

## Video recorders DX Series

AHD DVR cameras, analog, IP



### Operative manual

### for the installer and for the user

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



## Contents of this handbook

The DX series VCRs range is designed to allow the management and the recording of CCTV cameras AHD technology, traditional analog and IP. It is assumed that the DVR has been connected correctly according to the installation instructions. For convenience it will refer to commands by using the mouse.

## Switching on the DVR

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, the DVR will start automatically.

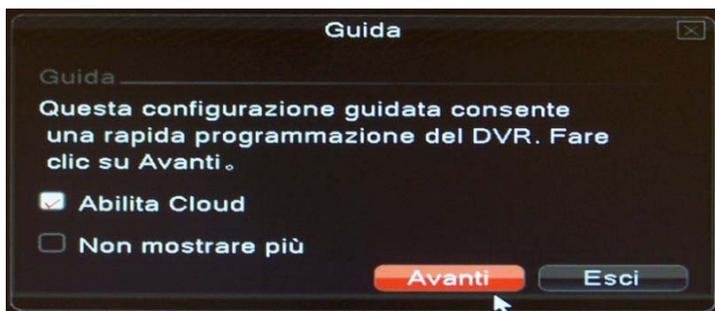
## Configuration Wizard (wizard)

At the first start the DVR offers a wizard to enable the connection to the server CLOUD and quickly configure any IP cameras.

It is, however, also it CARRIED operations directly in the DVR configurations as will be explained later.

The setup wizard is proposed at every start until you select "DO NOT SHOW MORE "

If necessary, you can always reopen the wizard with the button on the taskbar

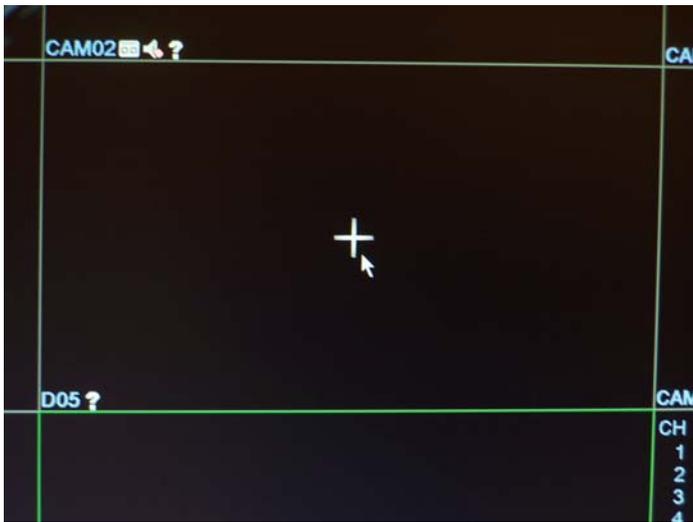


Enable cloud server is always recommended to facilitate web access operations.

### CONFIGURATION IP CAMERAS

The second step of the wizard only occurs if you have chosen, in the multi-technology options (see below), a combination of inputs providing for the management of IP cameras and allows you to match the network cameras to the DVR channels. ATTENTION: The "intelligent" configuration proposed by the wizard is not active on these. Choose SETUP MANUAL.

The configuration dialog can also be called simply by clicking on a black box to a non-configured IP camera.



**Guidata**

4	Nome dispositivo	Info dispositivo	Indirizzo IP	Porta	Tutti
1	ONVIF	IPC_M25WR-FS2	192.168.2.198	80	<input type="button" value="Cerca"/> <input type="button" value="Aggiungi"/> <input type="button" value="Rete"/> <input type="button" value="Quick Set"/>
2	ONVIF		192.168.2.207	80	
3	ONVIF		192.168.2.130	80	
4	ONVIF		192.168.2.220	80	

8	Tipo dispositivo	Indirizzo IP	Stato connessione	Canale re	Elimina
1	-	-	-	-	<input type="button" value="Elimina"/>  <input type="button" value="Copia in"/>
2	-	-	-	-	
3	-	-	-	-	
4	-	-	-	-	
5	IPC	192.168.2.199	Offline	1	<input type="button" value="Elimina"/>  <input type="button" value="Copia in"/>
6	IPC-Multicast	192.168.2.207	Collegato	1	
7	IPC		Non configurato	1	

Tipo dispositivo:

Canale remoto:

Indirizzo dispositivo:

Porta:

Nome utente:

Protocollo:

Stream:

Password:

The search window and IP camera setup consists of two sections. The upper part is used to list the available cameras on the network, while the lower part is the DVR channels



To the right are the control buttons. At the top you can choose the communication protocol: you can leave all or specify the ONVIF standard protocol that is supported by this DVR / NVR. Press the Search button to search all onvif camera devices that can be listed in the left window.

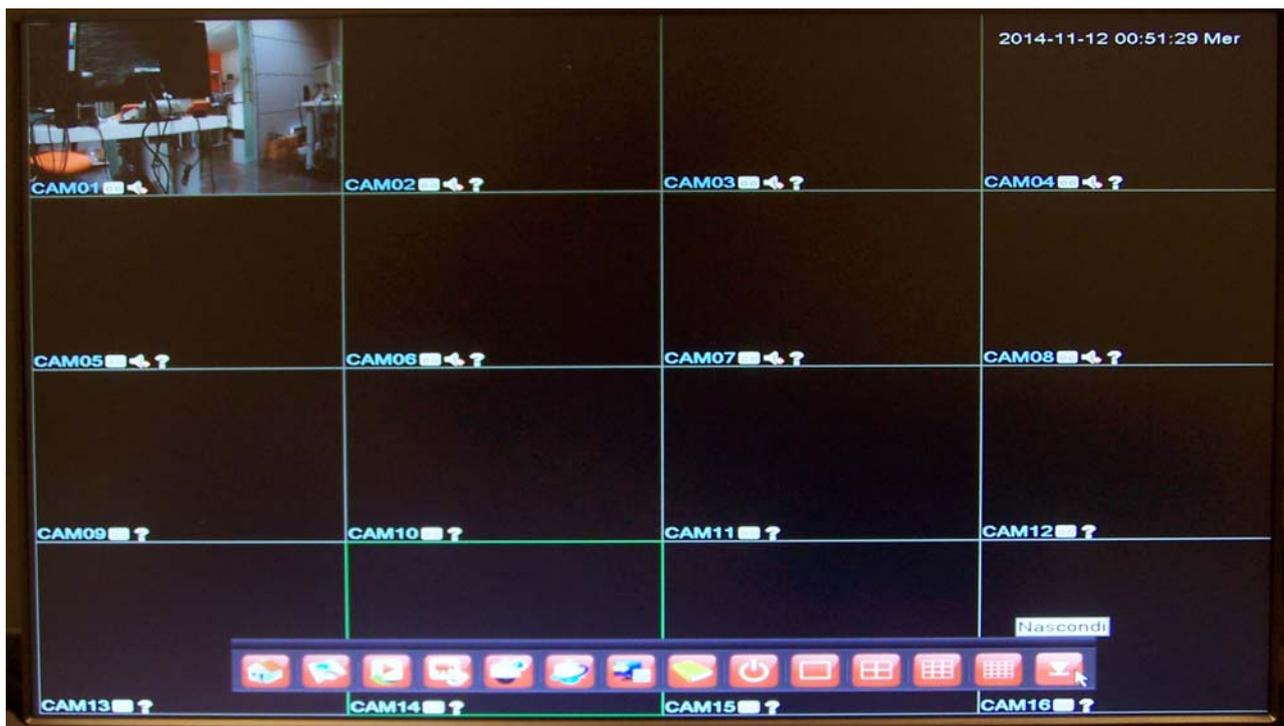
In the lower window shows all channels on the DVR. Only those marked with IPC will accept the connection of IP cameras while others are reserved for local cameras. Choose one of the IPC DVR canli the bottom window and a network camera from the upper window. Double click or press ADD. The camera will be connected to the selected channel and its data will appear in the fields below in the window. As a rule, the DVR is able to set itself consistently all the connection data, but you can edit them manually. In particular you may need to modify the video stream to be used (if the camera will support more than one) and enter your log in credentials.

Clicking APPLY the configuration will be saved. E 'can move a camera between the digital channels of the NVR with the up / down arrows and delete it with the DELETE button. The second DELETE button clears all channels configured to start the configuration. If you want you can quickly load all the cameras in free online channels of DVR QUICK SET button and then make any changes.

With the COPY button, you can copy some data on all cameras without having to manually set (typically useful for setting user name and password). The configuration of the cameras takes effect after you press the APPLY button.

## Log-in

After starting the DVR presents the subdivision screen 4/8/16 quadrants depending on the version



Clicking with the right mouse button you can appear and disappear TASKBAR with buttons at the bottom of the screen



The DVR control is password protected to prevent unauthorized access. To log-in click of a command button in the taskbar any



The DVR factory credentials

# CONFIGURATION MANUAL

Video recorders DX Series



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**USERNAME: admin PASSWORD: Leave  
blank**

E 'can customize password and user name in the user configuration.

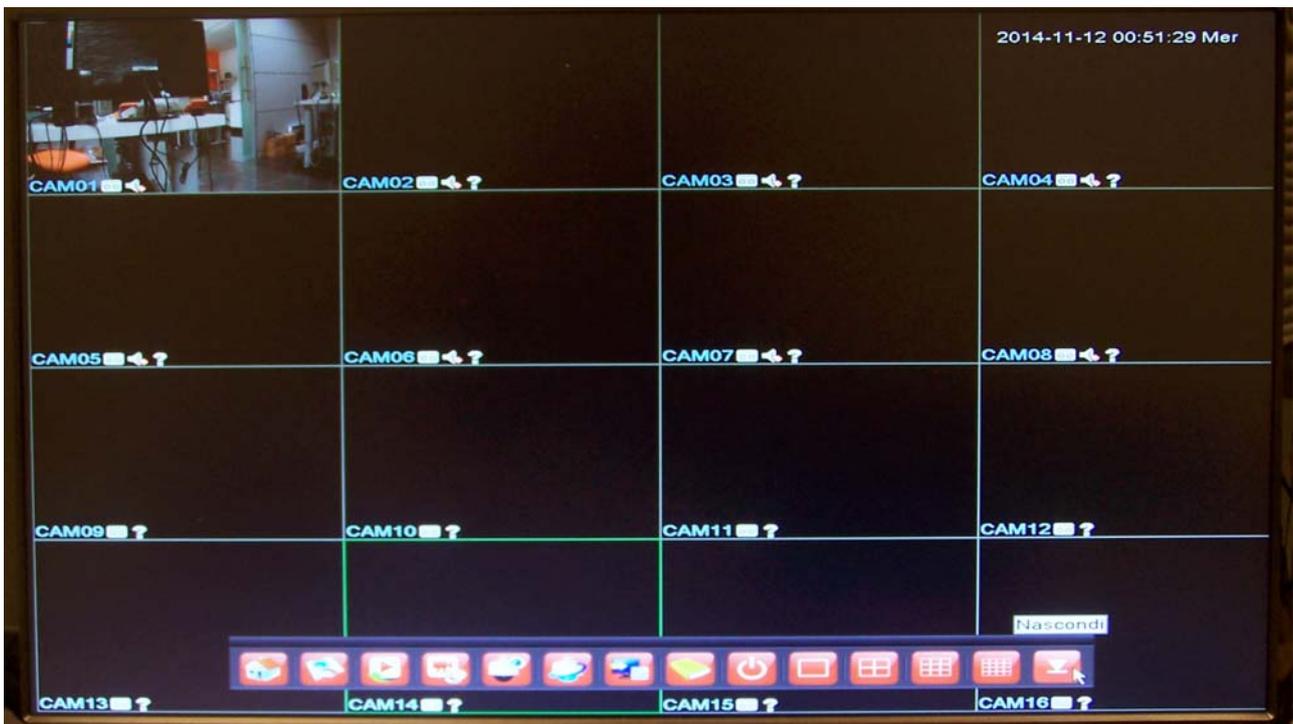
If you enter incorrect credentials 3 times the DVR beeps. After 5 times the DVR hangs and no longer accepts commands before 30 minutes have passed or that a restart takes place

If you lose your password please contact our customer service.

## Checking the DVR for viewing live

This section of the manual describes how to use the controls on the DVR in the LIVE Vision.

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



If at this stage the camera images do not appear in the boxes to check connections and power supplies to check the video signal presence. Refer to the installation manual.

### TASKBAR

Clicking with the right mouse button you can appear and disappear TASKBAR with the buttons at the bottom of the screen.



With the exception of the 3 leftmost OSD buttons, and PLAYBACK GUIDE which will be described later, all the remaining buttons relate to live view and are described in this chapter.



### ICONS OF CHANNEL STATE

Each camera pane shows the overlays provided in configuration and some icons that reveal the input status as per the following table

<b>Icon</b>					
<b>Description</b>	Video offline or absent	Recording in progress	Blindness camera in progress	Motion detection activated	Audio playback

### MULTIVISION CONTROL

To bring a camera full screen just double click on it. With a new double click to return to the multiple vision. You can select different screen layout options with the right-most button in the taskbar.



### DIGITAL ZOOM

The DVR DH series are equipped with a very advanced zoom function that allows you to easily zoom in the particular interest in both live viewing and playback. The digital zoom function works only in full screen view of a single camera. To zoom drag the mouse in the camera frame to fit around a particular interest. Then just click on the track pane. To turn off the display double click again.

### ACTIVATE AUDIO

The default audio playback of the individual channels is disabled. To unmute, click the icon of the channel speaker



### PTZ CONTROL

To control a motorized camera must first set the control parameters in the configuration menu (see below).

To enable auditing, click the PTZ button in the taskbar



It opens the control panel for motorized cameras speed dome



- CHANNEL - You should select the camera to be controlled
- SPEED - La 1 to 8 of the speed control allows you to choose the speed of movement.
- DIRECTION ARROWS - Used to move the camera in all directions
- ZOOM / FOCUS / IRIS - Lens Remote control
- SETTINGS - Accesses the PRESET / TOUR / PATTERN control window that allows you to schedule automatic camera movements.

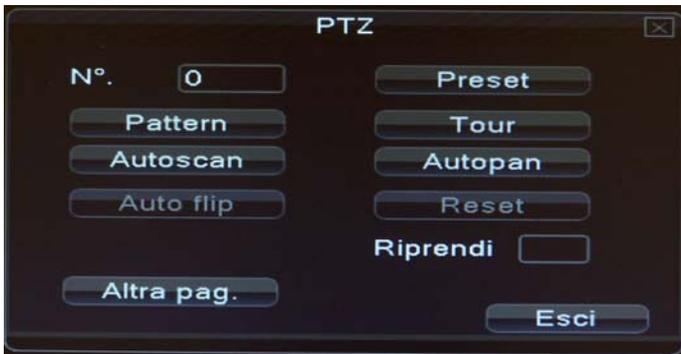
The setting of these functions may not be effective due to the imperfect homogeneity of the protocols, it is always better to set these movements in the camera setup menu.

- PTZ MOUSE - Activate the control of the camera movements acting directly on the image with the mouse. It is a type of very intuitive and direct command that allows it to move in one direction simply by clicking on the corresponding image edge. You can also zoom with the mouse wheel. The command of the PTZ with the mouse makes it possible to avoid the superimposition of the control mask.

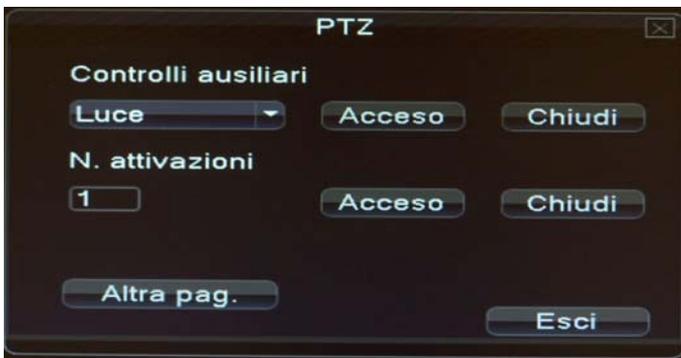
Note that the command of the PTZ with the mouse can also be activated with the MOUSE PTZ button in the taskbar



With the OTHER button PAG. PTZ control browsing other pages.



This page allows you to start automatic movements of the cameras as presets, patterns, tours etc.



This page allows you to activate auxiliary controls such as wiper.

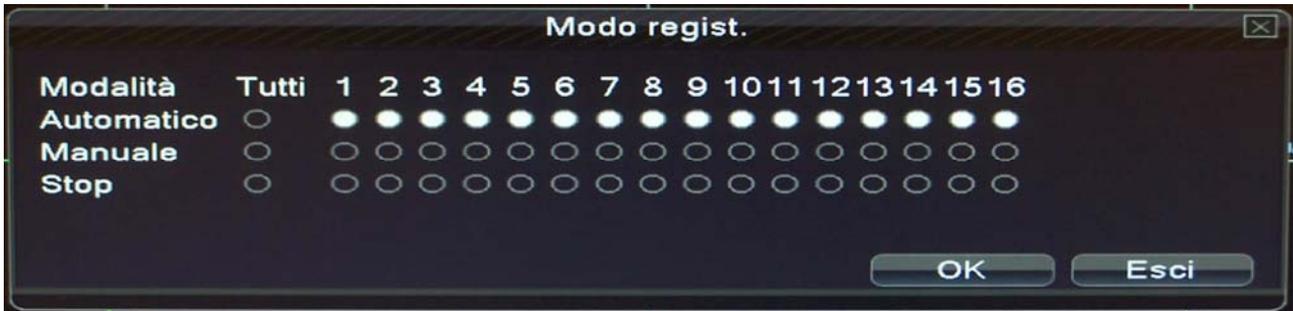
Note that due to the non-absolute consistency across all versions of the control protocols is possible that some of these advanced commands, relating to tour, patterns etc. not be effective on your camera. E 'can use attachment system presets to call these functions. Refer to the camera manual.

### CONTROL MANUAL RECORDING

As a rule, surveillance DVR recording based on time settings that are programmed into the device configuration. In abnormal situations, however, it may be

You must manually start the registration regardless of pre-configured settings. To do this there is a button in the taskbar.

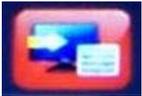




For each channel you can define whether to register on the basis of automatic settings, or start manual forced recording, or even stop recording forcibly.

### ADJUSTMENTS VIDEO

The VIDEO button on the taskbar serves to better adjust the screen image



In the upper section adjusts the size of the screen and in the bottom section of the rendered image.

### IMAGE ADJUSTMENTS

The COLOR button in the task bar is used to adjust the image rendering of the individual channels Select the channel and press





And 'possible to adjust the image parameters and set if desired two daily time slots with different settings (eg. Day / night)

### INFORMATION

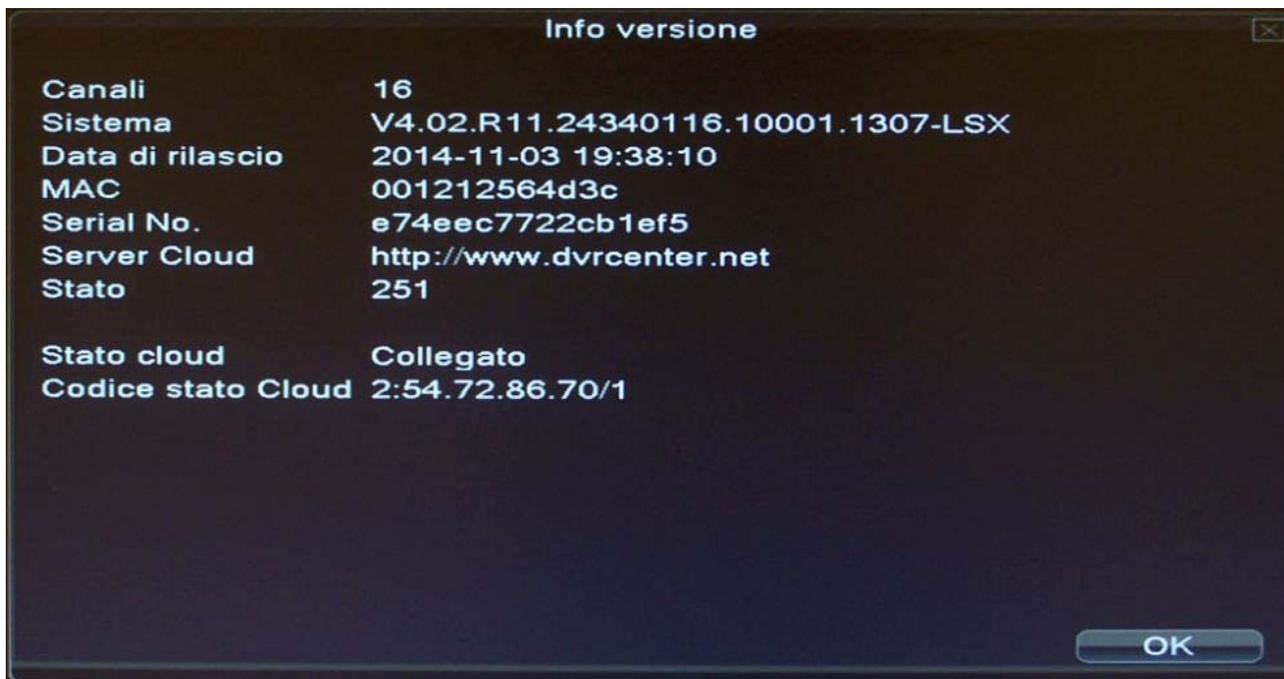
The INFORMATION button on the taskbar is used to check the DVR status.



There are five information panels:

- ABOUT VERSION
- Disk Information
- BPS
- LOG EVENTS
- USERS ON-LINE

The panels are shown below:



ABOUT VERSION provides information on the DVR provided. Of particular relevance in this window are the cloud server address that the DVR and the serial number (SERIAL No.) that are not visible elsewhere in the programming of the DVR, and that should be used in the use of cloud servers as explained in the installation manual.



DISC INFO contains the information on the hard disks connected within the DVR with the ability



Total and remaining. Administrative commands are explained later in the HDD configuration.

Bps					
Canale	Kb/S	MB/H	Canale	Kb/S	MB/H
1	2410	833	9	22	7
2	22	7	10	21	7
3	2496	836	11	16	5
4	23	8	12	16	5
5	22	7	13	16	5
6	23	8	14	16	5
7	22	7	15	16	5
8	22	7	16	16	5

Esci

BPS real-time displays the bit rate of each channel operated by DVR

Tipo:

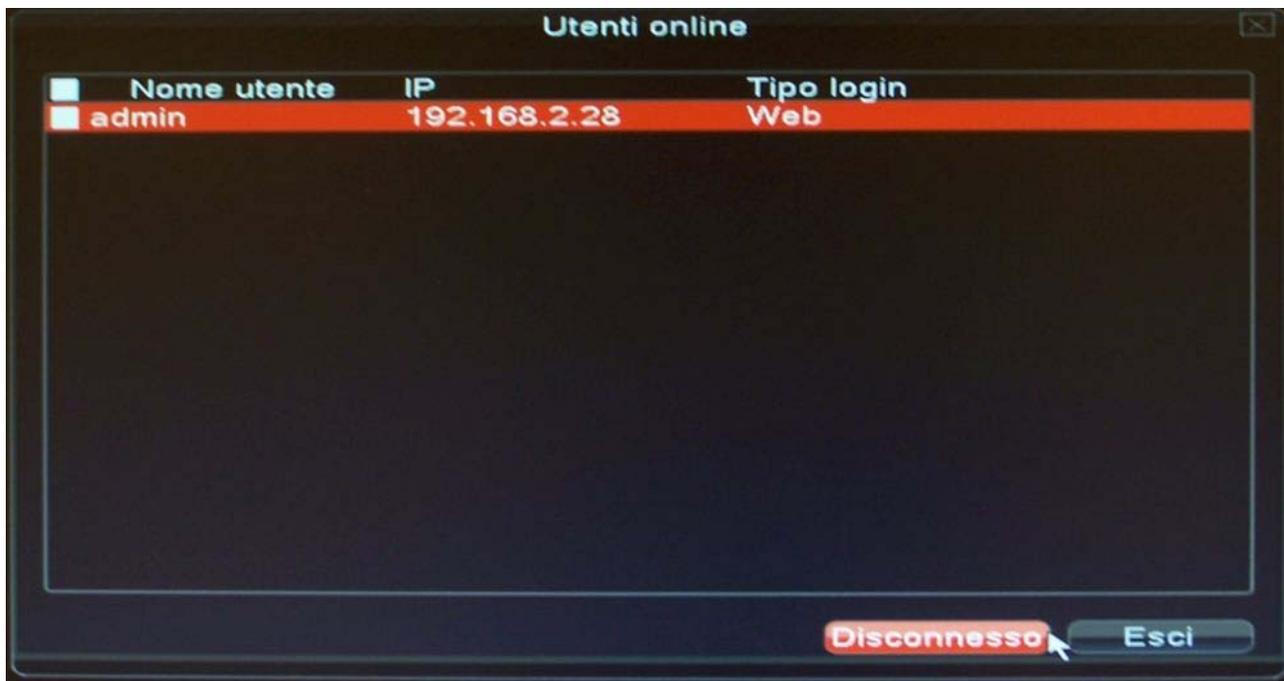
Inizio:

Fine:

16	Ora evento	Tipo	Log eventi
1	2014-11-09 22:28:39	Log in	admin<Web:192.168.2.28
2	2014-11-09 22:48:24	Salva config.	General
3	2014-11-09 22:48:24	Salva config.	GUI
4	2014-11-09 22:48:24	Impos. Ora	2014-11-09 22:48:24
5	2014-11-09 22:57:03	Log out	admin<Web>
6	2014-11-09 23:25:08	Salva stato sistema	2014-11-09 23:24:30
7	2014-11-09 23:25:08	Log in	default<GUI>
8	2014-11-09 23:26:17	Salva config.	Net common
9	2014-11-09 23:26:44	Log out	default<GUI>
10	2014-11-09 23:26:44	Log in	admin<GUI>
11	2014-11-09 23:27:45	Salva stato sistema	2014-11-09 23:27:08
12	2014-11-09 23:27:45	Log in	default<GUI>
13	2014-11-09 23:28:44	Salva config.	Net common

Cerca   Elimina   Esci

The LOG events lists all events that have affected the DVR and allows time for research and type.



ONLINE USERS allows to know the users connected remotely to the DVR and possibly disconnect them.

## LOG OUT

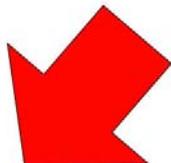
The LOGOUT button in the task bar is used to give access and request a new LOG-IN to control the DVR.



the Shutdown and Restart buttons are also available.

## DVR Configuration

To access the DVR configuration menu, click the right button to show the toolbar and press the MENU OSD button.



### LOG IN

Access to the configuration menu is password protected. If you access you have not made you will be asked to enter User Name and Password By default login credentials are as follows:

**USERNAME:** admin **PASSWORD:** (leave blank)

For the first access is therefore simply leave the password field blank. Later, you can set a custom administrator password and more users as we shall see.

### GENERAL MENU

The configuration menu is divided into six folders that are distinct from some icons at the top of the window:



- GENERAL - Contains the general settings of the DVR as date, time, etc. essential for the functioning
- REGISTRATION - Contains settings concerning the recording as the video compression settings and recording types according to the calendar.
- NETWORK - Contains all the settings of the network port and network services managed by the DVR
- ALARMS - Contains the motion detection settings, dell'antiaccecamento and external alarm inputs

- DIGITAL - In this section you set the multi-technology options that you decide whether to manage only local cameras (AHD or analog) or even IP cameras.
- SYSTEM - In this section there are all the DVR operation settings that do not fall into the above categories.

### MENU OSD / GENERAL

#### *Configuration of the general parameters of the DVR*



- LANGUAGE - Select which language to show the menus and overlays. The default language is Italian but the DVR also supports other languages. For convenience in this manual will always refer to the Italian language.

- VIDEO FORMAT - Select the video format analog cameras (if you plan to connect regular analog cameras to the rear inputs). The DVR supports both PAL, NTSC used in Italy, used for example in the US

*WARNING: The video format is set to NTSC error prevents proper display of PAL cameras. Check this setting if the screen appeared a video signal disturbed and black / white.*

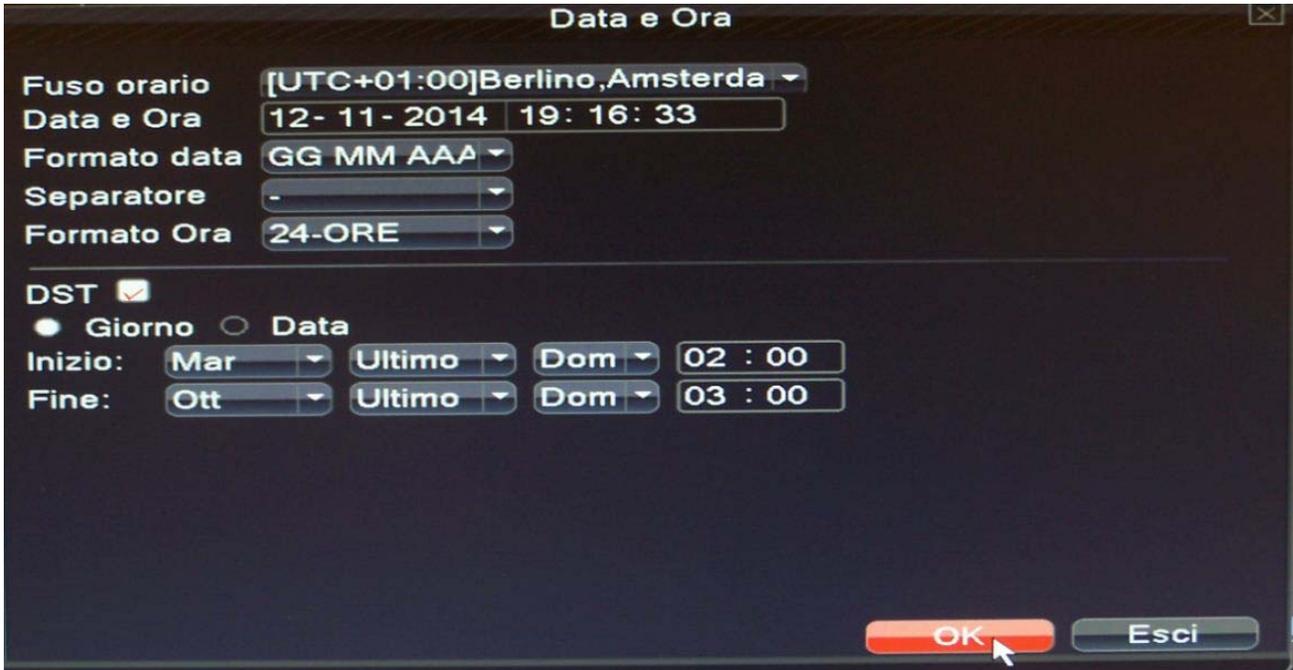
- RESOLUTION - Set the video resolution to use in output VGA and rear HDMI monitor. E 'can set resolutions from 1024x768 to 1440x900 even in FullHD 1080P. 1920x1080. Be very careful not to choose a resolution not supported by your monitor.

- PRIORITY - If you connect two video outputs (VGA and HDMI) for a single monitor



supports automatic input detection, you can determine which output to use as the preferred startup.

- DATE AND TIME - Press the >> button to open the clock setting window



Set the Time Zone (in Italian UTC + 1), Date and Time, Date format (usually DD MM AAA), the separator type and time format (12/24 hours). In the second pane, set the automatic summer time change data (as in Italy)

- HDD FULL - E 'can define how you should behave the DVR when you run out of disk space available for recording.

If sets STOP

RECORDING, once out of disk space the DVR stops recording and eventually performs the alarm actions envisaged for DISK FULL. If you set OVERWRITE, once out of disk space the DVR will overwrite the recorded files starting from the oldest ones in the archive.

Typically this second option is the most frequent. To comply with privacy regulations can limit the number of days

in archives in the section

SYSTEM / selfmaintenance

- NUMBER DVR - E 'can assign a number of DVR so you can tell it from other

- TRANSPARENCY - Set the transparency of the OSD relative to camera images in the background.

- TOUR SEQUENCE - E 'can set the cycle the display screen cameras it is believed to use it. In the cyclic scan the various cameras, or different combinations of cameras rotate at regular intervals in the screen. The DVR DX series have a cyclic function very evolved and fully programmable.



First you need to enable the cyclic and define that interval of time will pass between one screen and the next (INTERVAL: 5 to 120 sec.).

In a 16-channel DVR for example, if you leave all white squares, ie active, the DVR will show in sequence: all cameras in full screen individually, then the scanning of the quad visions (tel. 1-4, 5-8 , 9-12, 13-16), then a vision to 8 cameras with the main panel in the sequence of from 1 to 16 camera, then the scanning of screens 2 to 9 cameras and finally the complete screen of the 16 cameras.

Obviously this long sequence will never be used in full. You can eliminate the white squares to remove the sequence steps that you do not want.

The last two entries in the section TYPE SEQUENCE, are relative to the DVR behavior in alarm. The interval in this case is that the cyclical scan that can be generated as a result of an alarm (see alarm section). In general, this function is used to bring it to full screen the only alarmed camera. In this case, the interval will then be the residence time in full screen of the camera in alarm. The option back at the end, forces the return to the default scan at the end of the interval even if the alarm is still ongoing.

### OSD MENU / RECORDING

#### *Configuring recording mode*



- CHANNEL - Choose the channel (input) to program
- MAIN STREAM / STREAM SUB - The difference between main stream and sub stream is very important in the use of the DVR. The Main stream (main stream) of a DVR is the greatest video quality setting, normally used for local recording on HDD or in the internal network connection. The main video stream is typically quite heavy to use when accessing the internet with mobile devices that do not normally have a lot of bandwidth. For this DVRs DX series they have the ability to set a sub-stream, ie a lighter stream with less need for bandwidth.

- ENABLE VIDEO / AUDIO - Defines whether to enable the recording of the video only, or even audio.

- RESOLUTION - Defines the resolution of the video stream (left main-stream, right sub-stream). Here is a summary table. Name

	Frame Size For use with	
CIF	360x288 pixels	analog Cameras
HD1	704x288 pixels	analog Cameras
D1	704x576 pixels	analog Cameras
WCIF	480x288 pixels	Analog cameras 700 line
WHD1	960x288 pixels	Analog cameras 700 lines
WD1 / AHD1 / 960H	960x576 pixels	Analog cameras 700 lines
AHDM	1280x720	Cameras AHD 720P



720P (HD)	1280x720	IP Cameras 720P
1080P (Full HD)	1920x1080	IP Cameras 1080P

- **FRAME RATE** - The number of frames per second. 25 f / sec represents the so-called real-time, namely the cinematographic reproduction where the human eye does not perceive the presence of the individual frames. In sub-stream it is advisable to reduce the number of frames per second to avoid latency due to the lack of available bandwidth.
- **CONTROL BIT RATE** - There are two possibilities to control the video stream bit rate: VBR and CBR (constant bit rate and variable bit rate). If you select VBR the heaviness of the stream will automatically change to unaltered Mantener the video quality that is set in the following item (QUALITY '). If you choose CBR bitrate is always constant and is set in the following item (Bit Rate Kb / S)
- **REG. AUTOMATIC** - Here you can set the DVR recording mode depending on day of week and time of day.



At the top you choose the channel to be configured as each channel has an independent management. It defines the file length in minutes and a pre-record time on alarm. The selector is left to AUTO if you want to use the automatic programmer because MANUAL STOP mode and force him from the calendar regardless of registration status. For each day of the week can be defined 4 time slots to be used as normal Recording (continued), on the motion detection (Motion) or based on external alarm input. The Raid option at the top is used to define the recording will be saved

simultaneously on 2 HDD (HDD requires 2 to which a read / write and the other in RAID mode.

- PARAMETERS CODE - E 'can choose the compression profile H.264 (baseline, main profile, high profile)

### OSD MENU / NETWORK

#### *Configuring network connection settings*



In this section you set the network parameters. E 'can choose the automatic assignment 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. To connect remotely to DX VCRs using 2 ports: one is the MEDIA port for access with mobile devices and CSM software (default 34567),

Typically you can maintain the factory gates, but if necessary you can change them on this page. E 'need to change the ports if the same are already used by other devices, or if you need to reach more than one DVR in the same network with a unique IP address Internet.

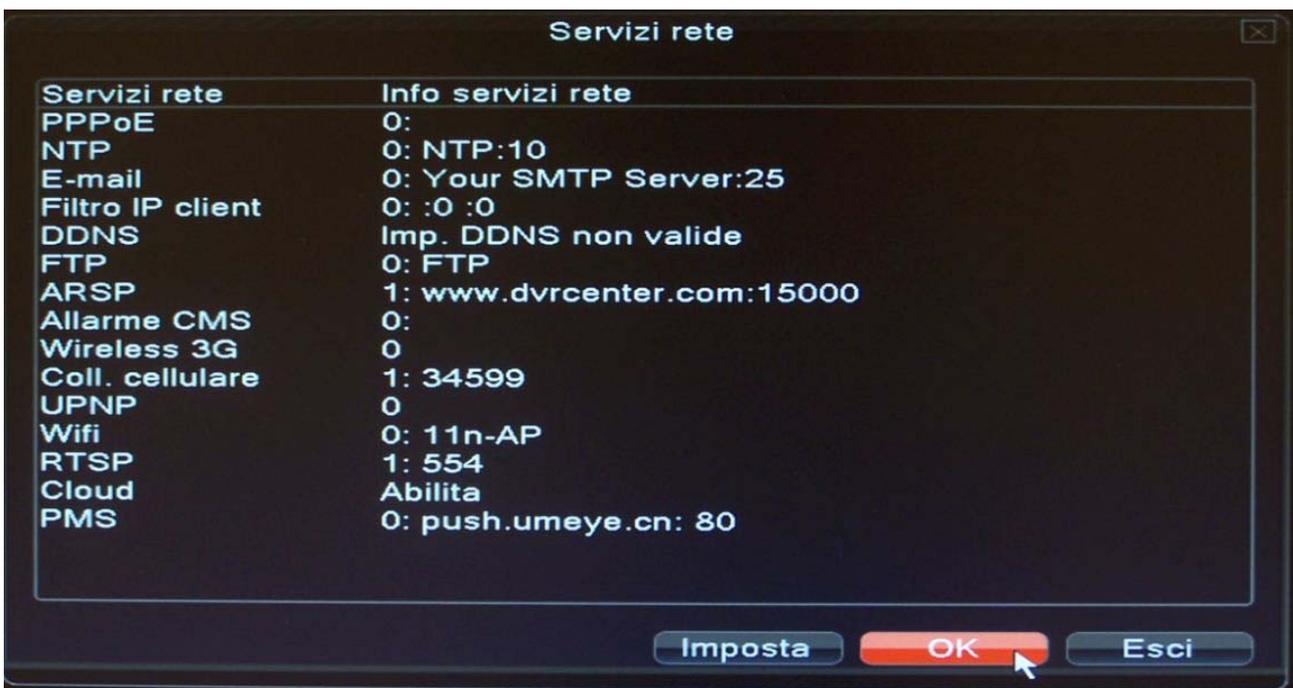
Note that if you change the WEB port 80, used by all factory



the browser, it will indicate the new port in the IP address to be written in the browser, for example. <http://192.168.1.120:8081> to use port 8081.

### OSD MENU / NETWORK / NETWORK SERVICES

#### Configuring network protocols



- PPPOE - And 'the protocol used to log-in to Internet services via modem



an ISP. You can enter the IP address of the server and login credentials.

- NTP - It's a protocol used to automatically update the date and time of the DVR using the NTP servers via the Internet. And it's possible to enter the NTP server name, the port used and the refresh rate.
- E-MAIL - The DVR can send emails in case of events. E' can enter the Internet address of the SMTP server, port (usually 25) and login credentials (if necessary). Also you can enter the reference of the sender, the recipient's email address, and the title of the message. 'Also a good button to test the connection.
- FILTER IP - E' can restrict remote access to the DVR by IP address to the high-security client applications. E' can create lists BLACK LIST (IP banned) or whitelist (IP-enabled). Be careful not to enable this feature in an unconscious way because it could make inaccessible remotely.
- DDNS - To reach the DVR via an Internet connection using a PC or a mobile device, you must call the IP address that our router from 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.

To place an Internet connection even with the DX series DVR variable IP address support our cloud services. Tuttavia you can also use the available network services, without charge, called DDNS. DDNS provider provides the user with a domain name that you can type on the client device to navigate to your DVR. THE provider will direct our call to the correct IP address for the DVR will be at that moment.

The DDNS service, in order to function, it needs a device of our 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 DVR itself is able to do so. The DX series DVR support some of the major DDNS services like DYNDNS and NO-IP. You can enter the domain name and the credentials assigned by the DDNS provider.

- FTP - The FTP protocol is used by webmasters to upload files on the websites. The DVR can upload movies to online FTP sites in case of events. This feature may be interesting for securing the movies in a place away from the monitored site. And it's possible to insert the address of the FTP server, port (usually 21), the access credentials, the maximum size of files and the remote folder.
- ARSP - protocol supported by the DVR, but no longer current



- ALARM CMS - Section to be used to send alarms to a centralized alarm station
- WIRELESS 3G - This section allows you to manage a 3G dongle plugged into a USB port on your DVR to gain access to the Internet. E 'can set the type of key and access data. To ensure compatibility with the procedure for accessing the ISP is still buying advice along with the stick a 3G router that provides a number of network ports to connect the DVR.
- COLL. MOBILE - System port. Do not change the factory setting 34599.
- UPNP - The protocol Universal Plug'n'Play (abbreviated UPNP) is a protocol that allows the DVR to communicate with other network equipment and perform control operations on other equipment. If you enable UPN function, the DVR will be visible between the network resources of the network PC and can also be configured by only the mapping of ports on the router to allow access from the outside (if your router supports and enables the function).

And 'possible to specify the ports that the DVR will try to automatically map inside the router.

This function, a major bike time, has now been superseded by our P2P cloud servers that allow remote access without port mapping.

- WIFI - Not supported
- RTSP - E 'can access the DVR remotely and get the only RTSP video streaming. And 'possible to enable this protocol and define the port (usually 554)
- CLOUD - DVRs include the ability to remotely access through our free cloud servers that allow you to avoid DDNS subscriptions and router ports mapping. Here you can enable or disable the sending of the connection data from the DVR to the server.
- PMS - function under development currently unavailable

### **MENU OSD / ALARMS**

#### ***Alarm Configuration***



The ALARMS section of the OSD menu allows you to set all the functions related to the management of the events. There are six categories of events, each with its own independent programming:

- MOTION DETECTION - Events generated by a front of the camera movement
- MASKING - Events generated by masking a camera
- VIDEO LOST - Events generated by the absence of video signal of a camera
- ALARM INPUT - Events generated by the alarm inputs
- ALARM OUTPUT - rear output drive of the DVR
- FAULT - Events generated by abnormal situations

## MENU OSD / ALARM / MOTION DETECTION

### *alarm configuration for motion detection*

It defines MOTION DETECTION MOTION DETECTION or the detection of intrusion into the visual field of the camera verified in accordance with the pixel image editing recovery.



- CHANNEL - Each video input has an independent motion detection setting
- ENABLE - Tappare if you want to manage motion detection of this channel
- SENSITIVITY - Adjusts the sensitivity of detection (6 levels). Carry out tests to verify that the detection occurs punctually but discriminating the greatest possible amount of inappropriate timing causes.
- AREA - Press SET and define the area to be considered in the survey. The active area is marked by the pink.
- BAND - E 'can enable the detection of movement only in certain time slots in the week. You can define 4 time slots for each happenend of the week.
- INTERVAL - Defines the duration of the event that flows from the detection (from 1 to 600 sec.)
- ALARM OUTPUT - Clicking the output pane so that white color is expected the rear output activation to occur intrusion
- TERM - Defines the alarm output activation time
- RECORD CHANNEL - Highlight white channels which you want to start recording the occurrence of the intrusion.
- SEQUENTIAL - Upon the occurrence of intrusion can lead to full-screen camera automatically. If you highlight multiple cameras in white they will be shown in a cyclic sequence. Nell GENERAL / TOUR section (second section) can set the dwell time of each camera in the scan in alarm.
- ACTIVATION PTZ - E 'possible to control the automatic movement of motorized cameras implant following the detection. For each channel you can call



automatically a preset, a tour or a pattern.

- DURATION - Sets the duration of the activation automatic PTZ (10 to 300 sec.)
- MESSAGE - If enabled automatically moves the overlay window alarm status occurs when the intrusion.
- SEND E-MAIL - Enables sending an email later alarm. The address should be set in the NETWORK section.
- BUZZER - Enable the sound of the buzzer inside the DVR to report the event
- WRITE LOG - Authorizes writing event in the event memory of the DVR
- FTP UPLOAD - Enable sending its event movie to an FTP server on the network. (FTP server set in the NETWORK section)
- TELEPHONE ALARM - function under development at the moment not available

### MENU OSD / ALARM / MASKING

#### *Configuring camera sabotage alarm*

It defines blinding the camera with masking objects or screens for which the video signal is connected but not significant.

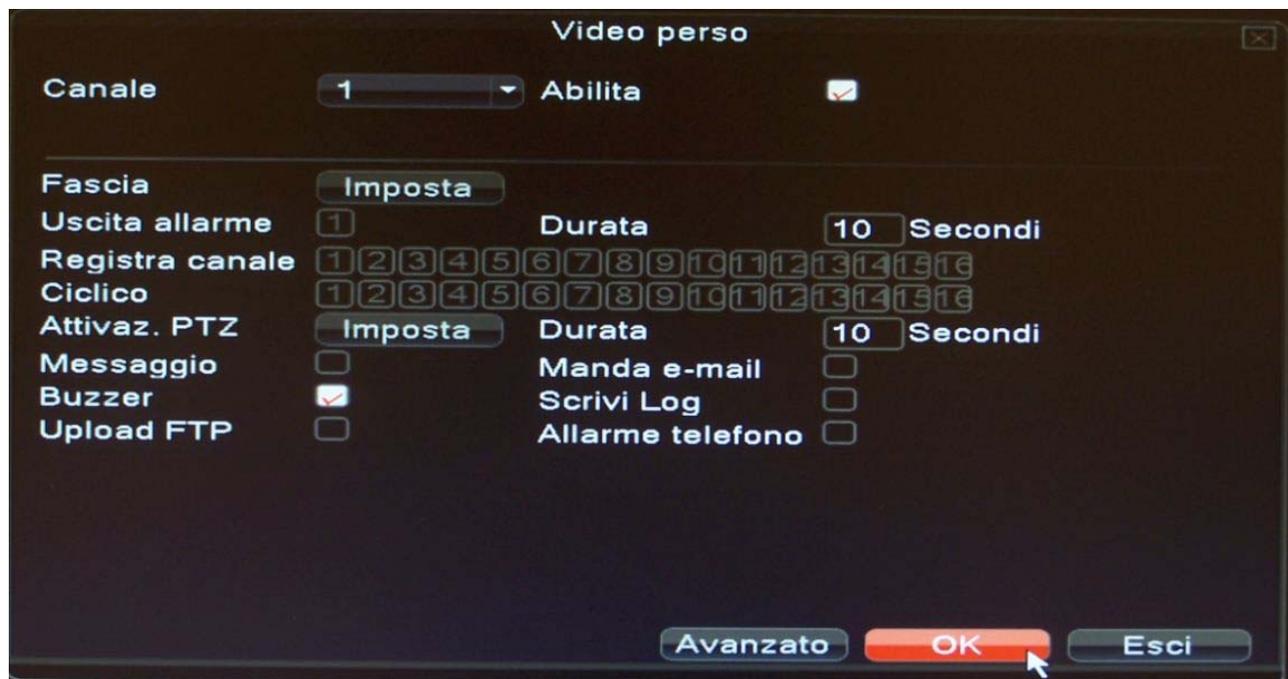


The alarm options are described in the previous paragraph with respect to the MOTION DETECTION

### MENU OSD / ALARM / LOSS SCREEN

#### *alarm configuration for video loss*

It defines VIDEO LOST the sudden absence of the video signal on a channel.

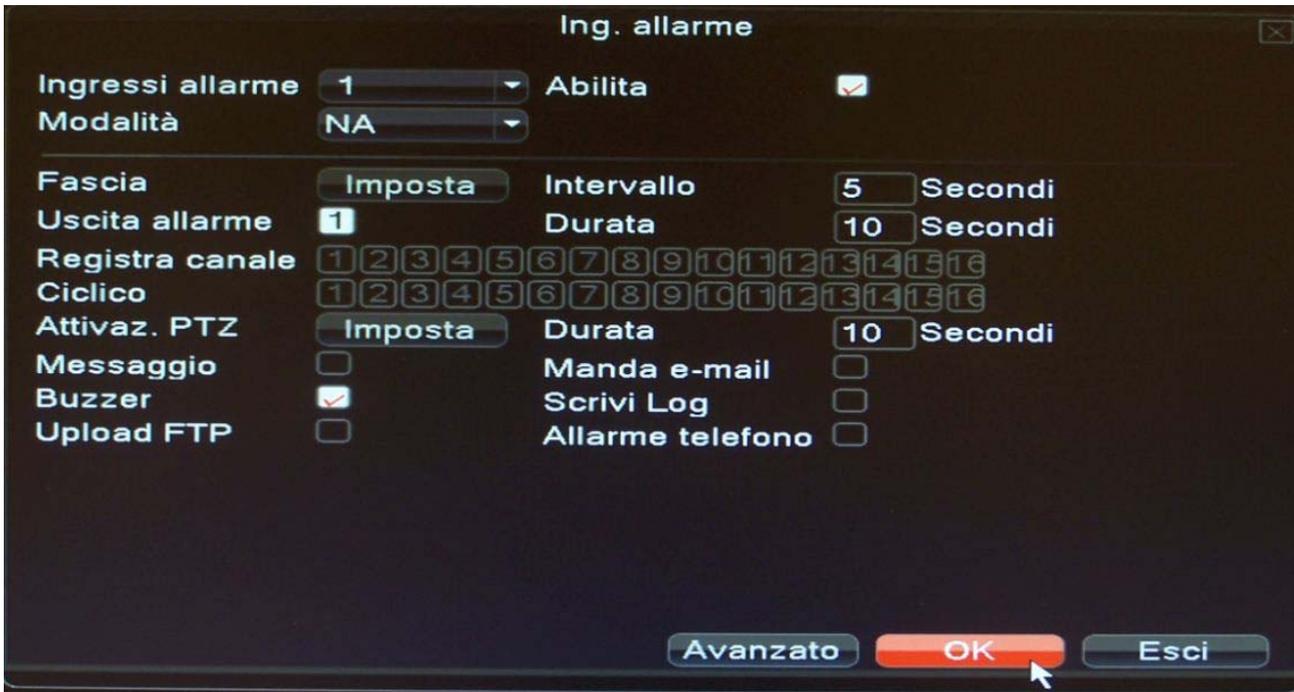


The alarm options are described in the previous paragraph with respect to the MOTION DETECTION

### MENU OSD / ALARMS / ALARM INPUT

#### *Configuration of the rear alarm inputs*

In this section, you configure the alarm generated by the activation of the rear alarm inputs of the DVR.



The alarm options are largely already been described in the previous paragraph with respect to the MOTION DETECTION. In addition there are the following options.

- INPUTS ALARM - The DVRs are equipped with 4 programmable rear inputs individually
- METHOD ' - Defines the way of NC alarm contact functions (normally closed) or NO (normally open). An NC input generates alarm when the connection between the two terminals is interrupted.

### MENU OSD / ALARMS / ALARM OUTPUT

#### *Alarm Output Configuration*

In this section it is possible to control the rear alarm output of the DVR.



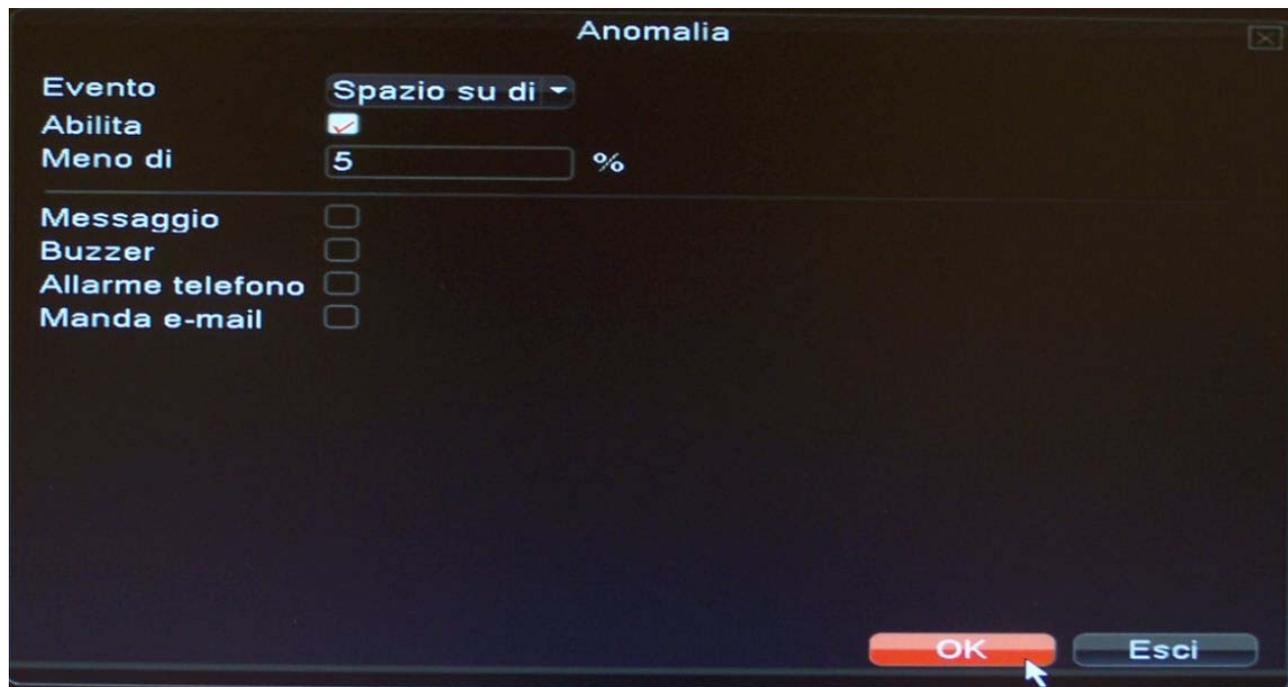
- ALARM TYPE - Having the DVR there is only one alarm output difference between operate in column 1 or All
- AUTOMATIC - When selected the alarm output is automatically controlled according to the DVR settings
- MANUAL - Forces output manual activation in real time. You can use this option to remotely control a remote device
- STOP - Forces the output manually deactivated in real time.
- STATUS - Displays the current output state (V = on)

## MENU OSD / ALARM / FAULT

### *Configuration of the system alarms*

This section sets the DVR behavior in case of functional abnormalities. You can manage five types of abnormality:

- NO DISC INSTALLED
- ERROR MEMORY
- DISK SPACE NOT AVAILABLE
- NETWORK NOT CONNECTED
- IP CONFLICT



The alarm options are largely already been described in the previous paragraph with respect to the MOTION DETECTION. In addition there are the following options.

- LESS ...% - Available only in the anomaly DISK SPACE NOT AVAILABLE, it sets the alarm threshold.

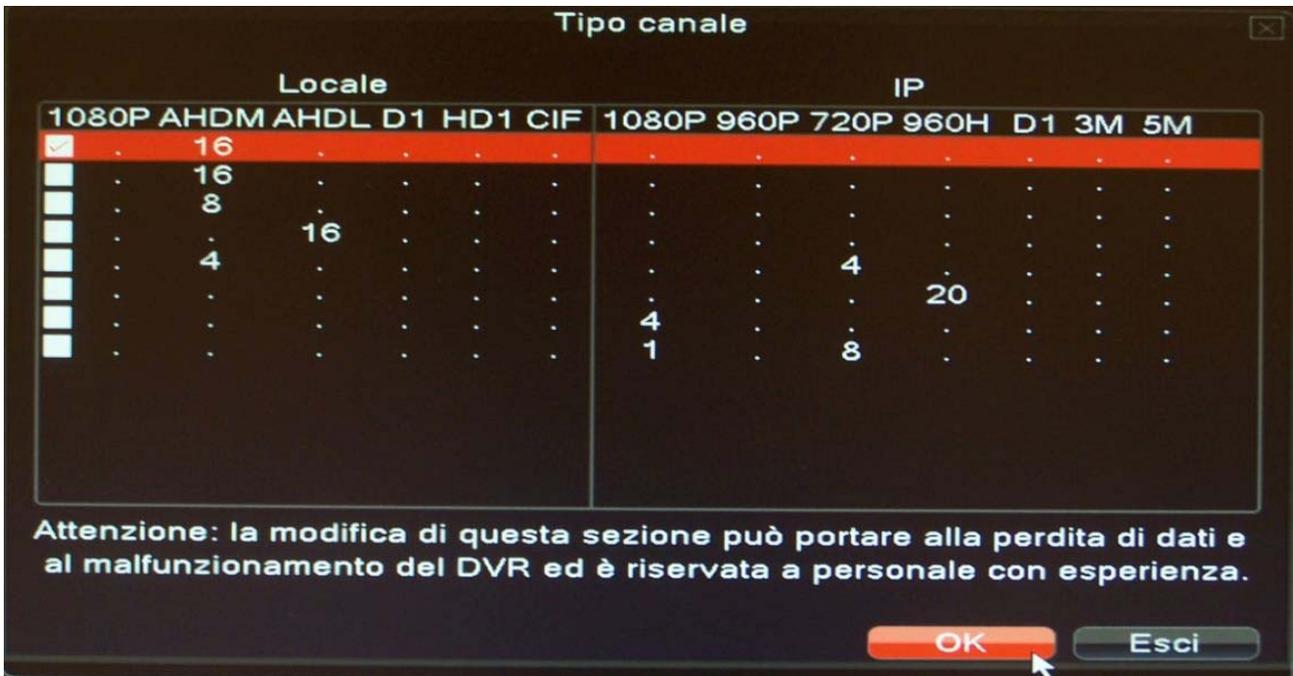
### OSD MENU / DIGITAL

#### *multi-technology Configuration AHD / Analog / IP*

This section and the main important if you want to use the DVR to handle not only local but also cameras IP network cameras. In this case it's one of the first sections to be set in order to define the operation of the DVR to suit your needs.



The selection table varies depending on the version of the product and proposes combinations of available inputs.



Select the multi-technology configuration you want and press OK. The DVR will be rebooted.

Changing this section already stored recordings could lead to the loss of video in the archives.

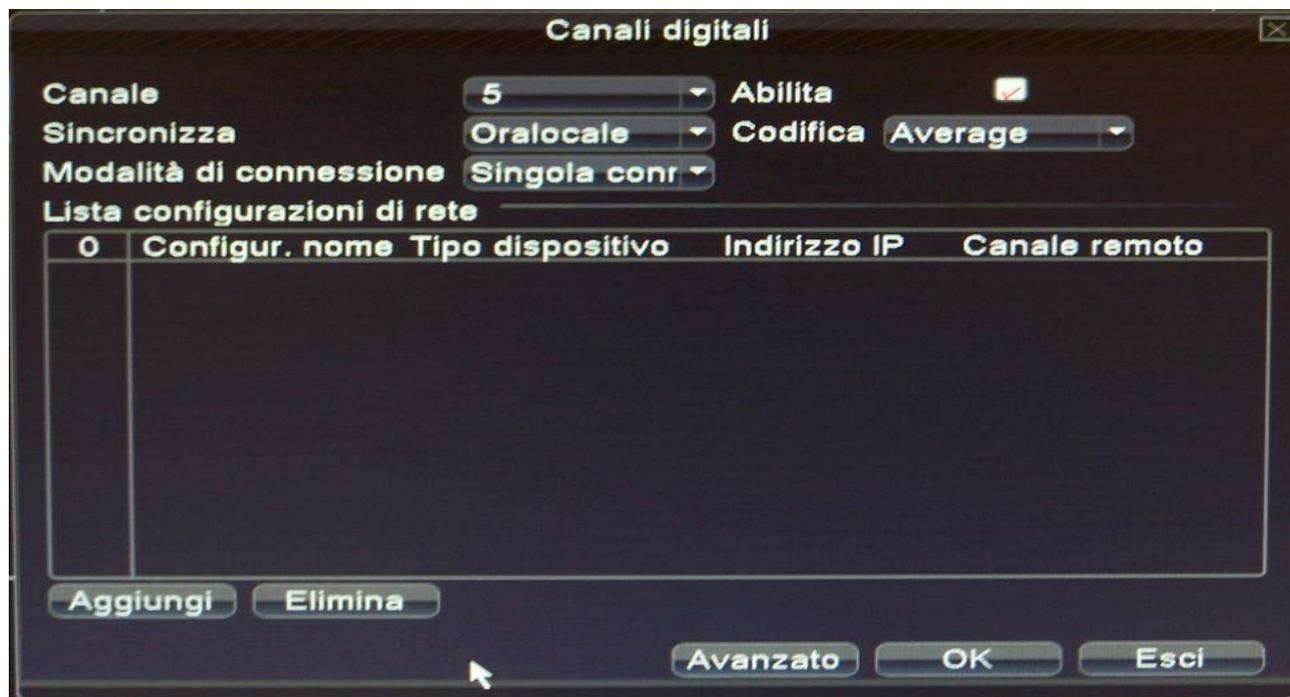
### OSD MENU / DIGITAL / DIGITAL CHANNELS

#### *IP network cameras Configuration*

If the choice of multi-view technology in the previous section you have chosen an option that provides the network cameras monitoring, the OSD window will change as follows, including the buttons for the management of IP channels



Clicking DIGITAL CHANNELS You can connect the IP cameras on the network to the DVR / NVR if you have not already done so with the configuration wizard seen above.



- CHANNEL - Select the channel to configure. the only IP channels are available
- SYNC - Choose now synchronize with the camera (usually: local time)
- CODE - Select the level of compression. The fluidity '4' represents the maximum compression possible.
- RULES 'OF CONNECTION - E' can choose single connection or multicast. In a single configuration only one camera is assigned to the channel. In the multicast connection instead of multiple IP cameras you can be displayed in sequence in one channel only and it is possible to define the scan interval. They use multicast, you can also get a lot of IP cameras on a single DVR / NVR but of course the device will record the scanning camera of each channel and not each one individually.
- ADD - After defining the digital channel management parameters, press this button to connect cameras



Pressing the down SEARCH button will search all IP cameras on the network. IP cameras must support onvif protocol to be identified on the network. Then double-click on the camera to show the connection data in the boxes above. As a rule, the DVR can automatically set all the connection parameters and simply enter the login password. If you can change the parameters manually. When you are ready, click OK to connect the camera to channel The cameras will appear on the screen once the configuration saved. If the video resolution that was not normal, check the IP channel DVR resolution (720P or 1080P) is supported by the camera.

Click on the STATE OF CHANNEL button you can see the links in place on digital channels.

Recall that the configuration of the IP cameras can be done more quickly using the configuration wizard that is started by clicking on a pane of a camera not configured, and which has been described at the beginning of manuale.

### OSD MENU / SYSTEM

#### *General System Configurations*

This section contains all the settings not included in other sections



## OSD MENU / SYSTEM / HDD

### *Formatting and Managing Hard Drives*

Clicking this button you access the hard disk control window where you'll find listed all the disks installed inside the DVR.



In this section you can select the disk and format it with the button **FORMAT**. It deals with



the first thing to do once you turn the DVR to allow it to record. Without you format the disk the DVR will not be able to save any videos.

If as a result of important recorded events you want to prevent deleted vengaa nothing you can press the READ ONLY button so that the DVR can not write to disk but only read. Press READ / WRITE to return to normal recording condition. If the DVR has two disks you can set one as RAID ie as an emergency HDD for data backup. In programming it is possible to define which cameras will be recorded simultaneously on 2 disks to take shelter from data loss in the event of a disk failure.

It 'also available PARTITION button to divide a disk into two partitions: one for recording and one of definable size, archive snapshot images saved.

### OSD MENU / SYSTEM / CONFIG PTZ

*the control protocol settings tel. speed dome analog*



DX Series DVRs are able to control the movement of motorized speed-dome cameras with the mouse, the keyboard of the DVR and even remotely connected with the browser or mobile devices.

Local motorized cameras are controlled through the rear RS485 serial port by following the instructions in the relevant installation manual.

It is not necessary this setting to control speed IP dome.

This section sets the protocol to be used to control speed dome camera sites



through the rear RS485 port. The second "RS485 device" column is not active.

- CHANNEL - The channel to which you refer.
- PROTOCOL - And 'the language to be used on the RS-485 bus to send commands to the camera. Specify the protocol to use in verifying that it is the same one used by the camera. The DVR supports many protocol: Pelco P and Pelco D in all its variants (for use with DSE speed dome cameras), HY, LG, Panasonic, Philips, Samsung, Sharp, Sony, etc. Yaan
- ADDRESS - Every speed dome camera has distinguished along the bus by his unique address that the program typically through internal switches. Insert here the address assigned to the camera (0 to 255)
- BAUDRATE - And 'the rate to be used on the RS-485 bus to send commands to the camera. Specify the bit rate to use in verifying that it is the same set in the camera. The DVR support from 1200 to 115200 baud.
- DATA BITS / STOP / PARITY '- Remaining protocol data which is normally no need to change.

### OSD MENU / SYSTEM / DISPLAY

#### *overlays Management*



Here we define the information to be superimposed in the LIVE Vision (top section - SCENE) and recording (Lower Section RECORD OVERLAY)

- CHANNEL NAME - Pressing the SET button will engage the identification name of each channel
- DATE / TIME / TITLE / ALL STATE REG./STATO. - You can enable / disable these



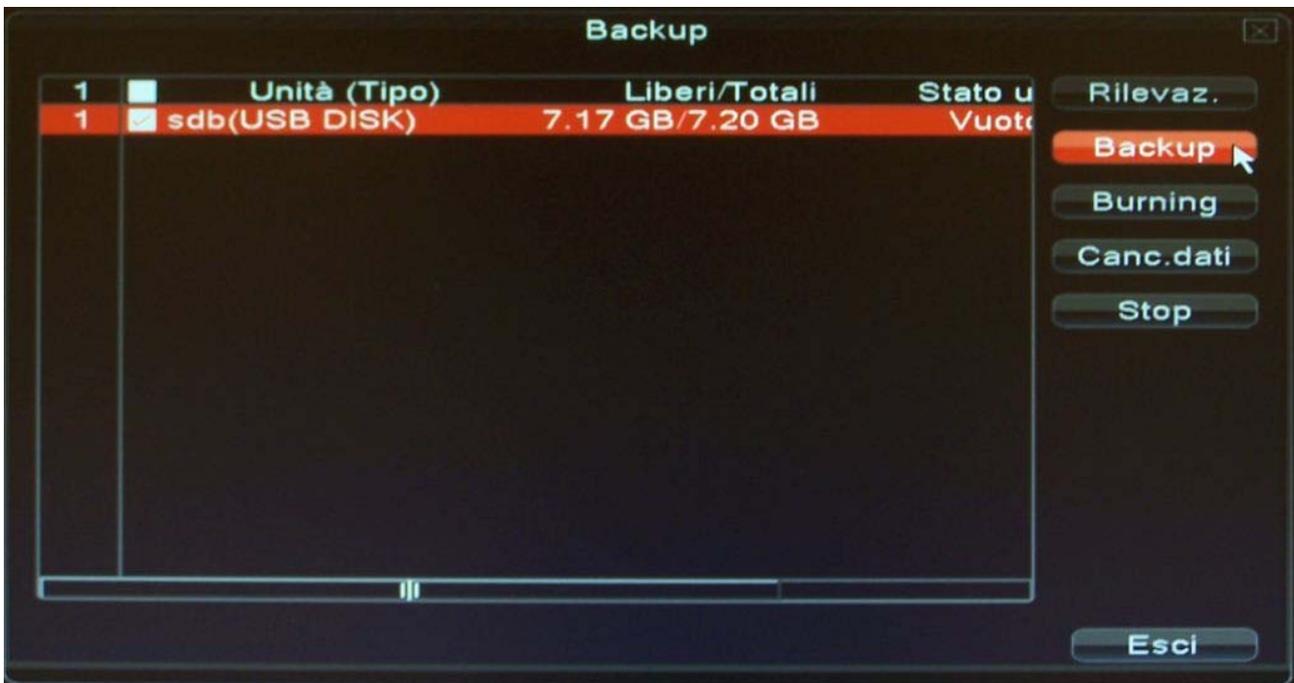
indications that appear superimposed on each channel in live view. This configuration is the same for all channels.

- **PRIVACY ZONE** - The DVR allows you to mask the shooting areas within the image of the cameras. Typically you work this masking for privacy protection such as in the surveillance of jobs. E 'can define up to four masks for each camera. To use the privacy mask, select the channel and enable the function. Choose the mask to program (1.2.3.4) and click SET. E 'can mask the area you want in the image resizing shooting and dragging with the mouse the rectangle that appears superimposed. After saving the configuration will appear a black overlay frame both in the live and recording. To delete the masks created press the number 1-2-3-4 depending on the mask that you want to delete.

- **RECORD OVERLAY** - Here you can define your overlays that will be indelibly present in the recorded video (channel Title and Date / Time). With the SET button POSITION choosing where to make them appear. This configuration is the same for all channels.

### OSD MENU / SYSTEM / BACKUP

#### *Export video and synchronized recording*

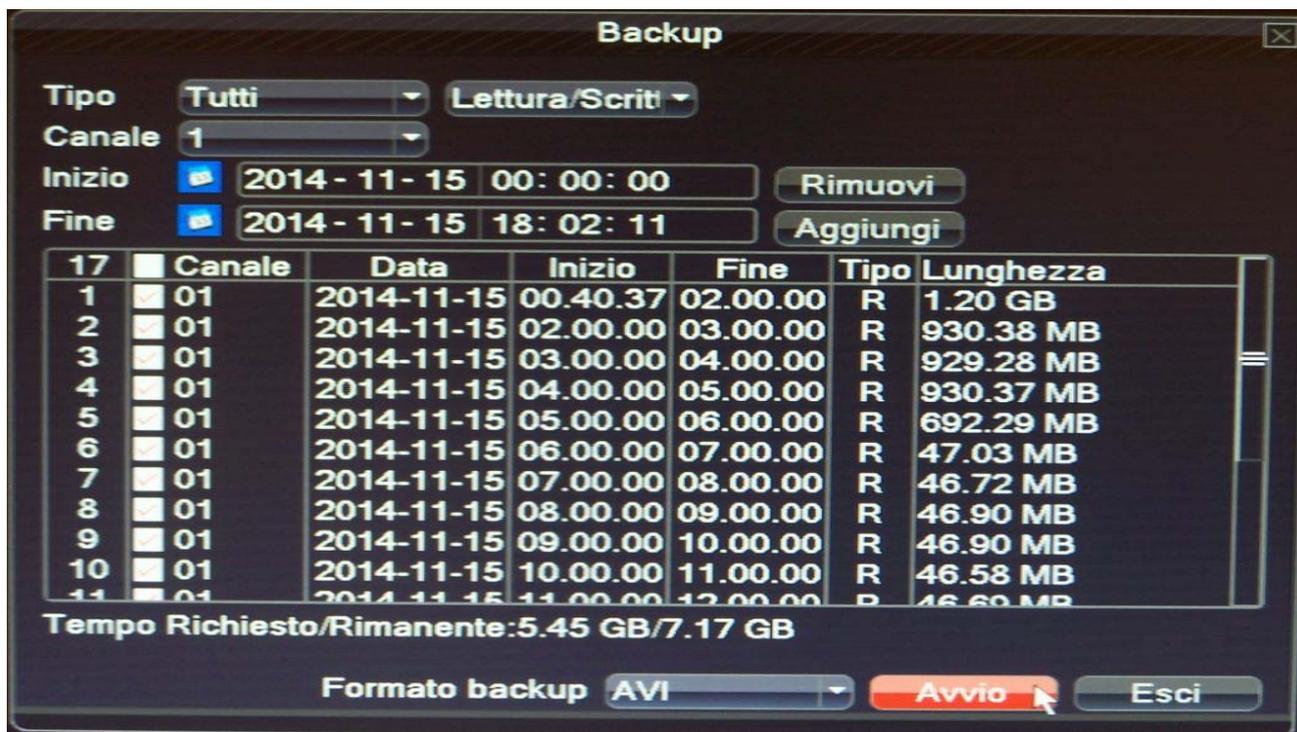


This section of the OSD menu is used to export recorded video inside the DVR to external storage media connected to the USB port of the DVR. Typically you use this function USB flash drives or external USB HDD. You should only export movies of interest, after identifying and circumscribed because export a lot of recording time

It requires a proportionally long time.

First, connect the USB memory to a port of the DVR. Then press RECORD and the memory unit will appear in the list on the left. If this does not work reboot the DVR leaving the backup drive connected to the USB port so that you detect already starting.

Press the BACK button and the mask will appear on the search of movies that controls all the backup function and is described below.



- TYPE - Choose which type of recording search among ALL, ALARM INPUTS EXTERNAL ALARM MOTION, INPUT ALARM + MOTION, MANUAL RECORD, GENERAL (normal scheduled recording). Next to select the disk you want to search.

- CHANNEL - Select the channel of interest or possibly the ALL option

- ARRIVAL / - Define the time-space research

- ADD - Start the search and adds the results in the list below

- REMOVE - Deletes events from the list found to allow a new search

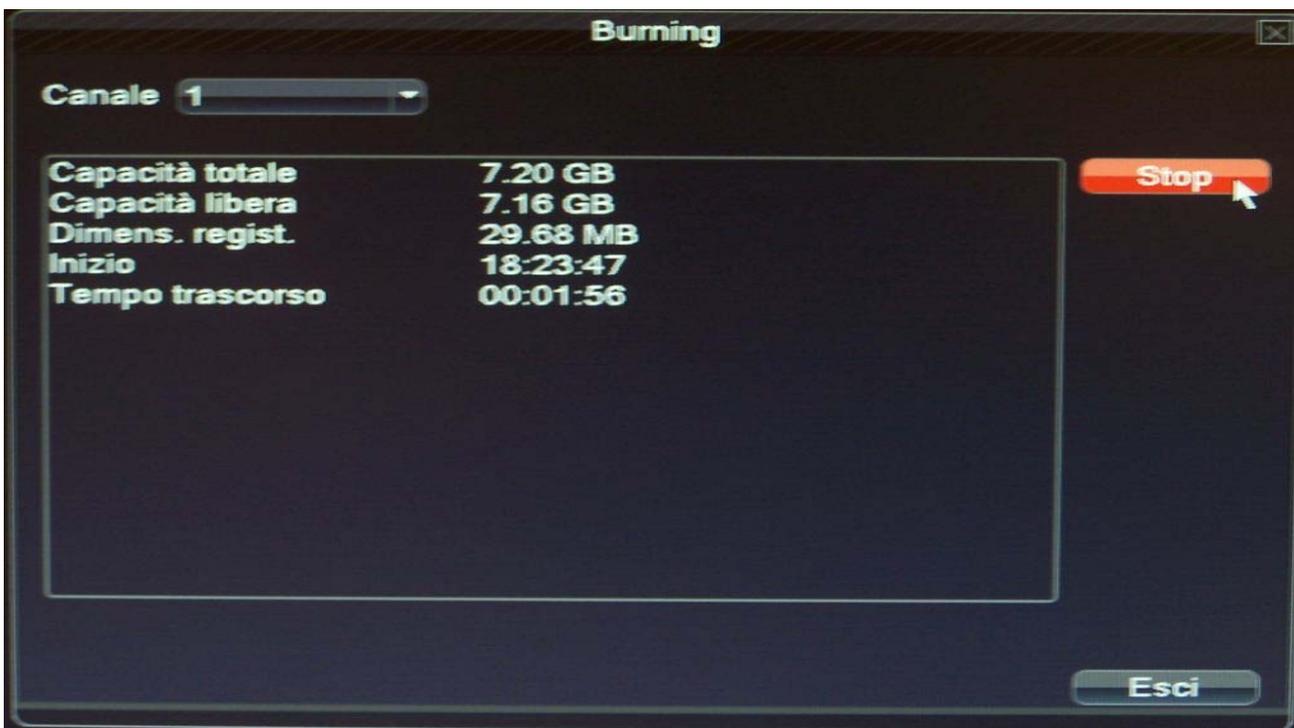
- FORMAT BACKUP - The DVR can export movies in two formats: H.264 and AVI. We recommend using the AVI format as easily be played on any media player like Windows Media Player, VLC etc. For the H264 and helpful reader program on the CD included with the DVR.

- START - After selecting the desired movies list, press START to start



the backup operation. It will see a progress bar will show the time remaining to complete the task. If necessary, you can stop with the STOP button.

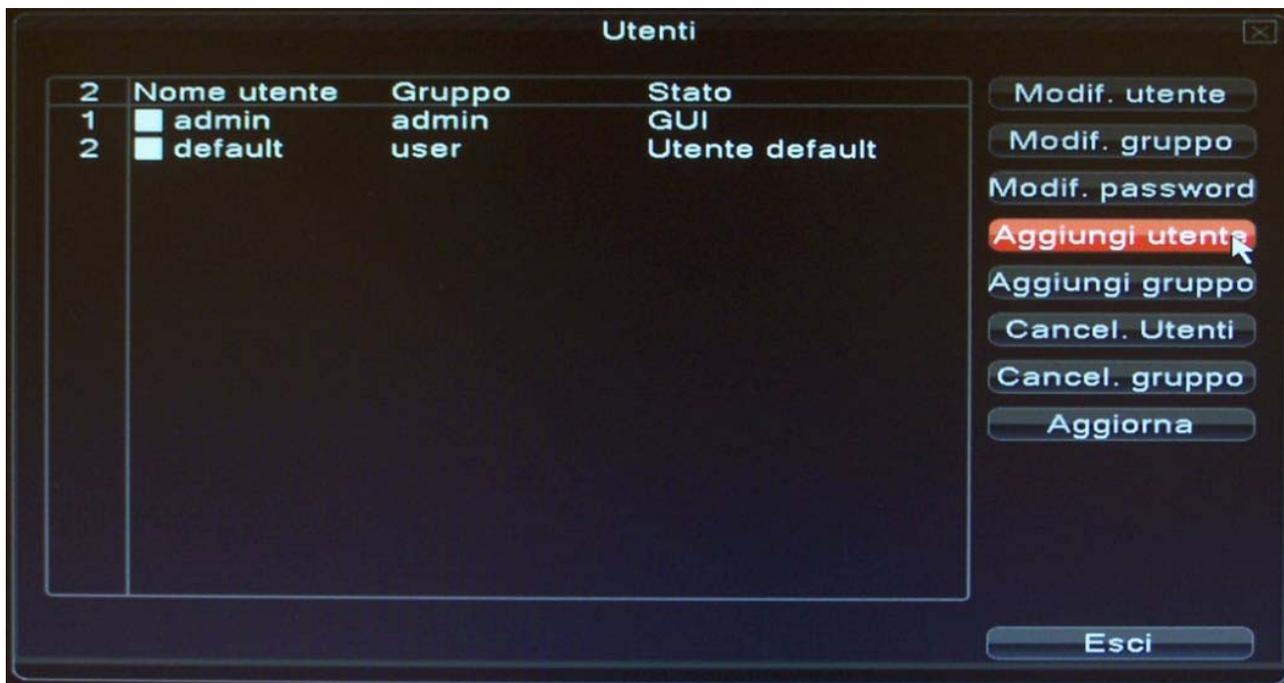
Returning to the overall backup window is available DELETE DATA key to be used to format the memory media and erase all the data on it. Also available is the BURNING button that allows you to record a selected channel at the same time the hard disk inside the DVR and the external storage medium (synchronized recording)



It is a mirror image recording can be useful for those who want to record some occurrence, such as a sporting event, and place it at the end of an instant copy on external support. During synchronized recording, you can exit OSD and use the DVR, without it stops. To stop synchronized recording must return to this page and select the STOP button. The synchronized recording can be performed on only one channel at a time, and save video files only in h264 format.

### OSD MENU / SYSTEM / USERS

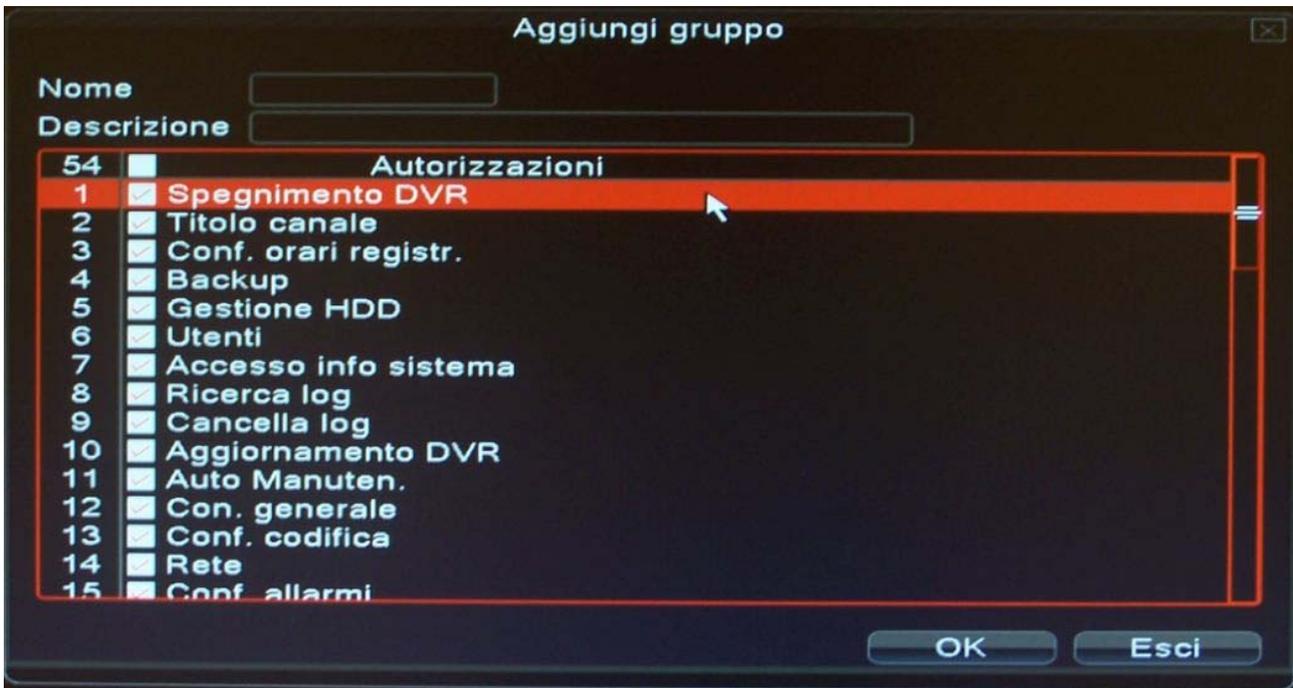
*Configure the password to access the DVR*



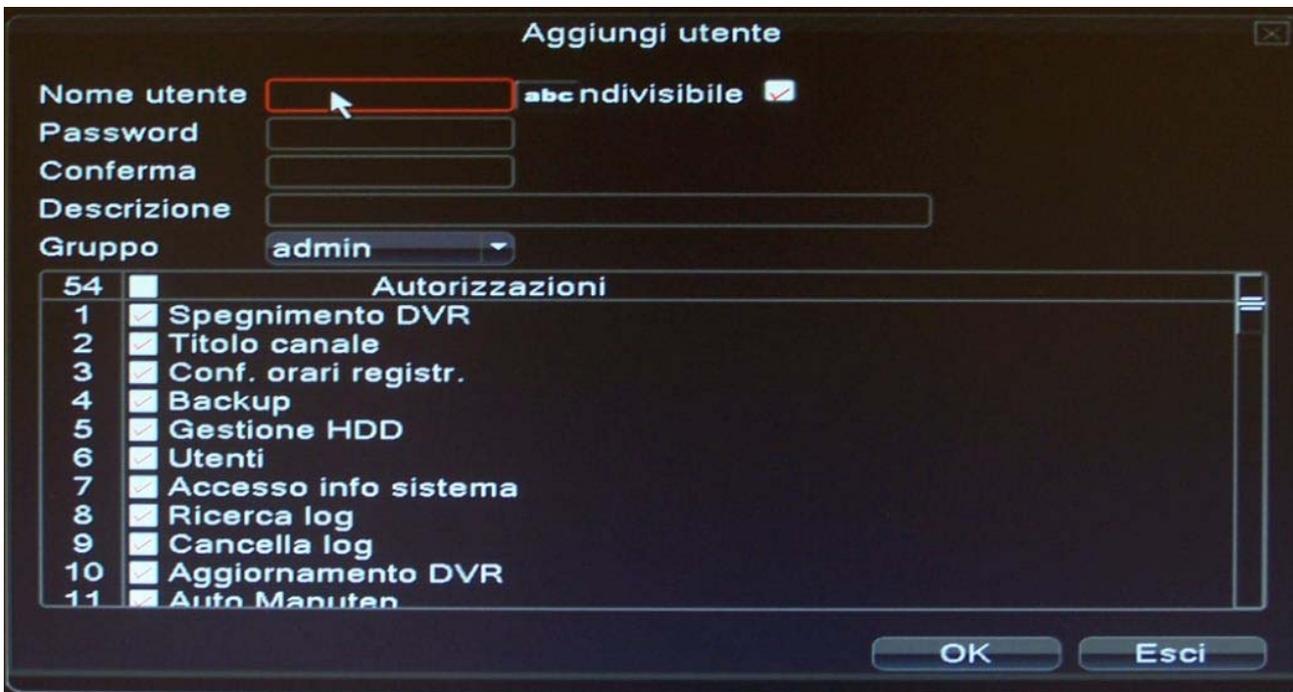
Access to DVR. Both locally and remotely is password protected. In this section we define passwords and authorization granted to different users of the system. User management of the DX series DVR is very powerful and requires a little explanation. The first DVR divides users into groups. Each group has its own level of access to system functions.

By default the DVR has already set up two groups of users: ADMIN users with total access, and USER users with restricted access only to the live view of the cameras. E 'can change the settings of these groups with the buttons CHANGE GROUP ADD GROUP, DELETE GROUP.

The DVR has a sophisticated permissions management of access for which each function or channel can be enabled or incompetent



Once the user groups established, you can add individual users with ADD USER button.



Each user is assigned a NAME and a PASSWORD (to be entered 2 times). Also you can combine a clear description and one of the preset GROUPS.

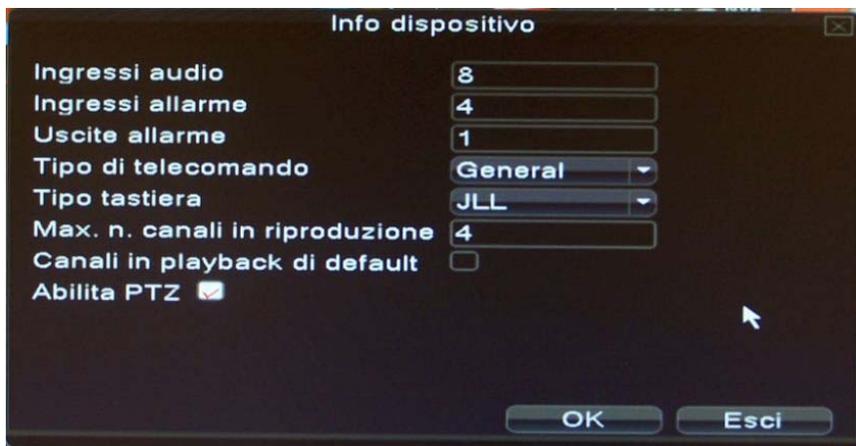
Once chosen the membership of the user group, the permissions of the group will appear in the list and are associated with the user. E 'can optionally, for the specific user,

rule of authorizations compared to those of the group, but not add them. In the user settings there is also a shared check: if you enable the user to simultaneously access from multiple locations.

Click OK to save the user that will be added to the list and will be immediately ready to be used both locally and remotely. There is no limit to the number of groups and users who want to create.

### OSD MENU / SYSTEM / DEVICE INFO

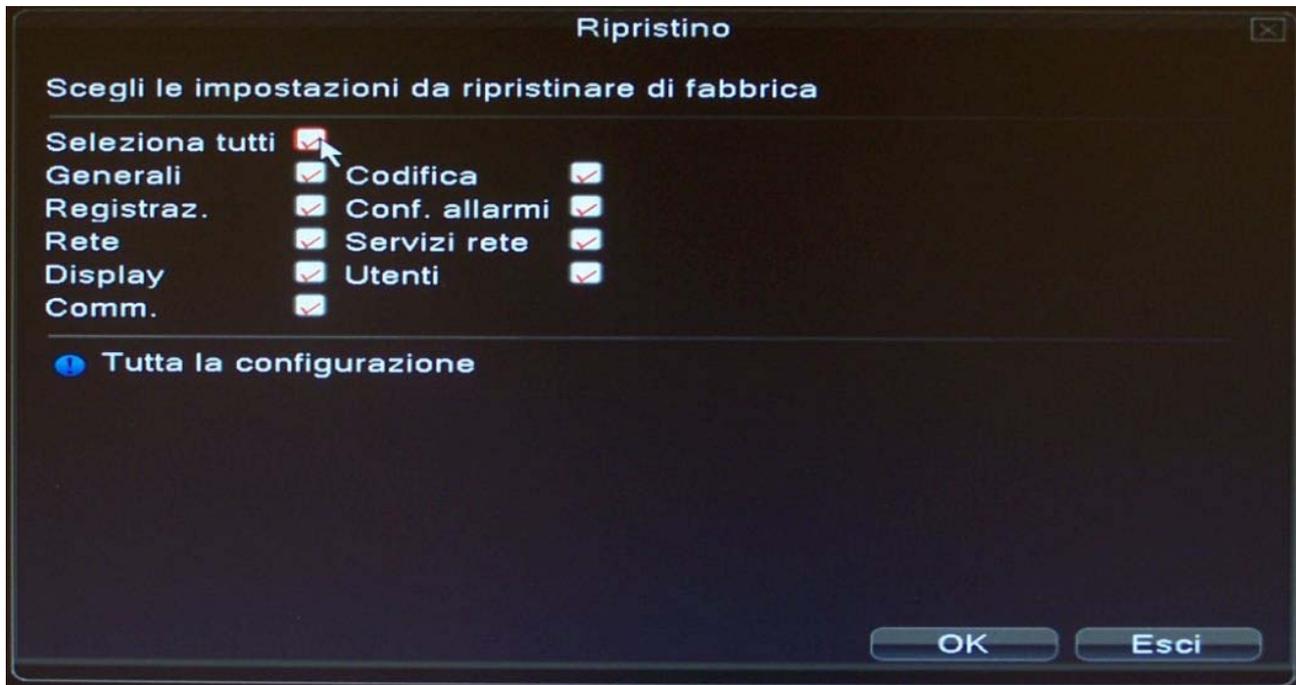
#### *Hardware DVR Endowment*



This section contains information on the provision of the equipment that is available for information.

### OSD MENU / SYSTEM / RECOVERY

#### *Back to the DVR factory settings*



This section is intended to restore the factory configuration of the DVR should you not be satisfied with the changes. E 'can choose all types of settings, or limit the recovery to a single section. Press OK to confirm the reset.

## OSD MENU / SYSTEM / selfmaintenance

*Auto Delete video recorded and programmed automatic restart*



This section serves to program two automatic functions that the DVR will automatically perform a regular basis.

- **AUTO RESTART** - you can make sure that the DVR will automatically reboot on a regular basis every day or every week at a certain time. It is a required function in certain applications but that is not necessary to enable
- **AUTO DELETE FILES MORE 'OLD** - You can program the DVR to delete the oldest video files after a certain number of days (1 to 99). This way the DVR will store only a limited history. It is a required function for privacy.

### OSD MENU / SYSTEM / UPGRADE

#### *DVR firmware update*



This section is used to update the internal software of the DVR. To perform this operation you need to get from our technical service for the upgrade file and copy it to a USB key to be inserted into the DVR.

I recommend that you never run an update without first contacting our technical service. Improper update can lead to non-operation of the device and void the warranty.

## OSD MENU / SYSTEM / IMPORT-EXPORT

### *Saving the DVR configuration*

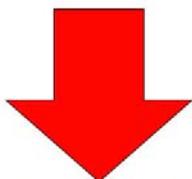


This section is used to export the DVR data to external storage media.

- **DEVICE NAME** - Choose the device connected to the USB port of the DVR on which to perform the rescue
- **EVENT LOG**-Allows you to export the entire event memory of the equipment that will be saved as a compressed file containing the log in TXT format.
- **SETTINGS** - Allows you to export the entire DVR configuration that will be saved in a CFG file. This function is particularly useful for installers to quickly replicate a standard configuration and then simply adapt it to the specific need of installation. It also recommends, however, users, especially those with other authorized users, to perform a backup of your configuration so you can restore it in case of improper modifications. To restore a configuration stored on USB flash drive and reload it on the DVR using the IMPORT button.

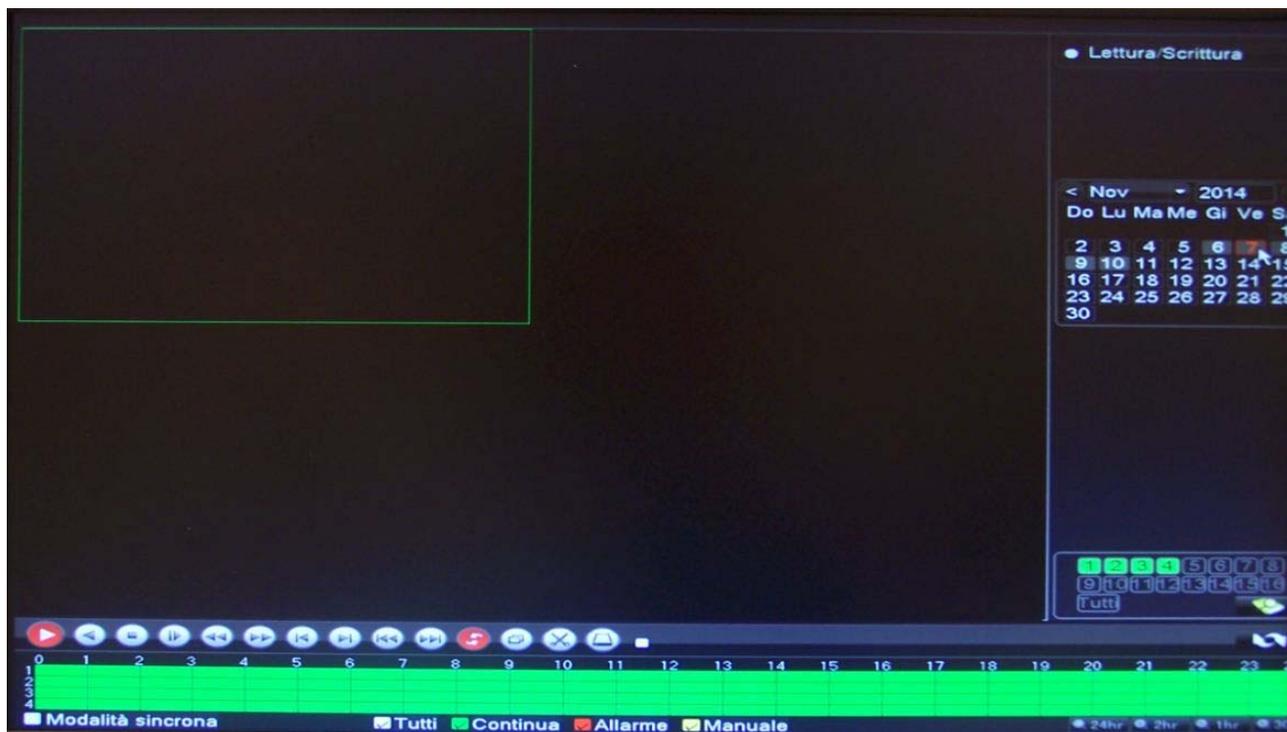
## Movie Playback

To access the movie playback, press the PLAYBACK button in the toolbar



Note that the DVR DX series are Full Hexaplex that registration does not stop during playback, configuration, remote access, backup etc.

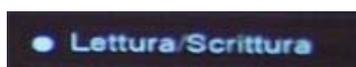
The DVR DX series are equipped with a search system with time line that the search for movies also makes it simple and fast during the long periods.



The recordings search page is divided into several sections that we describe below. Note that all of the components that are used to set the search criteria are not active with the current playback, should stop with the STOP button of the playback control buttons.



### SELECTION HDD



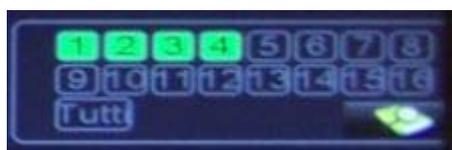
On the right, otherwise you can select the hard drive on which to search. Usually it is working with the main HDD but you can for example choose a rescue HDD if you're using a HDD in RAID.

### CALENDAR



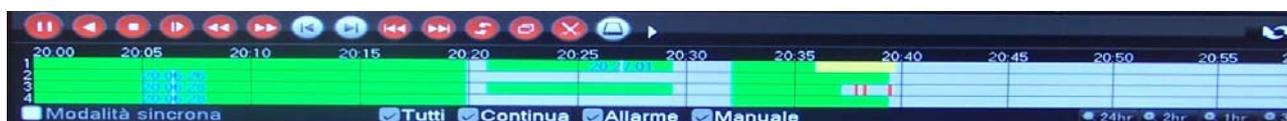
On the right of the screen there is the calendar. E 'can choose one day to taste and it will automatically be shown in the timeline at the bottom of the screen.

### SWITCH CHANNELS



Under the calendar you can define which channels will be playing. The maximum number of channels simultaneously reproducible may be limited depending on the model and the functional configuration of the DVR

### TIMELINE



The time line shows a bar for each camera. In abscissa there are 24 hours of the day

we have selected in the calendar on the left.

In the bottom right there are the 24H / 2H / 1H / 30M buttons that allow to change the scale of the timeline. It 'also possible to change the time scale using the mouse wheel. If we operate the scale of magnification we could move between the hours of the day dragging the black bar which shows the hours that acts as a scroll bar. Movies recorded in the database are shown in the time line of GREEN horizontal bars in the case of registrations of the continuous type, YELLOW for manual and finally RED forced recording in case of alarm recording (motion / inputs).

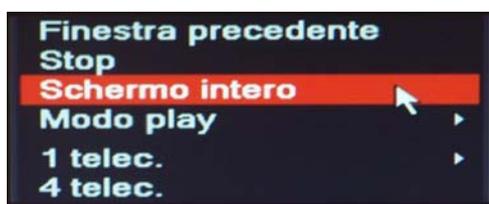


To play back movies just click on the timeline at the camera and time desired. The recorded video will automatically start playing in the top pane. And 'possible to click elsewhere on the time line to scroll to other times of the day.

In the bottom of the timeline there are, in addition to the buttons on the right scale, the selectors ALL, CONTINUE, ALARM, MANUAL which serve to hide in the timeline of the recording types that do not interest. It 'also have the option MODE' SYNCHRONOUS that if you turn condenses all the selected cameras in one line of the timeline.

### PLAY CONTROL

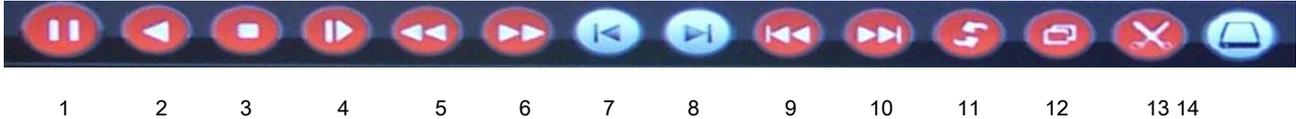
During playback, it is possible to bring a camera in full screen by double-clicking on it and is available the digital ZOOM function already illustrated previously in live viewing. You can also click with the right mouse button to display a context menu



- PREVIOUS WINDOW - Closes the playback window
- STOP - Stop playback (such as STOP button in the command bar)
- FULL SCREEN - Hides the search window and the timeline
- PLAY MODE - Select the level of compression of video playback
- MULTIVISION - Selects the split screen



Some of these commands are only available if the playback is not in progress. Under the camera frames there are the playback control buttons.



Above the time line there are commands to control playback. 1 - Play / Pause - Starts / pauses playback

2 - Back Play / Pause - Starts / pauses playback in reverse 3 - Stop - Stop playback and allows the addition of new search criteria 4 - Slow motion - Click repeatedly to select the speed x1 / 2 x1 / 4 x1 / 8 x1 / 16 5 - Play fast backward - click repeatedly to select the speed x1 / 2 x1 / 4 x1 / 8 x1 / 16 6 - Play fast forward - click repeatedly to select the speed x2 x4 x8 x16 7 - Back frame by frame - Enabled only pause playback 8 - Forward frame by frame - Enabled only paused playback 9 - previous file - Moves to the previous video file 10 - next file - Moves to the next video file 11 - continuous playback.

12 - Full Screen - Maximize the playback area by closing the lookup column and timeline 13 - Size - To define a piece of footage (CLIP) click the beginning and end of the clip 14 - Backup - Click to save the trimmed clip ( see previous) key on a USB memory drive

### SEARCH FOR FILE

After setting the search date and the cameras being played you can view the files stored in a list. You have to press the little CHANGE PAGE button below the search criteria.



Double-clicking on a file will start playing. E 'can also select one or more files and save them directly to USB memory.