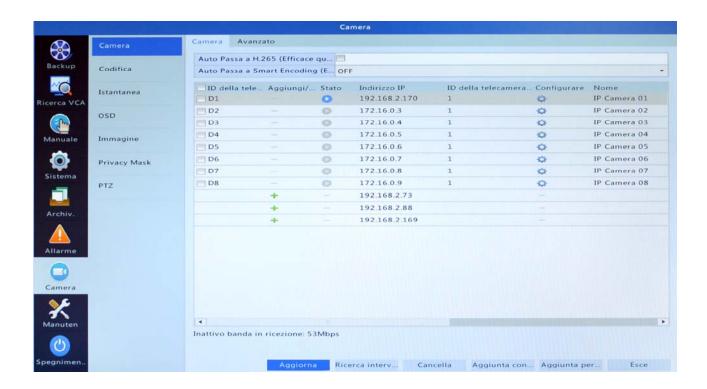
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# **DS Series Recorders**

## NVR for IP cameras



# Operative manual

# for the installer and for the user

How to use the GUI screen. How to set the programming options.

Video recorders NVR Series DS

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## Contents of this handbook

The NVRs series DS range is designed to allow the management and the recording of CCTV cameras over IP based on ONVIF protocol. In this manual, the control graphical user interface is described and all the options contained therein. It is assumed that the video recorder and the camera has been connected properly following the instructions in the installation manual. For convenience it will refer to commands by using the mouse.

# **Turning the NVR**

After having prepared the connections and installed on the hard disk as explained in the installation manual it is possible to proceed to the first ignition. Connect the power plug. L 'NVR will start automatically.

# Log in

Access to the configuration menu is password protected Factory credentials NVR DS series are:

**USER:** admin

**PASSWORD: 123456** 

You can of course change them later, taking care not to forget them.

Video recorders NVR Series DS

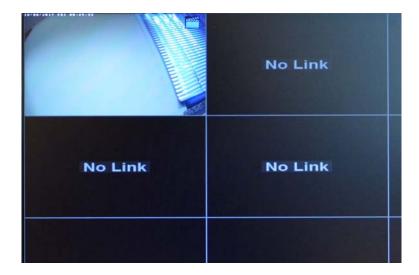
Page: 3



# **live Control**

In this section of the manual describes how to use the commands in the LIVE vision of the cameras.

Upon starting the VCR is proposed the simultaneous multi-vision camera with screen division in 4, 9 or 16 frames, depending on the model in question.



The panes of the cameras may take look different depending on the connection status:

LIVE PICTURE VISIBLE = Link underway NO LINK = Device Offline

NO RESOURCE = Device connected but not visible to the NVR insufficient resources ICON PADLOCK = vision device connected but not permitted BLACK BOX = No device set in the channel

## CHANNEL STATE ICONS

Each camera frame may contain a few icons that show the status as per the following table

## Video recorders NVR Series DS



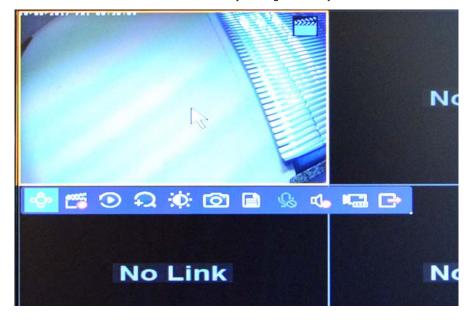


Icon	챘	100000		ullet	A
Description	Motion detection activated	Registratio it going	Audio playback	Two-way dialogue	Tamper Fault

In the images of the cameras you can be comprised of the overlays (date, time, etc) if provided for in the internal configuration of the camera.

#### **TOOLBAR OF THE CHANNEL**

Each channel has a control bar that is shown by clicking on it with your mouse.



PTZ - Show the PTZ controls for motorized cameras.

MANUAL RECORDING - This button is used to start recording manually if you want to record in spite of the camera at that time is not programmed to automatically record. Press again to stop manual recording.



INSTANT PLAY - Starts playback of images recorded in the last 5 minutes

DIGITAL ZOOM - Pressing this button is the camera full screen door and you can zoom to detail drawing of the boxes with the mouse. The useful PIP function

## Video recorders NVR Series DS

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It allows you to see always, in a frame, the image of the whole to see where there is the enlarged detail.



CONTROL - Adjusts Brightness, Saturation and Contrast in the live image

PHOTOS - Snap a photo of manual shooting scene. E 'can search, review and possibly export the photos taken in the menu to the BACKUP / IMAGE voice.



INFO - Clicking on this icon will display information related to the connected camera (IP, name, status, recording in progress)

TWO-WAY DIALOGUE - Click to talk to whoever is in front of the camera (if supported). In order to use this function it is necessary that the camera is equipped with a microphone and speaker and a microphone to the AUDIO IN of the NVR must have connected.

AUDIO - Enable audio playback channel and allows you to adjust the volume. If a channel audio is activated automatically it stops the audio of any other channels. To hear the audio it is necessary that the camera is equipped with a microphone and they are connected to the NVR of the speakers via the HDMI cable (TV monitor) or through the audio output OUT



CHANGE CAMERA - Allows you to quickly change the camera associated with that channel.



EXIT - Closes the channel toolbar.

## TOOLBAR OF THE MONITOR

If you bring the mouse to the bottom of the screen displays a toolbar that controls the monitor as a whole



1,4,9,16 dials

## Video recorders NVR Series DS









CHANGE PAGE - Moves to the previous or next screen. For example,

They are viewing the screen 1,2,3,4 cameras with the forward button you switch to 5,6,7,8



SEQUENCE CYCLIC - Starts or interrupts the cyclical scan that shows a sequence of cameras according to the programming



PLAYBACK - Opens the movie playback page



INFO - Click to see the status of all channels with information on access and video streaming



ALARMS - click to see a list of alarm events



NETWORK -Indicates the address of the NVR network card. Click to open the network settings.



ORA - Current date and time of the NVR



LOCK - Click to lock the toolbar so that it is not automatically hidden

## CONTEXT MENU

As an alternative to the toolbar, you can access the VCR control by clicking the right mouse button anywhere on the screen to show the context menu

## Video recorders NVR Series DS







MENU - Opens the on-screen menu for setup and the NVR complete control that will be described later in the manual.

SINGLE WINDOW - Allows you to select a camera to take full screen multiwindow - Allows you to change the division of the screen in 4,6,8,9,16 HALL panes - These NVR can manage the corridor vision with the width greater than height, which is useful in filming narrow areas like hallways. multivisions are available

3,4,5,7,9,10,12,16 cameras. It is recalled that for the best use of the corridor function the camera rotated 90 ° to be installed and then rotate the image in the internal configuration of the camera. In this way, by activating the corridor vision in the NVR, you will get a correct recovery of the corridor.

CONTROL PTZ - Enable control of motorized cameras ADDING IP CAMERA - Opens the configuration of cameras PLAYBACK - Opens the Search and Replay page

HOW TO EXIT - Select to monitor some useful vision mode to compensate for poor screen visibility situations.

#### PTZ CONTROL OF MOTORIZED CAMERAS

The VCR is capable of directly controlling the motorized cameras speed dome. You should choose the motorized camera and click on the right button and then choose the option CONTROL PTZ,

The selected camera will switch to full screen and you will get the following control panel

## Video recorders NVR Series DS







MOVEMENTS - Acting on the arrows to move the camera in all directions. ZOOM / FOCUS / IRIS - Check the camera lens. Some controls, such as fire control and manual iris, may not be supported by the camera settings. SPEED '- Defines the camera displacement speed. Note that regardless of this setting many cameras also change their speed according to the zoom. PRESET - E 'can set a preset by choosing the preset number (1 ... 256), in the Preset box and placing the camera and pressing the SAVE button. To recall the preset you choose the number and press GO A. To delete a preset, press DELETE.



# **Playback**

To view recorded nell'NVR must access the PLAYBACK.

## ACCESS THE PLAYBACK

There are a few different ways to open the playback window.

1 - Open the playback area from the bottom toolbar on the screen



2 - Open the playback area from the context menu (right click)

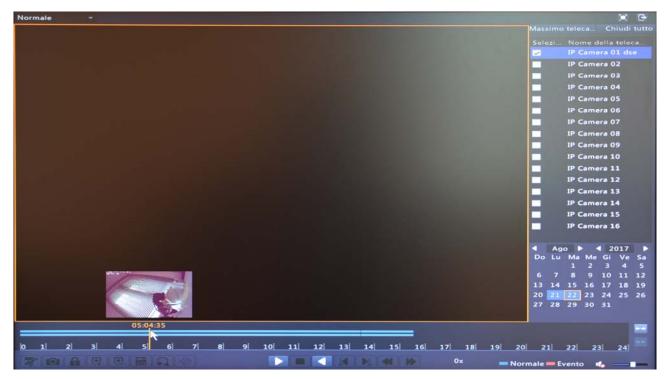


**SEARCH AND PLAYBACK** 

## Video recorders NVR Series DS

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To find and play back the images do the following:

- 1 Choose or cameras to be played in the right list. And 'MASSIMO can press to open the maximum number of cameras provided by the NVR model.
- 2 Choose your interest in the calendar day. The days that contain recordings are highlighted in blue, red ones that contain alarm recordings. 3 Click the mouse on the timeline bar at the bottom of the screen to move along the hours of the day. A small preview window helps you find what you need. In the timeline are colored in blue continuous recording and in red those that occurred after an event. More detailed timeline with the zoom buttons on the right.

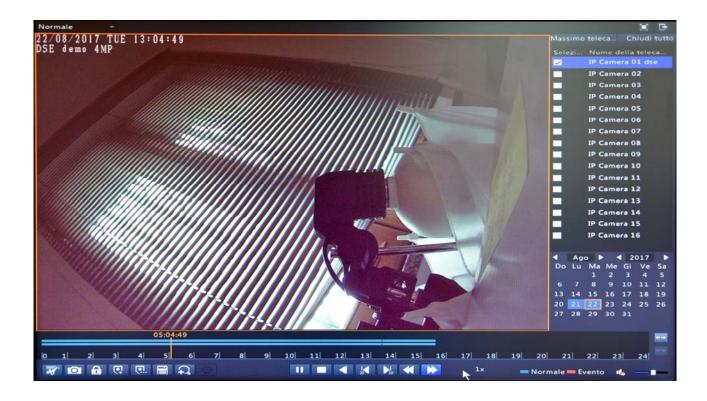


4 - Press the play button to play

Video recorders NVR Series DS

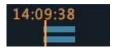
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## **CONTROL IN PLAY**

During playback you can use the buttons on the bottom bar



The bar on the timeline indicates the time position of the video









Customary command PLAY - PAUSE - STOP - BACK





Forward / backward step for 30 seconds. Useful to quickly scroll the movie.





Slow motion and fast forward. E 'can speed playback up to 1x256

and slowing it down up to 8 times.





Start / End of a clip. With these buttons you can trim a video clip to export





Lock your files so as not to allow the cancellation and make it easily searchable and exportable in the backup section

## Video recorders NVR Series DS

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Adds a bookmark (TAG) to easily find the time to play



He adds a bookmark with custom name



Opens the operating window of bookmarks, locked files and clips



Enable the digital zoom that allows you to zoom with the mouse of image details



Enable audio (with volume control)

#### **RULES 'OF PLAY**

In the upper left is a box where you can choose the playback mode



They are available the following NORMAL mode - Search for

all records

CORRIDOR - Normal search with display hall (width greater than height) TAG - Search manually set bookmarks in previous reproductions EVENT - Search only the movies tied to an alarm event EXTERNAL FILE - Research on key files

IMAGE - Search and playback of photos taken by the NVR INTELLIGENT - Not available

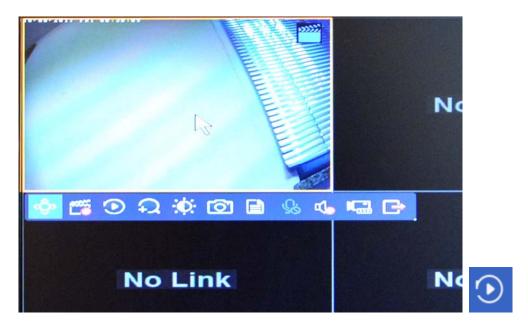
## **INSTANT PLAYBACK**

In the vision of the live cameras you can start a fast playback of the last minutes of recording time by acting directly on the taskbar of the channel.

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Pressing the Fast Playback button will automatically start playback of the last 5 minutes of recording. In the SYSTEM settings you can modify this time of 5 minutes 1 to 60 minutes.

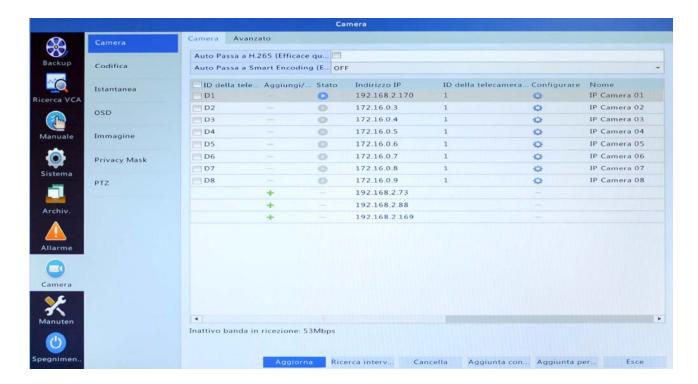
The instant replay has a time bar that you can drag the mouse to scroll faster viewing.



# **Configuration Menu**

Click the right mouse button and select OSD MENU to open the configuration menu





The configuration menu of the NVR DS series allows you to set all instrument functions. In the following sections of the manual to explain all of the configuration pages.

Video recorders NVR Series DS

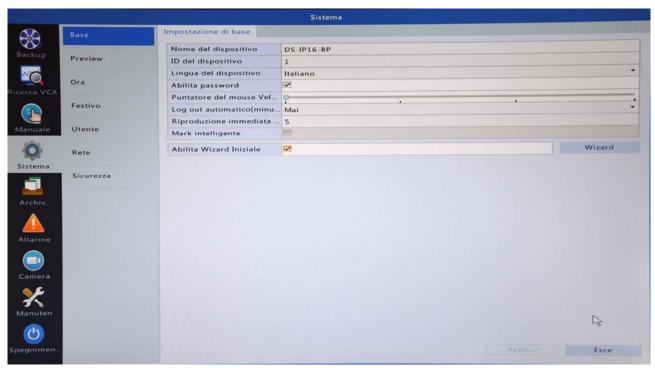
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# **OSD - SYSTEM**

In the SYSTEM section includes all the sections that relate to the general functioning of the NVR. The following explains one by one.

#### **BASE**



DEVICE NAME - E 'an NVR distinctive name that you can customize ID DEVICE - It' a number assigned to the NVR that you can customize LANGUAGE - change the menu language, factory ITALIAN ENABLE PASSWORD - disabling you will have access to the NVR no login pOINTER mOUSE - Adjust the speed of the mouse pointer

AUTOMATIC LOGOUT - E 'can set after how many minutes of inactivity the NVR NVR must exit the menu by requiring a new Login

INSTANT PLAY - During live view, you can start playing the last few minutes of recording for a quick check of what happened. In this box you can set the instant playback duration (by default: the past 5 minutes) MARK BRIGHT - Unsupported

FIRST WIZARD ENABLE - Enable a configuration wizard when you can start pressing the button WIZARD

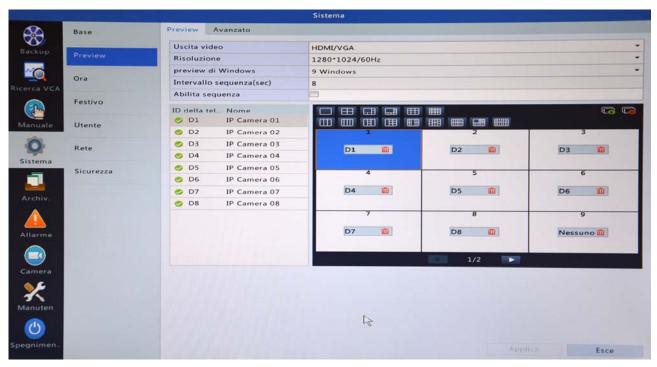
## Video recorders NVR Series DS

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#### **PREVIEW**

In this section, you configure the monitor management in live viewing



VIDEO - Indicates the video outputs available in the NVR. Typically these outputs show the same image and are programmed together.

RESOLUTION - Defines the video output resolution. By default this value is quite low set to give compatibility with all monitors. It 'good to bring the video resolution to the value closest to the optimum resolution of your monitor. Today almost all modern monitors support 1080P (1920x1080). If your monitor supports it, you can also set the 4K resolution. If you were to set a resolution not supported by the NVR will monitor automatically after a few seconds the previous resolution.

There are no contraindications to use a lower resolution than the maximum supported by the monitor, but it should be noted that if the monitor output is set, for example, su1080P (2MP) may not be able to appreciate the differences between an image and to 2MP a 4MP if performing a digital zoom.

PREVIEW OF WINDOWS - Here you set the primary video division of NVR namely where it will automatically show on startup. You can choose from 6 normal mode (1,4,6,8,9,16 windows) and 9 corridor mode for when shooting high and narrow areas. The corridor modes available are (C: corridor, N: Normal): 3C, 4C, 2C + 3N, 6N + 1C, 9C, 4C + 6N, 12C, 6C + 10N, 16C.

Some models may have only a portion of the options indicated by the number of channels managed by the NVR.

## Video recorders NVR Series DS





INTERVAL OF SEQUENCE - The NVR can show different screens in sequence, function commonly called CYCLIC. In this box you define how many seconds remain each screen during the scan.

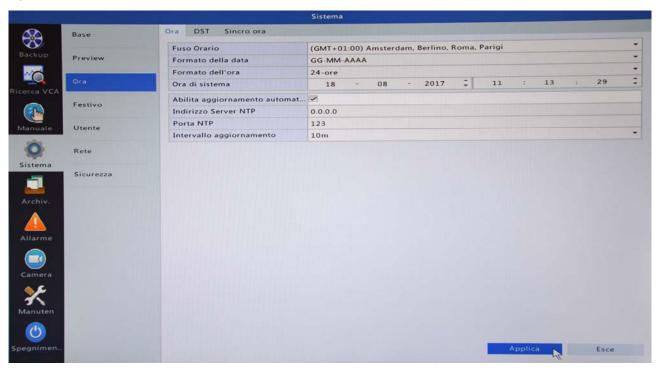
ENABLE SEQUENCE - E 'can customize the sequence of polling. The cyclic scan in fact may comprise single full-screen cameras (traditional cyclic) or even a sequence of quadrivisioni or other combinations. In the table it is necessary to choose the type of screen layout for use in scanning and assign a camera for each pane.

#### **PREVIEW - ADVANCED**

In this folder you can enable a single parameter

FLOW BEFORE SECONDARY - If enabled, the NVR will use always the secondary stream of the camera when viewing multiple cameras on the screen so as to favor a more fluid vision.

#### NOW



In this section we set the time of the NVR. It 'important to accurately set all the options in this section because the hour of NVR is crucial in the video archive management. TIME - Indicates the reference time zone of the NVR. In Italy choose GMT + 1. FORMAT OF DATE - Allows you to choose the date display format. Typically in Italy you use DD / MM / YYYY ie 2 digit day / month 2-digit / 4-digit year

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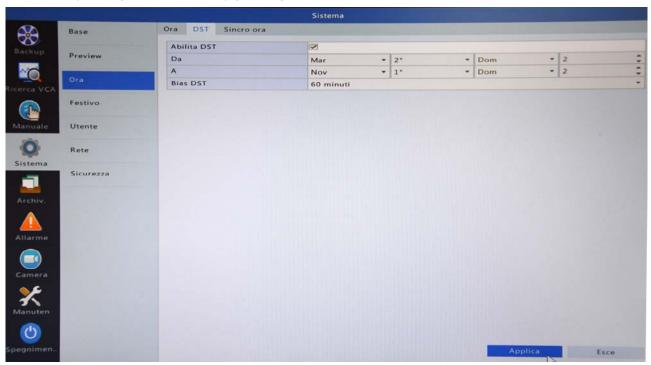
FORMAT TIME - 12 or 24 hours

TIME SYSTEM - Shows the date and the current NVR Now you can also edit manually

ENABLE AUTOMATIC UPDATE - E 'possible to make sure that the NVR automatically synchronize its time and date with an NTP server on the Internet such as time.windows.com. In the boxes below you can enter the address or the NTP server name and the port to use (usually 123). It 'also settable refresh rate.

#### **ORA - DST**

In this section, you configure the automatic Daylight Savings Time



DST ENABLE - Enable the automatic switch from summer to winter time now

DA - Set the date of daylight savings time (In Italy: 2 hours last Sunday in March) A - Set the date for daylight saving time (In Italian: 3 hours last Sunday in October) DST BIAS - Set ' DST entities (In Italy: 60 minutes)

#### **ORA - SYNC NOW**

This table contains only option you need to make sure that the NVR automatically synchronize the time of the cameras associated with him

SYNC NOW CAMERA - By enabling this option, the NVR synchronizes the time of the connected cameras. The option is enabled by default and d is always advisable, especially when the

## Video recorders NVR Series DS

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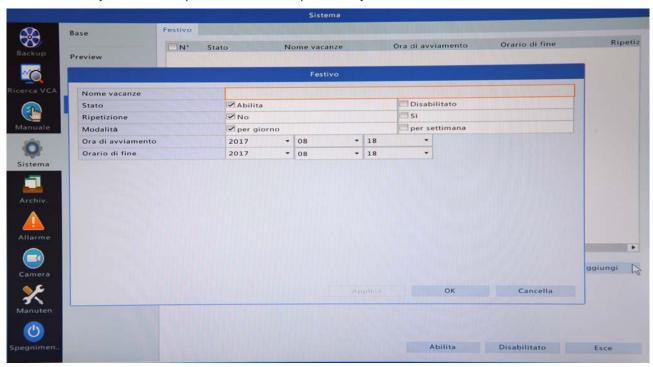
poe cameras connect to the gates of the NVR and are therefore not individually accessible from the network to adjust the time.

Press APPLY to start the synchronization

CAUTION - Because the synchronization is carried out correctly it is essential that in the settings of each camera is selected the correct time zone UTC + 1, otherwise the time will be synchronized wrong.

#### **HOLIDAY**

This section allows you to set custom periods to be treated as public holidays



HOLIDAY NAME - E 'possible to determine the periods of holidays or custom holiday. In the DVR programming they can be treated differently from normal weekdays.

STATE - Enable / Disable the festive period

REPEAT - Defines if the holiday occurs on a regular basis or once MODE '- Defines if the holiday occurs on a daily or weekly

TIME - Enter the interval to consider public holiday

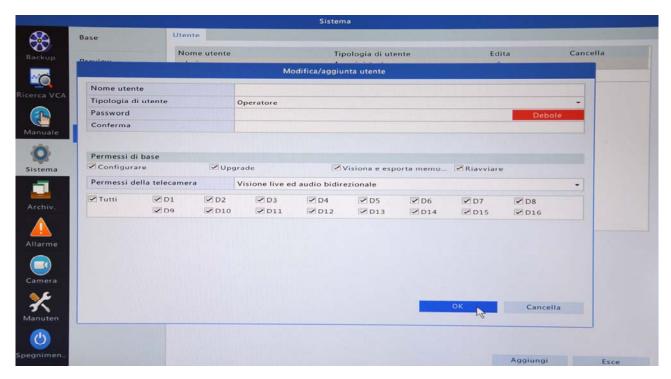
#### **USER**

In this section you can add new users that can access the NVR

## Video recorders NVR Series DS

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USER NAME - Enter the user name that will be used to log in

YOU TYPE - You can choose between Operator and Guest, based on this choice will automatically change the levels of the underlying access PASSWORD - Enter and confirm the password PERMITS - Select the operations to which you want to enable the user

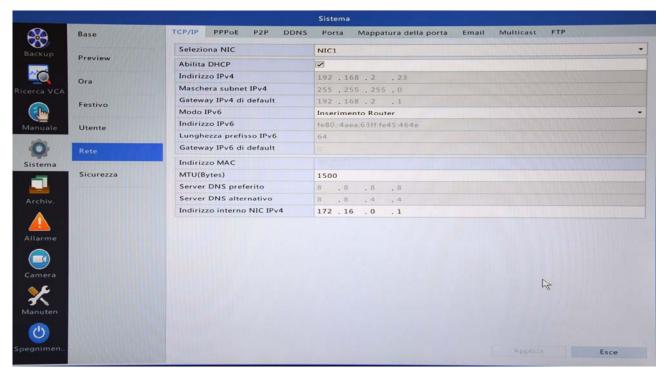
#### NETWORK

This section is important for the NVR because it contains all the connection to the network parameters

#### Video recorders NVR Series DS







SELECT NIC - Lets you choose the network port in the models that have multiple LAN ports

DHCP ENABLE - E 'can choose the IP address automatically via a network DHCP server, or set the parameters manually. The DHCP automatic configuration can be useful to those who administers the network independently to learn about the settings used by the network to which you connect. After that it is always preferable to set a manual fixed address in order to avoid that the same will automatically change in the future. You need to enter IP address and subnet mask as for all network devices as well as the gateway and DNS to connect to the Internet. If you enable the DHCP network the following parameters will be shown, but not editable, because they assigned automatically as you start.

ADDRESS IPv4 - And 'the IP address of the NVR that distinguishes the LAN. The first 3 numbers of the IP address must be the same for all network components.

SUBNET MASK IPv4 - And 'the subnet mask that must be common to all network elements. Of customary 255.255.255.0

IPv4 GATEWAY - And 'the IP address of allowing access to the Internet, usually the router. The router has a network address customary first class, for example, 192.168.0.1

----- IPv6 - The NVR is arranged to be able to operate on an IPv6 network, the future generation of network protocol, which would replace IPv4. The Internet providers are gradually switching to IPv6. In Internet networks for the moment you are using IPv4. MAC ADDRESS - Number of network interface identifier

#### Video recorders NVR Series DS





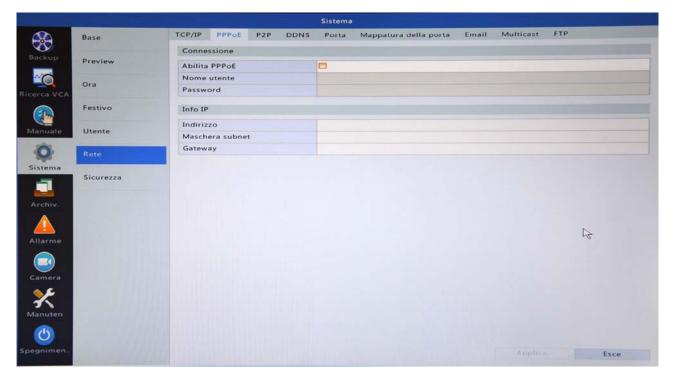
MTU - Maximum Transmission Unit of the network interface. No need to change the default value that is 1500 bytes, which is the typical MTU on the Internet

DNS SERVER FAVORITE - A device network needs a DNS server accessible via the Internet to surf the web sites listed in the form of name and not the IP address. Although it is not used to surf the Internet, even the NVR needs a DNS server to identify and reach Internet sites, such as the e-mail server to send email. You can enter here the DNS address of your ISP. If you do not know him you know launching an IP SETUP command on a PC in the network, as shown in the installation manual. Alternatively you can use the Google DNS: 8.8.8.8 and 8.8.4.4 as in our example above mask.

ALTERNATE SERVER DNS - DNS server to be used if the principal proves unattainable. INTERNAL ADDRESS IPv4 NIC - The NVR generates its own private network to manage IP cameras that connect to its direct POE ports. By default this internal network has class 172.16.0.xxx and NVR occupies the 172.16.0.1 address in this network. At the cameras they will be automatically assigned addresses like 172.16.0.2,3 etc. If for some reason you want to change the class of addresses that the NVR uses for its internal network, you can do it in this box.

#### NETWORK - PPPoE

In this section you can set the PPPoE protocol that is used when the NVR is connected directly to a modem that needs to perform a login process to access the Internet. It is a procedure of accessing the internet rarely used today.



#### Video recorders NVR Series DS

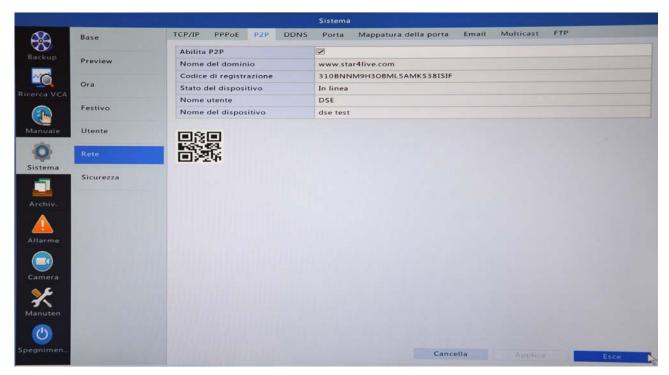




ENABLE PPPoE - Enable this protocol only if this is required by your ISP NAME / PASSWORD - the login credentials provided by the ISP IP INFO - Network Data assigned by the provider after login

#### **NETWORK - P2P**

This section controls access NVR to our cloud server which allows a simple connection via Internet



ENABLE P2P - is necessary to enable the service to be able to use our cloud servers. Disable the service if you prefer to manage the connection via the Internet directly to your IP address. DOMAIN NAME - E 'Internet address of our P2P server you should visit with a PC to create your account and add your NVR. Find the detailed information in the installation manual.

REGISTRATION CODE - E ' the NVR of your unique ID that distinguishes it on the server and that can not be changed. You are asked this number to charge your NVR server and even when they enter in the mobile app.

STATE OF THE DEVICE - Indicates the status of the P2P connection to our server. The NVR properly connected to the Internet and logged on our site displays the status: ONLINE. If the status is not connected to the NVR should be recorded on the server and verify that the NVR is properly configured network.

USER NAME - Shows the user name with which you registered on our site cloud and on which the NVR was recorded.

## Video recorders NVR Series DS

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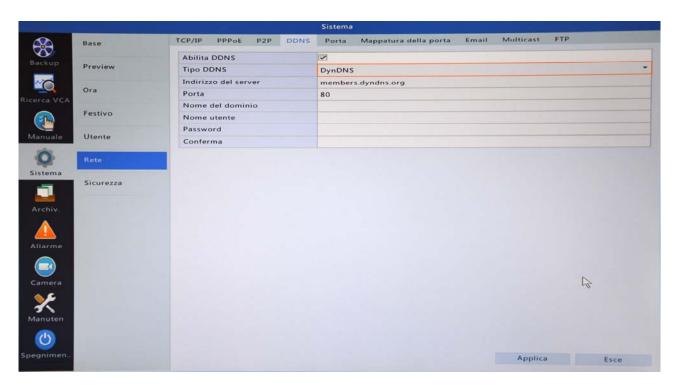
DEVICE NAME - Displays the name you assigned to this NVR in the cloud server to identify it

QRCODE - You can frame this QR code to load the NVR in the APA Mobile instead of entering the ID manually.

See the installation manual for more information on how to use the cloud server.

#### **NETWORK - DDNS**

In this section you can manage access to a DDNS server if you do not have a fixed IP on the Internet and for some reason do not want to use our cloud servers. It is a rather antiquated system, but still supported by our NVR.



ENABLE DDNS - In order to reach an NVR through an Internet connection you need to call the IP address that the router has the WAN side (to the Internet). This address is assigned by your ISP. The best thing is to get an IP address from the provider of static type, that it is stable over time. More often, however, it has to do with variable IP addresses that may change each time you connect. The NVR series DS include a convenient free service CLOUD (see installation manual) that allows you to simply get around the obstacle, but you can also use instead of DDNS services, such as: *dyndns.org*, *no-ip.com*. The DDNS services are available online, without charge, in which the DDNS provider provides the user with a name of a domain that you can type on the client device to achieve its NVR. The provider will direct the call to the

## Video recorders NVR Series DS

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correct IP address that 'NVR will at that precise moment.

The DDNS service, in order to function, it needs a device internal network periodically sends the updated IP address to the DDNS server.

Typically this task of updating is entrusted to the router to a PC on the network, but also the same NVR is able to do so if you enable it.

TYPE DDNS - DDNS The NVR supports the following services: dyndns.org, no-ip.com.

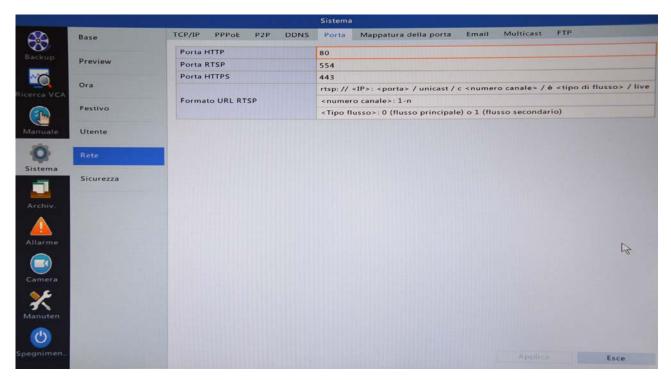
SERVER ADDRESS - DDNS server address

PORT - Port to use according to the instructions provided by the DDNS provider DOMAIN NAME - domain name assigned by the DDNS provider

USERNAME / PASSWORD - Credentials to be used according to the instructions of the DDNS provider

#### **NETWORK - PORT**

In this section you can change the communication ports used by the NVR if for some reason it becomes necessary. We recommend you never change the factory gates if you have full knowledge of why you're doing it. The improperly modifying the communication ports can make the device unreachable.



HTTP PORT - And 'the port used by NVR in dialogue with all clients (Default: 80) PORT RTSP - And' the port used by the NVR for sending the video streaming (Default: 554) DOOR HTTPS - And 'the door used by NVR in dialogue with all clients that use the HTTPS security protocol (Default: 443)

FORMAT RTSP URL - If you wish to receive live images from the NVR with a client such RTSP

## Video recorders NVR Series DS

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VLC example, here you can find instructions on how you structure the RTSP address (see installation manual)

Please note that in addition to the three communication ports indicated, the NVR uses additional 2 can not be modified doors for dialogue with mobile devices:

PORT MOBILE - And 'the port used by NVR in dialogue with the Mobile APP (Default: 6060) PORT VIDEO MOBILE - And' the port used by NVR in sending the video to the mobile APP (Default: 7070)

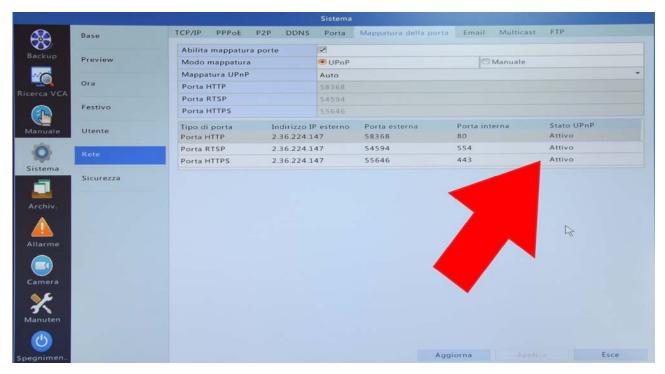
#### **NETWORK - MAPPING THE DOOR**

This section is very important because it defines the behavior of the NVR regarding the mapping of ports on the router that allows full access through the Internet. The DS NVR series to ensure optimal performance via the Internet make the automatic mapping of ports on the router through UPNP.

If your router supports UPnP, enable this function in the router in this section and choose the voice: UPNP. In this way, the NVR will automatically map ports of the router correctly.

The UPNP mapping is enabled at the factory.

 $\label{thm:equality$ 



If the status is INACTIVE UPNP then you probably need to enable the UPNP

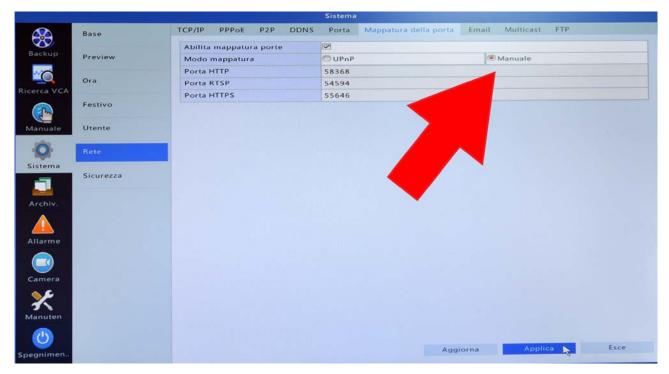
## Video recorders NVR Series DS





router configuration. If, in the worst case, your router does not support UPnP, you can not map the doors automatically and you will have to do it manually as indicated in the installation manual.

If you make manual mapping is important that in this window is chosen the option MANUAL



WARNING - Do not leave this page set UPNP if you map the doors manually, otherwise the remote connection will not work.

The HTTP / RTSP / HTTPS ports shown on this page are the external ports (from the WAN side) that the DVR intends to use in place of the internal doors.

The reason why the NVR uses of external ports (58368, 54594, 55646) different with respect to the internal ports (80,554,443) is to allow the upnp configuration to function properly because the UPNP configuration of common ports, such as 80, 554 and 443, also used by other services, it is almost always blocked by the router.

If you want you can change the external ports (WAN side) proposed by the NVR, by moving the MSI setup to MANUAL and entering the exterior doors of your choice, such as

50000, 50001, 50002. However, it should leave the automatic assignment because that way you are assured to use uncommitted doors by other services and automatic mapping will surely succeed.

A detailed explanation on the subject port mapping is available in the installation manual.

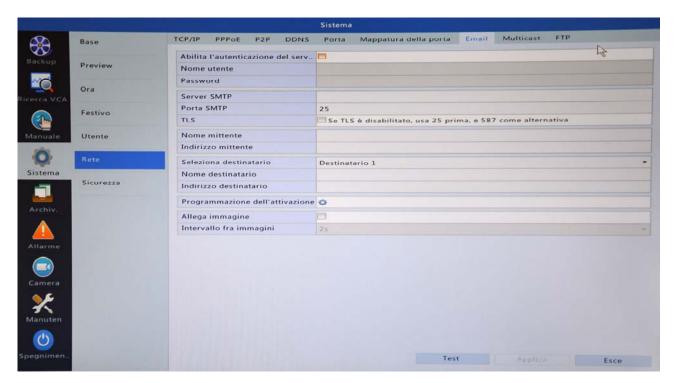
#### Video recorders NVR Series DS

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#### **NETWORK - EMAIL**

In this section we set the information for the alarm sending emails. The data included must be provided by SMTP provider that you choose to use. You can enter the same data you use in your normal email client computer.



ENABLE AUTHENTICATION - Enable if the SMTP server requires authentication for sending emails

USERNAME / PASSWORD - If authentication is required, you can enter the SMTP SERVER credentials - Enter here the name of the SMTP server of your email provider SMTP PORT - Insert here the name of your mail provider's TLS port used - Enable if your provider use the TLS encryption

STATION NAME - Enter the name you want to appear as the sender in the email sent by the NVR SENDER'S ADDRESS - Enter the email address you want to appear as the sender in the email sent by the NVR

SELECT DESTINATION - You can enter up to 6 recipients addresses of the alarm mail RECIPIENT NAME - Enter the name that identifies the selected recipient RECIPIENT'S ADDRESS - Enter the email address of the recipient chosen PROGRAMMING ACTIVATION - In this section you can enable the sending of email to the recipient only at certain times depending on the day of the week. You can set up to eight time slots for each day of the week.

ANNEX PICTURE - Enable if you want to attach your photo of intrusion that caused the alarm

## Video recorders NVR Series DS

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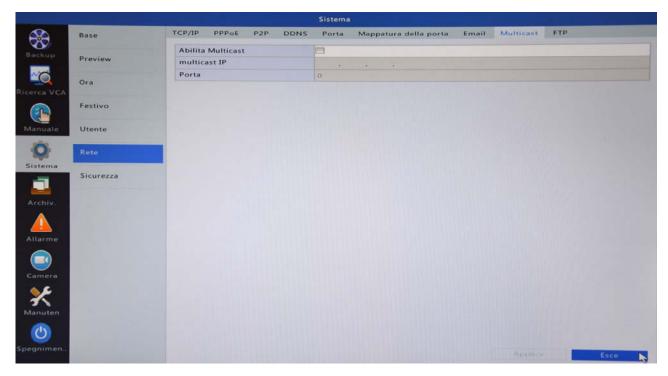
RANGE BETWEEN IMAGES - You can set the time interval between one photo and the next (from 2 to 5 seconds)

Note that for sending emails to be successful it is necessary that in the section ALARMS sending emails is enabled and the click of a snapshot in association with the cause of the alarm (eg motion detection). It should also be sure the DNS server is correctly set in the network parameters.

TEST - After entering all the SMTP parameters, use the TEST button to try sending.

#### **NETWORK - MULTICAST**

In this window you can use the multicast technology to allow a large number of customers to connect to the NVR.



ENABLE MULTICAST - Unlike normal unicast transmission, where the video stream is sent from the NVR directly to the client, in the same multicast video stream is sent to many clients simultaneously. The use of multicast is essential if you want that many clients can simultaneously connect to the NVR. In multicast, the NVR sends the stream to a multicast server (Rendez-vous Point) on which there was the clients who wish to receive streaming video. IP Multicast - Multicast server address PORT - Porta multicast server

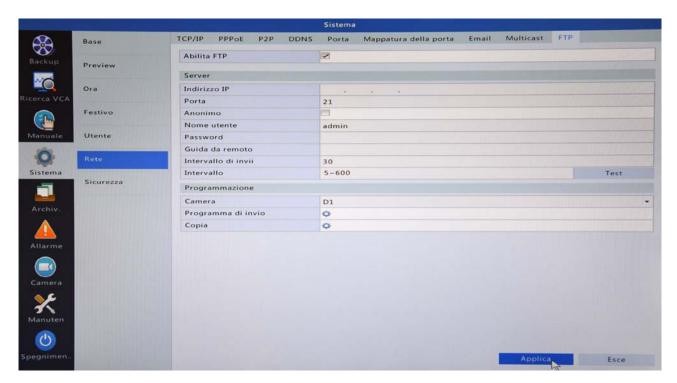
## Video recorders NVR Series DS

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#### **NETWORK - FTP**

In this window you configure the NVR sending images to an FTP server on your local network or the Internet.



FTP ENABLE - Enables sending via FTP. Sending to FTP server is typically used to publish content on web sites, such as application type webcam. IP ADDRESS - FTP server address PORT - Port of FTP servers

ANONYMOUS - Select if provided access without identification USERNAME / PASSWORD -

Access credentials to the FTP server

GUIDE REMOTE - Type the name of the folder in which to save the files to the FTP server. If you do not specify a folder, the NVR will create it automatically.

RANGE OF POST - Waiting time between sending a photo and the next INTERVAL - The sending allowable range is from 5 to 600 seconds

PROGRAMMING - E 'can restrict sending photos via FTP at specific times in the day. For each camera, it is possible to program two time slots for each day of the week on which to send snapshot and in each band is possible to enable the sending only in case of normal recording, alarm, etc. in motion

Video recorders NVR Series DS

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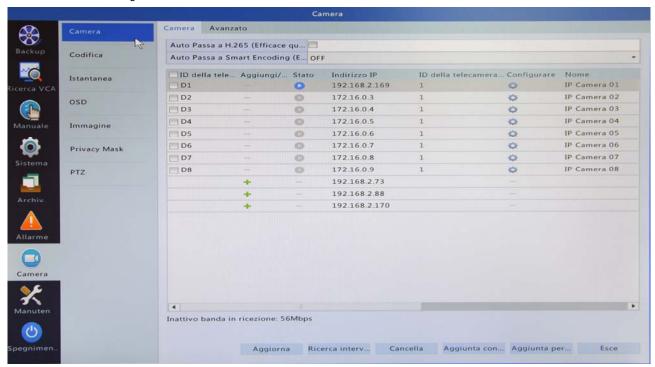
# **OSD - CAMERA**

In CAMERA section includes all the sections that relate to the functioning of NVR channels. The following explains one by one.

#### **ROOM**

This section is for loading IP cameras nell'NVR

The instructions for loading a camera in the NVR can be found in the installation manual



AUTO SWITCH TO H265 - By enabling this option, the NVR will always attempt to pass off the cameras H265 compression if supported by the camera. AUTO SWITCH TO SMART ENCODING - Not used when UPDATE - Repeat the search network IP cameras connected

SEARCH INTERVAL - Defines the network segment on which to look for cameras ADDITION WITH A CLICK - Automatically adds all the cameras detected in LAN ADDING PERSONALIZED - Allows you to add cameras manually.

#### **CAMERA - ADVANCED**

This section contains detailed information about the connected cameras

## Video recorders NVR Series DS

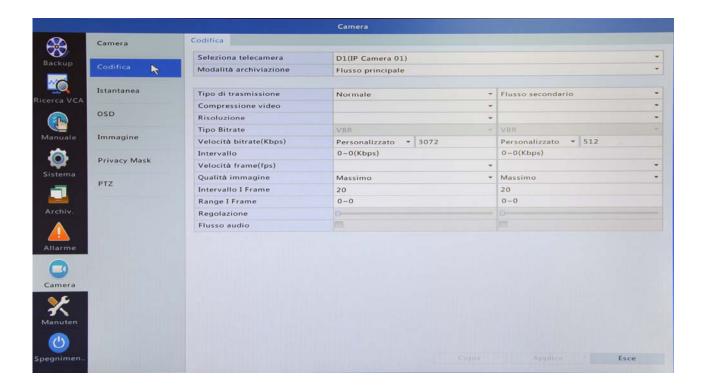
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#### CODE

This section contains, for each cameras, video streaming settings. Note that the device generating the video stream is the camera that normally would agree to change these settings in the camera's configuration with my browser. If the camera allows you can change the camera settings even streaming from NVR, through this window.

Many cameras, also according to their internal configuration, may not allow this operation.



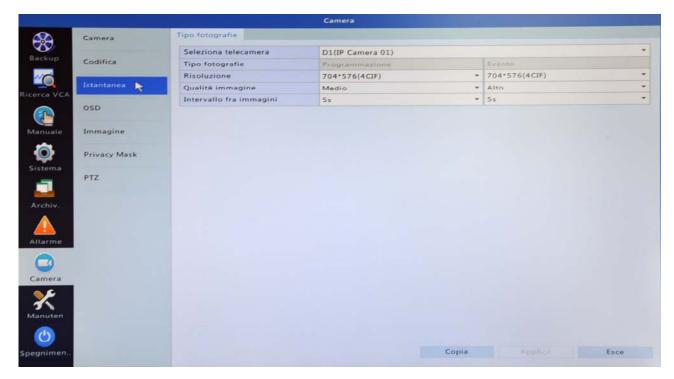
#### **SNAPSHOT**

This section contains the settings of the photographs taken by the NVR. The DS NVR series, in addition to capturing video, can also take pictures in sequence on the basis of a time programmer (programmable in section ARCHIVE)

## Video recorders NVR Series DS

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SELECT CAMERA - you can set different options for the picture to be taken for each camera

PHOTOGRAPHY TYPE - The programming is divided into two columns. You can program different settings depending on whether the photos are taken by normal programming or following event.

RESOLUTION - You can leave the resolution AUTOMATIC, which maintains the original resolution of the video, or force a lower resolution.

QUALITY 'PICTURE - Adjusts compression of the image file

RANGE BETWEEN IMAGES - The NVRs can store images continuously on the basis of archive programming. Here it is possible to set the interval between two consecutive shots (from 5 sec to 24 hours)

#### OSD

This section is expected to enter the overlays in the video in case of future integration of analog cameras in this range VCRs. In the IP camera overlays the date, time, name etc. you configure the individual cameras.

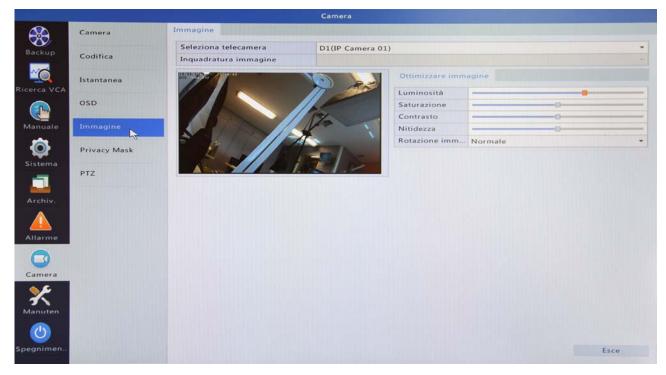
#### **IMAGE**

This section lets you adjust the view of the screen cameras

## Video recorders NVR Series DS







For each camera, it is possible to adjust the Brightness, Saturation, Contrast, and Sharpness. E0 also provided the image rotation if it is supported by the camera.

Note that for a more refined adjustment of the image from the camera can intervene in the internal settings of the camera according to the manufacturer's directions.

#### **PRIVACY MASK**

This window is used to apply masking of sensitive areas to protect privacy. Few cameras NVR enable this setting. For this reason it is recommended to set the privacy mask in the camera's internal configuration by following the manufacturer's directions.

#### PTZ

This window is used to set the main functions of the motorized cameras as a preset and tour (patrols). Remember that in motorized IP cameras, unlike analog, no need to set any control protocol as the PTZ controls are included in the ONVIF protocol.

## Video recorders NVR Series DS

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With the controls on the left panel is positioned at the camera. In the table on the right you save and recall the various presets (1 to 256). You can also store tour between presets (maximum 4) by adding the various preset with the + button and using the PLAY and STOP buttons to display the sequence.

It is recalled that for a more refined PTZ automatic movements is possible in the internal settings of the cameras according to the manufacturer's directions.

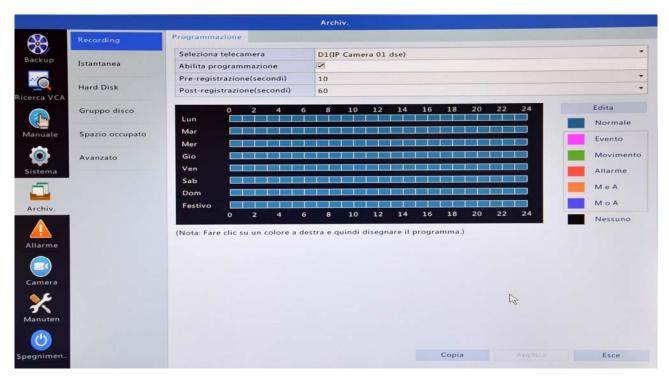


## **OSD - ARCHIVE**

In ARCHIVE section you set up the NVR registration rules.

#### **RECORDING**

In this section you set the rules for video recording. The factory setting provides recording of all channels continuously 24 hours 24.



SELECT CAMERA - The recording can be configured differently on each channel. If you complete the configuration of a channel and want to use it for other channels, use the COPY button

PROGRAMMING SKILLS - This check is used to activate and suspend the scheduled recording with a click

PRE-REGISTRATION / POST-REGISTRATION - If you use registration following technical events, motion detection or alarm input Here you can set a time that will be recorded before and after the event. It is a function that is used to avoid losing images before and after the event that may be relevant.

PROGRAMMING TABLE - The table shows 24 hours a day and 7 days a week

+ FESTIVE a period that you can customize in the DVR calendar as already explained. Choose the right one of the available colors and color the table with your mouse as you like. The colors correspond to different recording modes in accordance with the following description:

#### Video recorders NVR Series DS



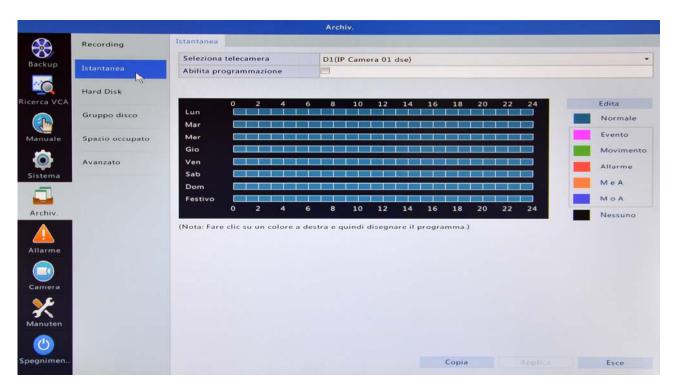


NORMAL - Continuous Recording

EVENT - Registration in case of anomaly of NVR MOVEMENT - only Registration in case of ALARM motion detection - Recording only in case of activated alarm input (if available) M and A - Registration in case of motion detection and M simultaneous input activation or A - registration in the event of motion detection or input activation NONE - No registration

#### **SNAPSHOT**

This range of NVR, as well as record video, you can also take individual photos. The resolution and frame rate of the picture is set in CAMERA section. In this section you set the rules for registration of individual frames.



SELECT CAMERA - The recording can be configured differently on each channel. If you complete the configuration of a channel and want to use it for other channels, use the COPY button

PROGRAMMING SKILLS - This check is used to activate and suspend the scheduled recording with a click

TABLE PROGRAMMING - The schedule box for taking pictures is configured as described above for video recording.

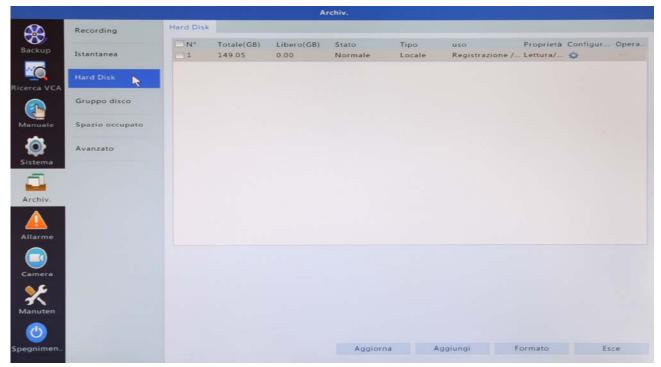
#### Video recorders NVR Series DS

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#### **HARD DISK**

In this section will control the hard disk mounted within the NVR.



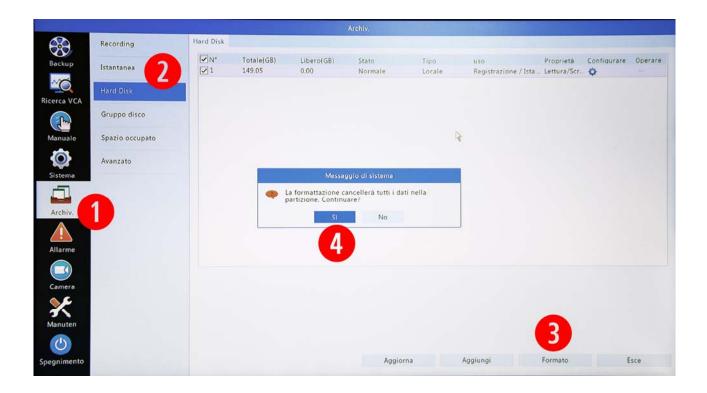
The table shows a list of all hard disk installed inside the NVR, as explained in the installation manual. If you have installed a hard disk and can not find in this table check its functionality and links. Check also having powered the NVR with the power supply, as an insufficient power supply may not be able to operate the hard disk.

The main task that you can do in this section is the FORMAT disk that allows the NVR to use it as an archive. The disc, even if properly installed, can not be used by the NVR before doing formatting. To format a new hard disk select it and press FORMAT

#### Video recorders NVR Series DS

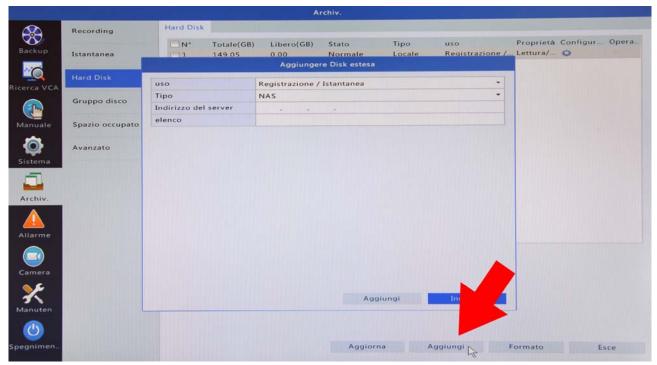
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#### **EXTERNAL HARD DISK**

In the Hard Disk Folder is an ADD button that allows you to connect external NAS



USE - you 'can connect a NAS to store videos and photos as if it were an Additional Hard Disk (Record / Snapshot) or as a backup of the internal hard disk (backup) TYPE - Available NAS. NAS (Network Attached Storage) hard drives are installed in the network

## Video recorders NVR Series DS

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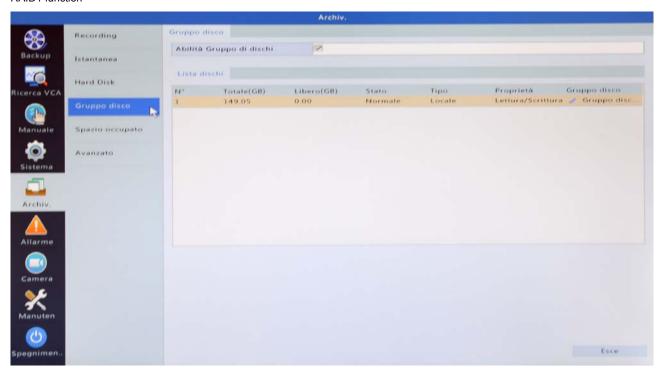


that act as storage for applications and external devices. SERVER ADDRESS - IP address of the NAS

LIST - Enter here the name of the folder in which to store the data within the NAS.

#### **DISC GROUP**

The NVR DN series that can install them to more than one internal hard disk allow you to use disks as groups of disks (Disk Array) with RAID1 function



ABILITY TO DRIVE UNIT - Enable the RAID function (requires at least two hard disks)

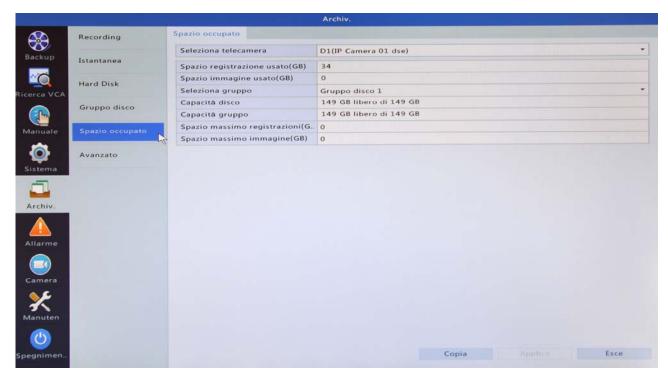
### **BUSY AREA**

Here it is possible to distribute the disc space between the various cameras

#### Video recorders NVR Series DS

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SELECT CAMERA - E 'possible to reserve a different disk management for each channel SPACE USED - These two fields show the disk space occupied by the selected camera to record video and photo images.

GROUP SELECT - If in the NVR are installed more Hard Disk grouped into 2 or more groups it is possible to assign the camera to a specific group

CAPACITY 'DISC / GROUP - Indicates the available capacity in the Hard Disk MAX RECORDING SPACE - AND' can limit the disk space available for the camera selected by entering the value in GB (separate for video recordings and images)

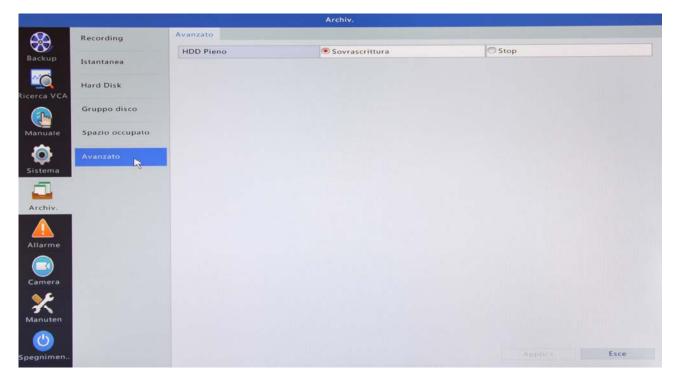
#### **ADVANCED**

This section contains only one data

## Video recorders NVR Series DS

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HDD FULL - This parameter defines how it should behave the NVR once run out of hard disk space. You can choose from STOP (stop recording) and OVERWRITE to continue recording over the oldest files. Overwriting is the default option.

NOTE - The video archive limitation in number of days required by privacy laws, not programmed in this section but in the MAINTENANCE section.

Video recorders NVR Series DS

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# **OSD - ALARM**

In ALARM section are set detections NVR and the consequent alarm actions. For each alarm detection are always present two soft boxes that are the same for all alarm events: SHARE OF SWITCHING and PROGRAMMING ACTIVATION

#### **SWITCHING SHARES**

For each alarm detection NVR you can be associated with the actions

Azioni di commutazione									
Cicalino Invia Email			1						
Finestra Pop	-up		]						
Recording	Goto preset	Preview	Uscita	dell'allarme	Istantan	ea			
Tutti		□ D2 □ D10	□ D3 □ D11	□ D4	□ D5	□ D6	□ D7	□ D8	

BUZZER - Activate the buzzer embedded in the NVR SEND E-MAIL - Enables sending emails to the settings

POP-UP WINDOW - Brings up a screen describing the camera screen window that triggered the alarm

RECORDING - E 'can start recording the selected cameras GO TO PRESET - E' can recall a preset of a motorized camera PREVIEW - E 'can show on the screen the selected cameras during the EXIT ALARM Alarm - E' can activate 'alarm output if the NVR will have INSTANT - E' can take pictures during the alarm with the expected frequency

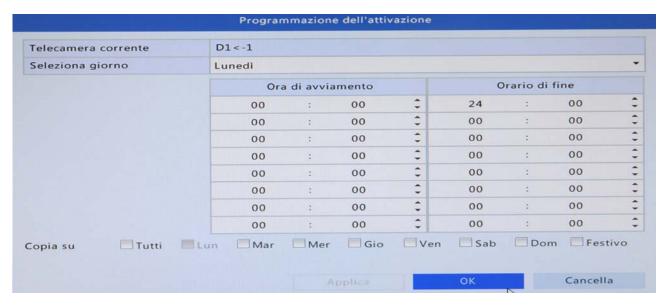
### **ACTIVATION PROGRAMMING**

Each detection NVR can be enabled only in specific time slots

Video recorders NVR Series DS

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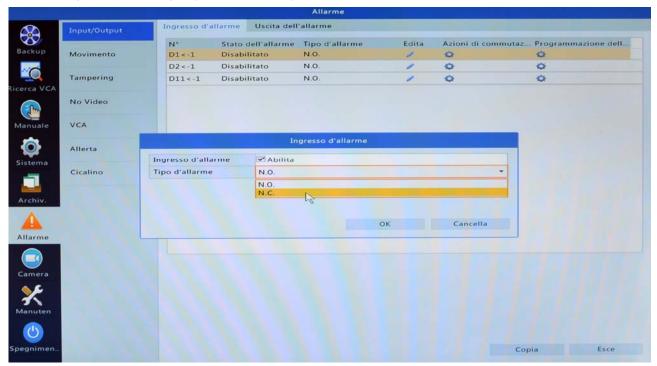




You can set up to eight times bands for each day that enable detection

#### **INPUT / OUTPUT**

In this section you set the alarm inputs (if available nell'NVR)



EDIT - Click this icon to open the window where you can set the alarm input operation: Normally Open (NO) or normally closed (NC)

## INPUT / OUTPUT - ALARM OUTPUT

In this section, you can program the alarm outputs in the same way as done for the inputs.

## Video recorders NVR Series DS

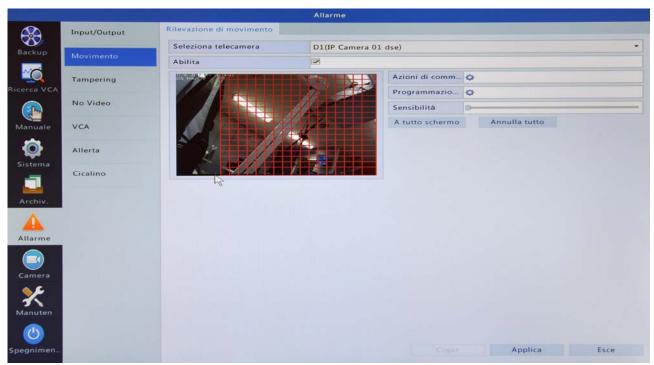
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E 'can set operation NO / NC and define the duration of the activation of 5 to 3600 seconds.

#### **MOVEMENT**

This section sets the motion detection or motion detection



For each camera, it is possible to select the detection zone. By default the entire image is enabled. E 'can erase the red boxes in areas where it wants to avoid detection. E 'can also adjust the SENSITIVITY' of the survey.

#### tampering

This section is currently not active

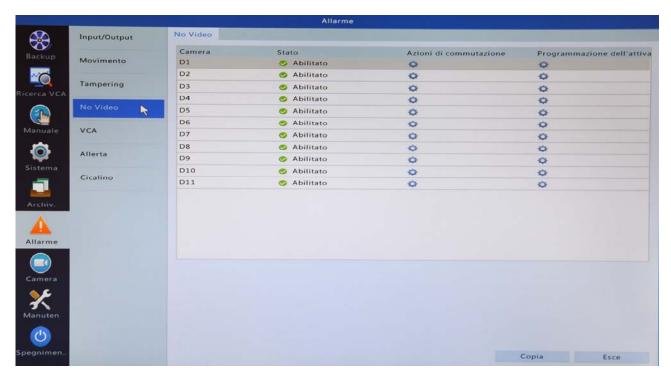
#### **NO VIDEO**

This alarm is generated in case of video loss

## Video recorders NVR Series DS

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There are no adjustments if you do not enable and the usual actions and time schedules

#### VCA

This section is currently not active

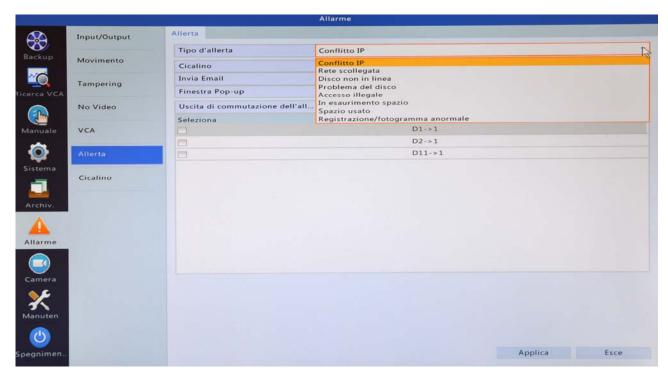
#### **ALERT**

This section contains technical alarms

## Video recorders NVR Series DS

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The NVR can generate alarms due to the following technical factors:

- IP Conflict detected in the network
- Loss of the NVR network connection
- Disk not recognized
- disk Error
- Attempt to login with incorrect credentials
- Disk space running out
- Registration Problems

For each technical event you can program the following options:

- Buzzer (beeper)
- Sending E-mail
- Alarm cameras in full screen
- Alarm output activation

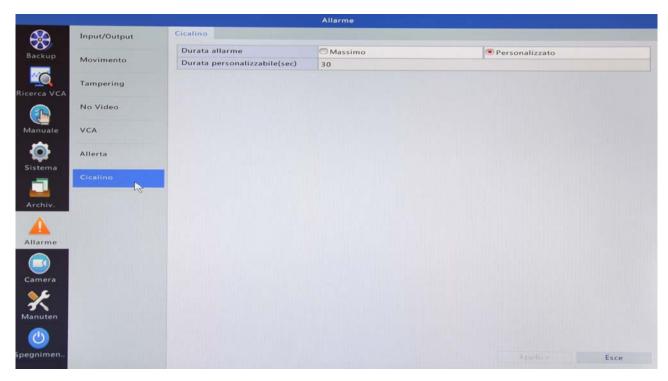
#### **BUZZER**

This section of the internal buzzer NVR program

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You can define whether the buzzer should be activated for the entire duration of the alarm (MAX) or for a defined period (CUSTOM), from 1 to 600 seconds.

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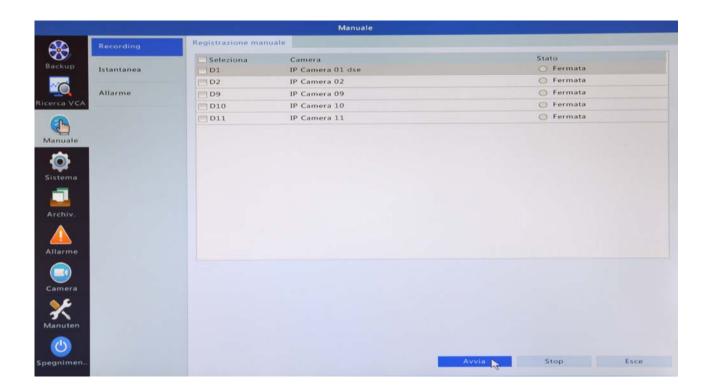


# **OSD - MANUAL**

In this section, you can start and stop all the NVR functions that provide for an operator's manual command. Typically the security video recorders operate on the basis of its own automatic programmer, but these NVRs also allow various manual functions to meet special needs.

#### RECORDING

E 'can start and stop manual recording with START and STOP buttons. Manual recording is used for non-safety applications where you want to control logging in need. E 'can also start manual recording from the live view as described above.



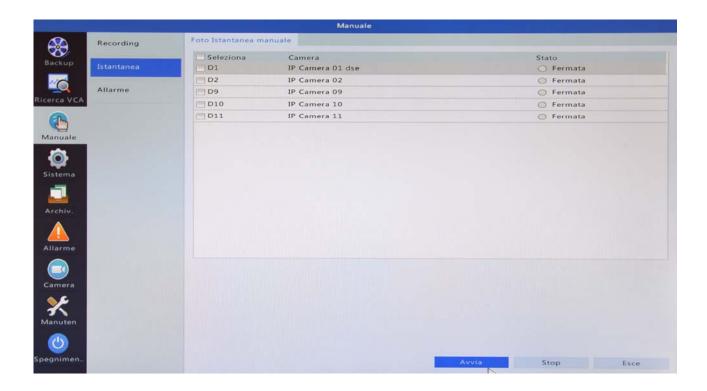
#### **SNAPSHOT**

E 'you can manually start taking photographs at a rate that is set in the CAMERA section. Select the camera and press START / STOP

## Video recorders NVR Series DS

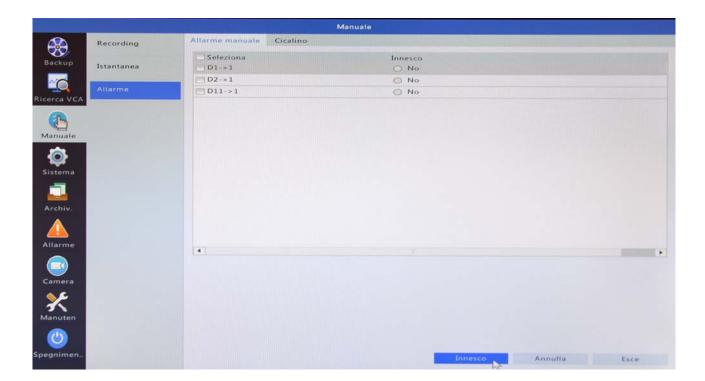
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#### ALARM

And 'possible to manually activate the alarm outputs, if available in the NVR. You use the TRIGGER / CANCEL buttons.



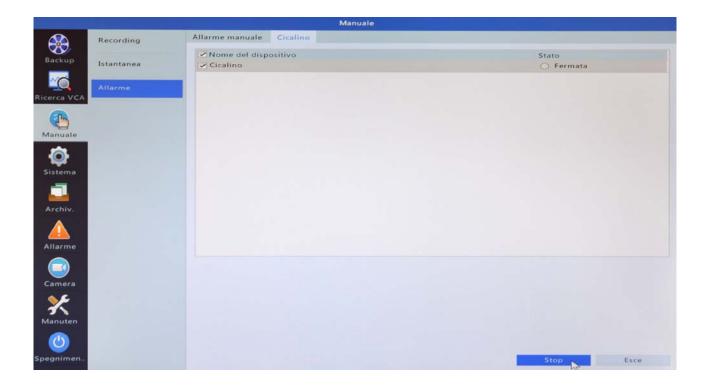
ALLARME- - BUZZER

## Video recorders NVR Series DS

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And 'possible to manually stop the buzzer of the NVR with the STOP button before it stops normally according to schedule.



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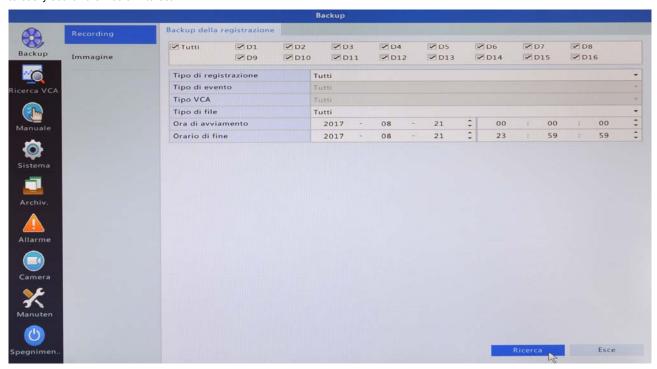


# **OSD - BACKUP**

This section is used to export video files and photos on external storage media such as USB flash drives or external USB HDD.

The section is divided into two folders: RECORDING, to export the video and IMAGE to export photos. They work both in the same way.

To back up the files necessary to connect a USB memory, such as a memory stick into the USB port of the NVR. The window allows you to easily search the files of interest.



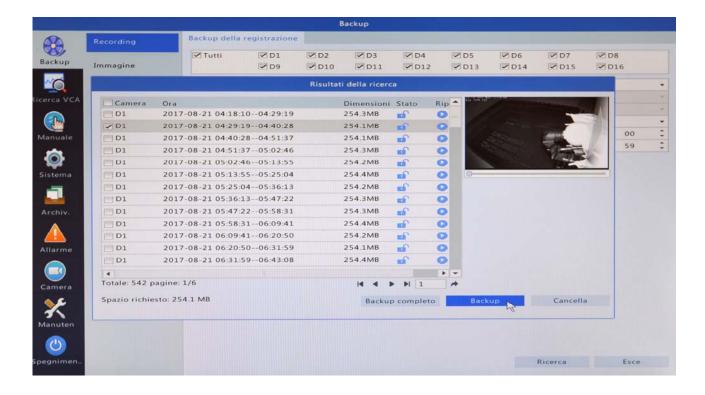
CHANNELS - Choose the camera or cameras to be searched TYPE OF RECORDING - You can limit your search to a specific type of recording, choosing between: Normal Recording, Manual Recording, and Event Recording. TYPE OF EVENT - If you chose in the previous box event, here you can specify the event to search (motion, external alarm) TYPE VCA - Not available

FILE TYPE - You can search for only locked files (protected against overwriting) or only unlocked. The files are locked in the PLAYBACK section. NOW - It defines the research period

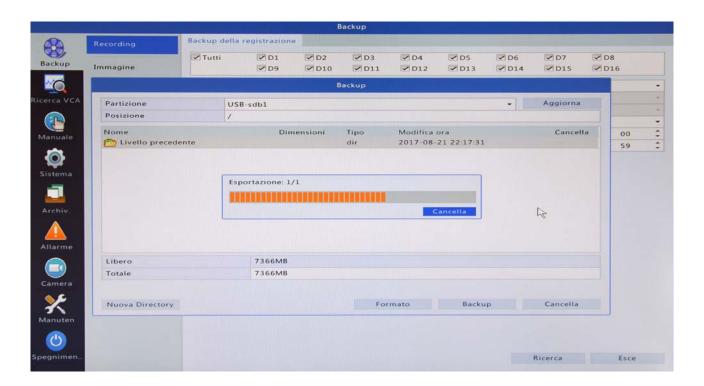
#### Video recorders NVR Series DS

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To copy the files to the external memory choose the files you care about and press the BACKUP button. You can watch a preview with the play button next to the file.



DIVISION - Here you can find the storage device you have connected to the NVR

## Video recorders NVR Series DS

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POSITION - Define where to save the files. Leaving the / symbol will be saved in the root folder

NEW DIRECTORY - You can create a new folder in the memory

FORMAT - For safety reasons you should always perform a memory unit formatting before you start the backup BACKUP - Start saving

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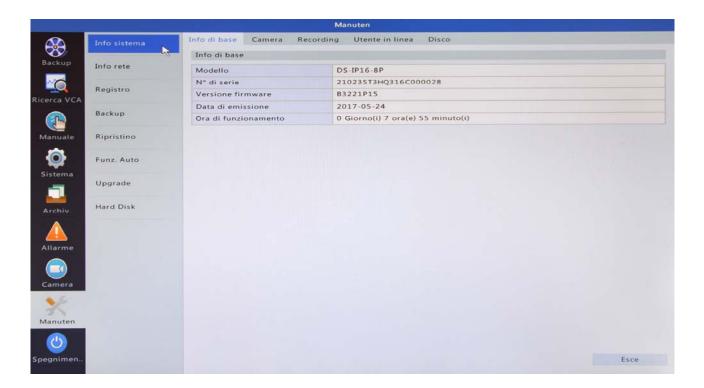


# **OSD - MAINTENANCE**

This section includes different technical functions for the management of NVR

#### **ABOUT SYSTEM**

This section shows all the NVR information divided into sections: BASIC ROOMS, RECORDING, USERS ONLINE, DISCO



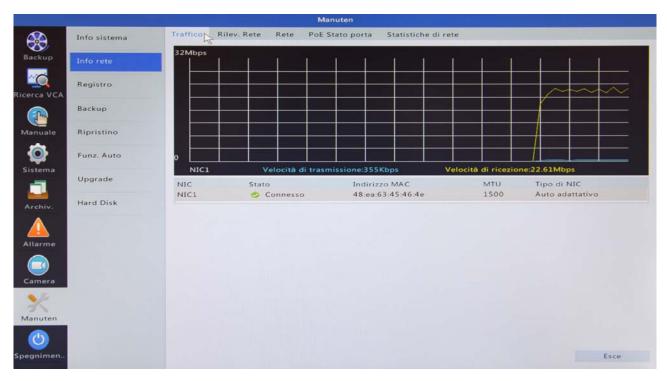
#### ABOUT NETWORK

This section shows information about the network status

## Video recorders NVR Series DS

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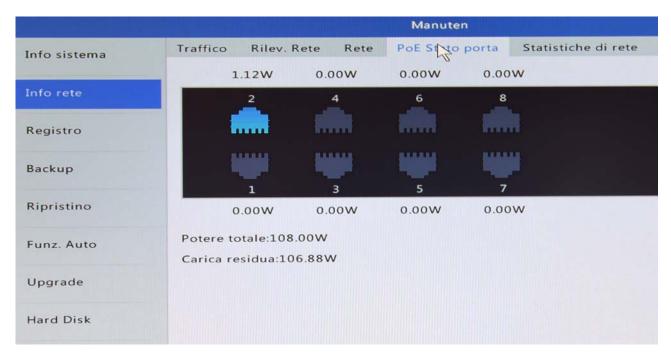




 ${\sf TRAFFIC-Graphic\ display\ of\ TO\ SENSE\ network\ traffic.\ NETWORK-This\ folder\ allows\ you\ to\ test}$ 

the network interface NETWORK - Summarize all of the NVR network settings

POE - Show the absorption of individual POE cameras and also the total power available and remaining POE



NETWORK STATISTICS - indicates that bandwidth is available, and the network interface.

## Video recorders NVR Series DS

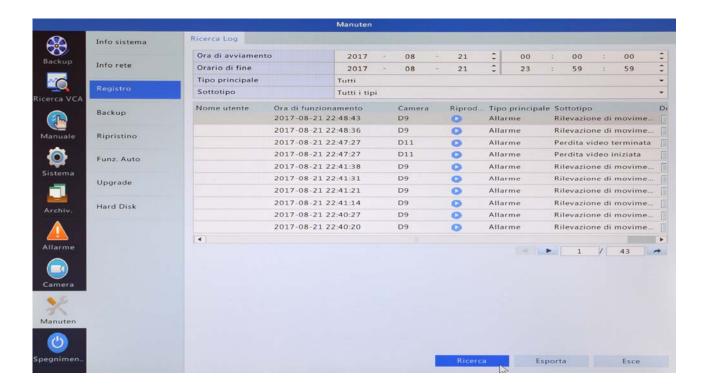
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#### **REGISTER**

This section contains the memory of the events NVR.

You can search all events or specific types. Press SEARCH to search for and EXPORT to export the details to memory stick.



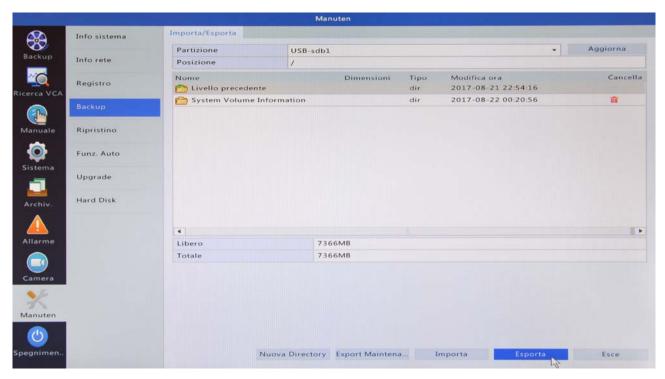
#### BACKUP

This section allows to export on USB stick the configuration of the NVR. This is a convenient feature for installers who need to configure a large number of NVR and can save a standard configuration to customize each time.

## Video recorders NVR Series DS

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EXPORT - Press to export the configuration of the NVR in an XML file IMPORT - Press to import a previously saved configuration EXPORT MAINTENANCE - Exports a TGZ file that contains all of the NVR log for anomalies

## RESTORATION



DEFAULT - Restore the factory configuration of the NVR while keeping settings

## Video recorders NVR Series DS

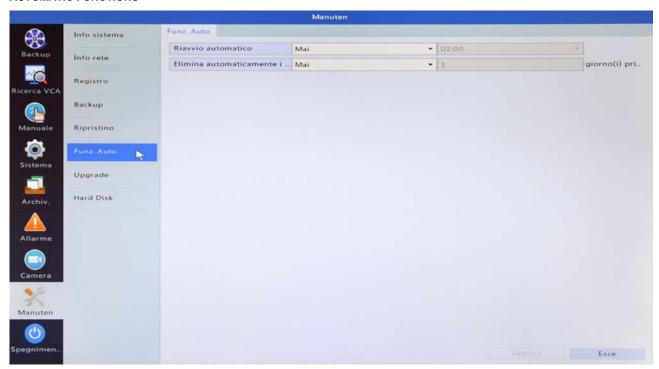
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network and user settings.

DEFAULT SETTINGS - Restore the NVR to its total factory configuration

#### **AUTOMATIC FUNCTIONS**



AUTO RESTART - E 'can set the periodic automatic restart of NVR DELETE AUTOMATICALLY - It' can automatically delete files recorded after a certain period to avoid historical excessive in relation to privacy regulations. E 'can set the maximum file size of 1 to 240 days.

### **UPGRADE**

This section is used to update the NVR firmware on the advice of our technical department.

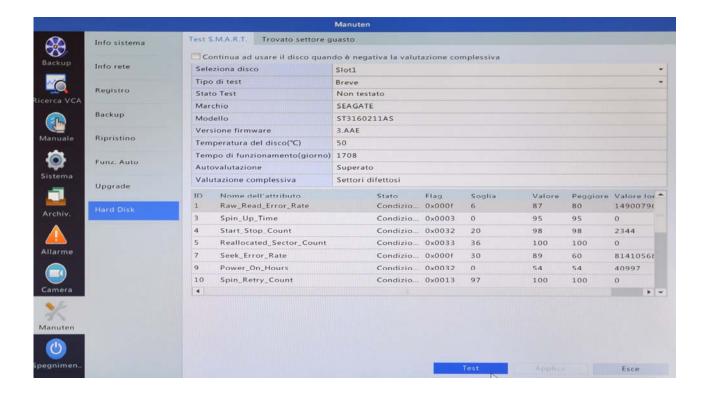
#### HARD DISK

This section contain very detailed information on Hard Drives, useful to detect possible anomalies

#### Video recorders NVR Series DS

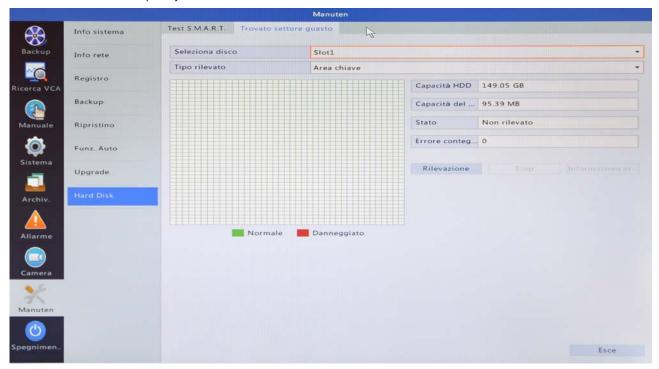
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#### HARD DISK - SECTOR BREAKDOWN

This section allows to test the hard disk by detecting any bad sectors pressing the RECORD key. This is a useful feature to figure out whether it makes sense to replace your hard disk.



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# **OSD - SEARCH VCA**

This section is not active at the moment

# **OSD - OFF**

This section allows you to turn off the NVR to restart and exit the LOGIN requesting a new password to access the NVR