### Audio output (AUDIO OUT)

You can connect speakers, headphones or other external audio equipment such as a TV audio inputs and monitor. This way you can hear the sound from the microphone inputs and during playback.

#### LINE audio input (LINE IN)

You can connect external equipment to be able to spread the audio signal through the speaker output of the DVR

### LAN

The connection to the VCR network takes place via the outlet of the rear RJ45 network. Before using the LAN connection set network parameters in the DVR setup menu.

#### USB 2.0

E 'can use USB 2.0 devices to save audio / video recordings The devices connect to the VCR through the appropriate front USB port. You can connect USB flash drives, USB Hard Disk and DVD burners.

### MOUSE USB

A second USB port is provided to connect the supplied mouse. The control with the mouse is much easier and faster than by keyboard or remote control and for this reason in this manual will generally rifermento to commands with the mouse.

#### Alarm inputs

Terminals 1-4 on terminal block - allow to connect external alarm sensors which can enable logging and generate alarm actions. The sensors must be connected between the alarm contact (1 ... 4) and the ground terminal GND present in the terminal. To ensure the sabotage immunity, the input of alarm is not sufficient to connect a simple contact, but should be applied between the two terminals a voltage of 12VDC. In programming it is possible to define whether to consider the presence of voltage alarm (HIGH LEVEL) or absence of voltage (LOW LEVEL).

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### Alarm output

The DVR feature 1 relay alarm output for external alarm devices which can be activated following the alarm events detected by the DVR. In this case the output is a clean contact Normally Closed consists of 2 terminals denominated NO1 and COM1. The contact is closed in normal condition and opens itself expected to be activated in the configuration of the alarm condition.

#### PTZ Cameras

The VCR is capable of controlling motorized cameras speed dome via a serial line that is able to operate on the RS422 and RS485 standard. The BUS RS422 / 485 part by RS422TX + RS422TX- terminals of the video recorder to be connected respectively to the RS485 terminals A and B of the cameras according to the directions provided by the manufacturer of the camera (some cameras reported +/- instead of A / B). The communication settings (protocol, speed, etc. of the bus) is operating in the DVR configuration menu and must be consistent with the commands accepted by the cameras used. The DR series DVR support PelcoD protocol used by DSE speed dome cameras, and various other protocols from other manufacturers.

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# **Basic Operations**

#### **START**

Before starting make sure that the connections are connected properly as described above. Proceed power by moving the switch back ON / OFF to ON. When you turn the POWER LED indicator lights red and the DVR performs a startup procedure that takes about 30 seconds ..

#### **SHUTDOWN**

The user can turn off the DVR with the remote control with the keyboard or the mouse. From the remote, press the STANDBY button and hold for about 5 seconds, and the DVR will turn off. 'Press and hold to restart. Using the keyboard or mouse to enter the programming menu, clicking the right mouse button and select the Shut down icon, the DVR will turn off after a few seconds.

Once the software shutdown is possible to move the ON / OFF switch to OFF if you are planning prolonged inactivity.

#### **LOGIN**

To access the configuration options, press the right mouse button or press the MENU button on the keyboard. This will open a window screen as the following:



The factory credentials to access are USER NAME: admin

PASSWORD: "leave blank"

After the LOGIN you can proceed with the system configuration and advanced controls.

### **VISION REAL-TIME**

The main screen shown on the monitor after booting the system is multi-image of the live cameras as shown in the figure below.

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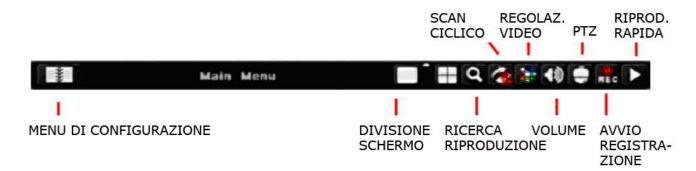
Each window can be present in the operating icons listed below:

Icons		*	<u>k</u>		•
Description	Recording in progress	manual recording	Motion detection activated	Alarm input active	scheduled Recording

### **TOOLBAR**

To show the need to click the right mouse button menu bar or press the ESC button on the front panel, it will appear in the bottom of the screen control bar. 'Press ESC to make it disappear.

The control bar includes all the buttons to control the DVR.



The icon MENU on the left provides access to the configuration menu of which will be explained at length in later. The 2 icons DIVISION SCREEN allow you to choose whether to see the screen quadrivisione cameras or a single camera full screen. By clicking on the icon among those viewing it will appear in a window screen to choose which channel to full screen.

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As an alternative to this command is also possible to bring a camera in full screen by double-clicking on it with the mouse (CAUTION: the toolbar must be closed to be able to operate in this way). The icon **SEARCH** It allows you to access the playback environment where you try and reproduce the images of interest. The icon **SCAN** It allows you to start to cycle the display screen cameras and stop it by pressing. The icon **ADJUSTING VIDEO** It allows you to adjust the display



In this interface, the user can adjust the brightness, the hue, saturation and contrast of the image in live view. Click Default to return to factory settings, or click Save to save the changes. The user can set all channels with the same parameters at once by checking the box ALL and then clicking Setup.

The icon **VOLUME** adjusts the rear external audio output sound. The icon **PTZ** opens the control panel for speed dome cameras



The icon REC starts manual recording. E 'can choose which camera to send in the registration icon PLAY on the right leads to the quick playback of the latest recorded images.

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#### REGISTRATION

This DVR supports different record types.

The most immediate way to start recording is press the REC button on the keyboard, remote control, or with the mouse on the toolbar. The recording will start immediately on select channels.

This type of registration is defined as:

**MANUAL RECORD.** It must be considered, however, as an emergency solution where the user manually intervene to make sure you record what is happening independently of the automatic configuration of the DVR.

More frequently, in fact, the DVR will record on the basis of automatic settings that are set in the configuration and will be described later.

The type of automatic registration are:

PROGRAM REGISTRATION - Timed based on the time and day of the week

RECORD ON MOTION DETECTION - Initiated the occurrence of a movement in the image

ALARM RECORD - Initiated following the activation of an alarm input

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# **Configuration options**

To access the programming of the DVR, click the main menu icon screen a window like the following





Clicking on "SETUP" will open the following screen which includes all the options of the DVR



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The configuration menu contains nine sub-menus: Basic, Live, Record, Schedule, Alarm, Network, Users, PTZ and Advanced which will be illustrated below.



## **BASIC** (general options)

Click "Basic" to open the general configuration window like figure, The General configuration menu is divided into two sections: System, Date and time.

### WINDOW SYSTEM (SYSTEM)



**DEVICE NAME** - User customizable name to help the user to recognize the device remotely.

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**DEVICE ID** - It allows to identify the DVR on a BUS

**VIDEO FORMAT** - The DVR It supports two video formats, PAL and NTSC. Select the video format compatible with the cameras installed in Italy PAL.

PASSWORD CHECK - If you enable this option the DVR will I require a correct log-in to allow access to the configuration. If you disable the option log-in will still be required but will not be checked for correctness of the credentials

SHOW SYSTEM TIME - Displays the current screen. The time will appear on the top left of the screen.

**VIDEO OUTPUT -** Here you can set the VGA video output resolution. Consult your monitor manual to set a resolution supported by your monitor (800x600, 1024x768, 1280x1024, HDMI 1080P)

**LANGUAGE** - Set the DVR language. The DVR supports several languages, including Italian. In this manual for international uniformity reference is made to the English text

PREVIEW PATROL INTERVAL - It establishes the residence time of each single camera during the cyclical scanning.

SHOW GUIDE - Show setup wizard during system startup.

LOCK TIME - Set after how much downtime the DVR will exit the log in and request your password again.

Press the "Default" button to restore the factory default settings. Press the "Apply" button to save your changes.

Press the "Exit" button to close the window.

WINDOW DATE & TIME (DATE & TIME)

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In this menu screen, you can set the date and time of the system. The screen is divided into:

**DATE FORMAT - Set the date format** 

TIME FORMAT - Set the time format to 24 or 12 hours

TIME ZONE - NOT USED

SYNC TIME WITH NTP SERVER - NOT USED

NTP SERVER - NOT USED UPDATE NOW - NOT USED

**SYSTEM DATE** - Set the current date

SYSTEM TIME - Set the current time

Press the "Default" button to restore the factory default settings.

Press the "Apply" button to save your changes.

Press the "Exit" button to exit the current interface.



# LIVE (live video)

In the menu "Setup" LIVE click on the item to enter the configuration of the live camera view. The LIVE setup menu is divided into two submenus: Live and Mask.

**WINDOW LIVE** 

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The window lists the four input channels. Click Camera Name to display on-screen keyboard to use to insert the camera name that will distinguish screen .. Tick the Show Name box to display live vision camera name in overlays. By clicking on Setup, you can enter the picture adjustment settings.



In this interface, the user can adjust the brightness, the hue, saturation and contrast of the image in live view. Click Default to return to factory settings, or click Save to save the changes.

#### MASK WINDOW

In this section the user can activate and define any privacy masks used to mask a particular you do not want to see during recording and adjusts the playback to protect personal privacy.

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Click SETUP on the channel which you want to apply a privacy mask, then select by dragging the mouse the part of the image to mask. To save and exit by clicking the right mouse button and click APPLY. To clear the mask created, double click with the left mouse button on the created mask.



## **RECORD** (recording)

In this section you set the recording options. The recording menu is divided into five folders:

Enable, Stream, Alarm Rec Time, stamps, Loop Record.

#### **WINDOW ENABLE**



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This section of the user record menu can also select which camera to enable or disable the video recording and audio recording. The last line of the screen is to select quickly the record setting same on all channels. Click APPLY to save your settings.

#### STREAM WINDOW



This section of the menu the user can set the recording of streaming video settings will be recording: resolution (Resolution), frame rate (fps), the bitrate management (Encode), video quality (quality) and maximum bit rate (Max bit rate).

Parameters	available settings		
Resolution	1080P, 720P, D1, CIF		
Fps	1-25 (PAL)		
bitrate Management	CBR / VBR		
Quality	uality Best, Better, Good, Normal, Bad, Worse		
Maximum bitrate	64Kb, 128Kb, 256Kb, 512Kb, 1024Kb, 1536Kb, 2048KB, 3072Kb, 4096Kb, 5120Kb, 6144Kb,		
	7168Kb, 8192Kb		

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### WINDOW ALARM REC TIME

In this window the user can set the recording time to the occurrence of an alarm can be triggered by motion detection or by external inputs. Pre-alarm Time Rec in the column (s) set the recording time to consider before alarm. In the next column you set the alarm recording time.

### **STAMP WINDOW**

In this window you define your overlays to videos that will be superimposed to register for each channel.



Enabling CH Name It will be shown in overlay the camera name. Enabling

Time Stamp It will be shown in overlay the date and time.

Click on the SETUP button and can drag with the mouse the overlays in the position where you want them to appear. Click the right button to go out and APPLY to save the settings.

The last line of the screen is to select quickly the record setting same on all channels.

#### **LOOP RECORD**

If this function is enabled, the recording will continue out of disk space by overwriting the oldest files. By disabling the recording function stops out of disk space.

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# SCHEDULE (time programmer)

In this section you set the timer recording. The menu is divided into 3 folders:

TIMER (timer recording)
MOTION (recording of motion detection) SENSO

MOTION (recording of motion detection) SENSOR (registration of external alarm input)

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For each type of recording it is possible to define the time slots depending on the day of the week.

The riquadrino blue means recording enabled, the gray color means the recording disabled.

In the top pane you choose the camera on which to apply the programming. The 3 types of recording can also be activated simultaneously. Factory recording on motion and alarm are enabled over 24 hours, while the timer recording is disabled. In the selection of time slots is supported dragging the mouse.



In this section we program the operation of the alarm detection. The DVR is capable of generating alarms as a result of the motion detection (Motion), external sensors connected to the terminal and Video loss. On the back of the DVR there is an alarm output with which it is possible to control external devices in case of alarm.

The ALARM section is therefore divided into 4 sub-menus: SENSOR, MOTION, VIDEO LOSS, ALARM OUT

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### **SENSOR**

Alarm management from external inputs. The page consists of three sections: basic, alarm, schedule

1> Basic



This table defines the operation of the 4 rear alarm inputs of the DVR.

**ENABLE** - Enables the alarm input management

**TYPE** - It defines the alarm input operation. HIGH LEVEL means that the alarm occurs when you apply the voltage between the terminals,

 $\label{low-level-low-level-low-lower} LOW\ LEVEL\ means\ that\ the\ alarm\ occurs\ in\ the\ absence\ of\ voltage\ between\ the\ terminals.$ 

NAME - E 'can set an identifying name of the alarm input.

2> Alarm handling



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In this table you define the actions to be performed subsequently to the alarm of the sensor

**DELAY** - Shows the duration of the activation of alarm from 5 to 120 seconds.

ALARM HANDLING - Defines actions to be taken in case of alarm activation. Pressing SETUP you have access to 3 cards



BUZZER - Defines whether to activate the buzzer inside the DVR

SHOW FULL SCREEN - Defines whether to automatically lead to full screen the corresponding camera in the entrance alarm

TO ALARM OUT - Defines whether to activate the alarm output on the back of DVR

E-MAIL - Defines whether to send an email alarm message.

TO RECORD - Define which cameras to record the alarm period

TO PTZ - Allows you to program the automatic movement of a dome camera in case of alarm. You can recall presets, tours and patterns

3> Schedule

E 'can perform the alarm action only during certain hours depending on the day of the week.

The riquadrino blue means action enabled, the gray color means disabled action. In the top pane you choose the camera on which to apply the programming. In the selection of time slots is supported dragging the mouse.

#### **MOTION**

Managing by motion detection alarms. The DVR can generate alarms based on the analysis of the images from the cameras if an intrusion occurs in the visual field. This detection is known in the industry as CCTV Motion Detection. The page consists of two sections:

Motion and Schedule

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1> Motion



This table defines the detection operation of the movement on the 4 inputs.

**ENABLE** - Enables the management of motion detection on the channel

DELAY - It defines the duration of the alarm time as a result of motion detection (from 5 to 120 sec.)

ALARM HANDLING - Defines actions to take in case of motion alarm. Pressing SETUP you have access to 3 cards



BUZZER - Defines whether to activate the buzzer inside the DVR

SHOW FULL SCREEN - Defines whether to automatically select the full screen the camera that triggered the alarm.

TO ALARM OUT - Defines whether to activate the alarm output on the back of the DVR E-MAIL - Defines whether to send an email alarm message. TO RECORD - Defines which cameras to record the TO PTZ alarm period - Allows you to program the automatic movement of a dome camera in case of alarm. You can recall presets, tours and patterns

AREA - Pressing this button you can define the portion of the image on which to operate the motion detection.

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the camera image should be covered with the blue lattice detection area which by default is set in the middle of the recovery. It operates directly on the image by dragging the mouse. Below commands are available:



- Select any image



- Uncheck any image



- Save selection



Quit without saving

In addition there is the slider to adjust the sensitivity of detection from 1 to 5 to be settled according to the environmental situation in order to avoid untimely detections.

2> Schedule

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E 'can perform the motion alarm actions only during certain hours depending on the day of the week.

The riquadrino blue means action enabled, the gray color means disabled action. In the top pane you choose the camera on which to apply the programming. In the selection of time slots is supported dragging the mouse.

#### **VIDEO LOSS**

Alarm Management as a result of loss of input video signals.

In case you fail the incoming video signal from one or more cameras it is possible to generate an alarm.



ALARM HANDLING - Press this button to define the actions to take in case of video loss. You have access to 2 cards



BUZZER - Defines whether to activate the buzzer inside the DVR

SHOW FULL SCREEN - Defines whether to automatically select the full screen the camera that triggered the alarm

TO ALARM OUT - Defines whether to activate the alarm output on the back of the DVR

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E-MAIL - Defines whether to send an email alarm message.

TO PTZ - Allows you to program the automatic movement of a dome camera in case of alarm. You can recall presets, tours and patterns

### **ALARM OUT**

Output Management rear of the DVR alarm. It is a normally open contact which closes in the event of external devices to activate alarm.

The page consists of three sections: Alarm Out, Schedule and Buzzer

#### 1> Alarm Out



RELAY NAME - E 'can set a custom name output for example to remember what kind of activation controls (lighting, etc. dialer)

DELAY - Defines how long the output will be activated in case of alarm (5 to 120 sec.)

#### 2> Schedule

E 'can enable the alarm output is activated only in certain time slots depending on the day of the week.

The riquadrino blue means action enabled, the gray color means disabled action. In the selection of time slots is supported dragging the mouse.

#### 2> Buzzer

E 'you can be associated with the activation of the release of the buzzer sound for a defined period of time

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(5 to 120 sec.)



## **NETWORK (Network)**

In this section you set the DVR network options that will manage the communication through the rear LAN port. The menu is divided into 3 folders:

**NETWORK - General Network Settings** 

SUB-STREAM - video stream settings for use with mobile devices E-MAIL - Settings for the alarm sending emails OTHER - Other network settings (DDNS)

#### WINDOW NETWORK

It contains all the settings interface DVR network



HTTP PORT - And 'the communication port used by the DVR to communicate with brawser like Internet Explorer cross the main network. By default this port is 80 because that is the default port used by brawser to communicate. If you change this port you will also need to specify the port in the address of the browser. For example, if the call brwaser DVR typing http://192.168.0.110 the call will take place on port 80. If you have changed the http port in the DVR for example.

in 81, you will have the address of the brawaser

indicate

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SERVER PORT - And 'the port used by the DVR for video and commands. Factory: 8670.

MOBILE PORT - And 'the port used by the DVR for dialogue with phones and tablets. Factory:

100.

NOTE: If the remote connection is made via a router is necessary that the ports listed above (default: 80, 8670, 100) are configured in the section PORT FORWRDING the router so as to be directional to the internal IP address corresponding to the DVR. Consult about the router manual.

**DHCP** - The DVR is able to work with both manual and automatic IP address assignment (DHCP). If you enable this option the DVR will automatically the network parameters from the DHCP server on the network and they will be visible in the boxes below. However this type of address assignment is not recommended because the IP address of the DVR might change over time and create problems connecting remotely. Best to leave this option disabled and proceed with assigning the network parameters that follow manually

**IP ADDRESS** - The IP address of the DVR. E 'necessary that the first 3 digits are common to all network elements so that they can communicate with each other

SUBNETMASK - Of 255.255.255.0 rule should be the same for all network elements

**GATEWAY** - The IP address of the router through which you access the Internet. Typically the address 1 of the network (eg. If the network 192.168.0.1 to class 192.168.0)

DNS SERVER 1 and 2 - The DNS server addresses for surfing the Internet from the provider

**PPPoE** - if the camera is not connected to a network but directly to an ADSL modern must enable PPPoE and enter the access data (USER NAME / PASSWORD) to connect to the Internet from the provider.

#### **WINDOW SUB-STREAM**

It allows you to set the lighter video stream for use with mobile devices would not be able to handle smoothly streaming FULLHD at full resolution and frame rate 25 f / sec.

Because mobile devices are often used via the internet with limited bandwidth availability is used to always enable the sub-stream pleasant that you do not use cell phones only on wi-fi internal networks.

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CH - For each channel you can set a different stream

**RESOLUTION** - And 'the resolution streaming to mobile phones (CIF D1 = 704x576 or 352x288)

FPS - It 's the number of frames per second (1 to 25) of the stream

ENCODE - E 'of the occupied bandwidth management method CBR (Constant Bit Rate) or VBR (variable bit rate).

QUALITY - If you have chosen bandwidth management VBR Here you set the video quality to be maintained

MAX. BITRATE - If you have chosen the management of CBR bandwidth Here you set the maximum bandwidth you want to occupy

### WINDOW E-MAIL

The DVR can send e-mail on alarm. In this section we set the parameters required for sending the emails.

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SMTP SERVER - Enter the SMTP server address for sending email. E 'can use the SMTP of prorpio ISP SMTP or free email services.

Consider that most refer to your ISP about it and test internet providers insert anti-spam that can make it impossible to send e-mail systems without using the common mail clients, this could result in a failure of the function, possibly several services among those available on the net.

PORT - The sending SMTP port governs 25

SEND ADDRESS - The sender's email address that appears in the email recipient

PASSWORD - Enter if the SMTP server requires it (usually not required)

RECEIVE ACCOUNT 1,2,3 - E 'can indicate 3 recipient addresses to which to send the alarm message

**TEST** - Button to test the functionality

### WINDOW OTHER (DDNS)

To connect through the Internet is highly advisable to have a fixed IP address so that you always know the exact address to connect. If you can not get from your provider, the DS-N4 DVR supports DDNS service (Dynamic DNS) that allow you to constantly monitor the machine's IP address. These services, also available for free, provide the user with a domain name that you type into your browser. The DDNS provider redirects communication to the IP address that the DVR has at that moment.

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**DDNS** - Enable the feature only after you have subscribed to a DDNS provider. The DVR supports several DDNS services like popdyr, 3322, dyndns, dvrnet, no-ip, jmdvr, ChangelP, jsjdvr, konlan. Consult conditions of services to choose the one that best suits your needs.

DDNS SERVER - Select the DDNS service you have subscribed

USER NAME - The user name for the access provided by the provider

PASSWORD - The password for access provided by the provider The user name for the

access provided by the provider

**HOST DOMAIN -** The DDNS server address from your provider

**UPDATE INTERVAL** - The DDNS services require that the DVR or PC on the same network you regularly send to the server your WAN side IP address. Here you set the interval between mailings update.

**REGISTER -** To test the functionality



# **USERS** (users)

Access to DVR, both locally and remotely is password protected to prevent unauthorized access. In this section we set managed users from DVR

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The default DVR already operates two users:

ADMINISTRATOR with all access levels and enabled GUEST enabled to view only. Both of these factory users do not foresee any password. Cliccare the ADD button at the bottom left to add a new user



USER NAME - The new user's name

PASSWORD - The combined password to be confirmed 2 times

**USER TYPE - Not used** 

BINDING PC MAC ADDRESS - E 'can match the user with a MAC address of a PC so as to enable access only through that machine

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In the second AUTHORITY card will enable the possibility to control the DVR you want to grant the new user.



# (PTZ speed dome control)

DS-N4 is able to control the movement of speed dome cameras directly through the RS422 / RS485 rear door. If you have motorized cameras control via DVR is a big advantage in that in addition to saving on the purchase of a control console for speed dome is possible to control the movements of the cameras via the network and also to perform automatic movements according to the alarms detected by the DVR.

THE BUS cameras command part by RS422T + terminals and RS422T- and consists of a twisted pair that enters and exits from all cameras until the last plant. Each camera is identified by a unique ID address from 1 to 255. In addition to the physical connection is necessary to pay attention to the communication protocol and its speed must be the same for all elements on the BUS.

The PTZ programming board consists of two folders

SERIAL - For BUS settings

ADVANCED - To set automatic movements in the speed dome programming.

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#### **SERIAL WINDOW**



CH - Enables the control of the cameras that support the PTZ control

ADDRESS - The camera address that identifies it on the bus (1-255)

**BAUD RATE** - The communication speed must be the same for all cameras and command organs. The DVR supports many communication speed of which the most common cameras are supported by 2400,4800,9600 Baud.

**PROTOCOL** - And 'the communication language to be used which must obviously be supported by the cameras. For speed dome cameras DSE use Pelco D Protocol The DVR supports the following communication standards from other manufacturers: HY, Panasonic, Pelco 9750, Pelco D / P, Philips, Samsung, Sharp, Sony, Yaan.

#### **ADVANCED WINDOW**



In this window, if the function is supported by the camera, you can set Major

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automatic movements of the camera that is the PRESET (preset), the TOUR (scanning between presets) and TRACK or PATTERN (sequences of recorded movements).

Clicking the SETUP button accesses the programming where the camera is possible to maneuver with the arrows and the lens with the Zoom keys, Fire and Iris (diaphragm). The SPEED cursor allows to adjust the speed of movement. With the SAVE button saves settings.





In this section some control functions are collected by the system administrator The folder contains 3 submenus:

SYSTEM RESET
IMPORT / EXPORT
MAINTAIN

#### SYSTEM RESET

It restores the system to factory settings.

#### IMPORT / EXPORT

This section allows to export on USB stick the DVR configuration to be able to then import identical on another DVR. It is a useful feature for installers so that they will not devote time to the programming of each installed system. EXPORT THE CONFIGURATION - Insert a USB stick in the port of the DVR and click NEW to create a new configuration file that will appear in the list. Highlight it and click

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EXPORT to copy it on your stick. The key will be copied to an INI file with all the DVR configuration options.

IMPORT THE CONFIGURATION - Insert the pen with the INI file previously exported in the new DVR to configure. Press REFRESH to read the contents of the stick. The INI file will appear in the list. Highlight it and press IMPORT to import the DVR configuration.

#### **MAINTAIN**

This section allows you to schedule periodic restarts of programmable DVR with daily, weekly or monthly. This feature, although required in some applications and therefore permitted by the DVR, it is not necessary for the smooth stable operation of the system.

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# **Management Controls**

To access the programming of the DVR, click the main menu icon screen a window like the following





Click on "Config" to access the configuration of all the DVR options we have just described in the previous chapter. The following icons enable you to control certain aspects of the equipment that we face in this chapter.



# DATE SEARCH (search video files)

In this section you can search for video files stored on the DVR. You can also access this window by pressing the SEARCH button on the DVR's keyboard or the SEARCH button on the remote.

There are two types of research

BY TIME: by time

BY TYPE: Depending on the type of recording

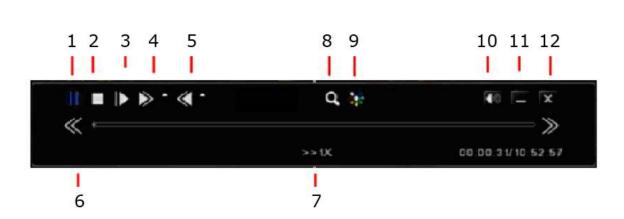
**BY TIME** 



This search allows you to search for files recorded by date and time of recording.



To play recordings select the date in the calendar to the left in the table and then set the start time (START TIME) and the end (END TIME) of the interest period. Finally, select the attractions camera 1,2,3 or 4. Press START PLAY to start playback. During playback, the following controls are available:



- 1 PAUSE Stops playing by freezing the screen image 2 Stop Stops playback will resume from the beginning
- 3 To play frame by frame. Advances one frame for each click on the icon. 4 Playback forward variable speed (1 / 8x to 8X) 5 Playback backward variable speed (1 / 8x to 8X)
- 6 Door to the previous minute (analogous to the other end of the timeline to advance button) 7 Indicates the type of reproduction that is in progress (forward / backward and speed)
- 8 Digital zoom By clicking this button you can drag the mouse on the screen and

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define an area or a particular magnify. Click the right button to exit digital zoom.

9 - Image Adjustment - Allows you to change brightness, Toni, Saturation and Contrast. 10 - Sound on / off - Adjust the playback through the speakers output. 11 - Close the tool bar tools while continuing playback 12 - Exits the Playback

#### **BY TYPE**

This search allows you to search for files recorded according to the type of recording. This environment is recommended when using the recordings after alarm or motion sensors.



Select the right table the period of time within which to search and or the cameras of the research.

Below choose the type of recording to search: TIMER - scheduled to schedule recordings MOVE - Registrations for motion detection

SENSOR - Recordings detection of external sensors (alarm inputs) MANUAL - Manual Recording by pressing the REC button

Finally press SEARCH to search the DVR memory. The events were found they will be listed in the grid. START Press PLAY to start playback from the first event, or double-click on a single event.

During playback you can use the same commands just seen in the search for time / date.

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# DATA BACKUP (save video files)

In this section it is possible to search the recordings and save them to the external storage medium connected to the USB port (stick, HDD, etc.) to be able to deliver, for example, to law enforcement.

Before the operation you need to insert the memory into the USB port of the DVR, any operation is not necessary to format the memory.



Select the right table the period of time within which to search and or the cameras of the research. Press SEARCH. The list of archived video files will appear in the list.

Select the files you wish to export and press BACKUP. This will open a window that summarizes all export data and indicates the size of the files that will be created. Check that the size of the storage medium is greater than the size of the files that you want to create you inside. Otherwise press cancel and select a number of files to export less. E 'can choose IFV export format or AVI. The two formats are equivalent in terms of size.

The AVI format is universal and easily reproducible by any player such as Windows Media Player, VLC etc.

The IFV format you can only play with the reader on the CD supplied with the DVR which nevertheless contains some playback controls more than the general reader.

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Press start to start exporting the progress of which will be shown by the blue band. When the message appears to report the BACKUP SUCCEED correct term

operation.

On the unit USB memory that you find yourself connected to a video file for each camera containing the overall recording period you have selected.



# **INFORMATION** (information)

In this section you will find all the information on DVR. There are 3 sections:

SYSTEM - Includes all information on the DVR version

**LOG** - Provides access to system event log. The DVR keeps in memory all the transactions undertaken by users both locally and remotely. For each event are given the LOG type, user, date / time, and IP address. The LOG window includes the search functions for date / time and type. E 'can export selected events on the USB device with the EXPORT button (create .LOG file)

NETWORK - Includes all the information about the status of the DVR Network (addresses, ports, etc.)



# HARD DISK (memory unit)

In this section are listed all the memory unit connected to the DVR, both internal (Hard Disk) and external that is connected to the USB jack.

The table provides for each unit the signs of type, size, free space and working condition.

**FORMAT THE DISC** - In this section you can format your hard disk by selecting the unit and pressing the FORMAT button. Wait while following the progress of the progress bar. E 'have to format the Hard Disk always after a new disk is installed.

Formatting the drive will erase all data on it.



# UPGRADE (update)

In this section you can update the system firmware after loading it on a USB stick. This operation is required only on the instructions of the DSE technicians.

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This button is used to make a voluntary LOG OUT. The system will remain in operation but will no longer be possible to access the control functions without having carried out a new log-in with correct credentials.



This button is used to stop the DVR securely. Although the back of the DVR there is an ON / OFF button is recommended to prevent data loss by acting on this command if you deisdera turn off the DVR. The unit will make the closure of all processes and will turn off automatically.

Wait until the unit turned off, then bring the ON / OFF button back to the OFF position.



This button is used to restart the DVR.

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# remote access

The DS Series DVR can be controlled remotely through a local network or the Internet using PC or mobile devices like mobile phones, iPhone / iPad, PDA etc.

In order to make these operations you must first correctly configure the DVR to the network.

#### CONNECTING TO THE NETWORK

To connect the DVR to the network using a LAN cable CAT5 or higher with RJ45 connector, straight type (not crossover). Connect the LAN port of the DVR to a free switch port. Check that after connecting the green and yellow LED on the DVR connector light up. This confirms the good functioning of the physical connection.

#### SETTING THE NETWORK PARAMETERS

To set the essential network parameters to the network operation act in the DVR configuration and subsequently clicking CONFIG NETWORK as shown above.



#### IP ADDRESS (IP ADDRESS) - SUBNET MASK - GATEWAY

The first parameter to set is the DVR IP address that identifies the network and allow you to achieve it. All the elements of the network the first 3 digits of the IP must share it (eg. 192.168.0.XXX) and the subnet mask to be able to share information. Factory DVR uses DHCP auto configuration that automatically regard by swicth network (or other DHCP server) IP address, subnet mask and gateway which are the basic communication parameters. If DHCP was disabled should turn it on and restart the DVR to get the network parameters at startup.

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The IP address will be an internal network address usually 192.168.xx the type and subnet mask of 2555.255.255.0 rule. The normally gateway will be the address 1 of the network class (eg.

192.168.0.1 if the class is 192.168.0).

It should maintain the parameters obtained in DHCP but remove the tick on DHCP in order to make these parameters can not be modified by the network automatically. In this way with little effort we set the DVR network section.

#### **COMMUNICATION PORTS**

In the Network Settings appear the three communication ports used by DVR

HTTP PORT: Factory 80 (used to access the Internet Explorer browser)

PORT VIDEO / DATA: the 8670 Factory (used for all kinds of - browser access, CMS client)

**PORT MOBILE:** Factory 100 (used to access with mobile devices and tablet) and 'should not modify the doors of the factory communication is not absolutely essential for the coexistence of multiple DVRs in the same network.

#### ACCESS FROM LOCAL

To connect to the DVR from a client residing on the same internal network DVR, for example, from a network PC or from a mobile phone connected to the internal WiFi network, the IP address to be included in the client will be the one of the internal DVR to the network (for eg. 192.168.0.XXX).

#### **ACCESS TO THE INTERNET**

To connect to the DVR from a resident client off the network using the Internet must be considered that among our local network and the Internet were hindered by a router. From the outside of the internal network IP address of the DVR can not be reached and we will have to call the external IP address of the router (WAN side). To learn about this public address (accessible via Internet) access the router configuration or use an internet service among those available to know your IP address.

however, it is not enough to call outside the network's public IP address to connect to the DVR. The router acts as a filter and does not pass within the impromptu external calls network. The router allows forwarding of external calls to the internal network only if within it there are instructions PORT FORWARDING.

These instructions are

fundamental for connecting to the Internet and must be made in the router. Consult the manual of Router on how to do port forwarding, also called port mapping or NAT.

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#### **PORT FORWARDING**

The port forwarding instruction to be inserted in the router is used to tell the router to direct the communication ports used by DVR (Default: 80, 8670, 100) from the WAN side (Internet) to the internal IP address assigned to the DVR.

Most routers also asked to enter a rule in the firewall section that allows the transit of communication about the ports used.

Each router has its own configuration, usually accessed by calling the browser's internal IP address of the router, so there is not possible to provide instructions on how to do the mapping. Consult the instructions for your router for details or contact your ISP service that supplied it.

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# Remote access with client DVR

The CD included with your DVR content is a centralized management application that allows control of one or more DVRs from a single computer. The program is for Windows DVR CLIENT

in the CD, double click on

DVRclientsetup.exe for setup over.

#### Log-in

To make access to the program enter a user and password. These credentials are typical of the program and does not relate to access to DVR.

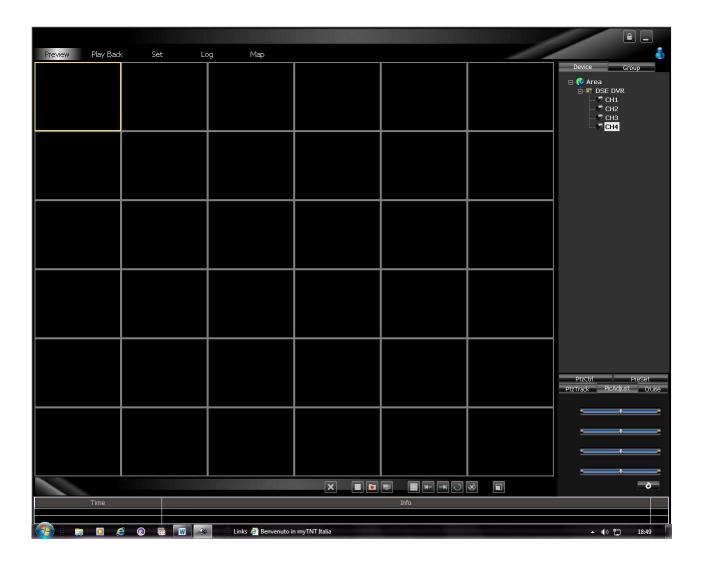


Access all'interfacia graphics program that is capable of managing a split-screen with up to 64 quadrants. It is a powerful centralized tool through which you can control multiple DVRs from a single location.

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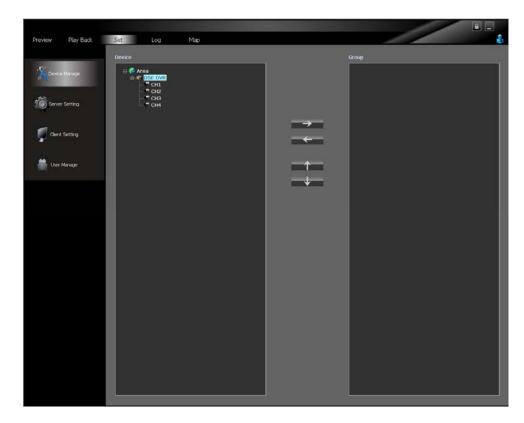




## **Settings - Adding a DVR**

The first thing to do is insert a link to a first DVR. To do this, press the SET button in the top bar and the first voice DEVICE MANAGER.





The first thing to structure the tree that identifies geographic areas or logic to manage. This allows you to logically group together also a large number of DVR. For example you can create a tree referring to the geographical areas or to areas of a large building with multiple DVRs. Acting clicking with the right button and then with the commands ADD AREA, AREA MODIFY, DELETE AREA. For example you might create a tree of this kind.



At this point you can add the DVR for the individual areas. Click the right mouse button to select ADD DEVICE. Enter data as in the example.

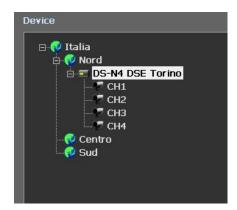
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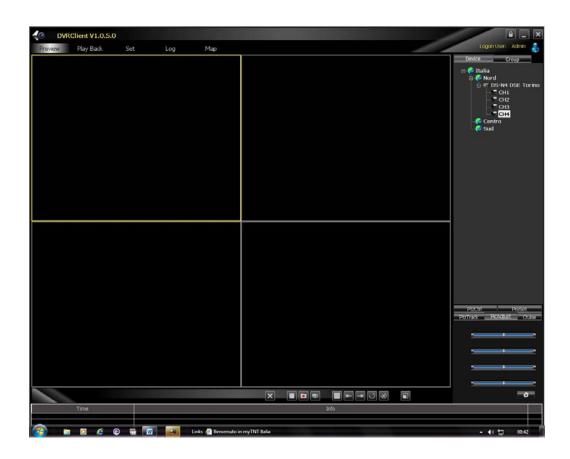


Click OK to add the DVR in your chosen



Do the same to add more DVR in other areas. Finally press PREVIEW top to exit the program and return to live viewing. We will find the right tree equipment just realized.





#### **LIVE Vision camera**

To see real-time cameras just drag the camera icon in the tree on the right to one of the viewing panes on the left.



At the bottom there are the control buttons

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- 1 Not used
- 2 Press to remove the camera from the display frame
- 3 Start the live recording of the cameras. A red icon appears on the camera to the right of the tree DVR
- 4 Take a camera photo selected 5 Change Screen Division 1 to 64 cameras
- 6/7 The program allows you to program different layouts of custom view you can then scroll using these buttons.
- 8 Start cycle the cameras of a DVR in a box (first select the DVR) 9 Stop polling (first select the DVR)
- 10 Full Screen Eliminates the outline of the program commands to leave only the full-screen cameras.

In the lower right are the controls for speed dome cameras. And 'possible in PTZCTRL folder control the cameras in their movements. The preset folders, Cruise, Track allow you to program and retrieve the automatic movements of the cameras.



In PICADJUST tab, you can adjust the display settings.

#### Watching the recorded video

The DVR client program also allows you to play back recorded images in both the hard disk of the PC it is installed on both the remote DVR. PLAYBACK Click on the button at the top you can choose between LOCAL and REMOTE PLAYBACK.

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In this window you can search for recordings based on time, the channel and, in the case of remote playback, the type of recording. E 'can play back movies in the windows, or download them to your PC with the DOWNLOAD button at the bottom.

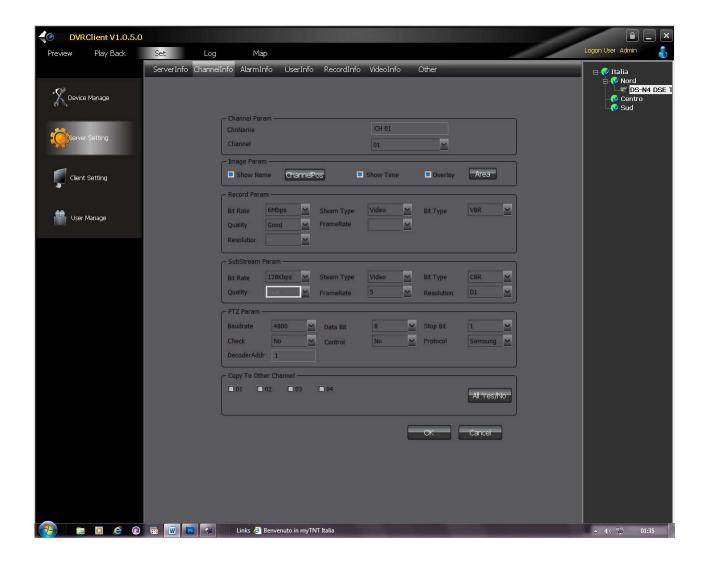
## **Settings - Server setting**

By pressing the SET button, in addition to the DEVICE MANGE folder that allows you to set the DVR to connect to and that we have already described, there is the SERVER SETTING folder. Here you can program the whole configuration of the DVR, as you can do directly from the keypad or remotely with the browser. The options in this section are the same as those seen in the DVR configuration. To operate select the DVR tree on the right and configure the options of the various tables.

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#### **Settings - Client settings**

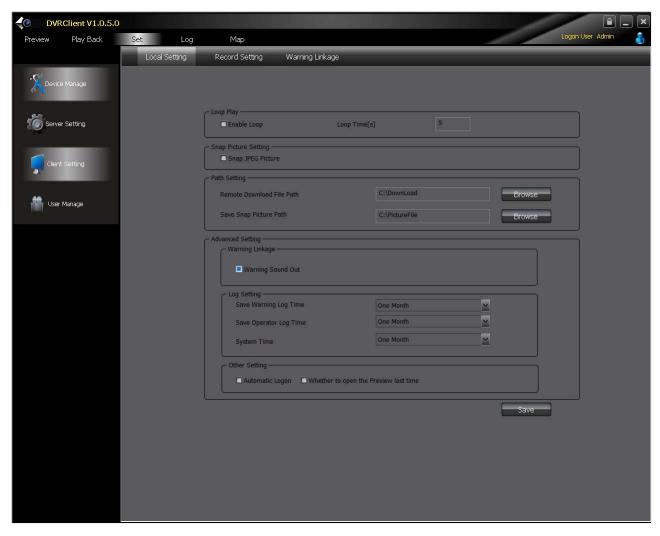
Here we are enclosed all client DVR program settings.

The section is divided into three folders: LOCAL SETTING RECORD SETTING and WARNING LINKAGE which we explain below.

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#### LOCAL SETTING

LOOP ENABLE - Enables the cyclical display of cameras in the viewing panes. LOOP TIME - Scan time between cameras

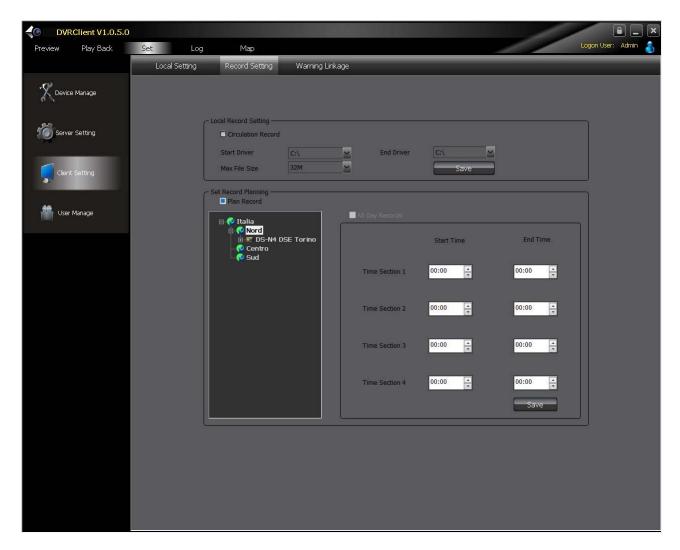
REMOTE DOWNLOAD FILE PATH - Defines the folder in which to save your recordings REMOTE SNAP PICTURE PATH - Defines the folder in which to save the photos WARNING SOUND OUT - Enable sound signal in case of LOG SETTING program alarms - determines how long to keep the historical memory of alarms, user access and system events

AUTOMATIC LOGON - Accesses the program without checking password alla'avvio wether TO OPEN ... - Enabling this option at the end of the program is memorized the layout of the screen cameras that will be repeated automatically to restart

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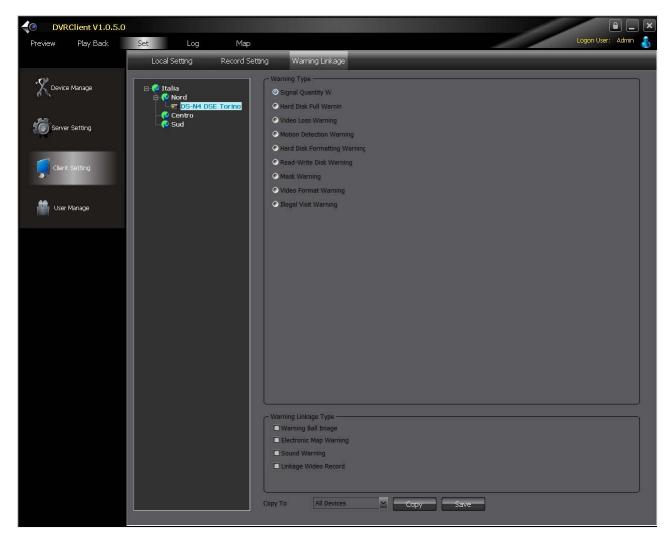
#### RECORD SETTING

CIRCULATION RECORD - Enables continuous recording to the hard drive. And 'possible to select the disc to start recording, and one on which end it if the PC has more HDD. E 'can also set the maximum size of each video file. PLAN RECORD - For each camera you can define if you record continuously (ALL DAY RECORDS) or only at certain times of the day. E 'can define 4 time slots.

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#### WARNING LINKAGE

For each abnormal event this on a connected DVR you can set alert actions on the PC. The following actions are available.

WARNING BALL IMAGE - Take the last image of the camera in full screen ELECTRONIC MAP - Not active

SOUND WARNING - Turn on the PC sound card alarm sound.

LINKAGE VIDEO RECORD - Starts recording. (Available only with ongoing recovery events) Select the DVR on the left, then the event to be monitored and then / the alarm actions, press SAVE to save. With the Copy button you can copy the settings to other DVRs.

#### **Settings - Manage User**

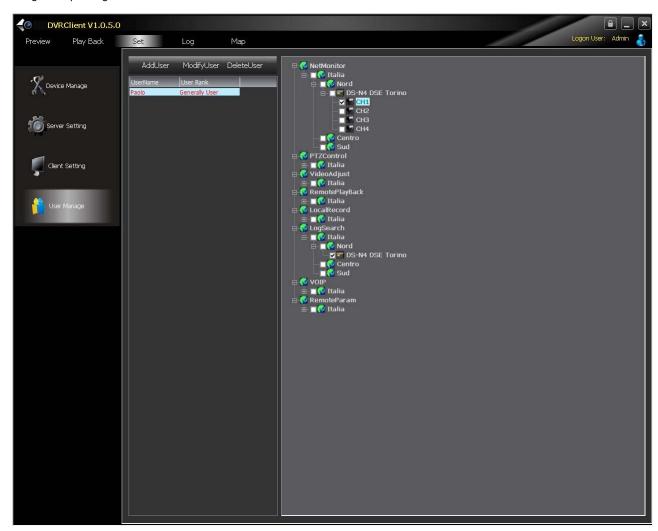
Here you've set new users who may have access to the program with their access level. Press ADD USER to add a user to assign name and password. Once you created the user can take action in the tree on the right to set the level of access

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assigned depending on the DVR and the camera.



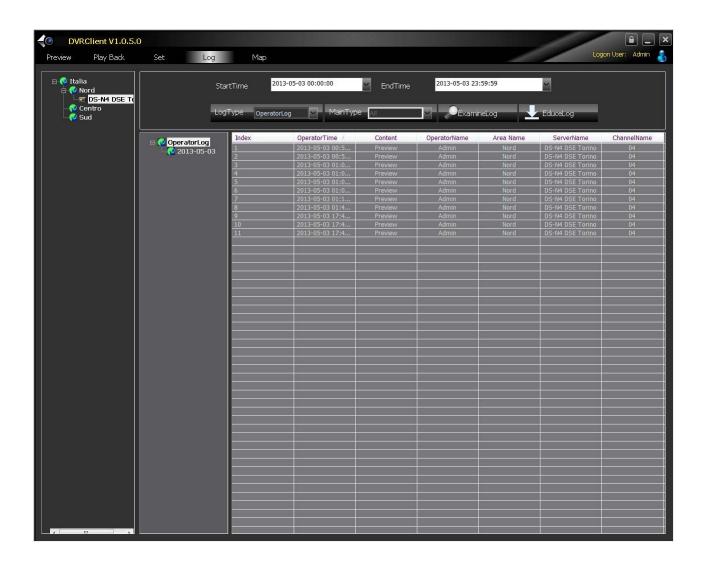
## Log

It enables you to browse the event log of remote DVR searching by date / time and type of event.

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#### map

Function currently not available.



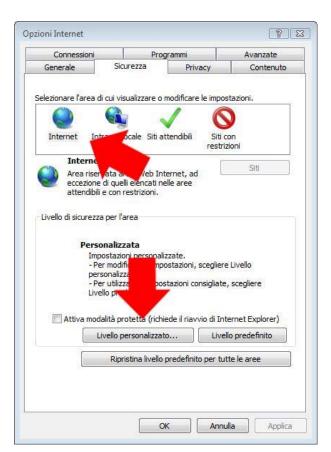
# Remote access with browser

DVRs allow access with the Internet Explorer browser by installing an ActiveX component. During the first connection the Internet Explorer browser must download it to install the activeX components from the DVR to play the control interface. Pere prevent this from being impeded by the browser security setting is absolutely necessary to check the settings as shown in the following paragraph.

WARNING: It 'important that the first connection with the DVR Explorer security settings are set as described below, otherwise the ActiveX components are not installed correctly.

#### **Enable the execution of ActiveX**

Internet Explorer has security settings that may prevent connection to the DVR. Before making the connections necessary to enable all options related to activeX in particular the execution of ActiveX NOT marked as safe. In Internet Explorer, select TOOLS / INTERNET OPTIONS



In the folder **PROTECTION** to choose

the area INTERNET and click LEVEL

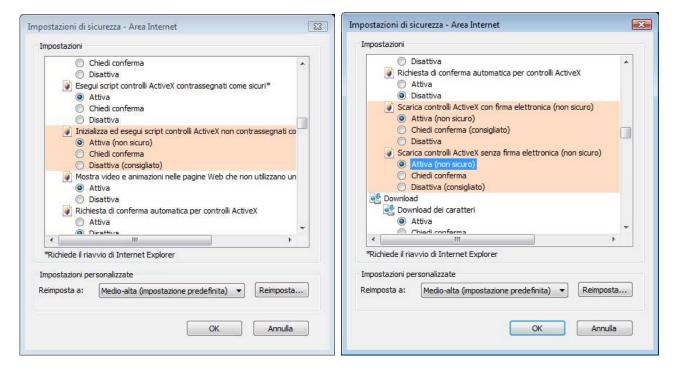
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CUSTOM. To enable ( NOT SUFFICIENT to permit confirmation ) all items for the download and execution of ActiveX especially those

NOT marked as safe. Ignore the security warnings that indicate that these settings pose a risk to PC security. In particular, you must set the following three options, all indicated as safe by the browser.



After setting these security options, save and restart Internet Explorer. Are you ready to make the first connection.

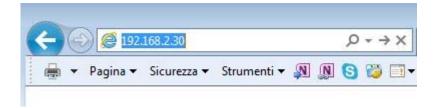
#### Log-in

To access the DVR with Internet Explorer, type in the address box, the IP address of the camera. In the example in figure we provide such as a link on the internal network to the DVR with IP address 192.168.2.30.

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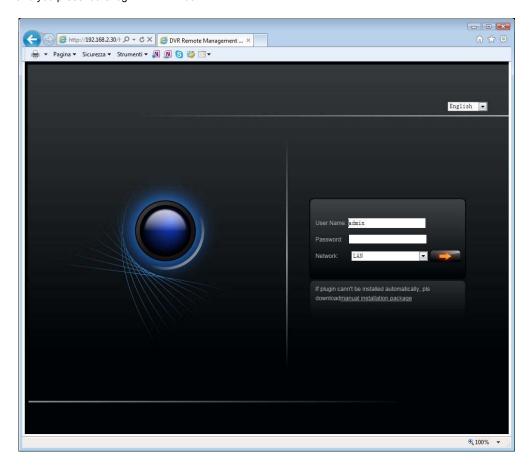




Typing the address in this way, the browser will call using HTTP port 80 which is the same set of DVR in the factory. If you have changed for some reason the HTTP port in the DVR settings, for example by placing 81, then you must specify the port to use the address of the browser as follows:



Press ENTER and you present the log-in DVR window



This is the stage where, only that the first access is made from the computer, the activeX components are installed. If you have properly set the security settings of the components

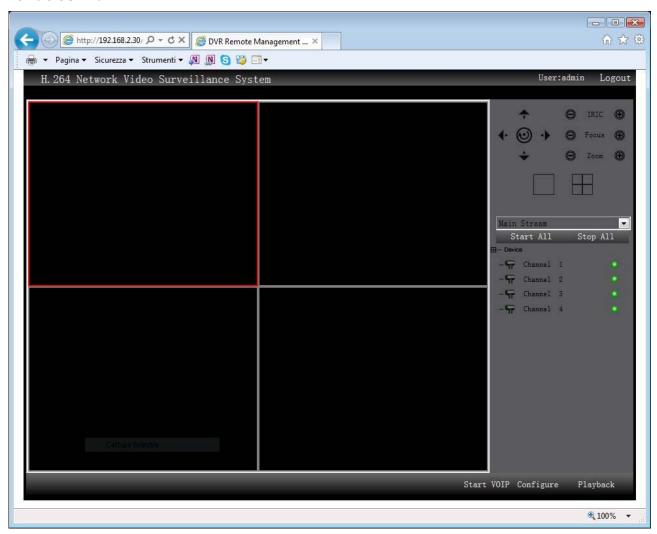
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They will be installed automatically without requiring any approval. If you happen to not get access beyond this mask log-in it means that the ActiveX components have not been installed because of IE security restrictions. Therefore Review the previous chapter by checking that you enable all required options. The log mask allows you to enter the access data that factory are: USER NAME: admin PASSWORD: leave blank

#### flexible GUI with IE



The area on the left image is divided into four quadrants. To bring up a camera to click a box so that it is surrounded by red and then choose the camera list on the right. Alternatively you can also click START ALL to start viewing of all 4 cameras and STOP ALL to stop it.

On the right of the screen are a few different controls

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It is advised that streaming of uncompressed SDI camera in FullHD resolution is quite demanding in terms of bandwidth. If you are experiencing little smoother images to the client PC performance or failure for a modest bandwidth available (for example in the Internet), you can elect to receive in lieu of the main stream in high resolution sub-more "light stream" in standard resolution.

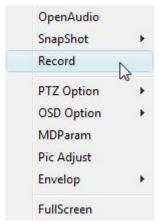
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#### camera Controls

By pressing the right mouse button on a camera you access a menu control



**OPEN AUDIO** - Activate the camera audio

SNAPSHOT - Take a photo in JPG or BMP format. The save folder is defined in the following section CONFIGURE

**RECORD** - Starts recording of the image in order to save short IFV revisable format clip with the player on the CD. The save folder is defined in the following section

PTZ OPTIONS - In this section you can act on the automatic movements of speed dome cameras. E 'can set, delete and retrieve the PRESET, the CRUISE (scanning between presets) and PATTERN or TRACK (custom segments)

OSD - E 'can change the position of overlays to the camera screen that are date / time and channel name.

**MD PARAM** - Here it is contained all the motion detection settings as set in DVR. E 'can change them and send them to the DVR by pressing SET.

PIC ADJUST - Change the image adjustments (brightness, contrast, Toni, Saturation)

**ENVELOP** - Set a possible privacy mask.

FULL SCREEN - Bring the camera in full screen.

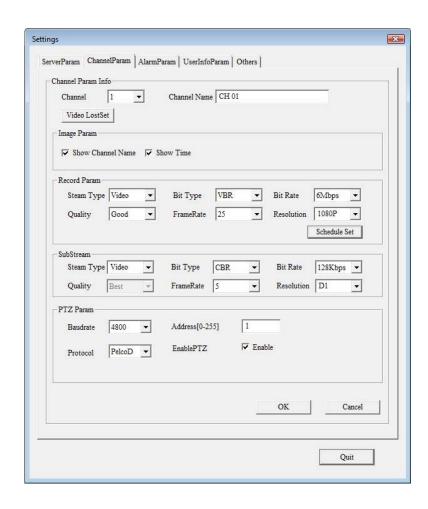
#### **Remote DVR Configuration**

Pushing the CONFIGURE button you can program all of the remote DVR configuration options.

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The options available in this section are the same as we described in the section of the manual dedicated to the DVR programming.

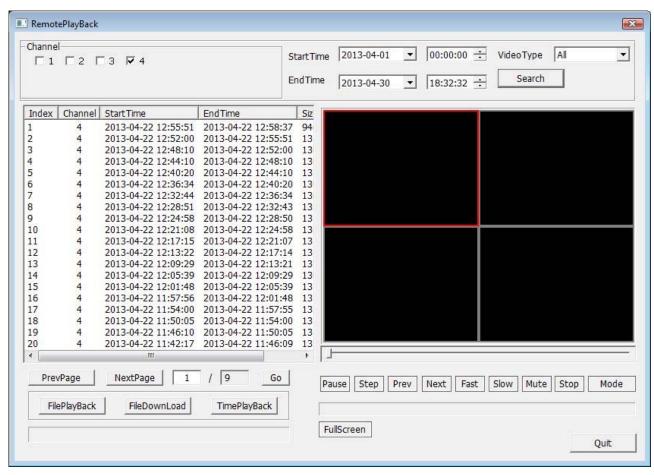
#### remote Play

Pressing the Playback button you can search for movies stored on the DVR hard drive.

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Define high the object of the search camera, the time period and the type of recording and press SEARCH. The window will list all the recordings in the DVR memory and you can play them or download them to your PC.

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# Remote access with mobile phones

The DS Series DVR can be controlled remotely through mobile and tablet devices such as iPhone / iPad, Android phones, Blackberry, Windows Mobile and Symbian. To access the DVR using a mobile device using the port named MOBILE PORT that factory is 101 and is modifiable in DVR network settings. In the DVR network settings you can also set the SUB STREAM folder, the details of the stream to be used in connection with mobile phones so that it takes a consistent bit rate limited by their bandwidth availability, almost always lacking in connections via mobile phone.

## **Windows Mobile**

If you have a PDA with Windows Mobile TMeyesetup.cab found in the files of the DVR Kit CD that must be installed on your PDA following the instructions of the equipment.

Run the program and click Kweye SETTING to set the address of your DVR. Enter your login credentials (default user: admin PW: -)

the IP address of the machine and

the port to be used which by default is 101

Tick Autoconnect and click OK. The HISTORY button provides access to other DVR that has had access in the past.

In the display window you can choose the camera to view and comandarne movements if it is a motorized speed dome camera. The icon with the camera lets you take pictures to be saved in memory.

#### Nokia / Samsung / LG Symbian S60 3rd / S60 5th

If you have a phone with a Symbian operating system found in the DVR Kit CD or the TMEye\_3rd.sisx TMEye\_5th.sisx files (depending on your phone) to be installed on your PDA following the instructions of the equipment.

For installation you need to set SOFTWARE INSTALLATION - ALL and CERTIFIED ONLINE CHECK - OFF

Run the program and click TMeye SETTING

DVR.

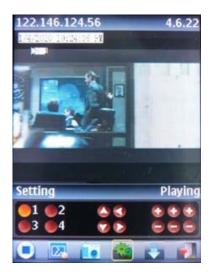


to set the address of your

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Enter your login credentials (default Admin / -), and the machine's IP address and the port to use that default is 101. The control buttons are:



Channel selection. To move these cameras Press





Moving speed dome cameras



Zoom Focus Iris and speed dome cameras



Play and Stop



Full screen hides the menu buttons



Take a picture and saves it into memory



Accesses settings



following cameras Group



Fxit



# iPhone / iPad



If you have an iPhone 3GS / 4/5 must connect to APPSTORE and install the free TMeye (single channel application) or TMeye + (multi-channel). If you have an iPad tablet to download the application

TMeye + (multi-channel).

#### **TMeye**

Start the program from the



Click



to open the settings window.

Then press the + button to add a DVR to which you can connect.

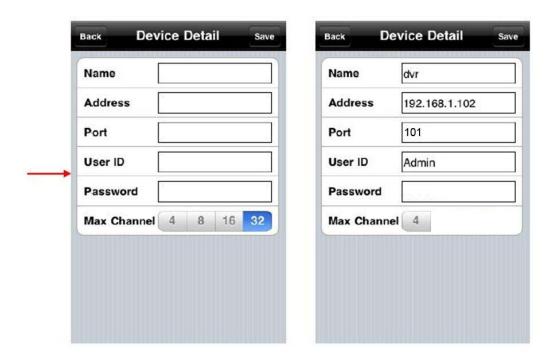
Enter your login credentials (default Admin / -), the machine's IP address and the port to use that default is 101. Finally specify the number of channels on the DVR.



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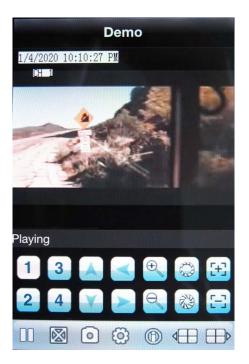
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Click SAVE and then BACK.

Click to start monitoring screen



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The control buttons are:



Channel selection.



To move on the following cameras



Shift - Zoom - Focus - Iris for speed dome cameras



Play and Stop



Full screen hides the menu buttons



Take a picture and saves it into memory



Accesses settings



About This App

#### TMeye +

This application can be installed on both the iPhone and iPad, and compared to the previous allows you to view multiple cameras simultaneously if the available bandwidth allows.

Start the program from the



and press the button at the top right to access the menu

control. Choose DEVICE LIST and then the + button add the DVR as soon as the visa application TMeye.

Below the installed application on iPhone

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Below the application installed on iPad



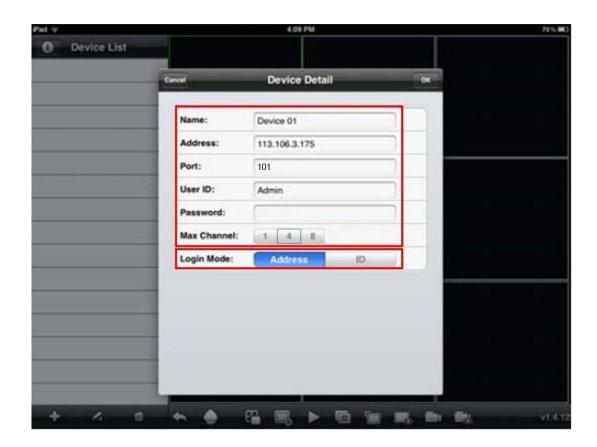
Click + to add the DVR and enter the access data.

They fit as already seen for the TMeye address, port, log-in and the number of channels.

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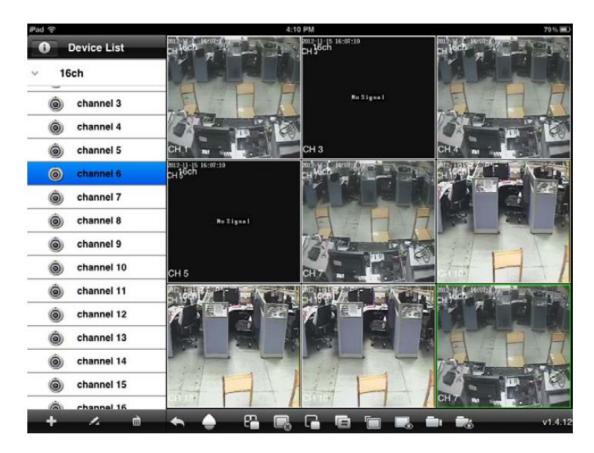


E 'can store multiple DVRs and cameras to choose which one they see on the screen. And 'you can display up to 9 cameras simultaneously from different DVR.

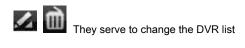
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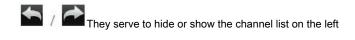
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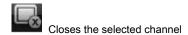
The commands available are:







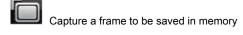








multivision Button (4/6/9 channels)



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Access to manage photos taken with the previous button



Registration of video memory. The REC indication appears in the upper right of the image when recording is active.



Access to the recorded video clip management

# Android (Samsung mobile phones etc.)



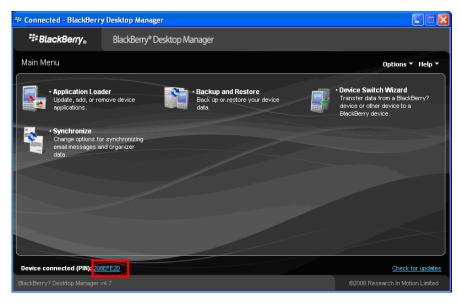
If you have a PDA equipped with Android operating system you have to log on to GOOGLE PLAY and install the free application TMeye (single channel) or TMeye + (multi-channel).

Once you installed the program TMeye the icon appears between programs Launch the application and follow the instructions for iPhone / iPad The TMeye + Android version allows multi-image of up to 4 channels.

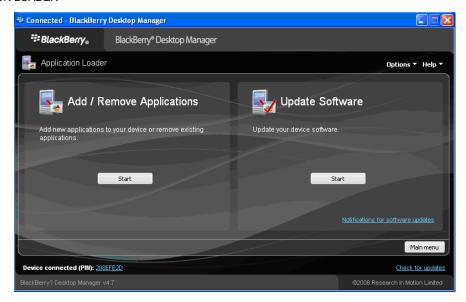
# **BlackBerry**

If you have a BlackBerry PDA you have to copy on a PC and TMeye.cod TMeye.alx files that you will find in the CD supplied with the DVR. To be able to install applications on BlackBerry requires that your PC is running BlackBerry Desktop Manager. Open the Desktop Manager:





#### Click APPLICATION LOADER

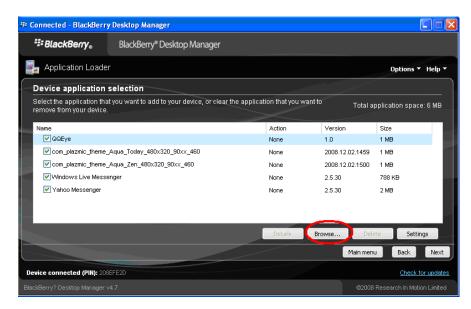


Choose ADD / REMOVE APPLICATIONS clicking START

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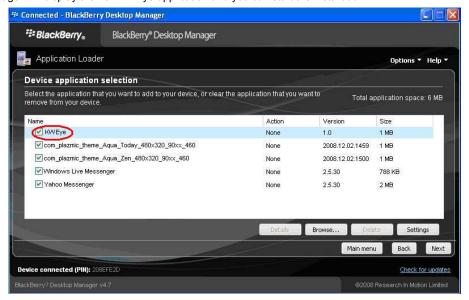
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Click BROWSE eg search on your PC TMeye.alx file. Check that you have copied all the other files provided in the same folder TMeye.alx

Now Desktop Manager will display the new TMEye application and you can start the installation.



Start the program from the



Click



to open the settings window.

 $Enter your login credentials (default Admin {\it I}-), the machine's IP address and the port to use that default is 101. \\$ 

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Click LOGIN. The DEVICE LIST button gives you access to other DVR that has had access in the past.



Click



to start monitoring screen

The control buttons are:



Play and Stop



Full screen hides the menu buttons



Take a picture and saves it into memory

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Opens the channel selection window.





Commands Move - Zoom - Focus - Iris to

Speed dome cameras