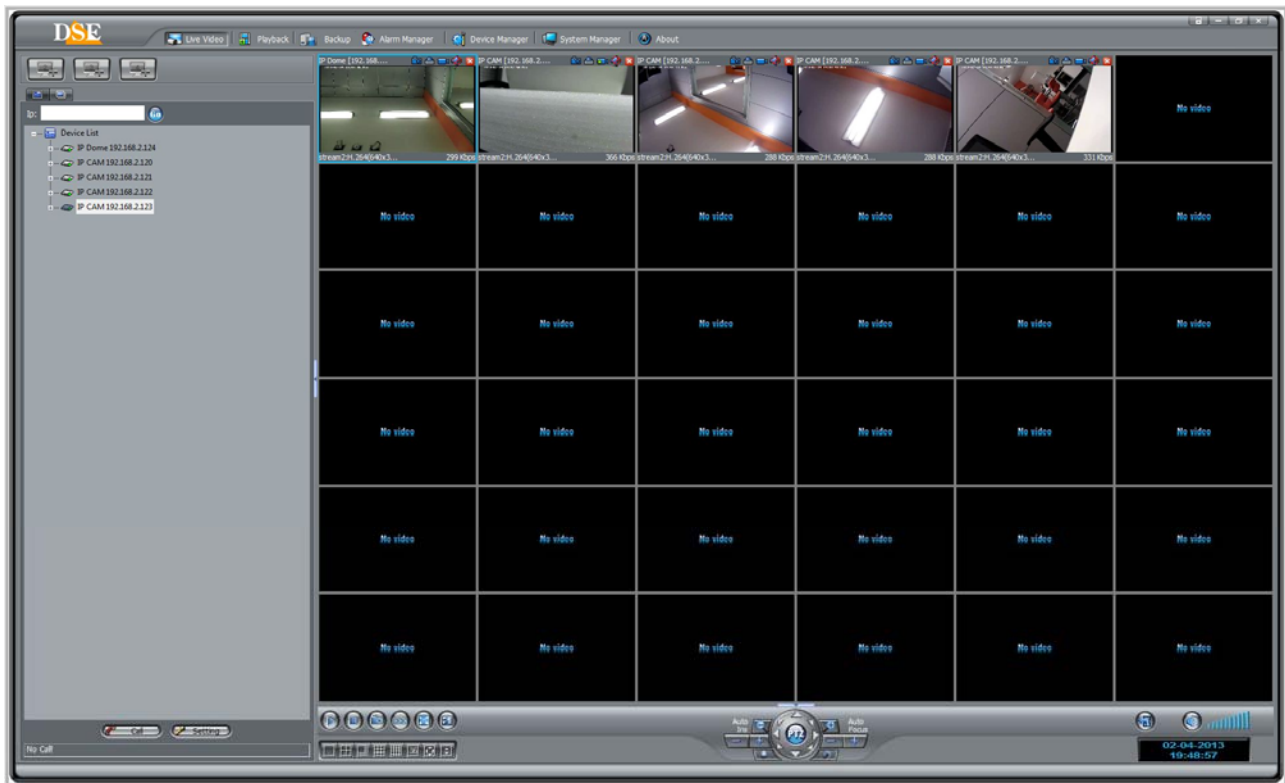


NetVMS



Introduction

The NetVMS software is a tool NVR (network video recorder) supplied with the cameras RH Series to allow viewing and recording of images coming from up to **128 cameras** IP networked.

It is a very powerful and flexible tool that can handle streaming video input and process them with its many functions.

Unlike ordinary video recording software, NetVMS also allows the automatic search for cameras on the network and the programming of configuration options to the CMOS sensor adjustments.



Minimum System Requirements

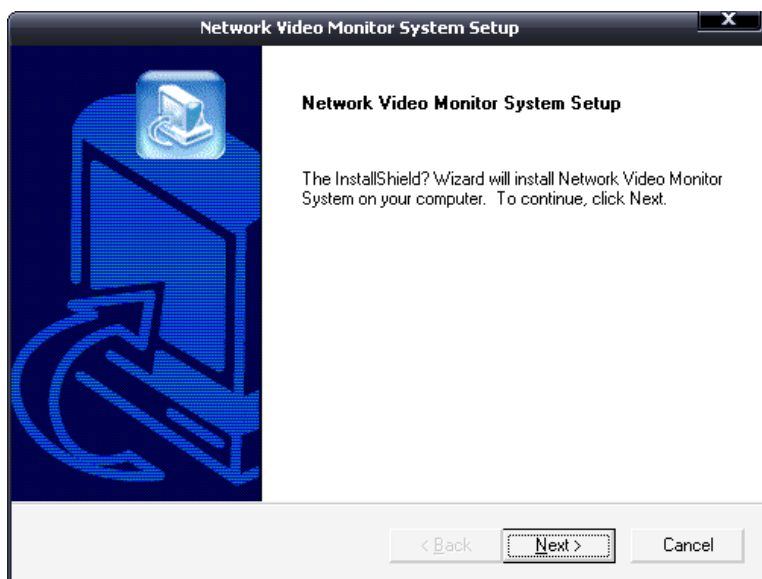
The NetVMS software must of course be installed on a computer connected through a local area network or the Internet with the cameras to handle. These are the minimum requirements to the PC on which to install the software:

- CPU: Intel Pentium 4 2.0 GHz or higher RAM: 1GB minimum
-
- OS: Windows Server2003 / 2000 / XP / Vista / 7 Video: 128MB
- or above Video Format: 16: 9
-
- Video card with support HARDWARE ACCELERATION (tested models: NVIDIA GeForce
6200/6600/7400/8600/9500/9600 ATI Radeon 7000/7200/7500/8500 / 9000/9200/9500/9600

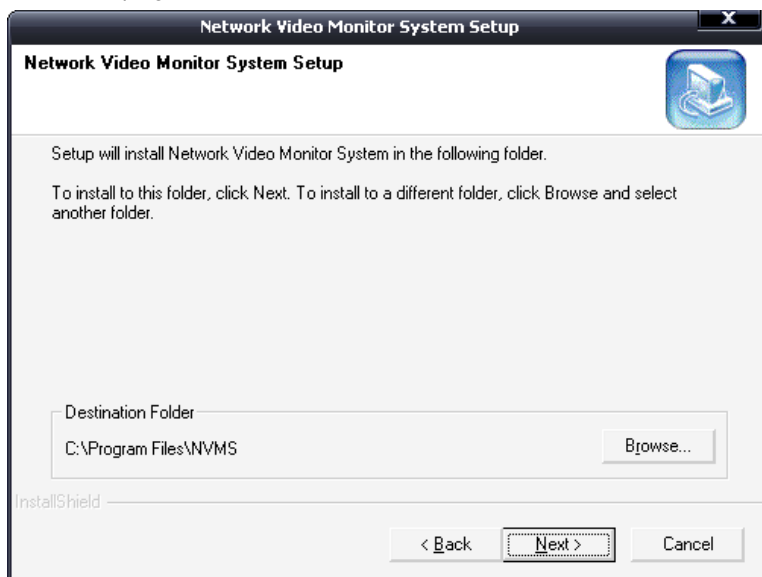
Installing Software

Insert the CD into the player and follow these steps:

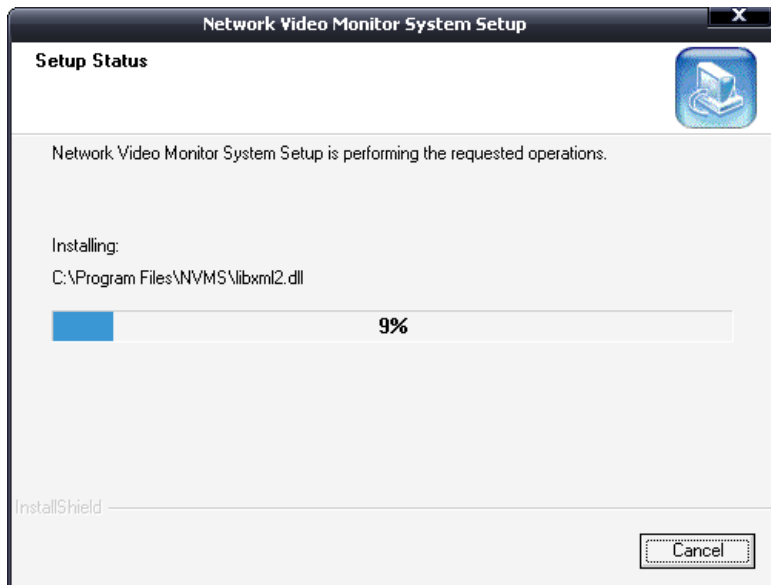
- Explore the CD and find the folder NetVMS the installation program (SETUP.EXE), double-click to start the installation



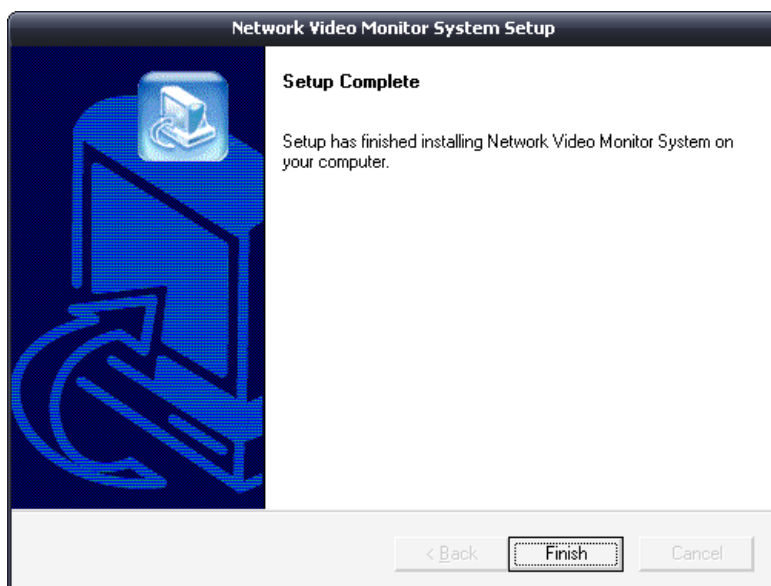
- Choose the program's installation folder



- Wait while



- Click FINISH to complete the installation



When the installation will appear on the desktop a new icon
icon to start the program.



. Double-click

Log-in

Access to NetVMS program is password protected. The Factory Data Access:

USERNAME: admin

PASSWORD: admin

Password is case sensitive



Of course you can customize the password in the settings.

CAUTION - If a user types 3 times an incorrect password is locked by the system. The administrator of

program can unlock

the user blocked

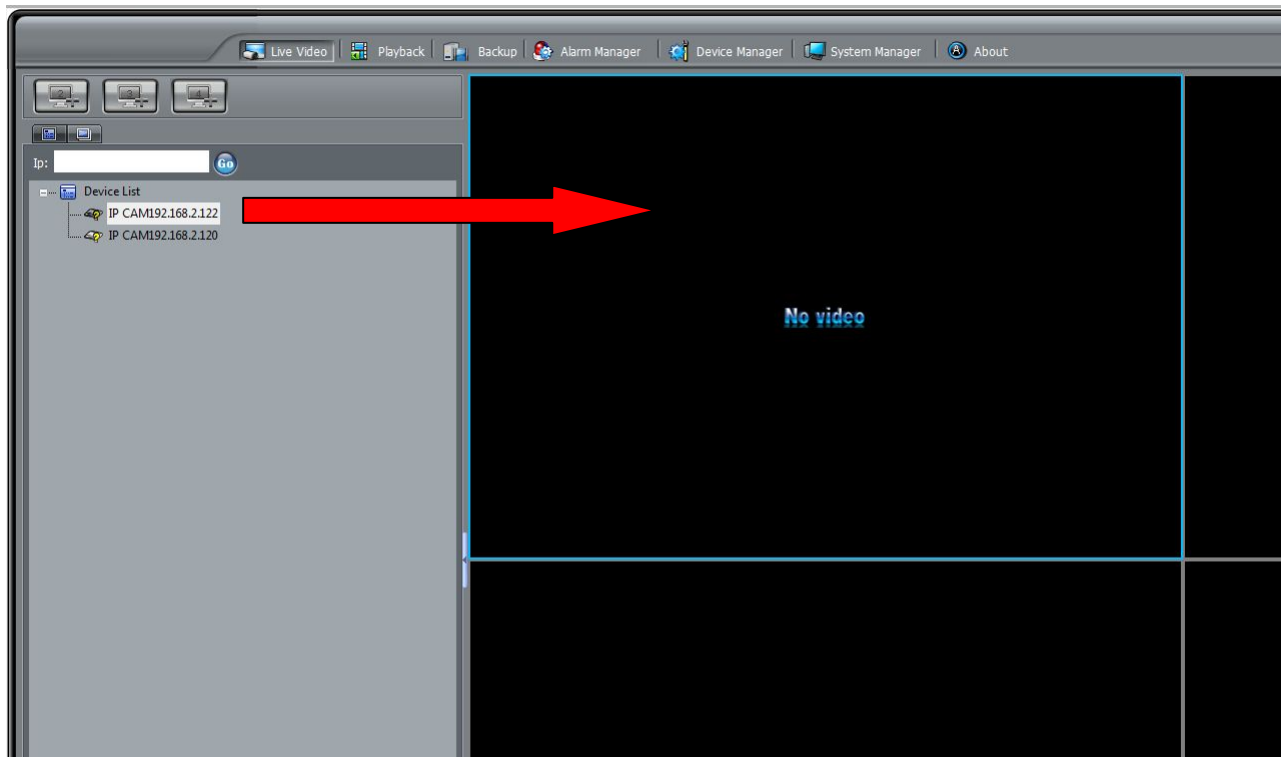
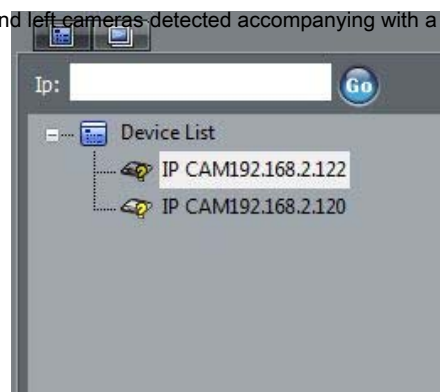
in the SYSTEM

MANAGEMENT / USER / UNLOCK.

In the Log-in NetVMS you can enable REMEMBER MY PASSWORD to avoid having to enter the password on each login and SIGN IN AUTOMATICALLY to skip altogether the log-in window.

Connection with cameras

The first thing to do to make operational the NetVMS software is connecting the cameras on the network. Before you do this you must have configured cameras in a consistent IP address to the computer that is with the same address class (es 192.168.0.XXX) and the same subnet mask (eg. 255.255.255.0). This is done using the IPSEARCH program (see the camera manual for use). NetVMS The software is equipped with an automatic search function of the network camera that makes the connection between software and very fast cameras. The NetVMS startup program performs a rapid screening of the network lists and left cameras detected accompanying with a question mark.

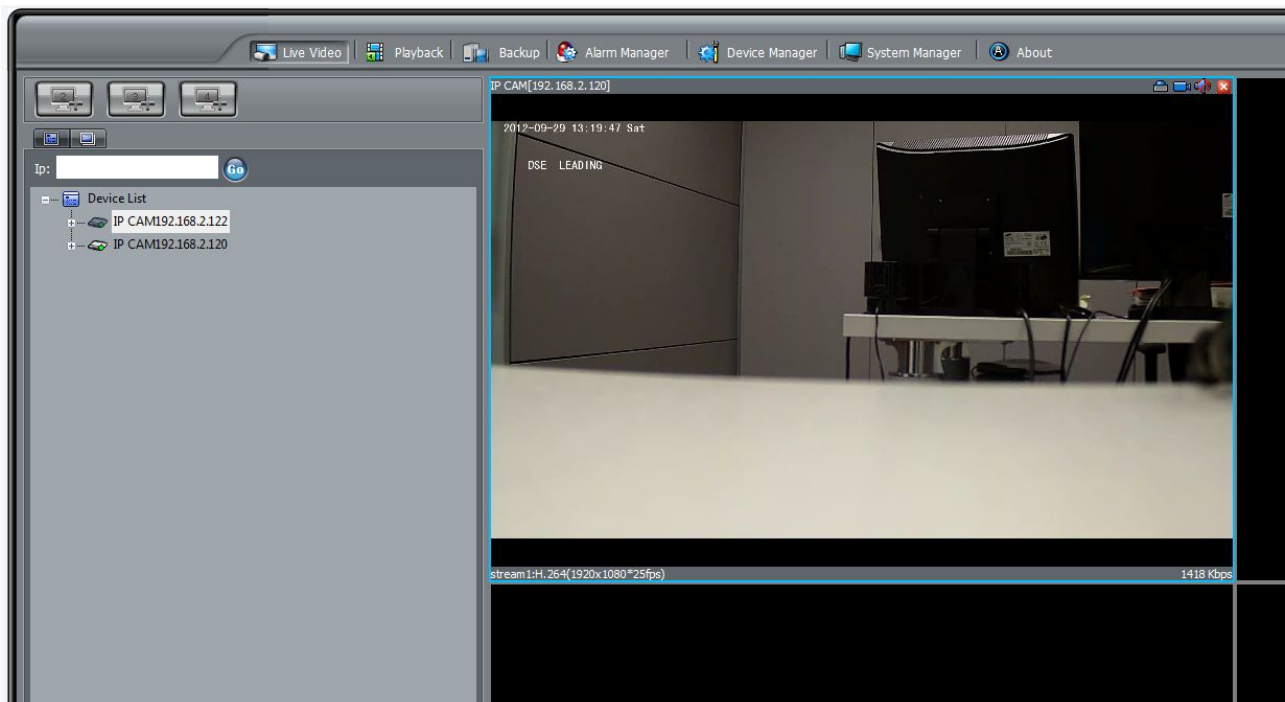


Releasing the mouse will appear in the pane window to log in which you must enter the access credentials of the cameras (by default: admin / admin)



Once the log-in the camera will be immediately visible in the pane. If this does not happen is necessary to revise the camera's network configuration by referring to the installation manual.

A green dot appears on the icon of the signal the occurred access camera.

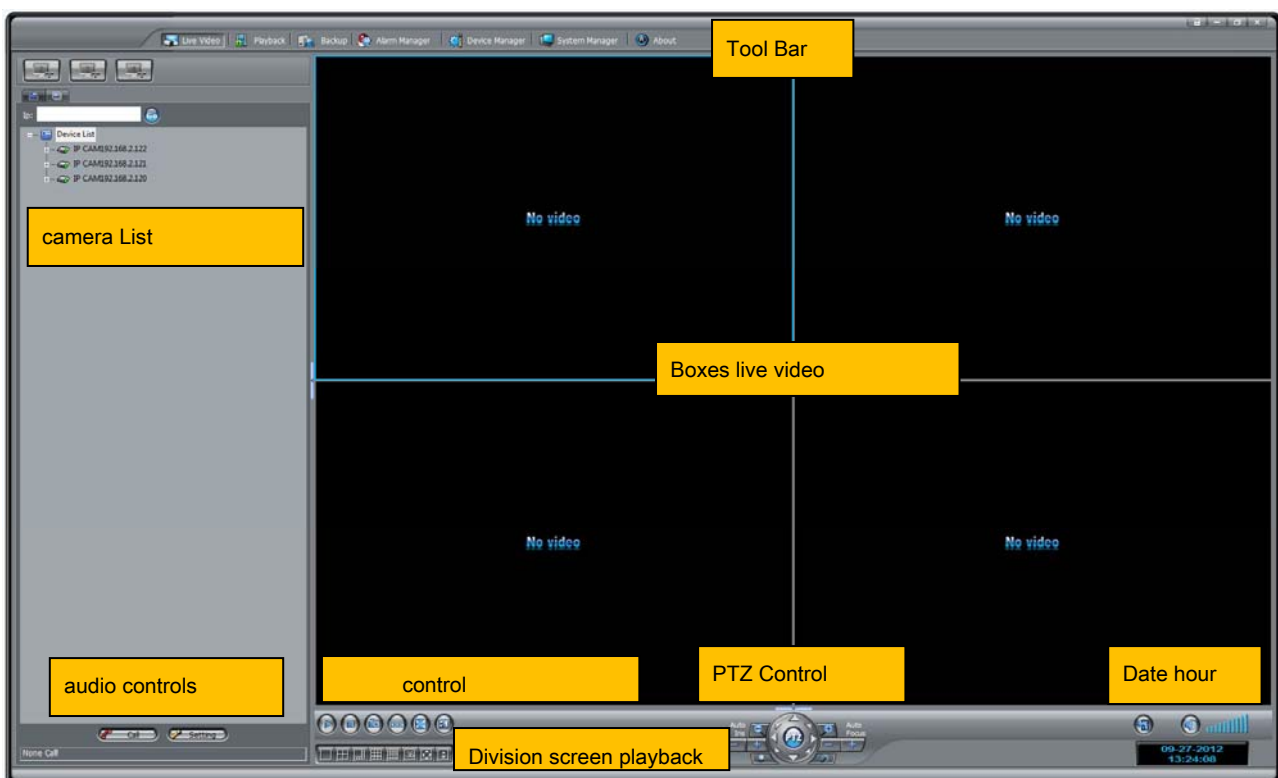


In the system options you can also set the password to access the cameras to be used by default. In this way the access to cameras will occur automatically without requiring the log-in mask.

If the system consists of many cameras that use the same access password (admin / admin Factory) it is recommended just installed the program to enter SYSTEM MANAGER / DEFAULT DEVICE USER and set the login credentials for the cameras in a way that connects program within seconds to all cameras automatically (see chapter manual ADVANCED SETTINGS).

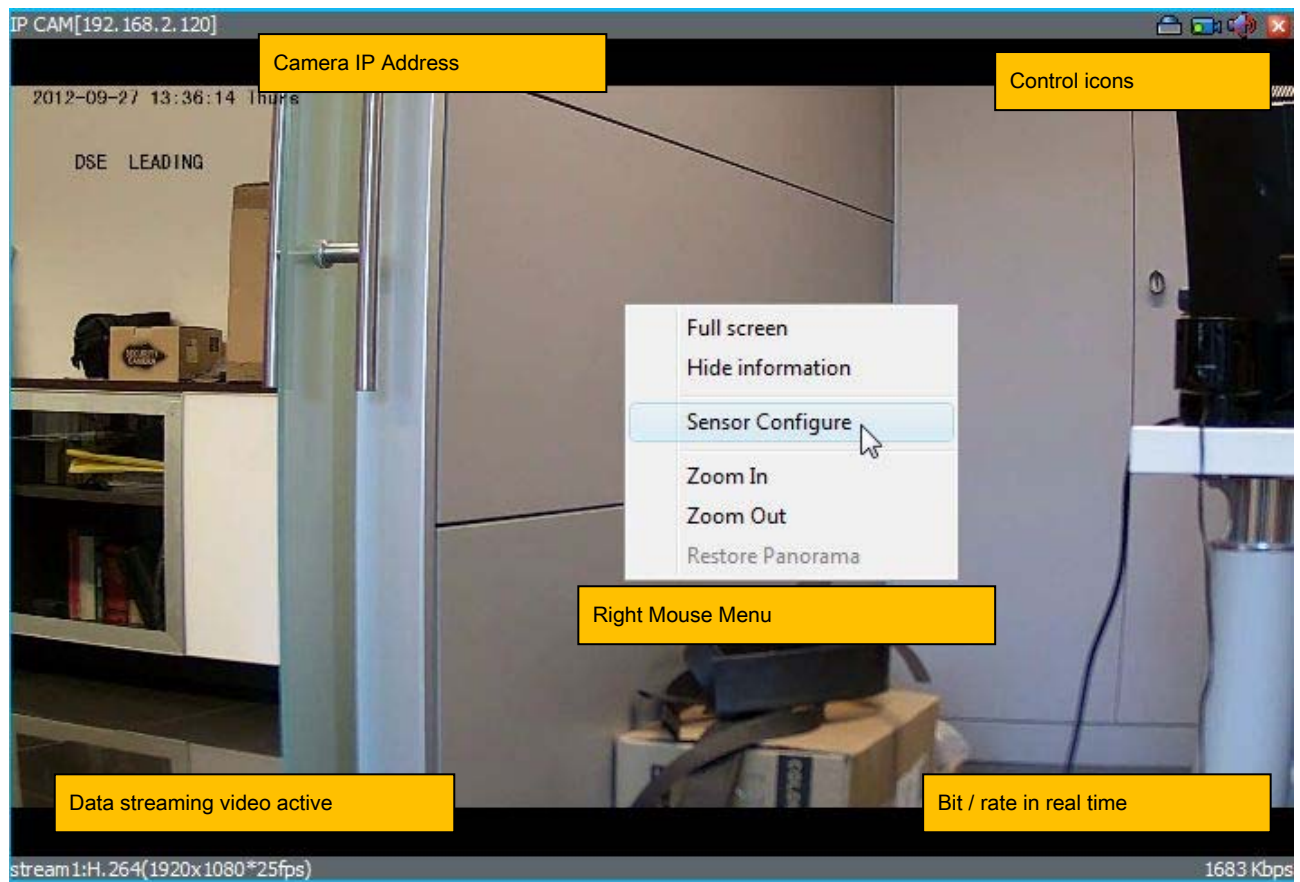
User interface

The graphical interface of NetVMS program is divided into different operating areas that in this chapter are described one by one.



BOXES VIDEO LIVE

Dragging the camera icon in the view pane starts streaming video. The display window contains various information and commands.



Clicking the **right key** the mouse in the image appears a control menu with the following options:

FULL SCREEN - Bring the camera full screen. You get the same result by double click on live.

HIDE INFORMATION - Hide all the information present in the 4 corners of the live box and leaves the single image.





CONFIGURE SENSOR - Access to the adjustment of the programmable parameters of the camera video sensor. And 'possible to directly intervene by adjusting the electronic shutter, gain, AWB, Day / Night etc. without having to access the camera using the browser. Refer to the specific manual for the options available in this menu.

CAUTION. During these adjustments may produce malfunctions on the analog video BNC.

ZOOM IN / OUT - Digital Zoom + and -. In alternatives to these commands it is also possible to drag the mouse in the image to define the area in which he wants to zoom.

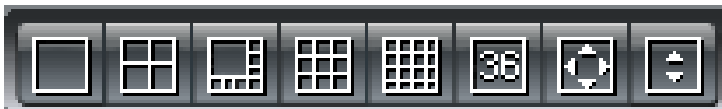
RESTORE PANORAMA - Return to the natural image size by canceling all zoom levels

At the top right you have some control icons:

	<p>3D PTZ POSITIONING - This icon is used to enable / disable a special PTZ speed dome cameras called 3D POSITIONING. With the 3D positioning enabled it is possible to draw a rectangle with the mouse in the image from top to bottom and obtain the automatic movement and zoom of the camera to frame. By tracking the rectangle from the bottom otherwise you get zoom out. Enabling the 3D positioning it inhibits the ability to make the digital zoom in the image by dragging the mouse. This is why this option is disabled by default. MANUAL RECORD - Starts</p>
	<p>manual recording of channel regardless dale automatic schedules. Because the recording is started you must have set the options regarding the recording that we will see later. AUDIO ON / OFF - Enables or disables audio playback on the computer station</p>
	
	<p>RECORDING INDICATOR - If the channel is recording the icon turns red.</p>

SPLIT SCREEN CONTROLS

NetVMS The program allows you to simultaneously display screen up to 36 cameras. With these buttons you can split the screen in the most appropriate manner.



From left to right:

SINGLE CAMERA DIVISION IN 4, 8, 9, 16, 36 panes.

FULL SCREEN - It hides the frame of the program is the buttons and shows only the cameras. Press Esc to exit.

HIDE INFORMATION - Hides data printed at the corners of the image containing information on streaming video.

CONTROLS PTZ SPEED DOME

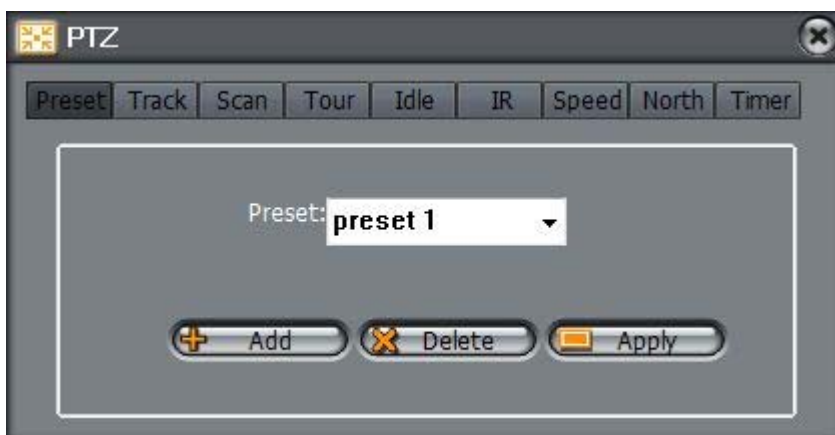
The NetVMS program can control and configure the motorized speed dome cameras RH series. The common navigation commands, zoom, iris, focus can be made directly with the on-screen buttons



However, you can also access a more complete control menu that lets you set and also control all the automatic movements of the camera as presets, tour, scan etc. Pressing the PTZ button in the center window opens that allows and which is described in the next chapter

CHECK / SETTING SPEED DOME

Pressing the PTZ button in the center of the dome control panel opens the following window:



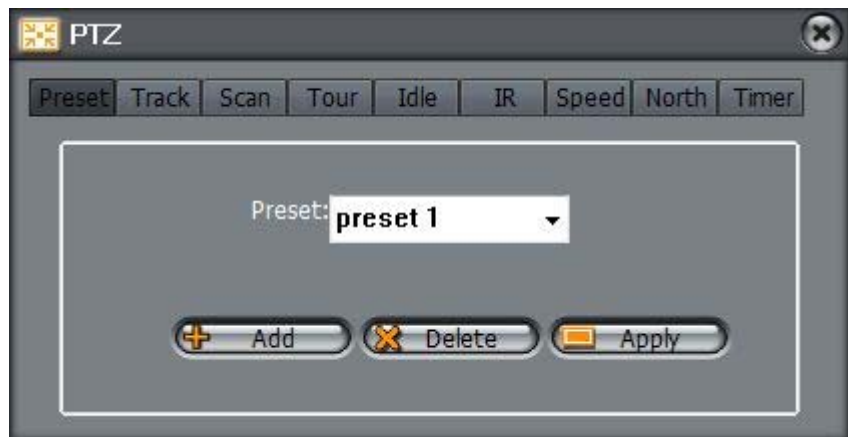
To avoid misunderstandings in the reading of this first part of the manual should be clarified that the IP speed dome RH series cameras can perform 4 types of automatic movements:

- **PRESET** - The presets are preset camera positions characterized by a precise value of X / Y coordinates, zoom and focus. You can easily call from the client if necessary.
- **TOUR** - Also called PATROL or CRUISE. It means the automatic movement of the camera between presets with a residence time on each of them programmable.
- **SCAN** - It is understood the continuous movement RIGHT-LEFT between two end positions
- **TRACK** - Also called PATTERN. It is similar to the TOUR. The camera, however, does not follow in sequence the various presets, but a custom continuous movement recorded by the user in the programming phase.

PRESET

For set a preset position the camera the desired location and click the ADD button. It is given the opportunity to edit a name for the preset and then must confirm

Press SETTING. For call back the presets select it in the list and press APPLY. To cancel it, press DELETE.

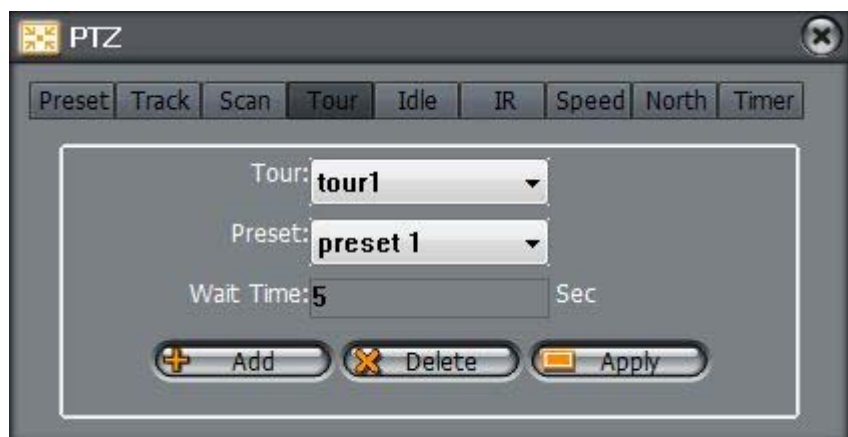


TOUR

For set a tour

Press ADD and appoint the tour (the cameras can manage up to 12 different tours). Choose the first preset from where the tour will start and the camera dwell time

then press



START.

Select the second preset and time to stay on it, then press ADD. Proceed by adding all the presets you want to include in the tour. At the end, after you press the last ADD, press END.

To start the TOUR select it in the list and press APPLY. To cancel it, press DELETE.

To stop a tour running just call any other of the camera movement command.

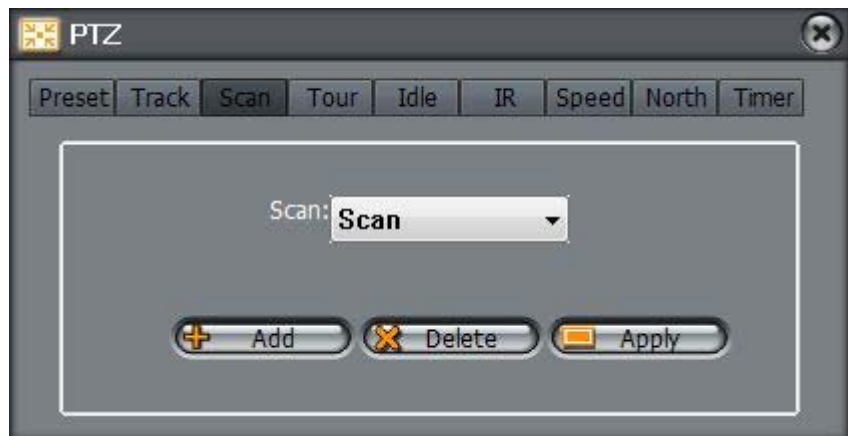


SCAN

To set a scan between two points
of limit
press ADD. In the window that appears
name the scan (the cameras can manage
up to 12 different scan).

Place there
camera at the point where it intends to
begin the scan and
press START. Then place the camera at the point where it intends to
terminate the scan and press END. To start the scan select it in the list
and press APPLY. To cancel it, press DELETE.

To stop a scan running just call any other of the camera movement
command.

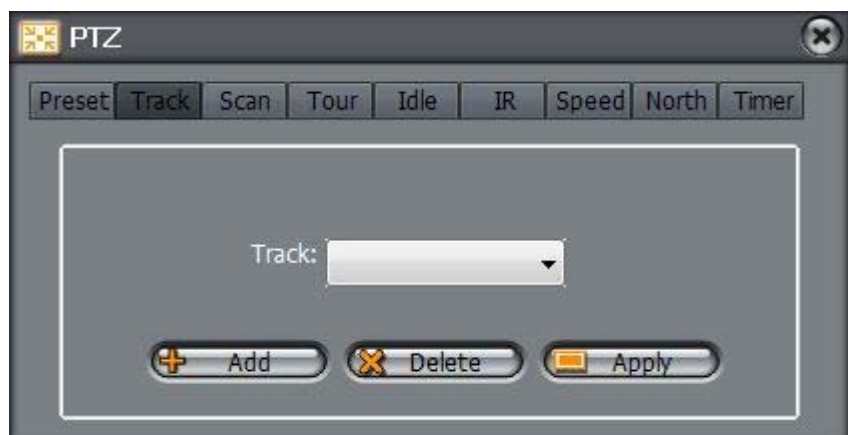


TRACK

To record a new sequence
of movements
customize press ADD. In the window that
appears to name the track (the
cameras can
manage up to 6 different track). Position the
camera at the point where you want to start

recording and press START. Run now with the camera all the
operations that are to be stored (movements, zoom, etc.) in the
desired timeframe. When finished, press END.

The camera is now in degrees alone repeat the sequence of
operations stored and run continuously.



To start the execution select the track list and press APPLY. To delete a track, press DELETE.

To stop a track running just call any other of the camera movement command.

IDLE

The IDLE function is used to perform an action automatically after a certain time the absence of commands by the operator.

It is an important setting to prevent the camera from being inadvertently left on insignificant positions.



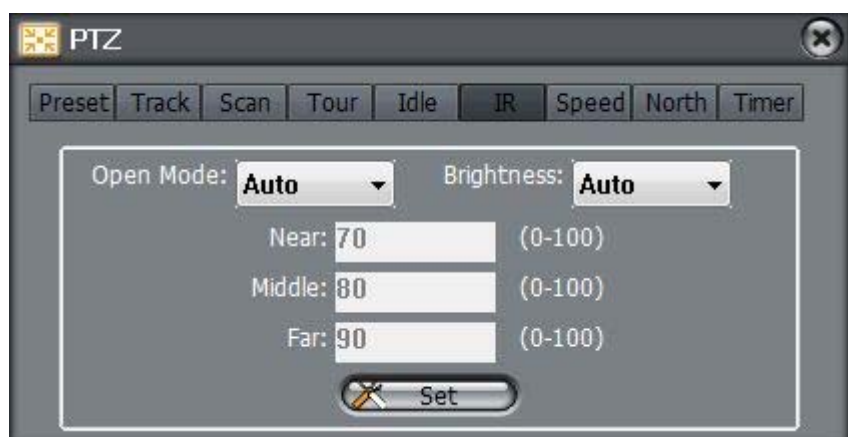
One can program the camera so that it invokes a particular preset, tour, track scan or after a certain time (IDLE TIME) absence of commands (from 1 to 240 minutes). To store the setting

activate / deactivate temporarily automatic return. Press SETTING. The OPEN button is used to suspend IDLE to allow the operator to

IR

This window is used to adjust the infrared lighting settings in the speed dome cameras that are equipped.

In the OPEN MODE box rule defines that the lighting of the IR LED should



occur automatically at nightfall (AUTO) but it is also possible to make so that the LEDs are always lit (OPEN) or always off (CLOSE).

In the box BRIGHTNESS adjusts the brightness of the LEDs that can be left automatically or manually set. In the latter case it is possible to set (0 to 100) from the brightness near (NEAR) medium distance (MIDDLE) and far (FAR).

SPEED

Rule the speed of movements of the camera (1 to 8)

NORTH

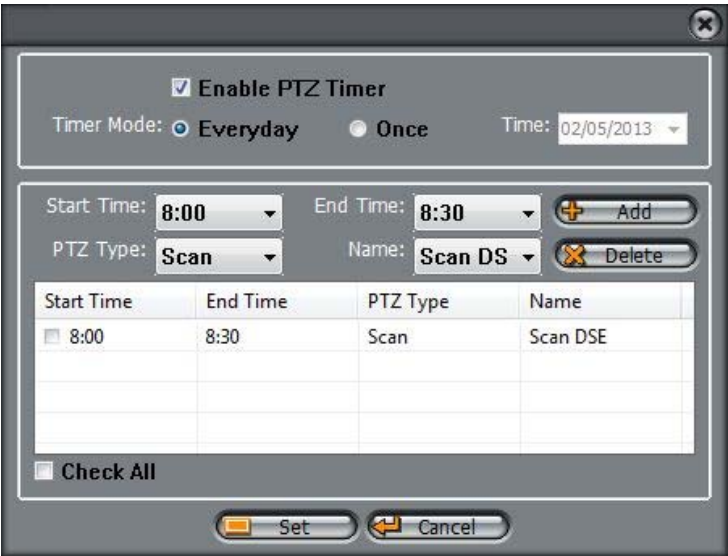
Place the camera toward the geographic north with the help of a compass and click SET to obtain a correct reference position with respect to north.

TIMER

Pressing setting is possible to program the automatic operations (preset scan, tour or track) that there camera will perform automatically according to a timer. E 'you can add several programs with

ADD button. You can program the actions that will take place every day (EVERYDAY) or once (ONCE). E 'can set the start time and end time (START TIME / END TIME) and the type of action to be performed (preset scan, tour

or track). Why a programming is actually performed it must be enabled with a check mark (use CHECK ALL to enable all rprogrammazioni).









CONTROL AUDIO



The program allows the two-way dialogue with the camera listening to the sound perceived by his microphone and talking through the speaker connected to its audio output.

	Run the bi-directional dialogue with the selected camera using the microphone and speakers of the computer station allows you to choose the audio compression to be used.

CONTROL OF REPRODUCTION

	PLAY - starts video streaming channel
	STOP - Stop streaming video channel
	SNAPSHOT - allows to capture frames. Pressing the button opens a small menu where you can both capture only one frame (SINGLE SNAPSHOT) that a number of frames at programmed intervals (SEQUENCE SNAPSHOT). It 'also SETTING option available to define the directory in which to save the photos, the capture range sequentially and image format (JPG or BMP)
	VIDEO QUALITY - E 'can choose which video streams receive setting of the camera with this client
	FULL SCREEN - By clicking this button the selected camera is brought to full screen. Same measured weight is obtained fracnedo double click live image of the camera
	HIDE INFORMATION - This button hides the data for the streaming video that are shown by default in the live box corners.

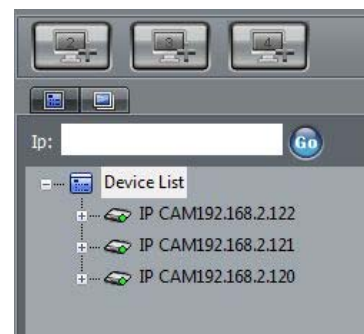
Bottom de stra are some additional commands

	VOLUME - Adjusts the speaker volume. By clicking the button with the speaker icon is enabled / disabled audio.
	LAYOUT - This button is used to save a video format of the camera and be able to recall at any time. When you placed all the cameras in the option of multi-image you like, click SAVE LAYOUT to save the configuration. To recall press RESUME LAYOUT. In the system settings you can also decide to recall the layout that you have saved each time you start the program.

LIST OF CAMERAS

To the left in the graphical interface of the program there is a list of cameras. If the number of cameras is limited you can keep the default display that lists all cameras included in the system one after another.

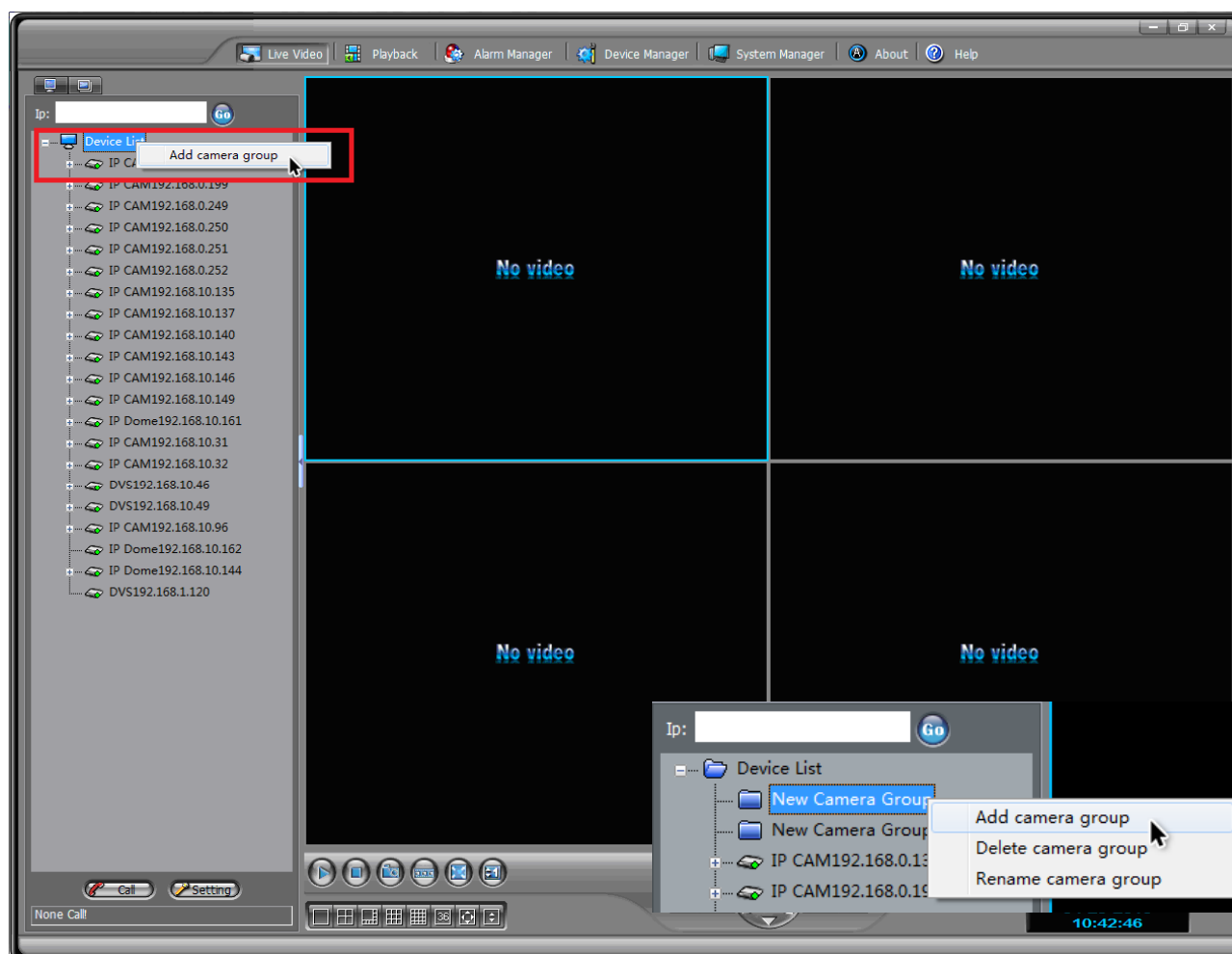
The NetVMS program, however, also offers two important tools to efficiently manage even a large number of cameras: the CYCLE GROUPS and that we describe below.



LIST OF CAMERAS - GROUPS

The NetVMS software can receive up to 128 cameras and mostrarne to simultaneously screen up to 36 at a time. In order to conveniently manage a large number of cameras you can group cameras in folders in order to divide them logically. For example, if the same software are connected to two different sites you can create two folders containing the cameras of each

To create a group, click with the right mouse button at the entry DEVICE LIST and select ADD CAMERA GROUP.



Once you create a group, you can click on it with the right mouse button to do the following:

ADD CAMERA GROUP - Adds a new group within the selected group
CAMERA GROUP DELETE - Deletes the selected group

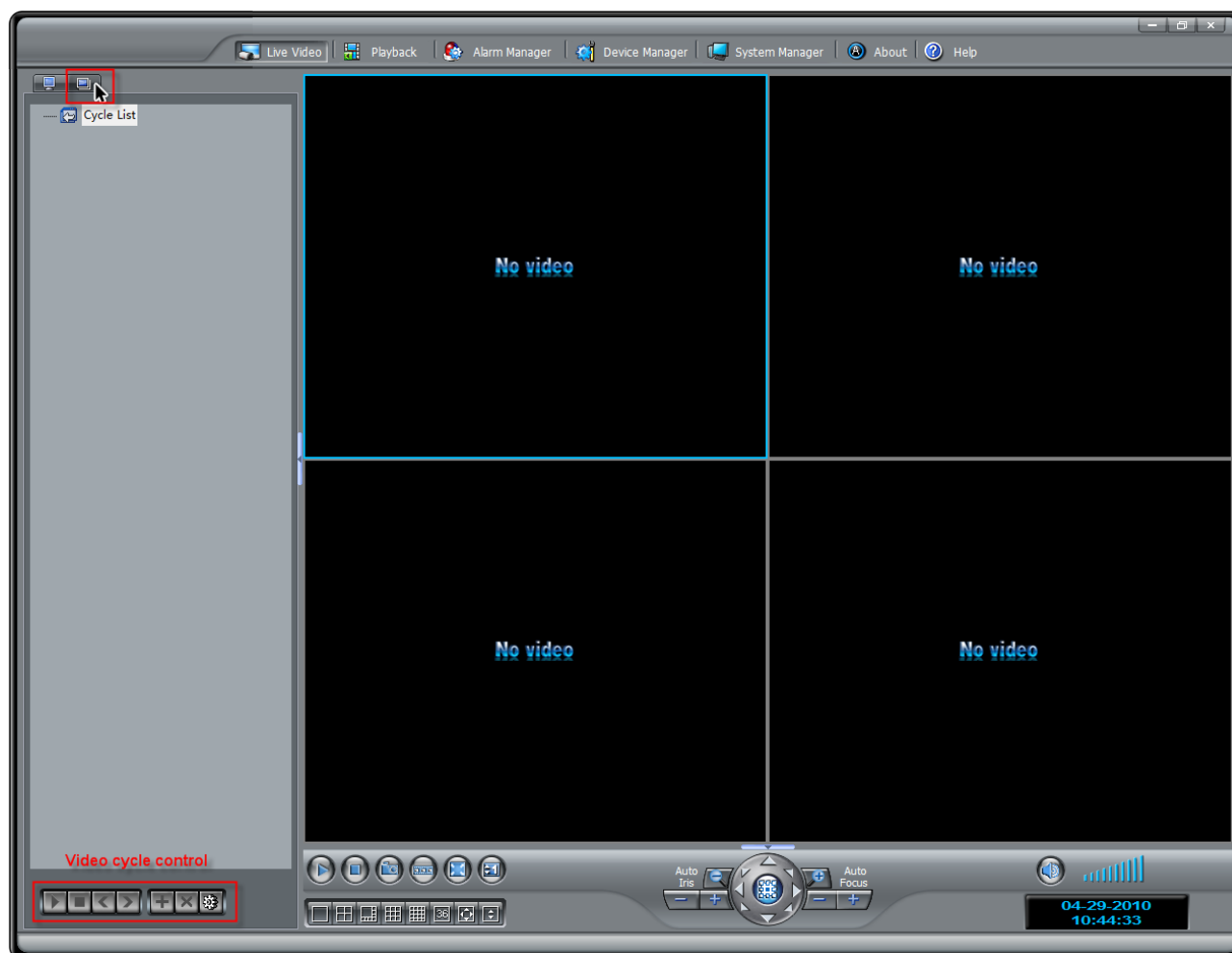
RENAME CAMERA GROUP - Allows you to edit the distinctive name of the selected group.

Once you have created the group structure by dividing the cameras list of folders and any subfolders you can place the cameras inside dragging them with the mouse.

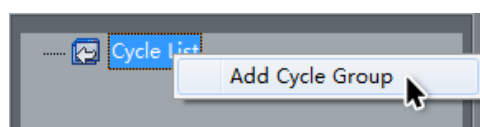
LIST OF CAMERAS - CYCLE

NetVMS contains a powerful configuration of customized cyclical scans. E 'can set the cyclic scans with layouts from 1,4,8,9,16 or 36 cameras. You can set various cyclical scans to be recalled at will in the live view by dragging them on the screen as if they were cameras.

To manage the cyclical scans necessary to abandon the display of the camera and enter the CYCLE management.

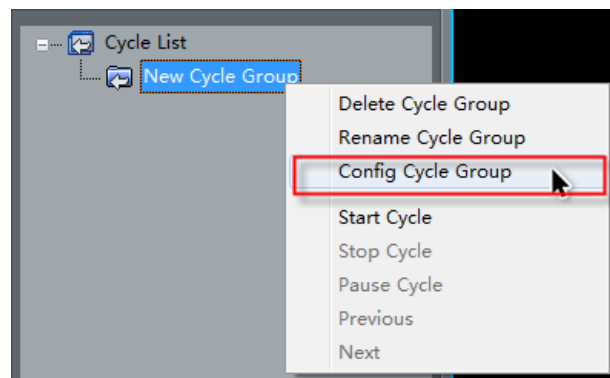


To create the first polling must click the right mouse button and select ADD LIST of CYCLE CYCLE GROUP



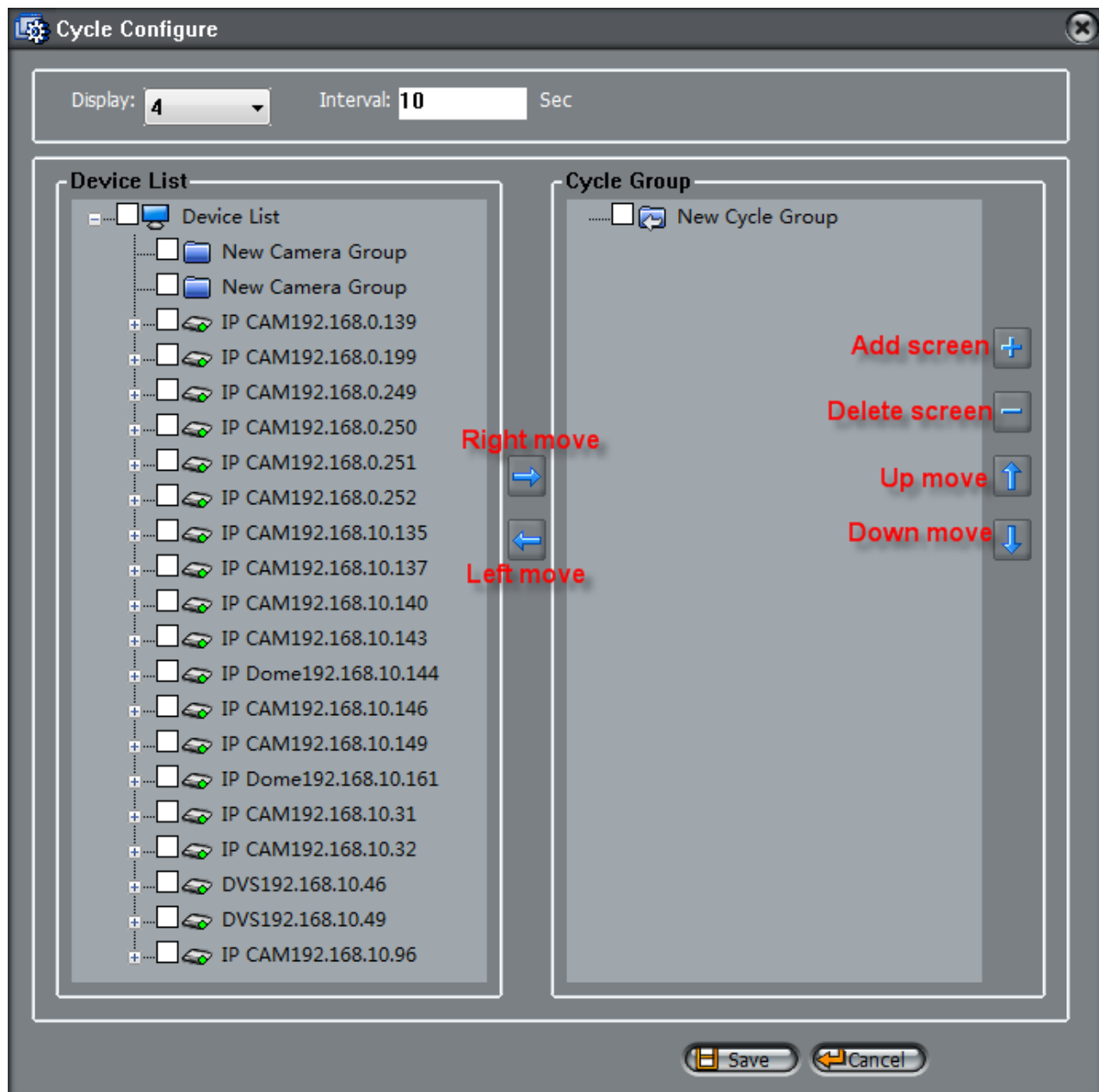
Click with the right mouse button on the GROUP CYCLE just created to access the following features:

DELETE CYCLE GROUP - Delete group

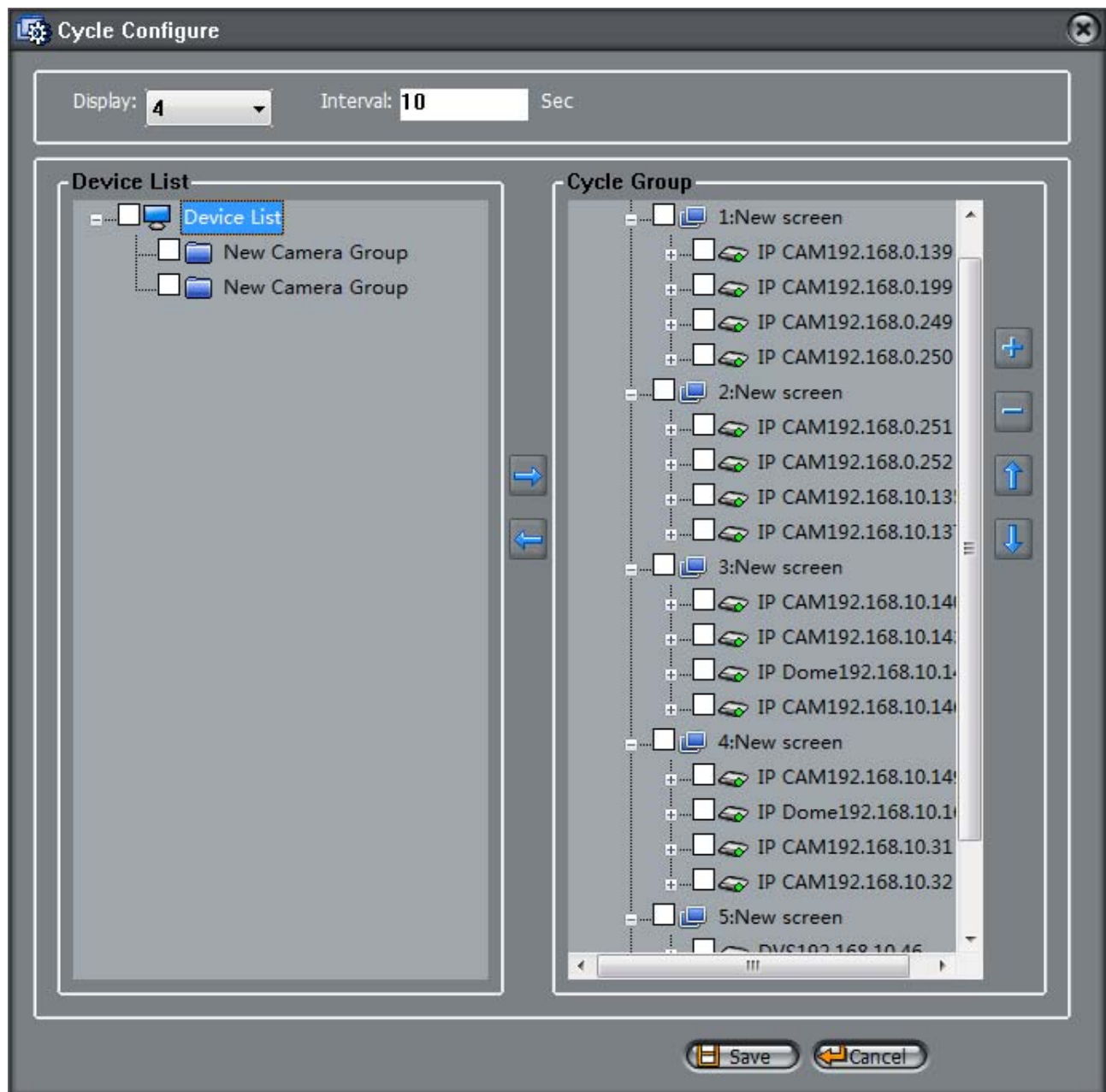


scan cyclic

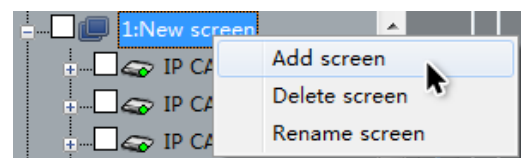
RENAME CYCLE GROUP - Allows you to edit the distinctive name of the selected group. CONFIG CYCLE GROUP - Allows you to enter the configuration page of the cyclical scan that is explained below.



- At the top left, under DISPLAY define whether this cyclical scanning cover of the screens from 1,4,8,9,16 or 36 cameras. Alongside, the INTERVAL item defines the dwell time in seconds of each screen during the scan.
- In the left column, select the cameras that will be part of the scan and transfer them to the right column by pressing the arrow RIGHT MOVE.

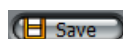


- In the right column to set the screens that make up the scan, and will cycle on the screen in sequence. The number of cameras per screen depends on the initial DISPLAY upper left. To add, delete or rename a screen, click the right button. In the " above, for example, has set

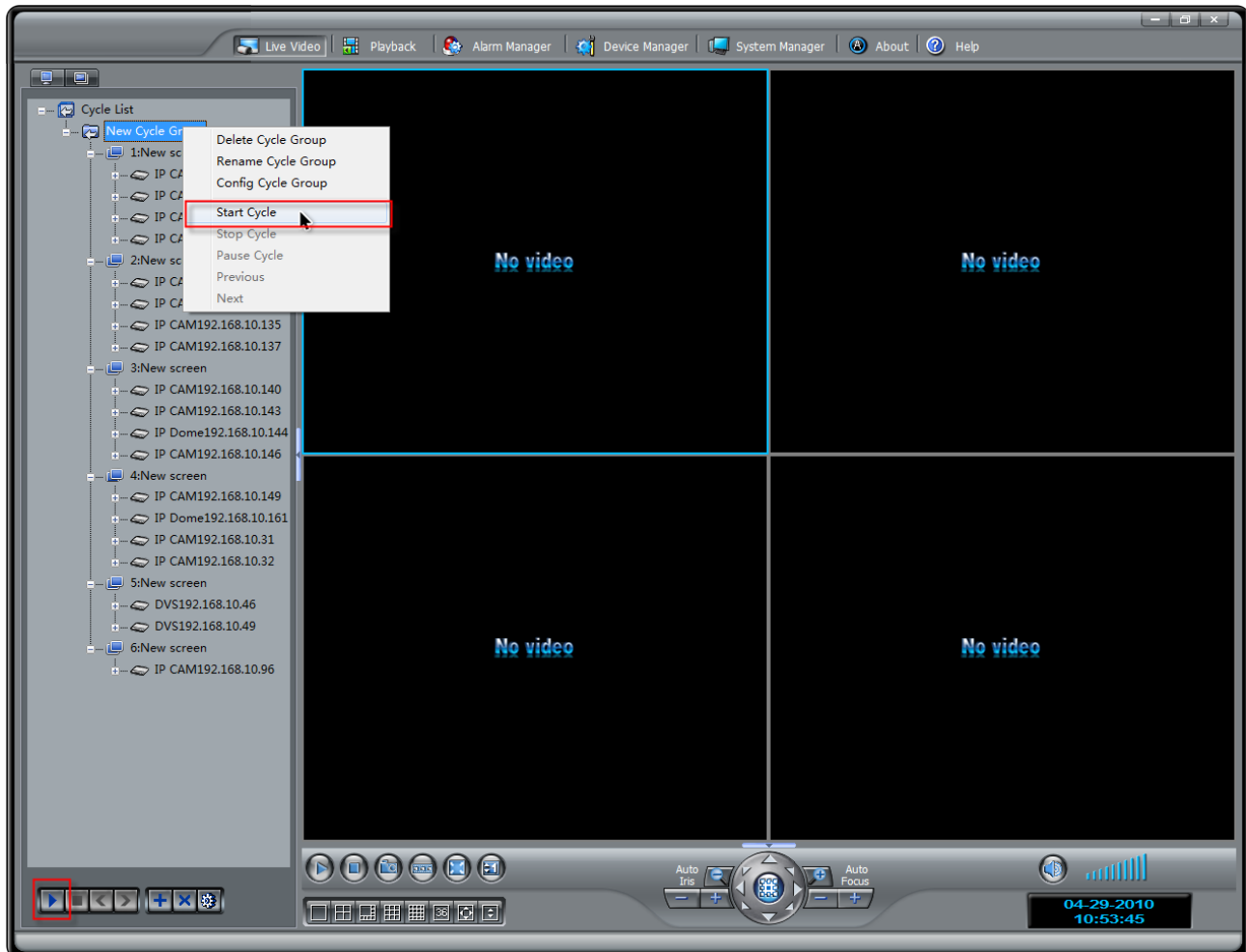


the cyclical rotation of 5 screens composed of 4 cameras each. Each screen will remain on screen for 10 seconds.

- Press SAVE to save the scan



To start the scheduled scan, click the right button and choose from the list CYCLE START CYCLE. E 'can also press the play button below, or simply drag the scan on the live view screen, the position where you want to happen playback

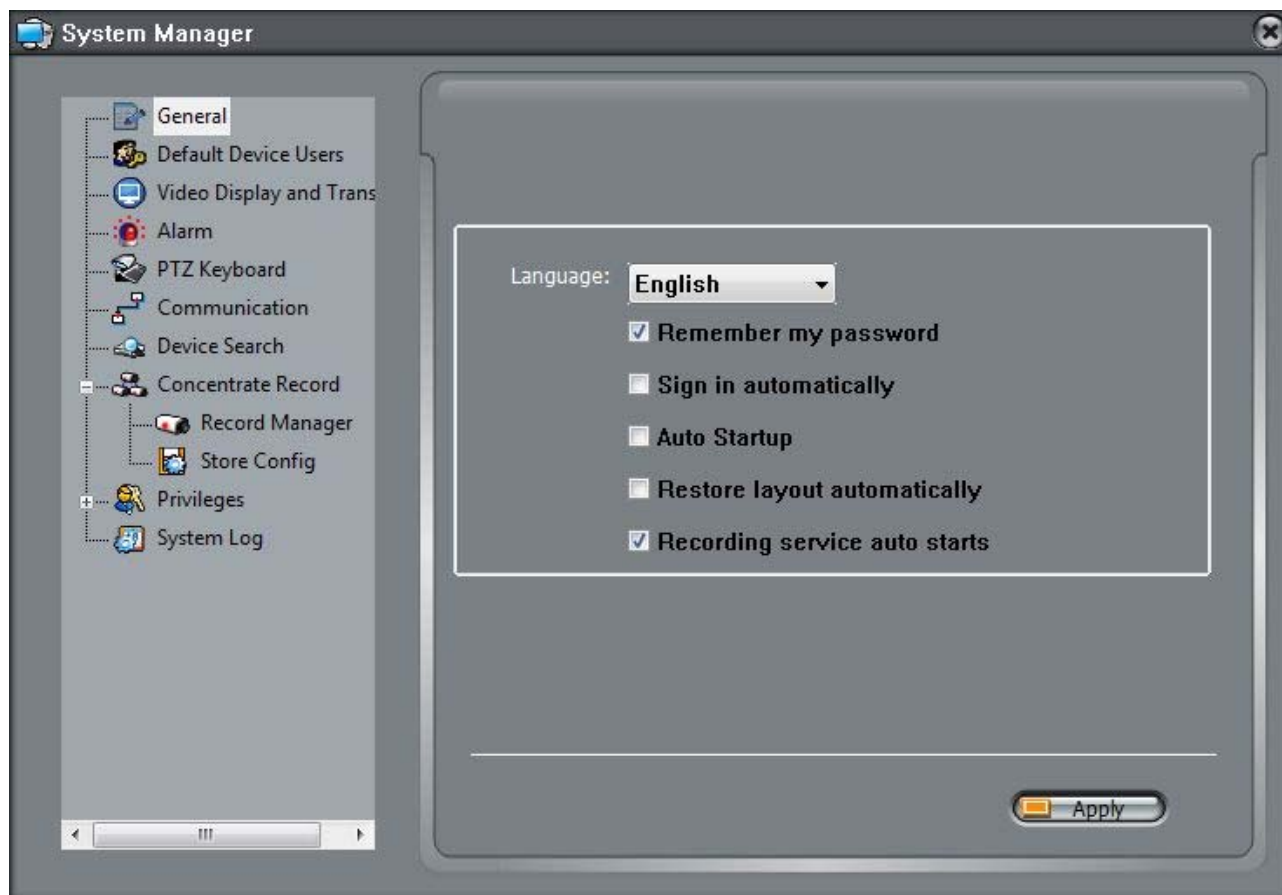


Obviously the cyclic scan will occupy a number of boxes equal to the cameras that make up its screens (1,4.8.9.16 or 36).



System Configuration

Click the button  to access the configuration of NetVMS program.



GENERAL

- **LANGUAGE** - NetVMS Although the program is designed to manage other languages it is recommended to keep this option ENGLISH since for international uniformity, this is only option that is conducted every reference functional tests.
- **REMEMBER MY PASSWORD** - This option is used to speed up log in as you will not have to type every time the access password to log in. Obviously this option should be enabled only if you do not need to manage multiple user access with different authorization levels.
- **SIGN-IN AUTOMATICALLY** - This option is only available if you have enabled the previous option REMEMBER MY PASSWORD. In this case the system will not only remember your password dell'utenet but not even appear the window to log in. This option is useful if you want to start the program automatically becomes operational

without requiring operator actions. Obviously, enabling this feature, the system remains unprotected against unauthorized access.

- **AUTO START-UP** - With this option, the program will start automatically when Windows starts.
- **RESTORE LAYOUT AUTOMATICALLY** - Enabling this option each time will be automatically recalled the last layout of live images you have saved with the **SAVE LAYOUT** button.
- **RECORDING AUTO SERVICE STARTS** - With this function enabled, when the program enters the same recording immediately starting all automatic recordings services programmed in the configuration (see below). It 'not advisable to disable this function. With this function disabled, the startup program does not record anything and will need to go to advanced configuration and manually start individual **TASK** recording that you have configured.

DEFAULT DEVICE USER

User Name	Password	
<input checked="" type="checkbox"/> admin	admin	

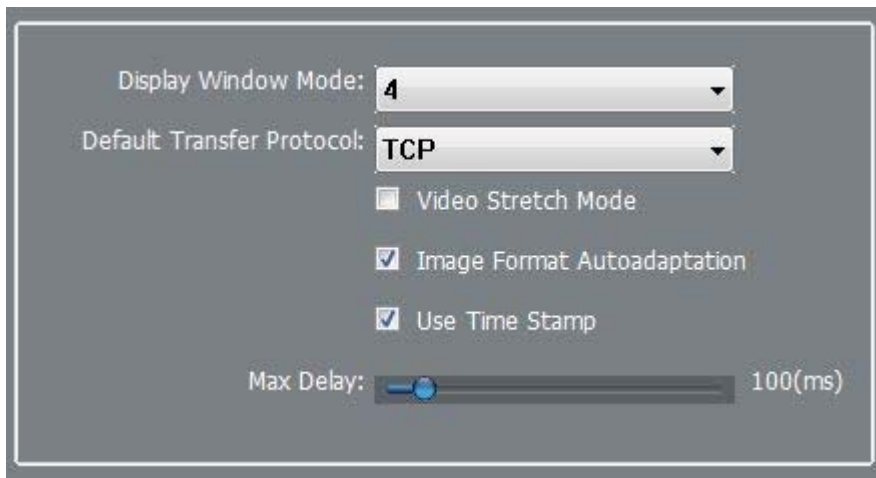
☐ **Select All**

User Name:

Password:

To access the cameras always require a log-in procedure. Even the NetVMS software can not connect to cameras without proper credentials. In this section you can set one or more standard password to use the camera without ever having to type it. By setting this parameter the NetVMS newly installed software automatically connects to the cameras found in the network without the need for any action by the operator.

VIDEO DISPLAY AND TRANSITION



- WINDOW DISPLAY MODE - Defines as quadrants will split the screen at startup (1,4,8,9,16, or 36). Obviously the multivision can then be modified as desired by the operator.
- DEFAULT TRANSFER PROTOCOL - The protocol to use by default in network communication with the cameras (TCP / UDP / RTP). Default TCP.
- STRETCH VIDEO MODE - The NetVMS program is totally resizable in order to be able to adapt to any monitor resolution. Depending on the size of the live playback panes program could change proportions window. Enabling this feature allows the live image of the camera will always be automatically resized so as to perfectly fill the pane. The downside is that this function q images might be more or less deformed if proporzioi the panel should be very different from the 16: 9 Native dell'immagini camera. Leaving this option disabled the image will be preserved in its native format instead of 16: 9 and any unoccupied in the box will be filled with black bands areas.
- IMAGE FORMAT AUTOADAPTATION - The video resolution of the program automatically adapts to the size of the monitor in use
- USE TIME STAMP - Enter the "time stamp" in the recorded video management allows perfect synchronization of picture and sound with the system clock during playback. However, this function affects data heavy, so if you enable this function, you can set the delay between the time stamps (Max. DELAY). A high value (max. 5000 msec) is a guarantee of greater fluidity of play.

ALARM

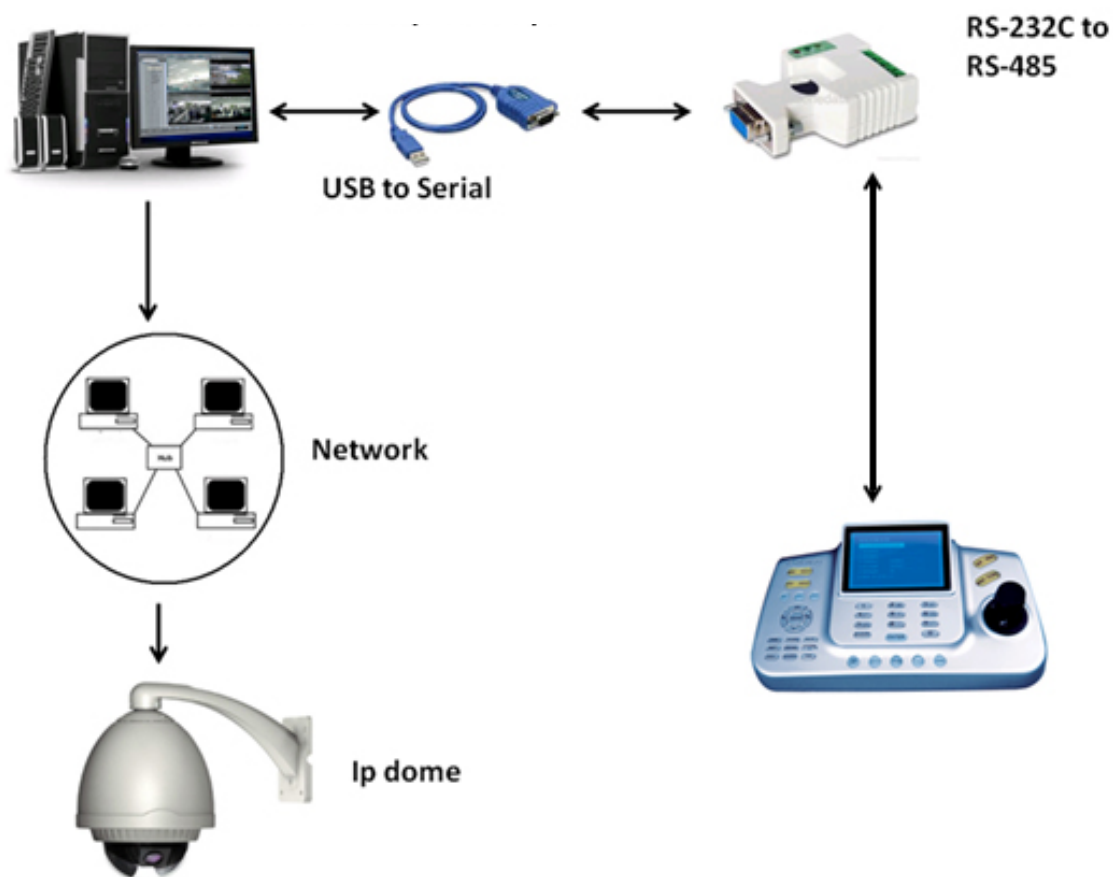


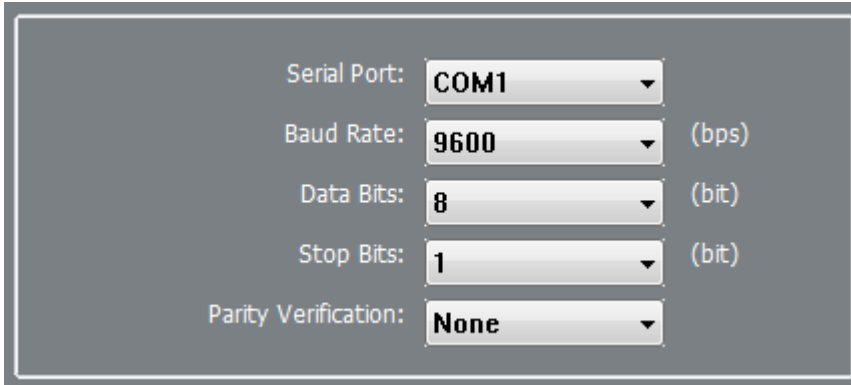
NetVMS The program is able to receive alarm signals from individual cameras. Enabling this function when an alarm will appear in the bottom right of the screen the icon of a red flashing and clicking on it will open immediately the alarm log window.



PTZ KEYBOARD

NetVMS The program is designed to connect to a computer station PTZ control keyboard for speed dome cameras. This will make it possible to control the movements of network speed dome cameras also conveniently with the joystick on the console instead of just using the mouse. The Keypad must be connected to the RS232 serial port (COM) of the PC or in the absence of it to a USB port using a converter as in the following example

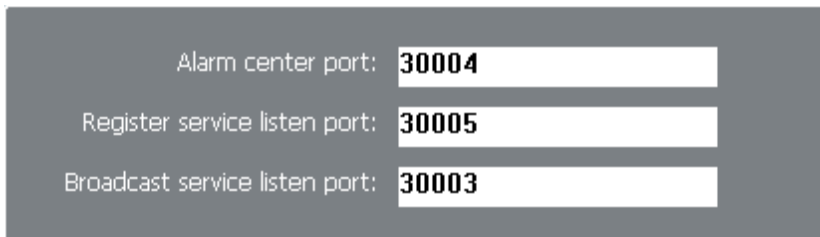




Serial Port:	COM1	
Baud Rate:	9600	(bps)
Data Bits:	8	(bit)
Stop Bits:	1	(bit)
Parity Verification:	None	

In the window above you enter data do the communication protocol to be used in dialogue with the console PTZ

COMMUNICATION



Alarm center port:	30004
Register service listen port:	30005
Broadcast service listen port:	30003

This is the default communication ports that the program will use the network. It 'not recommended to change the factory settings of unnecessarily ALARM CENTER PORT - Used to receive events from REGISTER SERVICE cameras - currently unused - Available for future developments BROADCAST - Used to detect the cameras on the network

DEVICE SEARCH

Begin IP	End IP	Port
<input type="checkbox"/> 192.168.9.1	192.168.9.255	30001
<input type="checkbox"/> 192.168.9.1	192.168.9.255	30003
<input type="checkbox"/> 192.168.0.1	192.168.0.255	30001
<input type="checkbox"/> 192.168.10.1	192.168.10.255	30001

☐ **Select All**
 Begin IP:
 End IP:
 Search Port:

The NetVMS program automatically performs a search of IP cameras on the network. This function, as we saw earlier makes fast set up new cameras without uploading them manually. In this section you can specify one or more ranges of IP addresses in order to limit and make research more efficient and faster. You can also specify the communication port which defaults to 30001 and should not be modified rule. Why NetVMS Consider the interval in research need to enable it with a check mark.

CONCENTRATE RECORD - STORE CONFIGURATION

In this section you define the storage unit where the program will NetVMS to store the recordings. NetVMS can record to hard drive but also on external NAS (network storage stations). NetVMS not necessarily record all video files together in the same storage unit, but is able to handle different UNIT DISC (folders) within which you can define which cameras record and in what mode.

[illegible]

To add a UNITA 'DISCO click ADD. In the window that appears you can choose to add a folder on a local hard disk or on a network NAS.

ADD LOCAL DISK DRIVE

Record Directory Add

Disk Type: **Harddisk**

Disk Path

☒ **Enable**

Directory: **H:** **Browse**

Group ID: **1**

☒ **Use All Space**

Usable Space: **107** M

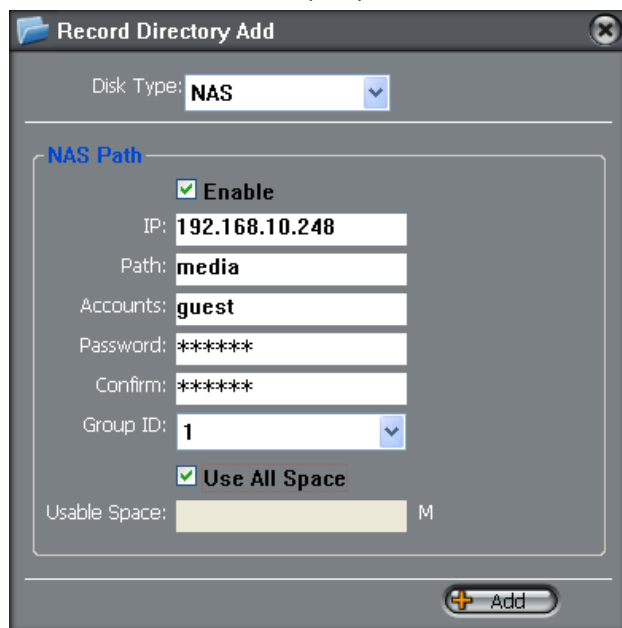
Add

- **ENABLE** - Because the unit is actually used by the program is necessary that this tick is present
- **DIRECTORY** - Locate with the **BROWSE** button to devote to the recording folder. E 'can select an entire hard drive or just a folder contained in it.
- **GROUP ID** - The storage folders can be grouped into 8 **GROUPS**. In

next programming section can be defined for each camera in which disk group storing the images. In this box you choose the disk group to which it belongs this archive folder.

- **USA ALL SPACE** - Enabling this function does not arise limit to the size of the folder and the program will occupy all the free space available. This option must never be enabled if you are setting up a main mail folder on the hard disk where even the operating system resides. In this case, you set a size limit to the folder in order to preserve a space of a few GB for the proper functioning of the operating system.
- **USABLE SPACE** - If you disable the previous option Here you can set the maximum size of the folder (in MB), after which the program will consider out of space. The space occupied by the recordings varies depending on the bit / rate of the stream that is recorded. Consider recording streaming FullHD can occupy too much disk space, roughly 1 to 3 GB per hour of a camera recording.

ADD DISK DRIVE NETWORK (NAS)



The screenshot shows a window titled "Record Directory Add" with a close button in the top right corner. Inside the window, there is a "Disk Type:" dropdown menu set to "NAS". Below this, there is a section titled "NAS Path" which contains several fields: "Enable" (checked), "IP:" (192.168.10.248), "Path:" (media), "Accounts:" (guest), "Password:" (masked with asterisks), "Confirm:" (masked with asterisks), "Group ID:" (1), and "Use All Space" (checked). At the bottom of the "NAS Path" section, there is a "Usable Space:" field with a yellow bar and the letter "M". At the bottom right of the window, there is an "Add" button with a plus icon.

- **ENABLE** - Because the unit is actually used by the program is necessary that this tick is present
- **IP** - The IP address of the NAS.
- **PATH** - The name of the folder to be used within the NAS
- **ACCOUNTS / PASSWORD / CONFIRM** - Enter the login credentials to NAS
- **GROUP ID** - The storage folders can be grouped into 8 GROUPS. In the next programming section you can be defined for each camera in which disk group storing the images. In this box you choose the disk group to which it belongs this

archive folder.

- **USA ALL SPACE** - Enabling this function does not arise limit to the size of the folder and the program will occupy all the free space available.
- **USABLE SPACE** - If you disable the previous option Here you can set the maximum size of the folder (in MB), after which the program will consider out of space. The space occupied by the recordings varies depending on the bit / rate of the stream that is recorded. Consider recording streaming FullHD can occupy too much disk space, roughly 1 to 3 GB per hour of a camera recording.

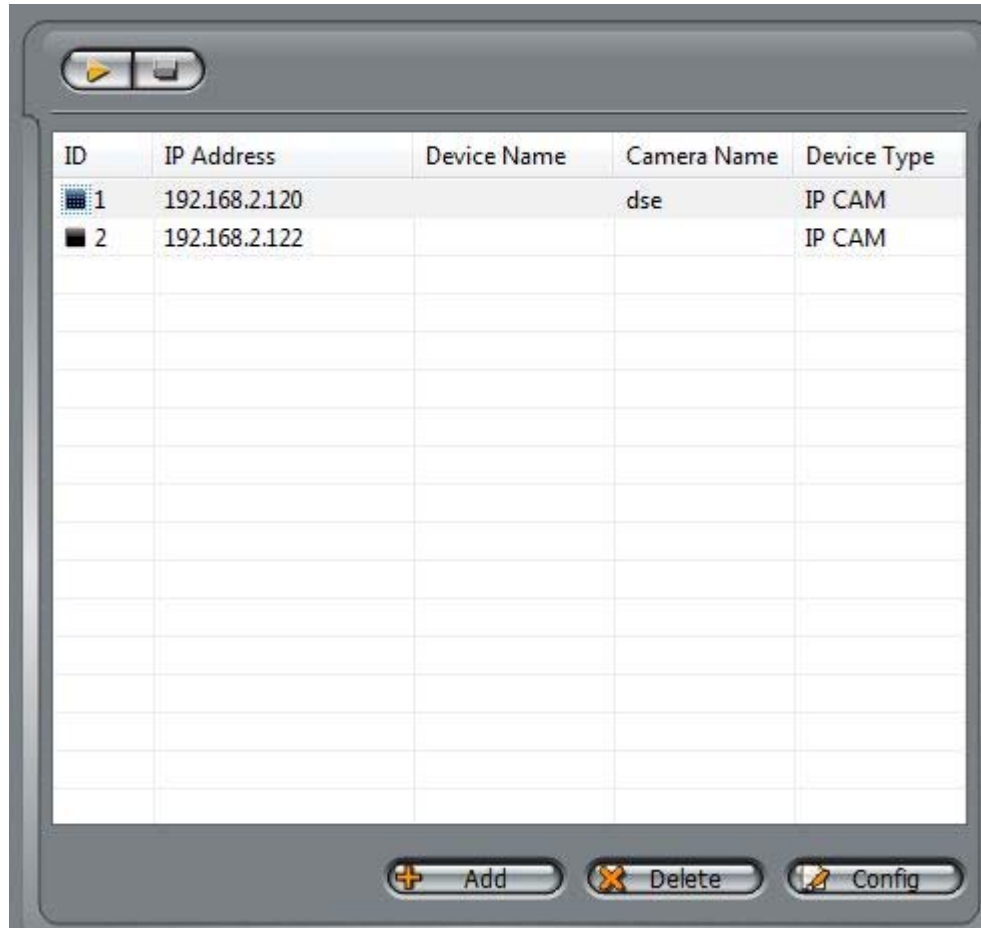
For the changes to take effect, press



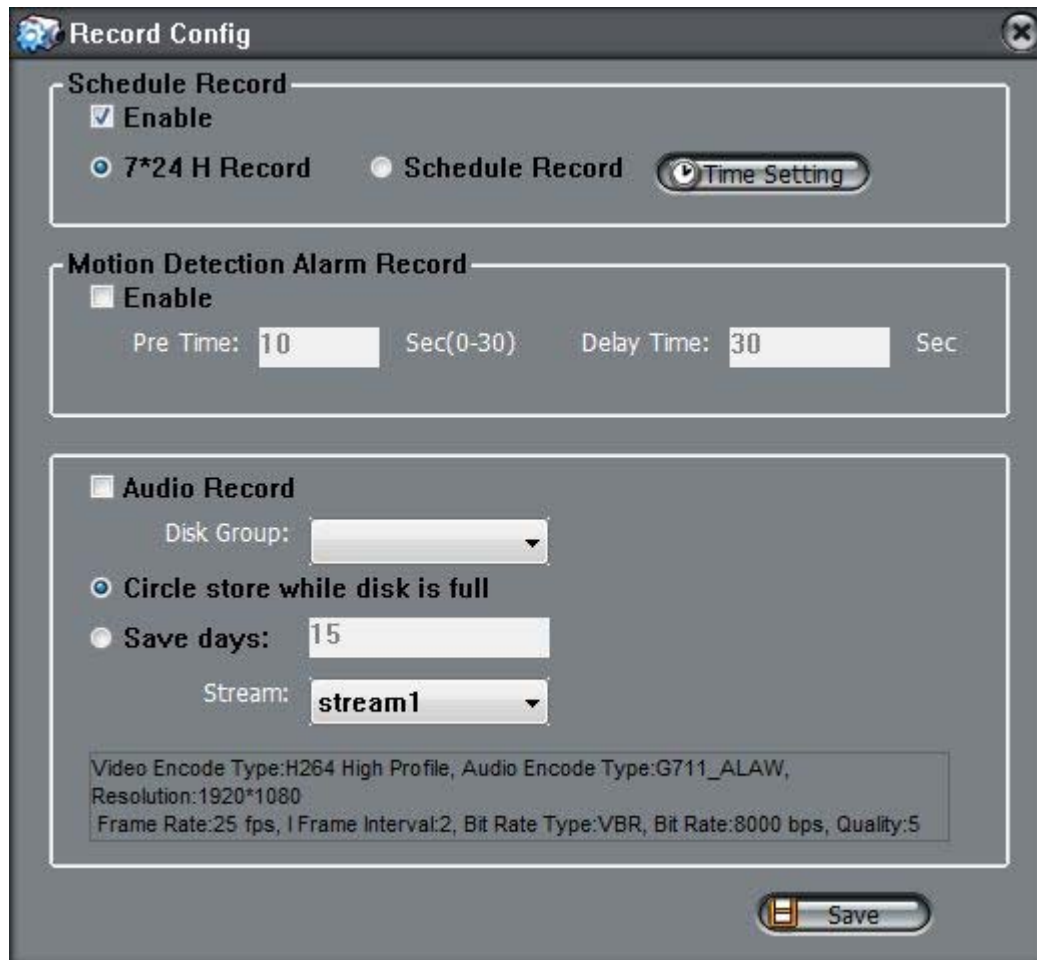
before going out.

CONCENTRATE RECORD - RECORD MANAGER

In this section you define how the NetVMS program records the incoming images from the cameras and stores them on your hard drive that we have given in the previous chapter. The programming is independent for each individual camera. First, all cameras must be entered in RECORD MANAGER list for which you intend to manage the recording.



To add and remove cameras act on ADD and DELETE buttons. Once you have added all the cameras will be recording in the list you must select them one by one and press CONFIG to define the recording mode of each of them.



Record Config

Schedule Record

☒ Enable

☒ 7*24 H Record ☐ Schedule Record **Time Setting**

Motion Detection Alarm Record

☐ Enable

Pre Time: Sec(0-30) Delay Time: Sec

Audio Record

Disk Group:

☒ Circle store while disk is full

☐ Save days:

Stream:

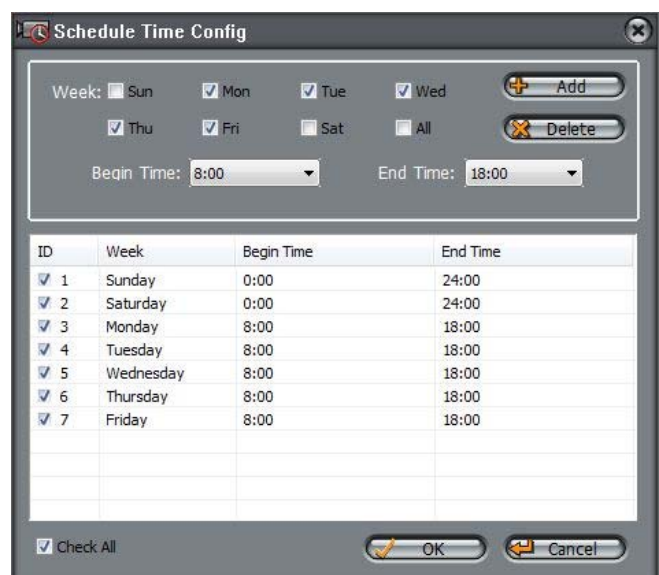
Video Encode Type:H264 High Profile, Audio Encode Type:G711_ALAW, Resolution:1920*1080
Frame Rate:25 fps, IFrame Interval:2, Bit Rate Type:VBR, Bit Rate:8000 bps, Quality:5

Save

SCHEDULE RECORD

- **ENABLE** - This option enables continuous recording or scheduled on an hourly basis
- **7 * 24H RECORD** - By choosing this option the camera will be recorded continuously 24 hours a day.

- **SCHEDULE RECORD** - By choosing this option the camera will be recorded only at specific times. Pressing the **TIME SETTING** button you can define more than one time slot for the different days of the week within which the recording should take place. In the example on the camera side it is recorded for



Schedule Time Config

Week: ☐ Sun ☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☐ Sat ☐ All **Add** **Delete**

Begin Time: End Time:

ID	Week	Begin Time	End Time
<input checked="" type="checkbox"/> 1	Sunday	0:00	24:00
<input checked="" type="checkbox"/> 2	Saturday	0:00	24:00
<input checked="" type="checkbox"/> 3	Monday	8:00	18:00
<input checked="" type="checkbox"/> 4	Tuesday	8:00	18:00
<input checked="" type="checkbox"/> 5	Wednesday	8:00	18:00
<input checked="" type="checkbox"/> 6	Thursday	8:00	18:00
<input checked="" type="checkbox"/> 7	Friday	8:00	18:00

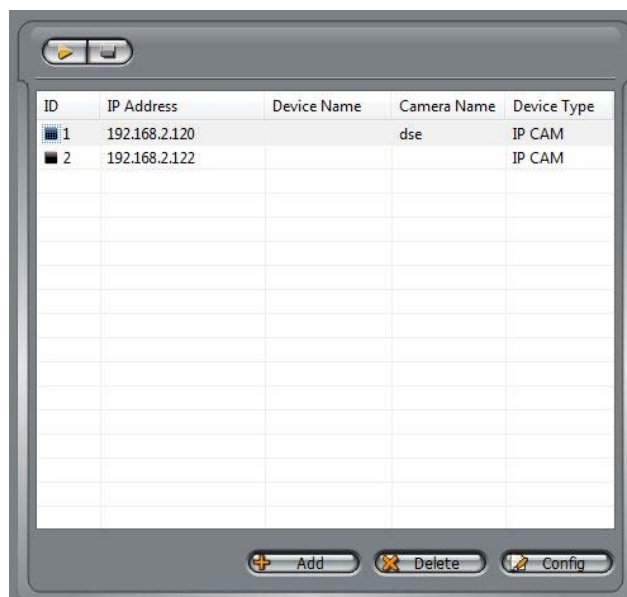
☒ Check All **OK** **Cancel**

all day on holidays and only from 8 to 18 on weekdays.

- MOTION DETECTION RECORD ENABLE - This option enables the recording of motion detection. NetVMS can in fact also record in case of motion alarm is generated from the camera. This option can be enabled independently of the scheduled recording.
- PRE-TIME - E 'can set a period of time to be recorded before the alarm (max. 30 sec.) In order to have a more complete idea of what happened.
- DELAY TIME - This determines how long to record after a motion alarm
- AUDIO RECORD - E 'can record audio along with the video
- DISK GROUP - Defines what DISCO GROUP (see previous chapter) store camera video files
- DISK IS FULL CIRCLE WHILE STORE - When enabled, it runs out of disk space allocated, the program will continue recording by overwriting the older images. Unlike stop recording.
- SAVE DAYS - This feature allows you to program a maximum number of days to keep on file to comply with any requirement of privacy protection.
- STREAM - Choose the camera video stream record

START RECORDING

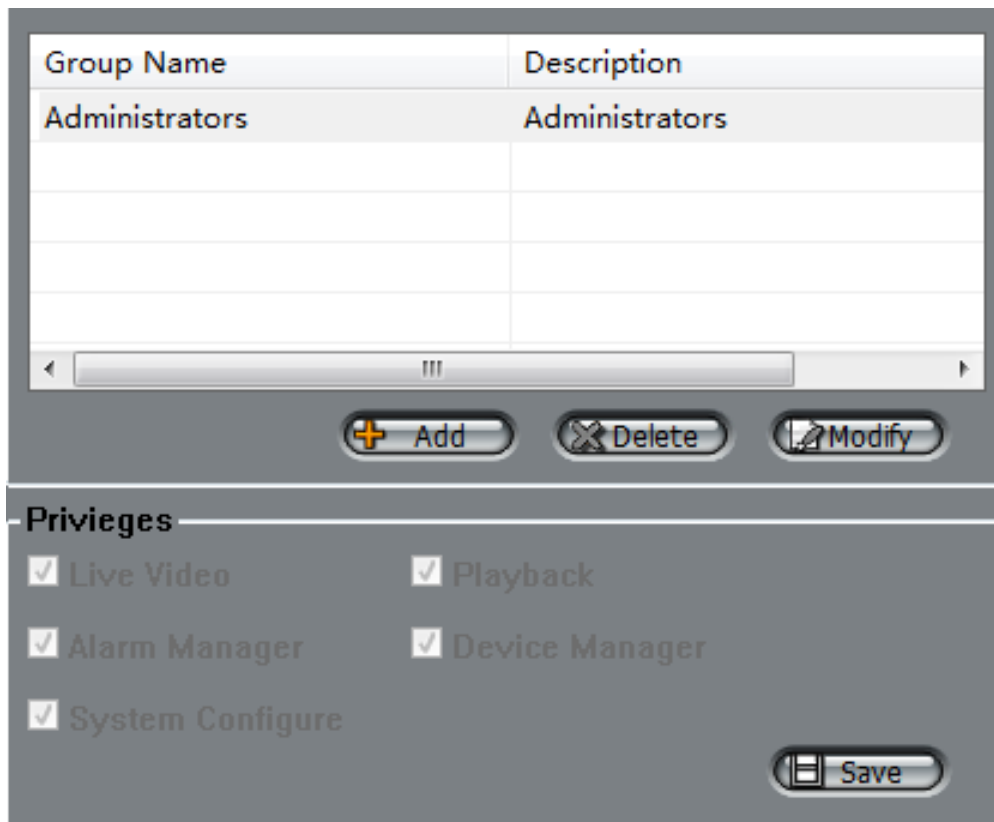
To start and stop manually programmed recordings press the PLAY / STOP button on the top left



A green dot will indicate the services of registration in the list who were able to start up properly. E ', however, advisable to program the start of the recording automatically when the program starts to prevent this (see above)

PRIVILEGES - GROUP

The NetVMS program provides access via a log-in procedure that allows to identify the user. And 'possible to manage different users with different levels of access to the program. First in this section you have to create USER GROUPS to assign a certain level of access to the system. Each user can be associated with one of these groups.



Group Name	Description
Administrators	Administrators

Buttons: Add, Delete, Modify

Privieges

- ☒ Live Video
- ☒ Playback
- ☒ Alarm Manager
- ☒ Device Manager
- ☒ System Configure

Save

The ADMINISTRATORS group is the group that provides access to all functions and can not canacellare. And 'possible to add other groups using the Add button. Each group can be enabled and less to the following functions:

- LIVE VIDEO - Live viewing of images
- ALARM MANAGER - access to alarm management
- SYSTEM CONFIGURATION -access to the program configuration
- PLAYBACK - access to playback of recordings
- DEVICE MANAGER - access to the configuration of the cameras

PRIVILEGES - USERS

User Name	Group	status	Description
admin	Administrators	normal	admin

User Name:

Password: Strength: Weak

Confirm:

Group:

Description:

Unlock Add Delete Modify

Here it is possible to add users. For each user you must specify NAME and PASSWORD (to be confirmed), and group membership. Besides the usual DELETE / MODIFY commands the UNLOCK button is available that can be used by your main (default admin / admin) to unlock users who have been blocked for three consecutive times typed an incorrect password.

SYSTEM LOG

Query Condition

Begin Time: 04/22/2010 16:46:56

Log Type: ALL

End Time: 04/28/2010 16:46:56

User Name:

Query

Time	User Name	Log Info	Device IP
04/28/2010 16:46:44	admin	Login System	
04/28/2010 16:46:35	admin	Logout System	
04/28/2010 16:46:34	admin	Stop Live Video	192.168.10.96
04/28/2010 15:29:01	admin	Start Live Video	192.168.10.96
04/28/2010 15:24:40	admin	Login System	
04/28/2010 15:24:24	admin	Logout System	
04/28/2010 15:18:59	admin	Set Device Param	192.168.10.96
04/28/2010 14:06:55	admin	Stop Reomte Record	192.168.10.96
04/28/2010 12:01:34	admin	Stop Live Video	192.168.10.143
04/28/2010 12:01:34	admin	Stop Live Video	192.168.10.144
04/28/2010 12:01:33	admin	Stop Live Video	192.168.10.140
04/28/2010 12:01:33	admin	Stop Live Video	192.168.10.141
04/28/2010 12:01:28	admin	Stop Live Video	192.168.10.137
04/28/2010 12:01:28	admin	Start Live Video	192.168.10.140

In this section you can see the program memory (in the local database). At the top you can define the search period (From ... To) and the type of event. The available event types are:

- LIVE VIDEO - Start / Stop Live TV
- VOICE TALK - Start / Stop two-way dialogue
- LOGIN SYSTEM - Access to the program
- September PARAMETER DEVICE - Change the remote configuration of cameras

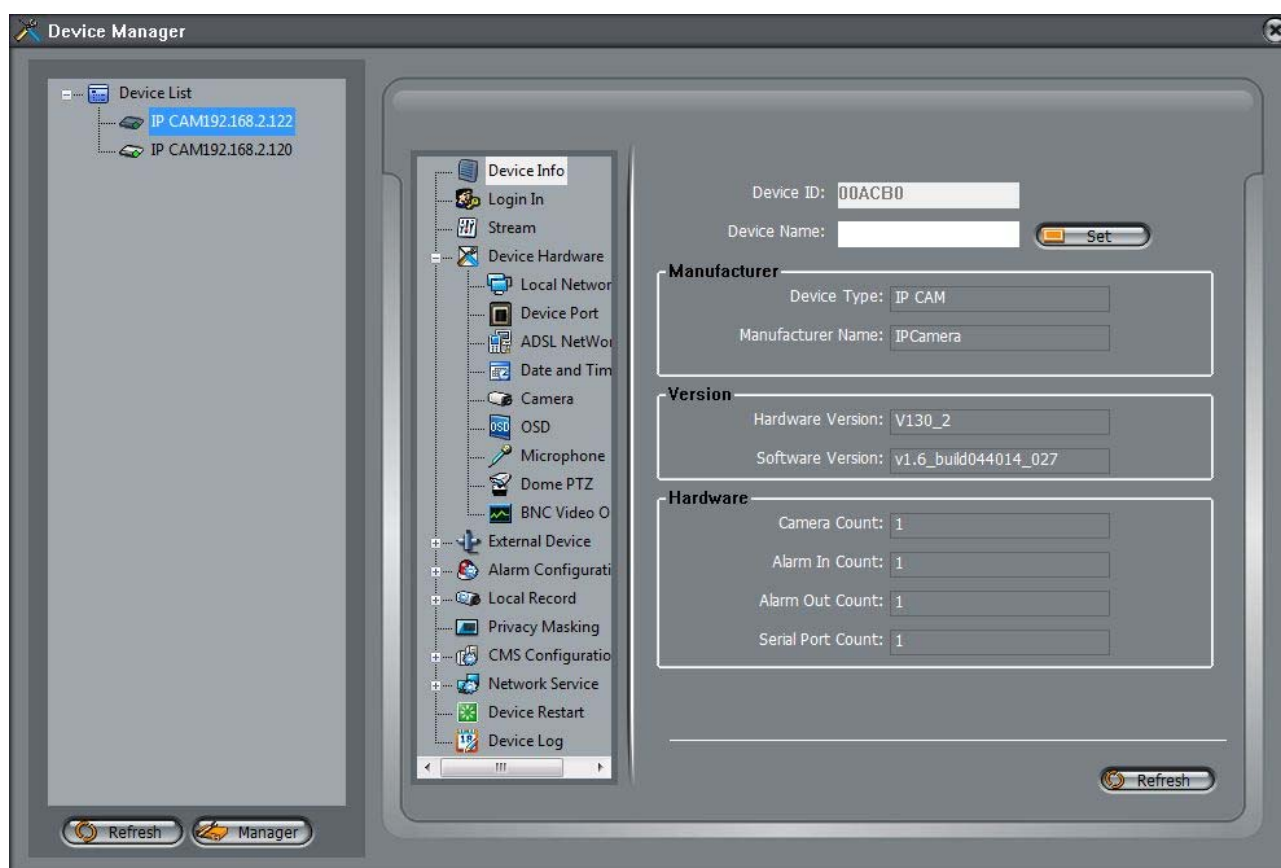
Remote cameras Configuration

Click the button



It leads to the NetVMS program that allows

modify the internal settings of the cameras. The section manager NVR is available for future applications but is currently unused.



This page contains all the programming options that can be configured by accessing the camera with a browser and which are described in detail in the manual of the camera. For this reason this section is not addressed in this manual. Refer to the camera manual for details.

The lower left button is available
connected



that accesses the camera operator

[illegible]

Here you can delete already configured manually add new cameras or cameras.

ROUTER ENABLE MAPPING: Function when not in use

Playback

NetVMS is in degrees of playing both video files recorded on their hard drives (Hard Drives, NAS) is on board cameras on the SD card.

Video files are stored in the database folders .TS format. The program creates within its hard drive a folder for each camera, and within them a folder for each day of recording.

Archivio DSE NVMS	00ACB0_192.168.2.122_1_20121003091703.ts	03/10/2012 9.32	VLC media file (.ts)	131.072 KB
record	00ACB0_192.168.2.122_1_20121003093138.ts	03/10/2012 9.47	VLC media file (.ts)	131.072 KB
00ACB0_192.168.2.122_1	00ACB0_192.168.2.122_1_20121003094628.ts	03/10/2012 10.02	VLC media file (.ts)	131.072 KB
2012-09-30	00ACB0_192.168.2.122_1_20121003100140.ts	03/10/2012 10.17	VLC media file (.ts)	131.072 KB
2012-10-01	00ACB0_192.168.2.122_1_20121003101634.ts	03/10/2012 10.30	VLC media file (.ts)	131.072 KB
2012-10-02	00ACB0_192.168.2.122_1_20121003102903.ts	03/10/2012 10.44	VLC media file (.ts)	131.072 KB
2012-10-03	00ACB0_192.168.2.122_1_20121003104301.ts	03/10/2012 10.58	VLC media file (.ts)	131.072 KB
007AD2_192.168.2.120_1	00ACB0_192.168.2.122_1_20121003105713.ts	03/10/2012 11.10	VLC media file (.ts)	131.072 KB
2012-09-30	00ACB0_192.168.2.122_1_20121003110917.ts	03/10/2012 11.22	VLC media file (.ts)	131.072 KB
2012-10-01	00ACB0_192.168.2.122_1_20121003112101.ts	03/10/2012 11.33	VLC media file (.ts)	131.072 KB
2012-10-02	00ACB0_192.168.2.122_1_20121003113250.ts	03/10/2012 11.46	VLC media file (.ts)	131.072 KB
2012-10-03	00ACB0_192.168.2.122_1_20121003114534.ts	03/10/2012 11.58	VLC media file (.ts)	131.072 KB
	00ACB0_192.168.2.122_1_20121003115743.ts	03/10/2012 12.10	VLC media file (.ts)	131.072 KB

E 'can browse the memory unit with Windows Explorer and copy the file of interest at will. For playback of .TS files you can use the free player VLC MEDIA PLAYER.

For a smoother playback of movies recorded on NetVMS PLAYBACK program includes a section where you can search and play back movies using a handy timeline.

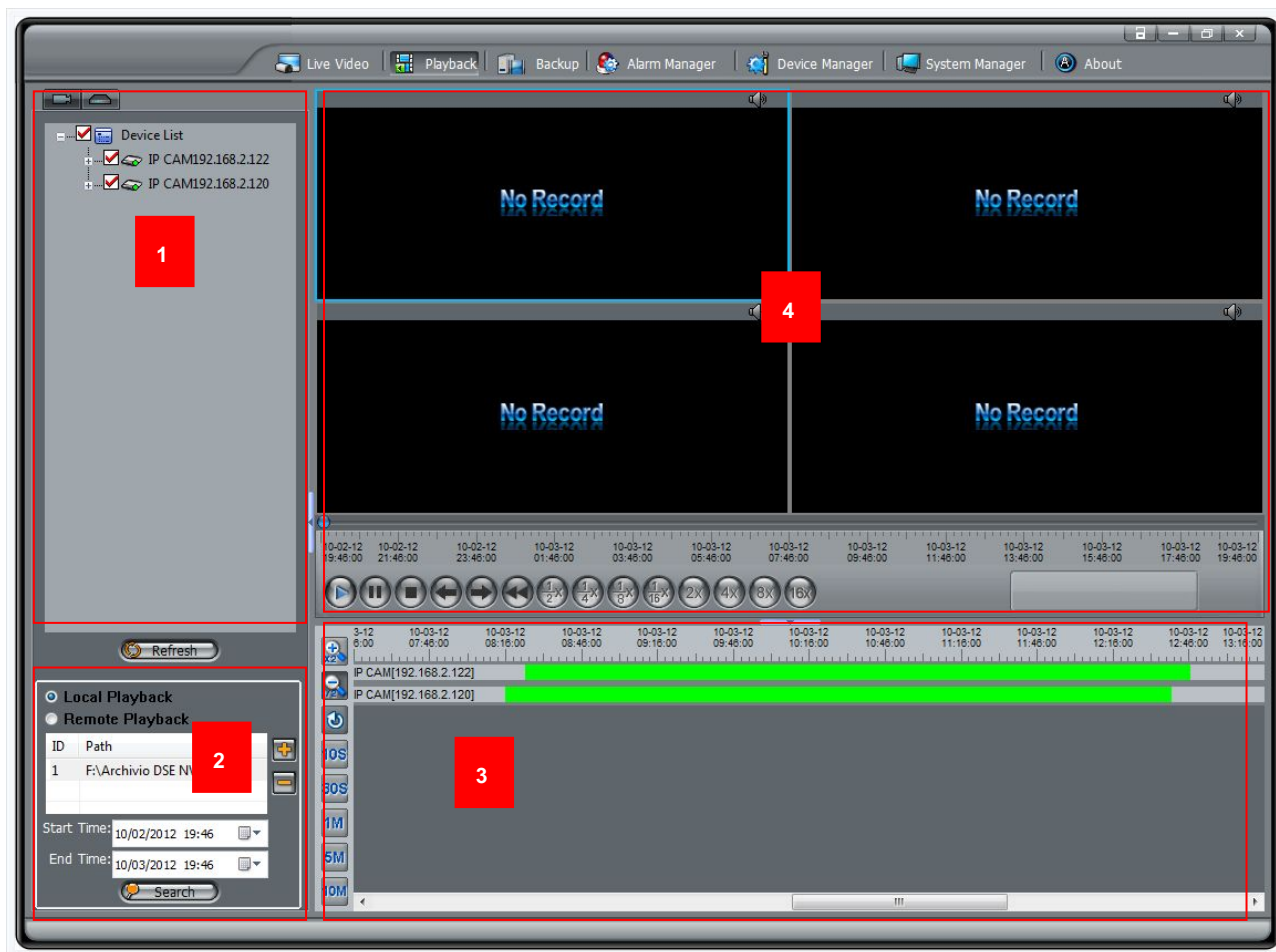
To access, press the playback environment



E 'it is given the opportunity to choose from **RECORD PLAYBACK** is **FTP RECORD PLAYBACK**

RECORD PLAYBACK

This section allows you to search recorded video on local hard drives (including both hard disk of the PC that the network NAS) and even those registered installed on board cameras on the SD card.



1 - CAMERAS CHOICE - This section in the upper left appear the cameras managed by NetVMS program. Select the cameras to play. E
'can play back up to 16 cameras. **2 - SEARCH PARAMETERS** - Select LOCAL PLAYBACK to search the local database. As a local
database means all storage devices (HDD and NAS) that have been set in the configuration (see above). Select REMOTE PLAYBACK to
search in the SD card onboard the individual cameras. In the START TIME / END TIME boxes indicate the beginning and end of the time
period within which to search. And 'possible to select a maximum period of one week. The button



is



Available to add on the subject of search folders occasional folders, as it could be for example a folder to backup video files copied to
your desktop. Press SEARCH to start the search. **3 - TIMELINE** - At the end of this time line search is all the researched period. In the top
of the timeline are reported subdivisions with date and time. Further down there are the bars representing the cameras. The colored
sections **green** containing video recorded in continuous recording mode, the features in color **red** contain recorded video while the alarm



sections **Grey** no data.

On the timeline left are the ZOOM buttons that allow you to change the scale of the timeline to center in the best interest period.

E 'can act on the ZOOM + / ZOOM buttons - or on the lower buttons that define directly the timeline subdivision steps (10 sec, 30 sec, 1 min, 5 min, 10 min). These buttons function as the tool to turn on or off. For example, to enlarge the scale click on the zoom button, then click on the time line several times until you reach the desired zoom level, finally press the zoom + button to exit the zoom tool. **4 - REPRODUCTION**

- Once you have researched and brought to the center line of the time period of interest you move the playback panel that is automatically divided into different quadrants depending on how many cameras were selected in step number 1 above. In this different commands are present pane



1 2 3 4 5 6 7 8 9 10 11 12 13 14

From left to right:

1 - PLAY - Start playing the timeline

2 - PAUSE - Stops playback while keeping the image on the screen 3 - STOP - Exits the playback to a new search

4/5 - FRAME BACK / FORWARD - This button allows you to play one frame at a time to analyze with great care a sequence of interest 6 - BACK FAST

7/8/9/10 - BUTTON SLOW MOTION

11/12/13/14 - BUTTON FAST FORWARD

In addition to the playback control buttons you can double-click directly on the timeline to move the desired play on the instant. It 'also possible when playing the mouse to drag the scroll bar under the video playback boxes. For each camera it is available in the upper right the speaker icon to enable or disable audio playback.

FTP RECORD PLAYBACK

The RH series cameras are able to record on FTP server. This section of NetVMS program is used to search video files saved via FTP or local disk, if the program is installed on the same FTP server, or on remote FTP server. The display and controls are quite similar to the local playback

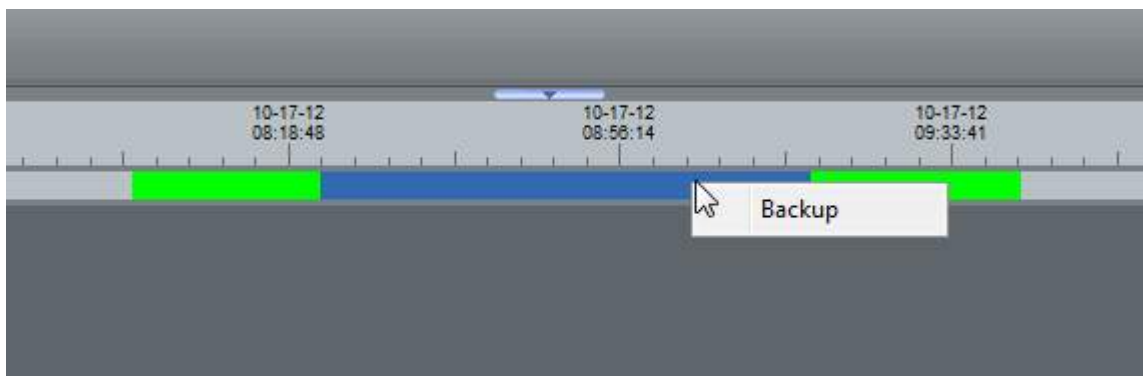
[illegible]

Export and backup movies

NetVMS BACKUP has a convenient feature to export your recordings and save them in a folder or on a removable media like a USB stick. This feature allows you to export both the local PC hard disk and those recorded files stored on external NAS and even those recorded onboard cameras in the SD card. To export recorded files you first have to search for them using the PLAYBACK window as just described in the previous chapter.



Once you have found the video files (green or red stripes in the timeline) select the period you want to export by dragging the mouse inside the red line and holding the left button. The period delimited with the mouse will take on the color blue. Click on it with the right button and choose BACKUP

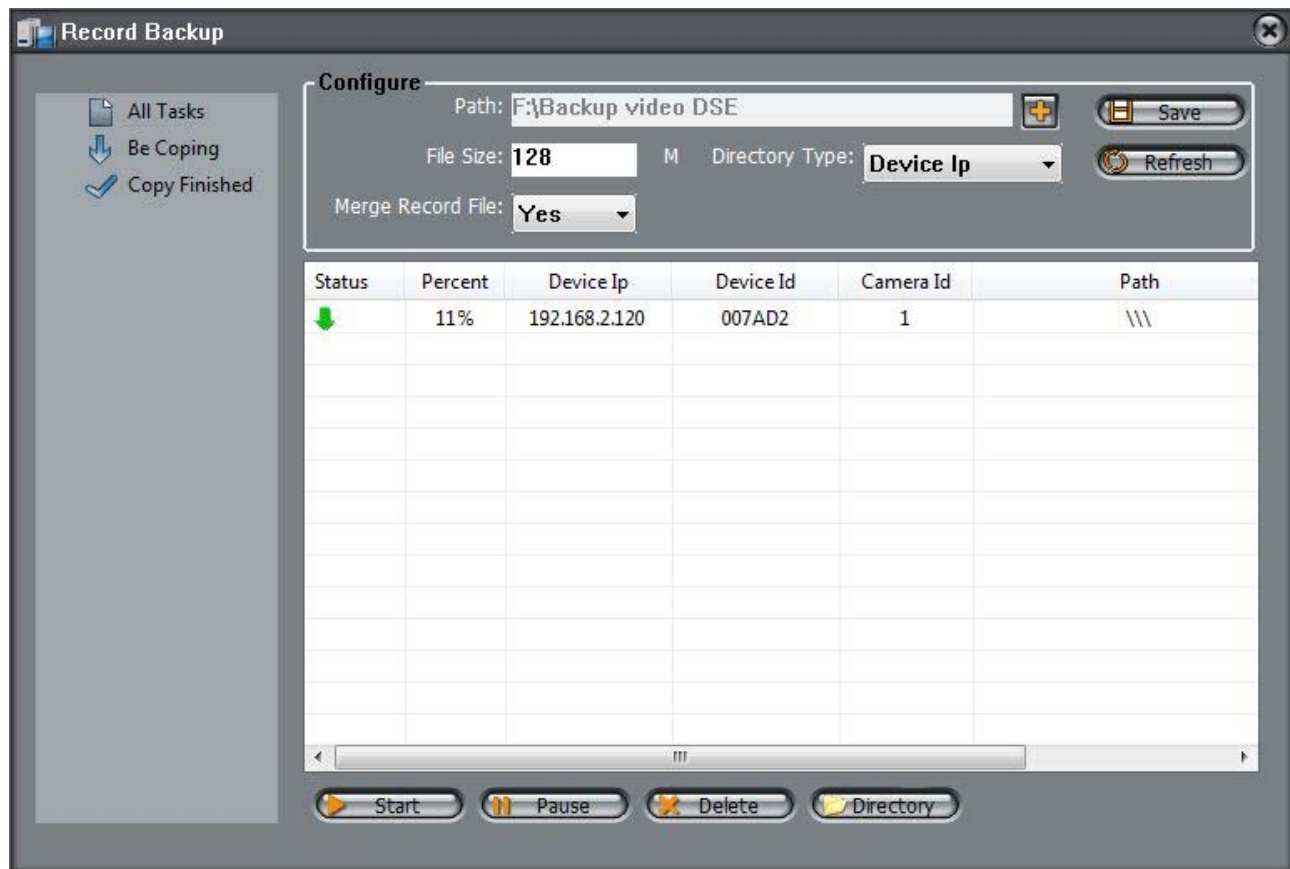


It will start saving immediately. For the control of export operations



BACKUP access the section by pressing the button

In the window you can set the mode of export and also follow the progress of operations. This advancement vision are convenient when you have to save long recording periods.



- **PATH** - Press the + button to search the PC the destination folder where you want to save the exported files.
- **FILE SIZE** - Define the size in MB of each video file in which to divide the period
- **DIRECTORY TYPE** - E 'can save the files grouped in folders, each appointed by the camera's IP address (IP Device) or its identifier (Device ID) or even without grouping them in folders (None)
- **RECORD MERGE FILES** - Select whether you want to merge the exported files with others already present in the backup folder.
- **SAVE** - Save the backup settings

In the white box in the center you can see the backup operations. With the buttons on the left you can see all the operations (ALL TASKS) or only those under way (BE COPING), or even just those already completed (COPY FINISHED).

With the buttons below you can pause a backup (PAUSE) and resume it later (START) or delete (DELETE).

With the DIRECTORY button to directly explore the folder where the files are saved (see above PATH).

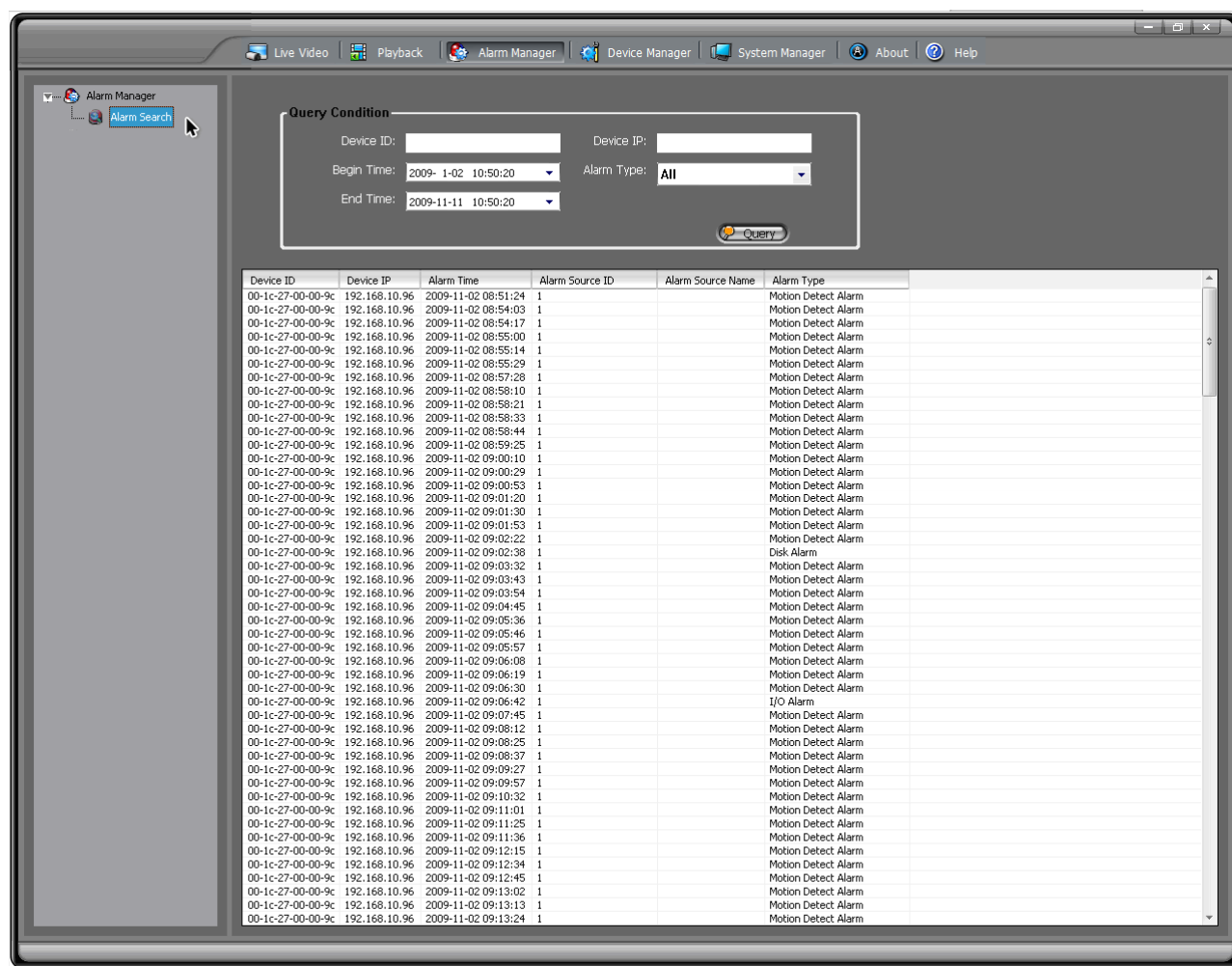
For playback of files saved in .TS format you can use the free VLC player



or the SNPlayer player included in the camera CD.

Alarm Manager

NetVMS is able to read the alarm events generated by the connected cameras. All events are stored in an event memory in chronological order. To view the event log, press

The screenshot shows the Alarm Manager window with a sidebar containing 'Alarm Manager' and 'Alarm Search'. The main area has a 'Query Condition' section with fields for 'Device ID', 'Device IP', 'Begin Time', 'End Time', and 'Alarm Type'. Below this is a table of alarm events.

Device ID	Device IP	Alarm Time	Alarm Source ID	Alarm Source Name	Alarm Type
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:51:24	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:54:03	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:54:17	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:55:00	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:55:14	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:55:29	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:57:28	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:58:10	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:58:21	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:58:33	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:58:44	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 08:59:25	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:00:10	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:00:29	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:00:53	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:01:20	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:01:30	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:01:53	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:02:22	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:02:38	1		Disk Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:03:32	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:03:43	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:03:54	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:04:45	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:05:36	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:05:46	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:05:57	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:06:08	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:06:19	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:06:30	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:06:42	1		I/O Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:07:45	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:08:12	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:08:25	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:08:37	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:09:27	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:09:57	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:10:32	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:11:01	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:11:25	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:11:36	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:12:15	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:12:34	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:12:45	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:13:02	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:13:13	1		Motion Detect Alarm
00-1c-27-00-00-9c	192.168.10.96	2009-11-02 09:13:24	1		Motion Detect Alarm

In the boxes at the top and can set the search parameters by choosing camera / e, event type and time period. Press QUERY to start the search.

In the system configuration it is possible to make sure that the occurrence of an event to appear on-screen alarm by clicking an icon which automatically accesses the event memory.