Video recorders DVR / NVR

Series DN

For cameras AHD-CVI-TVI, CVBS and IP ONVIF

Installation manual

How to connect components

How to perform the network configuration

Contents of this handbook

The range of VCRs DN series is designed to allow the management and the recording of CCTV cameras of all technologies.

The NVR models can be used for IP-based cameras ONVIF protocol. The DVR models can handle multi-technology analog cameras, AHD-CVI-TVI (analog high resolution) and ONVIF IP.

This manual describes how to properly install the video recorder and how to make the network connections to access the VCR remote.

Product description

The DN series recorders are digital video recorders intended for video surveillance systems in Analog technology, AHD and IP.

E 'can control DSE cameras or other manufacturers. In matching with IP cameras is an indispensable condition that the same are based on ONVIF protocol, established standard in the industry today. Old cameras that do not support this standard can not be connected.

E 'can control any traditional analog camera CVBS regardless of the manufacturer or the date of manufacture.

Also with regard to the AHD technology, recent evolution of analog CCTV in high resolution, you can control any camera manufacturer.

These DVRs are also compatible with other analog technology in high CVI and TVI resolution, used by other manufacturers.

main Functions

The DVR DN series are the latest generation of video recorders that can integrate all the latest functions required by video surveillance applications over IP.

LIVE VIEW

The NVR / DVR DN Series feature a variety of video outputs for displaying the cameras in real-time. E 'can connect the computer monitor to the VGA port or HDMI video output of TV sets. It is high-resolution outputs able to make the maximum FullHD resolution.

There is no longer the traditional analog video output BNC type whose resolution is insufficient to support the latest technologies.

And 'possible to view each camera full screen, the cyclical scanning and multivision
4, 9 or 16 cameras simultaneously.
The optimum monitor video format is widescreen 16: 9 However, you can also use the monitor in various formats such as 4: 3.

RECORDING VIDEO / AUDIO

The recording takes place with H264 compression in continuous mode, motion detection or alarm, with a time-controlled. The audio and video are synchronized.

PLAYBACK AND BACKUP

The DVR / NVR have different search systems to enable quick handling of recordings. Use the time line allows you to move quickly between times of the day. Through the USB port you can be connected to external storage media such as USB drives, external hard drives, etc. and save the interest clips in AVI format.

Playback allows modes: Slow motion, fast forward, reverse playback and frame by frame playback. During video playback, the time and date can be displayed on screen.

INTELLIGENT DIGITAL ZOOM

E 'can easily zoom in on details by using the mouse wheel on the screen, both in real-time view that in recordings playback.

CONTROL WITH MOUSE AND MENU IN ITALIAN

All functions are controlled with the mouse in a simple and quick. The use of menus and

Setup is entirely in Italian and does not require time for learning.

Hexaplex

The devices are able to continue recording during playback of recorded files, viewing real-time, remote access, backup, configuration etc.

PTZ CONTROL

The DN series VCRs support PTZ control of motorized cameras speed dome directly through the onvif protocol, or through the RS485 port. The camera's movement is easily controlled via the keyboard, remote control, mouse, and even in remote access from a PC or mobile phone.

MOTION DETECTION

The detection of the movements allows to activate the recordings and any alarm actions as a result of an intrusion.

NETWORK FUNCTIONS

Through the network port can be remotely monitored in real time, searching and playback of video stored remotely and control PTZ Speed Dome cameras. And the complete configuration of programming 'also possible.

Remote access is done from a PC using the Internet Explorer browser or the program provided for the centralized management of multiple appliances. E 'can also access by mobile phone or tablet with the free application.

ALARM FUNCTIONS

In case of alarm it is possible to generate a variety of actions such as activation of the buzzer or the recall of preset positions of the speed dome cameras. E 'can also send e-mail and real-time notifications.

REMOTE CONNECTION P2P

The recorders DN series include P2P / CLOUD technology that allows you to connect through your Intenet without the need to subscribe DDNS services, or to program the mapping of router ports.

front Panel

The VCR keyboard allows control of all its functions. However, it is Menu very practical to use than the mouse and therefore its use and only recommended in applications where the mouse is not physically used. On the front panel there are also some LEDs that give an immediate idea of the device status especially useful if the display is not connected.

1 - KEY MENU - Accesses the configuration menu. Even function ENTER / CONFIRM 2 - BUTTON EXIT - Exits the displayed window function EXIT / CANCEL 3 4 5 6 - ARROW KEYS - Used to navigate the screen options. 7 - REC BUTTON - Opens the Settings page of the recording modes. Note that the security video recorders is not necessary to press the REC button to record but you set the recording mode based on the time and day. 8 - KEY PLAY - Opens the playback window for searching movies stored 9 - REC LED - signal that is being recorded in continuous mode, motion or alarm 10 - LED ALARM - E 'being an alarm event (motion , input or technical event). And 'common for this LED showing active during installation. The most frequent causes were the failure of the HDD formatting and the absence of one or more video signals. If HDD or some video channels are not used should rule out the alarm signal in case of HDD failure and

video loss.

11 - LED POWER - Report the VCR function.

VERSIONS FOR VEHICLES DN-V ...

In DVR devices for vehicles, the front panel, which should be more accessible in the assembly is as follows

1 - JACK CABLE RECEIVER IR - To control the functions DVR is equipped with an infrared remote control supplied. The receiver of the remote control is placed on the DVR, often installed in a location not accessible, but on a cable supplied separately that allows you to install it on the vehicle dashboard for convenient use. 2 - Power LED

3 - USB 2.0 port - A further USB 2.0 port is located on the other side of the DVR that normally is less accessible. On the USB ports connect the supplied mouse, and USB storage devices such as USB HDD or USB flash drives for backing up movies.

NOTE FOR ASSEMBLY - The DVR rule vehicles are mounted under the dashboard. It is necessary that the DVR is accessible because you can control with the remote IR. And 'well, however it foresees the possibility to occasionally reach the DVR to turn off the system at the main switch and to insert a key into the USB port for saving movies.

Major Specifications

AHD DVR / IP ANALOG

http://www.dseitalia.it/dati_videoregistratori_digitali_AHD.htm

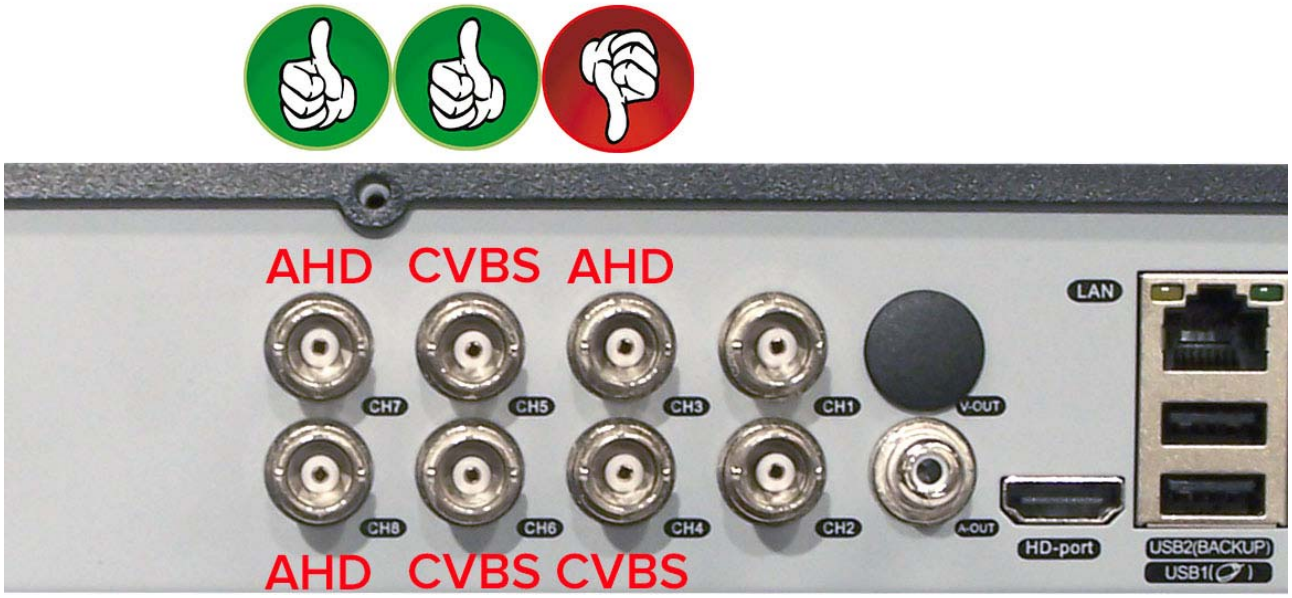
NVR

http://www.dseitalia.it/dati_NVR.htm

Multi-Technology

The DN-R4P / 8P / 16P models are multi-technology DVR can handle both local cameras, connected to BNC inputs, and IP network cameras.
At the local BNC inputs placed on the DVR can be connected to both classical analog cameras (CVBS) and in technology AHD, CVI or TVI. The DVR recognizes the input type automatically.

The 720P models (for vehicles) AHD handle cameras up to the maximum 720P resolution. Table models can handle both AHD 720P 1080P cameras and over up to 5MP. When connecting local cameras is recommended not to connect several technology AHD / CVBS on two adjacent channels (1/2, 3/4 etc.) as in the following example.



If you want to control IP cameras with DVR Multi-technology, it is not free to choose individually for each channel as the management of a network channel DVR is for very different than a local channel.

You have to chose one of the options made available from the apparatus according to the multi-technology table that is in the OSD menu by pressing the MODE 'button AHD / CVBS / IP.

Connections

The connections are located on the back.

NVR MODELS ONLY (DN-IPxx)

The IP camera only models do not have inputs for local cameras as they only interact with network cameras.

1 - NETWORK PORT - RJ45 connector to connect the NVR to a LAN 10M / 100M network. Before using the LAN connection set network parameters in the DVR setup menu. In NVR the network connection is crucial because it is the only communication port toward the implant devices. Check that the yellow and green LEDs light up both when connected to the switch the NVR.

2 - AUDIO IN - Auxiliary audio input for connecting an audio input which can be useful if you use two-way audio. Unlike analog cameras, IP cameras in the audio management coming from the camera does not require a separate entrance as the audio is embedded in the digital stream. This audio input is thus not for recording but can serve to connect a microphone with which the operator can talk through the audio output to the camera board (if present). To use this feature requires that the audio IP camera supports G711 to 8000Hz.

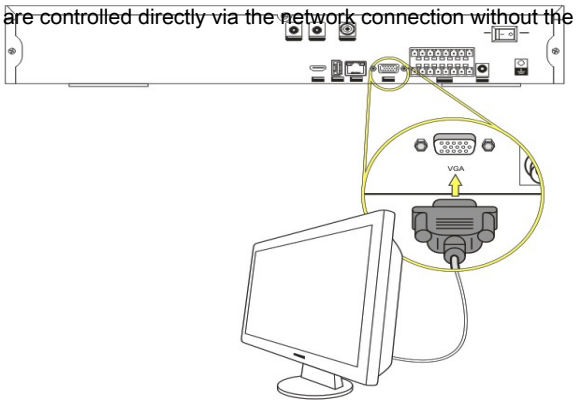
3 - AUDIO OUTPUT - mono RCA audio output for connecting an external speaker that allow you to hear the audio of the live cameras and recordings.

4 - VGA OUT - Used to connect a PC monitor. It is a door in high resolution up to 1440x900 and even HD and FullHD. The PC monitors are now the best solution if you are looking for a monitor with an excellent value for money. The VGA video output resolution is set in the configuration of the NVR. It must take great care to set resolutions supported by your monitor, because if the resolution does not prove supported will be forced to connect another BNC or HDMI monitor can edit it. Special attention must be made before choosing the 1080p and 720p options that not all PC monitors are capable of handling. 5 - HDMI OUTPUT - Used to connect a FullHD monitor with HDMI input. It is a high-resolution brings FullHD used among other things as all the latest generation of TV sets. The HDMI output is always recommended, especially if you want to connect a large monitor. The HDMI output also carries the audio signal.

6 - USB 3.0 PORT - The NVRs are equipped with one rear USB port complies with the latest USB 3.0 standard. This port can be used as a normal USB 2.0 port (see next item), but if you have back-up units that support this standard should connect to this port to a higher transfer rate. The USB 3.0 port is replaced by a 2.0 in multi-technology models (DN-Rxx)

7 - USB 2.0 PORT - The NVR are equipped with a USB 2.0 port rear. An additional USB port
2.0 is placed side by side on the keyboard (not present on DR-N4 / 8) ae USB ports connect the supplied mouse, and USB storage devices such as USB HDD or USB flash drives for backing up movies. The ports are all the same so you can connect the mouse to the door of your choice.

8 - PORT RS485 - From the RS485 port part on the bus going to control PTZ or speed dome cameras and that enters and exits from each camera by connecting them in cascade to the last. The RS485 BUS is performed with a twisted pair that connects to the terminal RS485A and RS485B. Take care to respect the order of the connections A (+) and B (-) in all cameras NVRs DN series PelcoD support the protocol used by the DSE speed dome cameras, and various other protocols from other manufacturers. Note that this RS-485 connection does not serve to control speed dome DSE IP cameras that are controlled directly via the network connection without the need for this additional wiring.



9 - 12VDC - Power connector where

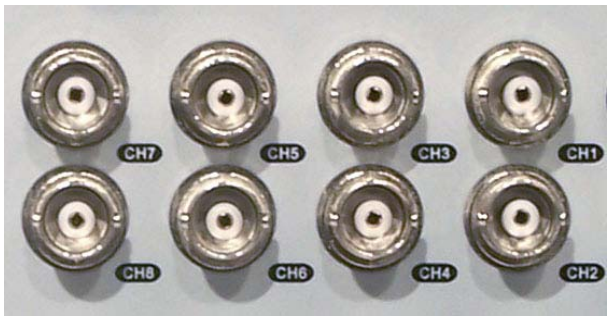
Connect the power adapter included 10 - GND - Ground

connection

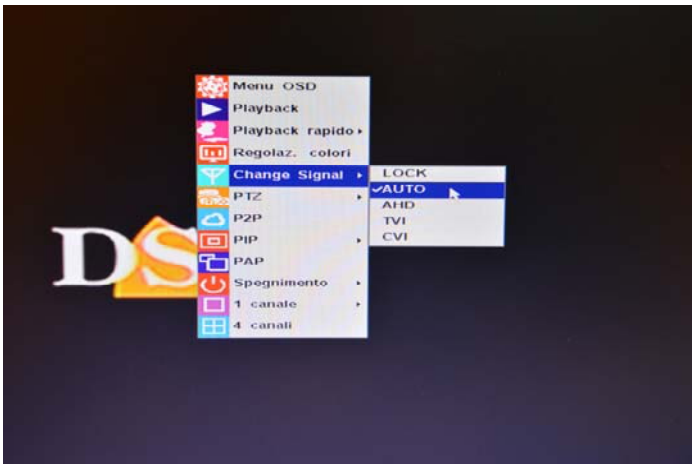
11 - ON / OFF - Power switch

MODELS MULTI-TECHNOLOGY (DN-Rxx)

The multi-technology models have all connections just seen for NVR, but with the additional local video and audio inputs for cameras AHD, CVI, TVI and analog.



VIDEO INPUTS - BNC video connectors to connect the cameras AHD, CVI, TVI or analog. The same inputs are used for the different types of signal. The DVR automatically recognizes the type of input AHD (DSE), CVI (Dahua), TVI (Hikvision) or CVBS (Traditional analog). In some cases you may want to force the DVR to only use a specific technology, it is done in the configuration menu with the mouse.



The number of BNC connectors varies from 4 to 16 depending on the model in question. In this manual it refers often to these inputs by calling "local input" to distinguish them from the IP cameras.

AUDIO IN - mono audio inputs for connecting external microphone or audio signal from cameras with embedded audio. The connector used is RCA. Using external microphones it is necessary that they have their own power supply. VIDEO BNC - For connecting an analog input monitor service. This video output is only used for auxiliary monitor as it does not play higher resolutions to analog CVBS.

MODELS FOR VEHICLES (DN-Vxx)

The models for vehicles equipped with similar inputs and outputs to the table DVR multi-technology mentioned above, but the connections are a bit 'different to adapt to mounting on vehicles.

1-2-3-4 - VIDEO INPUTS - Connector to connect video cameras AHD 720P or analog CVBS. The same inputs are used for the two types of signal. The DVR automatically detects the type of input AHD or CVBS (analog). Warning: these DVRs do not support higher resolution to 720P.

For an easier installation on board of vehicles or mobile means, these DVR does not use the classic BNC of our tabletop models, but the connector 4 PIN, supplied with the appliance, which serve to conduct with only a 4-wire cable both video and 12VDC power supply.

The connector is wired as follows:

1 - 12VDC + ... CABLE RED 2 - GND (12VDC -) ... .. CABLE BLACK 3 - AUDIO INPUT ... .. WHITE CABLE 4 - VIDEO INPUT ... .. GREEN LEAD

Included are the connectors already fitted with a section of cable that must be connected as follows: 12VDC + and - (camera power supply) to the black and red wires of the connector (1 and 2) VIDEO SIGNAL of the GREEN and BLACK cables camera (4 and 2) AUDIO SIGNAL camera to WHITE and BLACK cables (3 and 2)

5 - VIDEO OUTPUT CVBS - Output to connect with an analog input monitor and possibly also provide 12VDC power supply. Almost all small monitor for vehicles accept an analog signal and can be connected to this output. The wiring is equal to that just described for the cameras and also provides to the 12VDC power supply monitor. 6 - VGA OUT - Used to connect a PC monitor. This port supports resolutions up to 1280x1024.

7 - POWER INPUT - Here goes connecting the power cable supplied. Being intended for operation of the DVR means is provided with two pairs of red / black cables, each with a protection fuse: a pair for connection to 12VDC / 24VDC (battery) and one pair for connection to the vehicle control unit where to pick up the ignition signal. If you want the DVR turns on and off with the means connecting both the +/- 12V that ACC + / ACC exit the vehicle, only supplying voltage with the ignition on.

If you prefer that the DVR always functions, even with the vehicle stationary, then connects both the 12VDC torque that the torque to the ACC of the vehicle battery.
8 - OFF / ON - Main switch to completely shut down the DVR regardless of the voltages applied to the power connector

9 - VIDEO HDMI - Use to connect a TV-like monitor. This port supports resolutions up to 1280x1024.

10 - USB 2.0 PORT - These DVRs are equipped with a USB 2.0 port. A further USB 2.0 port is located on the other side of the DVR that normally is more accessible. On the USB ports connect the supplied mouse, and USB storage devices such as USB HDD or USB flash drives for backing up movies.

11 - NETWORK PORT - RJ45 connector to connect the DVR to a LAN and thus allow control from PC and mobile devices, including via the Internet. Before using the LAN connection

set network parameters in the DVR setup menu. Check that the yellow and green LEDs light up both when connected to the switch the NVR.

Installing the Hard Disk

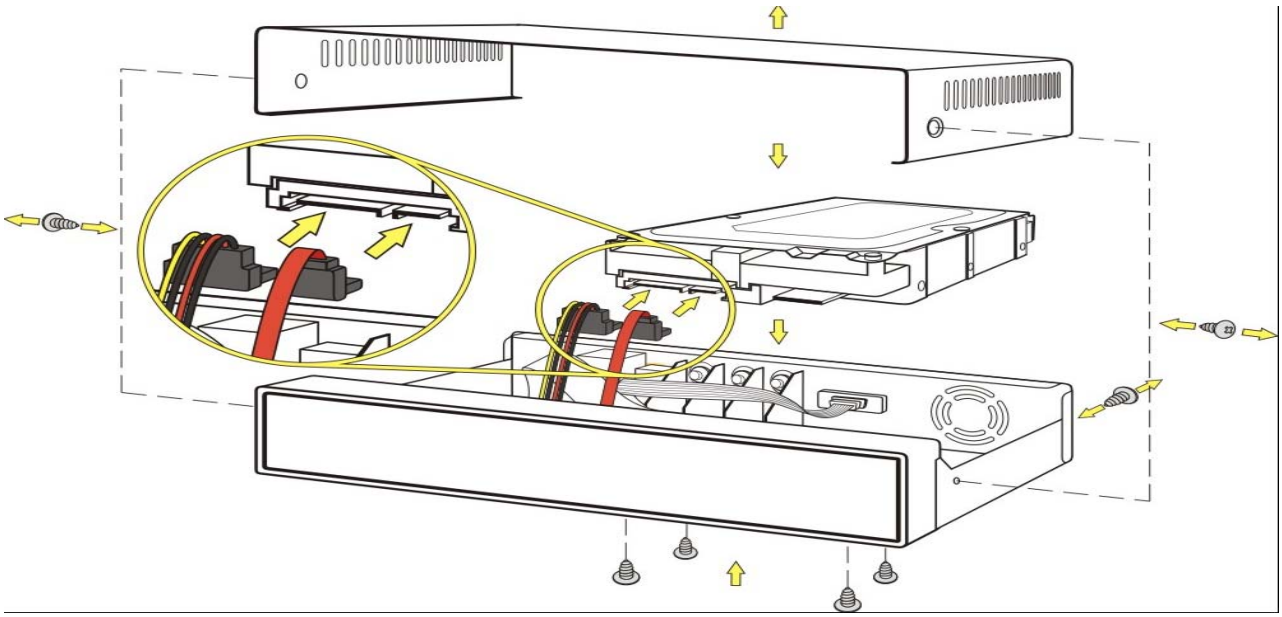
Because the recorder is capable of recording you need to install a hard drive inside the equipment. The NVR is always supplied without a hard disk, so the first step needed is the install disk.

The DN series of devices can accommodate 1, 2 or 4 Hard disk of any brand provided with SATA connector. There **maximum manageable capacity of 4000 GB (4 TB)** for each HDD. Proceed with the installation of the hard disk as follows:

1. Turn off the appliance open the VCR by removing the top cap by unscrewing the lateral fixing screws.

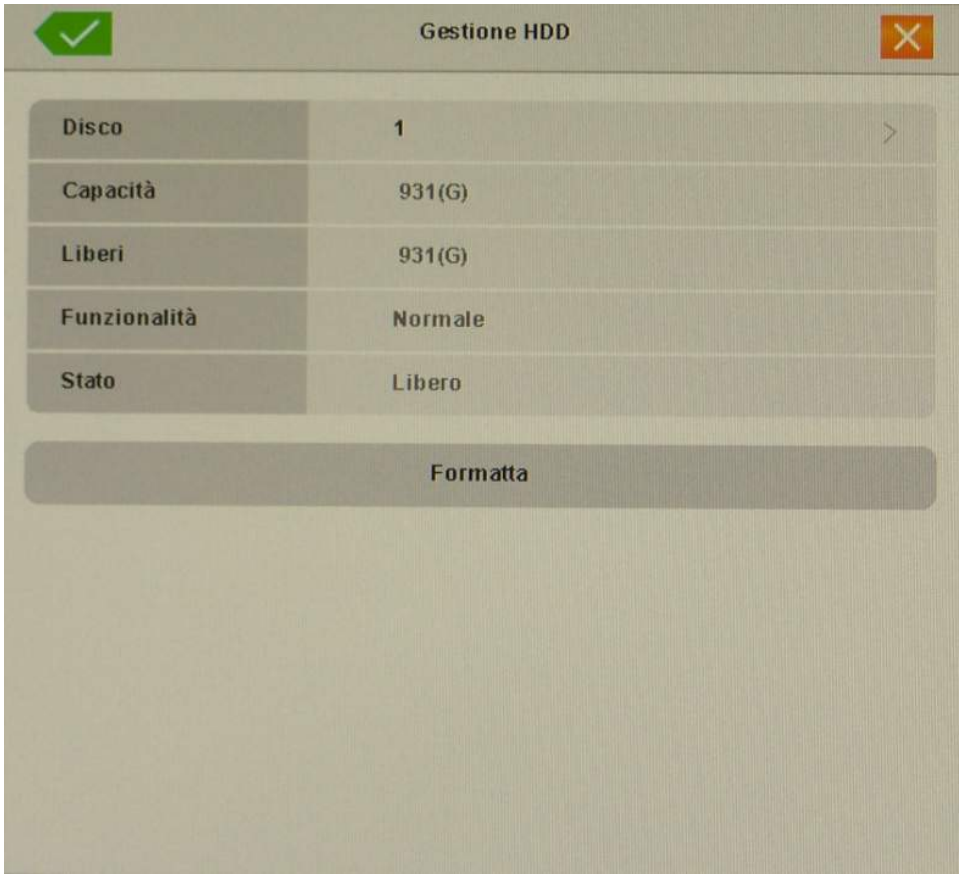
2. Attach the hard disk unit in its seat by means of the fastening screws.
3. Connect the red SATA cable for data and power cable between hard drive and motherboard.

4. Close the appliance with the lid by screwing the screws.



WARNING: Before you start recording you should use the **physical formatting** hard drive in the configuration menu to HDD MANAGEMENT. See the instructions in

Configuration manual. The device will not be able to register until you have completed the formatting.



Mouse Installation

Video recorders DN series control mainly with the mouse included. The mouse is connected to a USB port of the NVR. You can connect the mouse to the USB port of your choice, but it is recommended to use the rear USB 2.0 port in order to leave the side door, easier to access, free to insert removable drives.

The mouse can be connected to hot-swap, with the NVR in operation.

The NVR of the functions can be controlled also by means of the remote control or even only with the front keys of the keyboard. But this is less intuitive methods of control so it is advisable to always provide, where possible, the installation of the mouse. This manual always refers to **Control of the NVR via the mouse.**

Note that while you are controlling the NVR with the mouse is being recorded for the CPU involved in coding can occasionally cause delays in the perception of mouse clicks.

# of multi-technology settings

The recorders multi-technology AHD / Analog / IP (DN-R ..) can handle both local and IP cameras. If you use the DVR to record only local cameras (AHD or analog) you can avoid reading this warning.

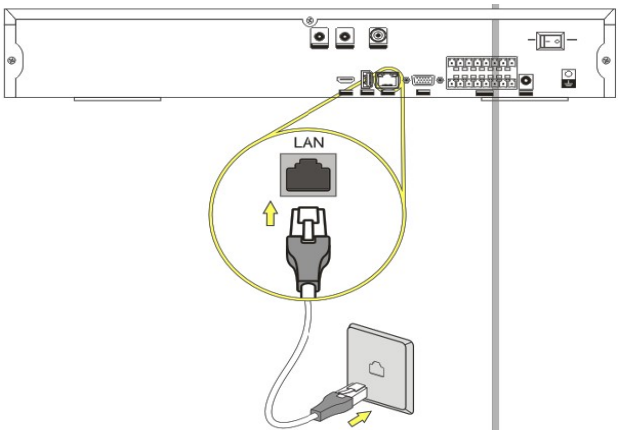
If you are running a mixed configuration with local cameras, but also IP cameras then it will be necessary to plan carefully the option of multi-technology to decide how many rooms and how many cameras do manage IP cameras to the VCR. If you do not select an option of multi-technology, the DVR will not be able to add IP cameras.

Find the description of the multi-technology options in **Configuration manual.**

They have several options of multi-technology can be selected according to the camera to be connected

Network Configuration

The NVR (DN-IP ..) are network video recorders where all communication between the device and the camera passes on the LAN.



The DVR multitechnology (DN-R ..) also control local cameras but also have a network port.

To connect to a LAN, the first thing you need to connect the rear door to a network port on your swicth using a straight type power cable. As soon as you plug the cable i

yellow and green LEDs on the switch and connector on the NVR port should go on. If you do not monitor the proper functionality of the cable.

IP ADDRESS ASSIGNMENT

The recorders are able to support the automatic address assignment (DHCP). This means that once connected to the network automatically acquire the network parameters from a DHCP server, typically your router or network switch. This mode, although with a very simple hand, it is not advisable in video surveillance applications since the NVR might following a restart modify its own address and it would be necessary to reconfigure many settings.

It should use the DHCP mode of the DVR may only get to know, the first link, the correct parameters can be assigned to the DVR, but then set them as static IP so that you can not change in the future. Before you must obtain from your network some information about the management of the IP addresses used on your network. E 'need to know an IP address can be assigned to the NVR that is not equal to any other existing network device. The first 3 digits of the IP address must be the same ones used by the other computers, otherwise there will be communication between network components.

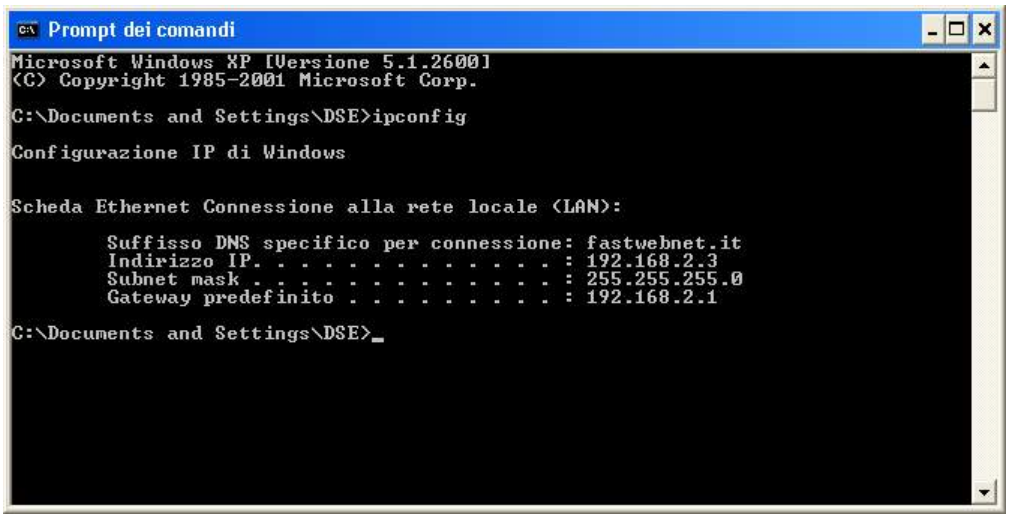
KNOW THE PARAMETERS OF COMPUTER NETWORK

If you are uncertain about the operation of your network and you do not know which IP address assigned

the NVR can use certain commands in DOS PROMPT

On a PC networked launched a DOS window available between the Windows accessory programs.

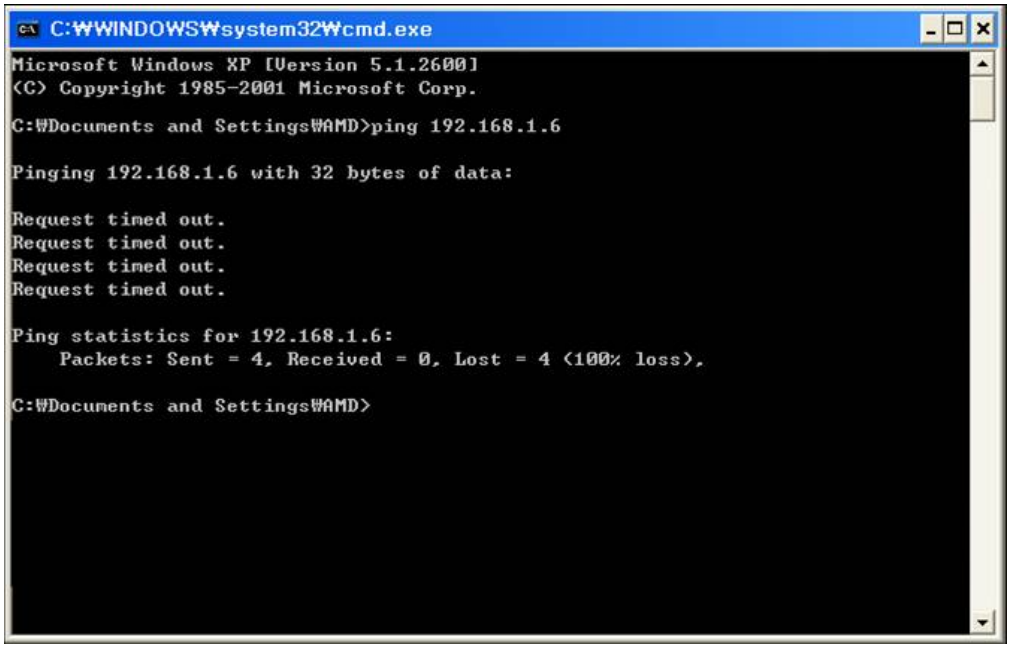
Type IPCONFIG at the command prompt and press ENTER. They will see the TCP / IP parameters. The second line is the IP address assigned to your computer.



In the above example the address of the PC on which you are working is 192.168.2.3 and the subnet mask used is the classic 255.255.255.0. Al NVR can therefore assign an address chosen by the 192.168.2.XXX type, where XXX stands for a number between 0 and 255. E '

important **choose an address that is not already used by other devices** of network. To verify that the chosen address is free, try to make a PING from the same DOS window by typing PING followed by a space and by the IP you wish to assign to the camera. Press ENTER. If there is no device responds to that address, you will receive 4 REQUEST TIME OUT. In this example you are occurring that does not exist in a network device with IP address 192.168.1.6 typing: PING

192.168.1.6

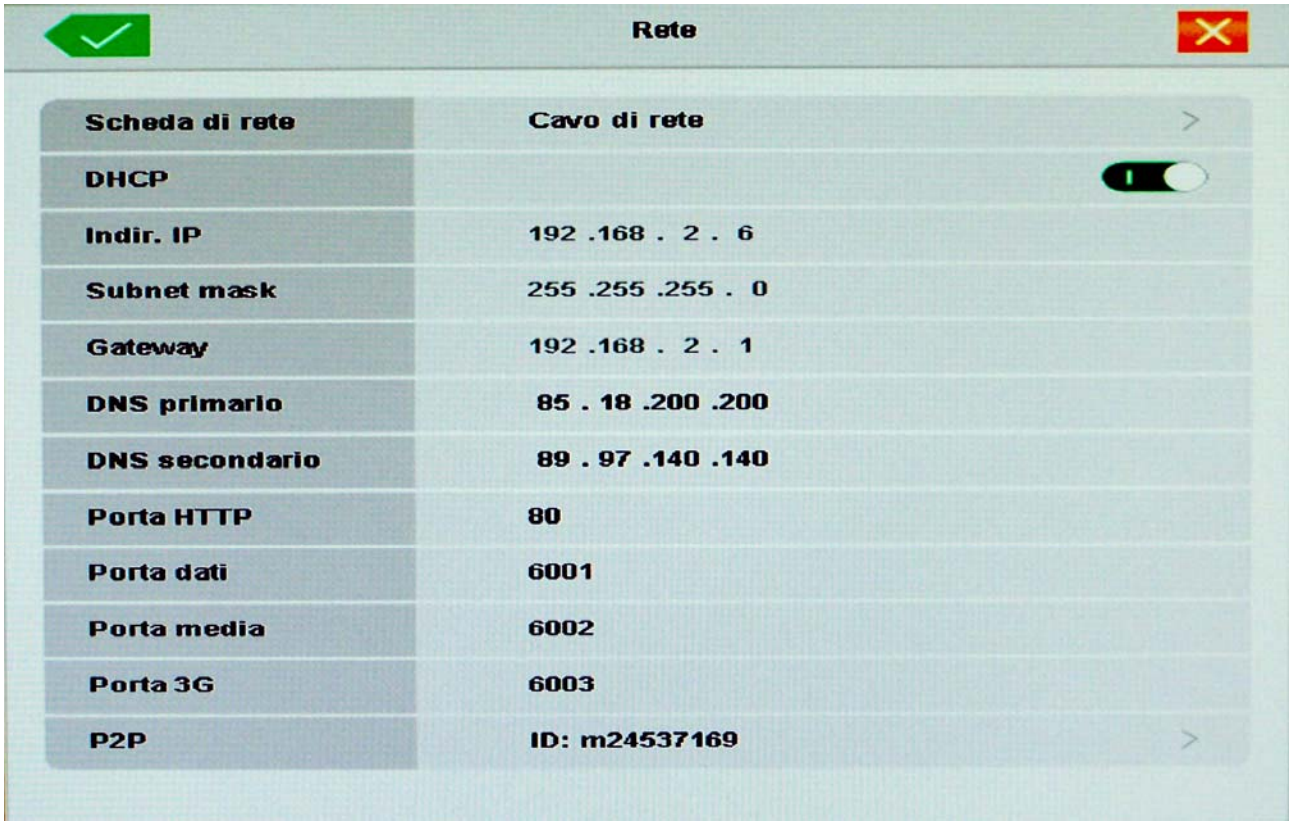


The 192.168.1.6 address is available for use and assigned to the NVR.

KNOW OF THE PARAMETERS NVR NETWORK WITH DHCP

Although the automatic IP assignment in DHCP mode is not advisable in the surveillance it is useful both because it allows you to connect the machine to a network with the certainty of not create any conflict, both because it allows to immediately know the network parameters that we can assigned to our VCR.

If we connect the device to the network and we go into the OSD setup SYSTEM / NETWORK section page already find the network parameters correct for our NVR / DVR



We will only have to disable the DHCP assignment and enable manual assignment by copying the data that the DHCP server had assigned automatically.

PARAMETERS NETWORK TO BE MET

Because our VCR can talk to your network it is indipensabile which are set the following parameters:

IP ADDRESS

SUBNET MASK

Because it can see the outside Internet network must also parameter

GATEWAY

That rule is the number 1 of the address class (eg. 192.168.0.1)

We saw earlier how to know these settings through its network.

To complete the configuration still required parameter:

DNS PRIMARY AND SECONDARY

This parameter is important if you want to use our servers CLOUD as it allows the videoregsitratore

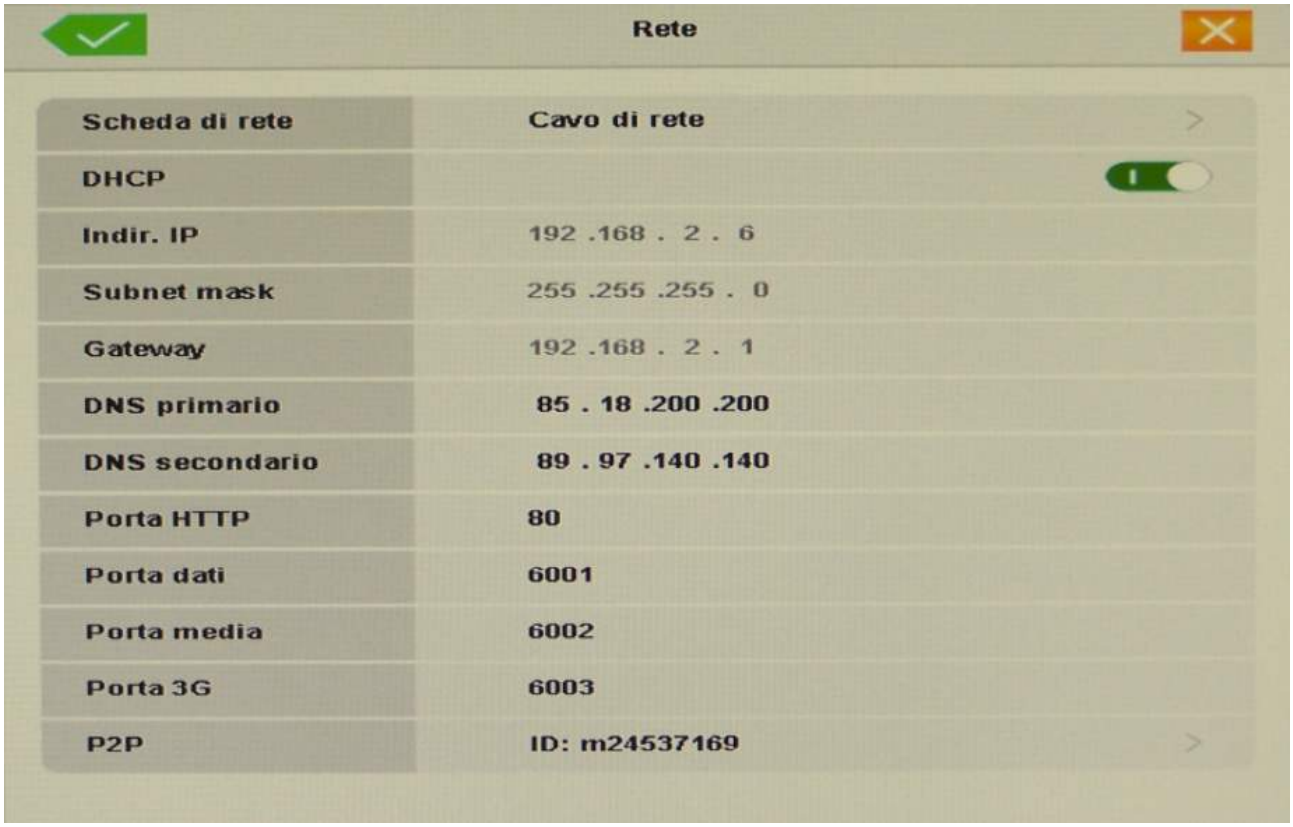
locate websites. Without DNS properly set the

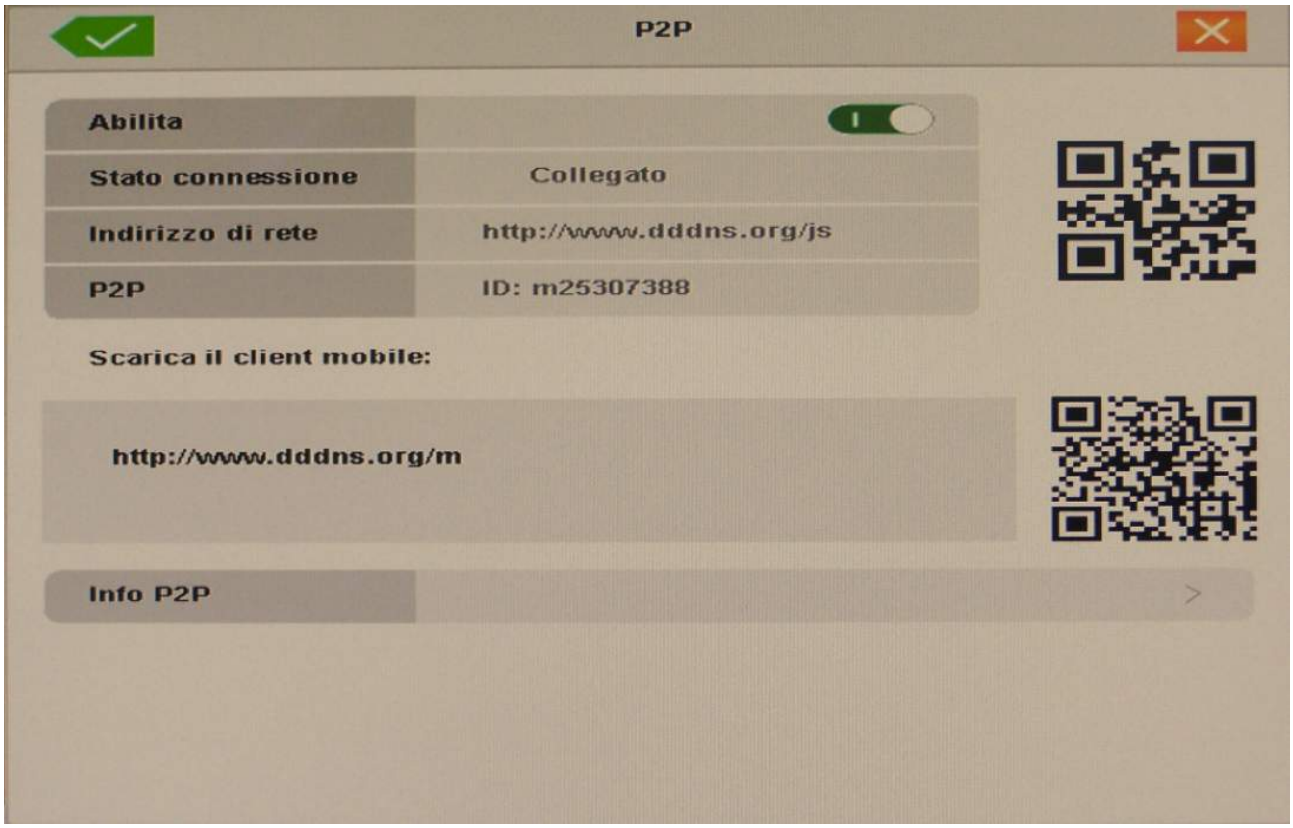
VCR will not dialogue with our cloud.

The DNS can get from your Internet service provider, or by using a DHCP connection initially as seen above.

NETWORK CONFIGURATION COMPLETED

If you have completed the network made a small effective functioning configuration by going to the programming menu to NETWORK item and clicking the last entry P2P (see configuration manual)





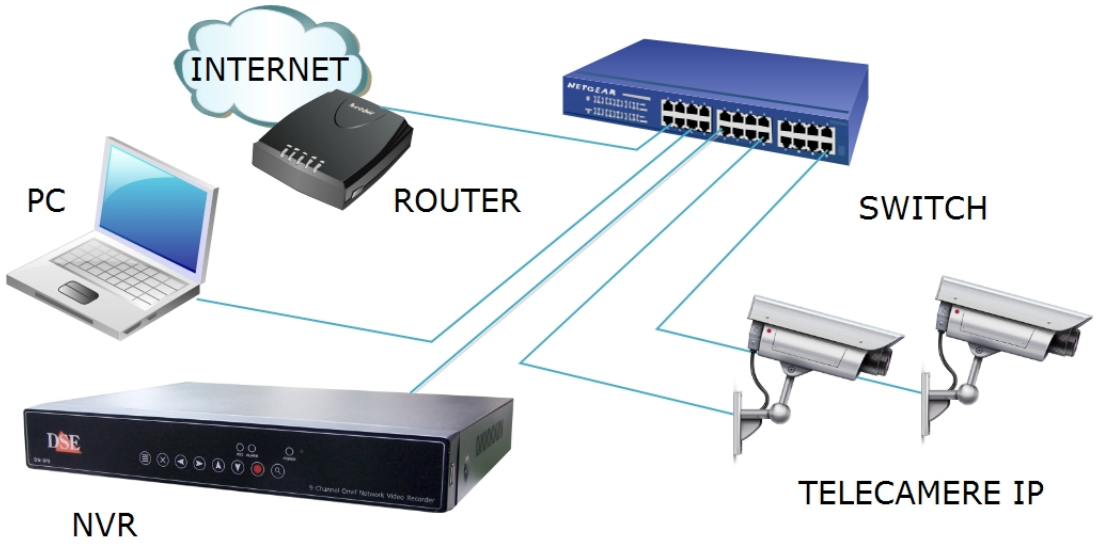
The connection was reported as CONNECTED indicating that the VCR communicates properly with your network and the Internet.

IP cameras Configuration

When using a pure NVR or DVR with an option of multi-technology connection be made between the VCR network cameras.

This operation is not necessary for the local cameras as individually connected to the inputs of the DVR and then connected automatically.
This manual assumes that the system's IP cameras have already been installed on the network and are fully functional. For this situation it is necessary to make use of the manuals supplied with the cameras to configure IP addresses. Once connected to the NVR in the network will need to provide the connection data to reach the IP cameras in the system.

In a very simplified view an IP camera system can be outlined as follows.



If the cameras are properly configured on the network, each with its own IP address, you can proceed with the configuration of the NVR cameras.

AUTOMATIC CONFIGURATION OF CAMERAS

The DN series recorders are able to automatically search the network for all DSE IP cameras and all cameras be able to properly manage the ONVIF protocol. It should be noted that the video recorder is not able to recognize IP cameras with non-coherent IP address with that of the VCR, that is, with an address class (first 3 address numbers) different.

If you have not yet made the IP address of the cameras consistent with your network equip the camera manual and use the supplied configuration software of the same. To configure the cameras automatically, start the VCR and click the right mouse button to bring up the operation menu, then click AUTO ADD IPC

The video recorder will automatically search the IP cameras onvif network and configure itself automatically. If you have not logged into the OSD you will have to LOG-IN to the system with the default credentials

USER: admin

PASSWORD: leave blank

Once added automatically cameras is always advisable to go to the OSD of the video recorder and check the individual settings that are assigned to the cameras. You usually need to enter your login credentials.

CAUTION: If you leave enabled the automatic addition of a function of each cameras installed in the network camera will be added automatically to the VCR and can not eliminate cameras in manual mode.

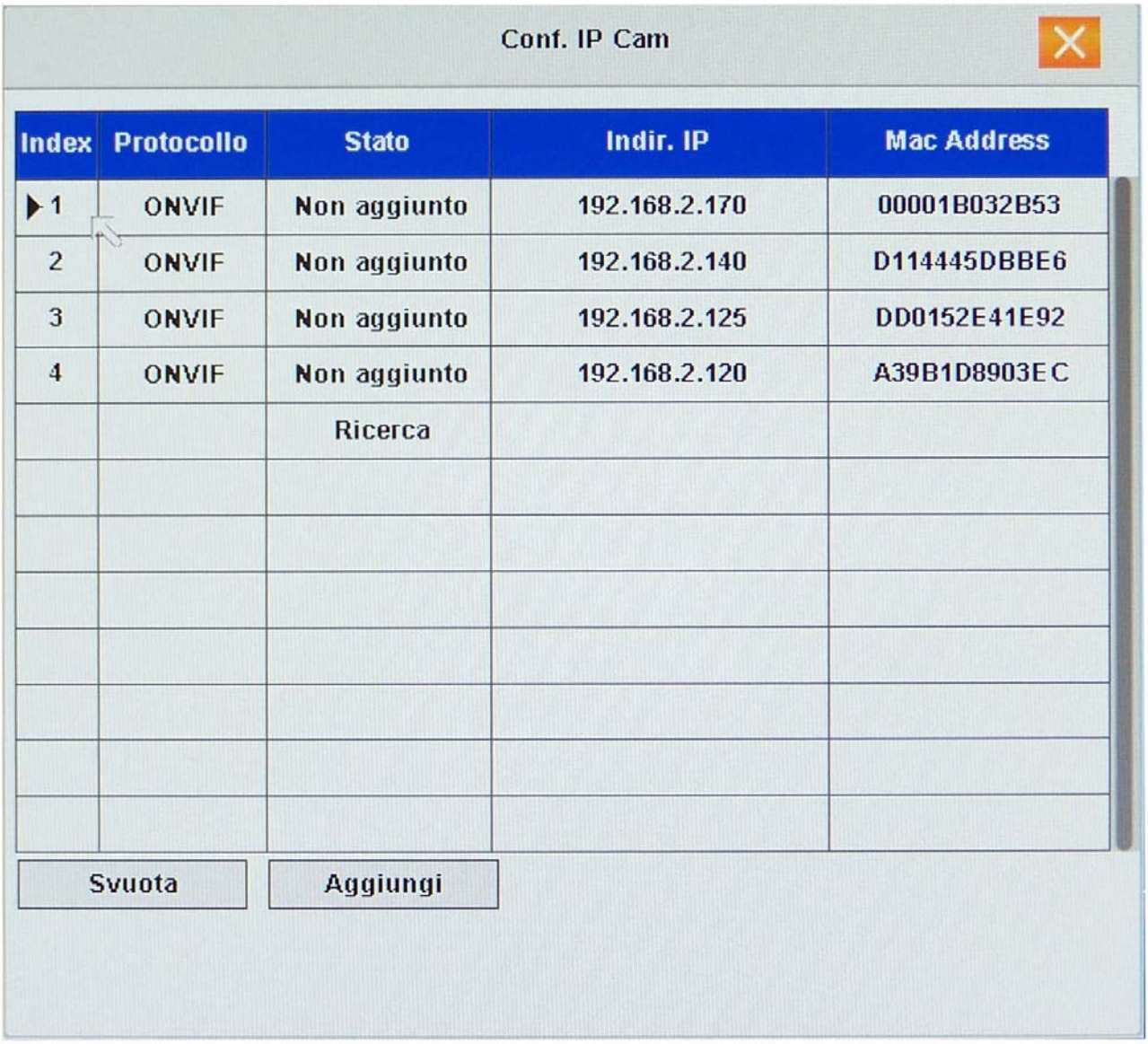
AUTOMATIC CONFIGURATION ADVANCED CAMERA

The configuration of the fully automatic cameras seen in the previous chapter is not the user leaves a large control solla camera management. Alternatively, it is possible to proceed in semi-automatic mode, equally rapid procedure, but that more leaves a greater possibility of customization during configuration.

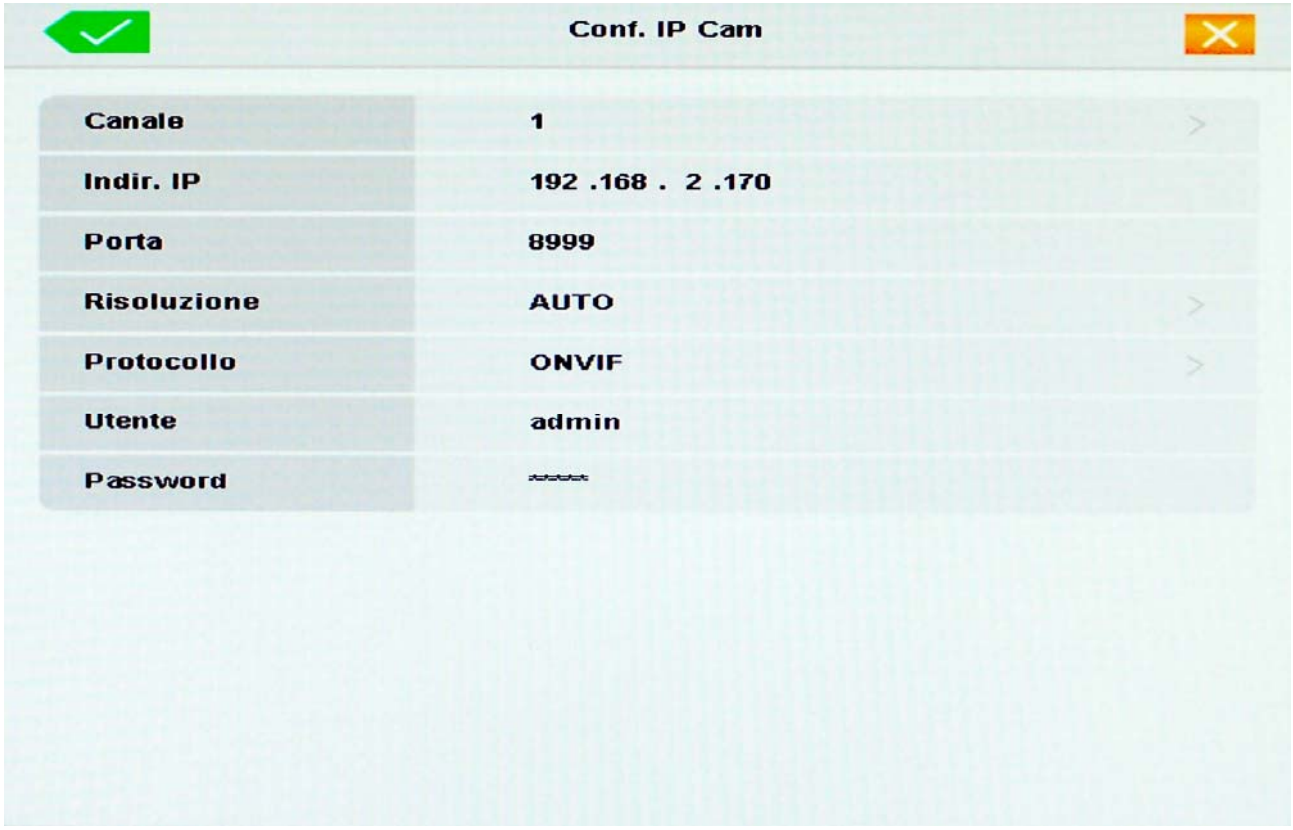
To perform this configuration, click the right button to display the menu and then choose ADD IPC

Alternatively you can also click on the little + icon that appears leaving the mouse for a few moments on a live window is not assigned to any camera.

The window that appears automatically shows all available cameras on the network.



Select a camera and press ADD, you will see the camera setup window where you can maintain the recommended parameters or change them at will.



This brings the window should appear as early as correct since the camera communicates this data to the NVR. How resolution is recommended definitely AUTO option that allows the NVR to adjust the resolution optimally depending on the camera. Username and password are ALWAYS INCLUDED MANUALLY overwriting any existing default values, otherwise you risk a lack of access to the wrong login.

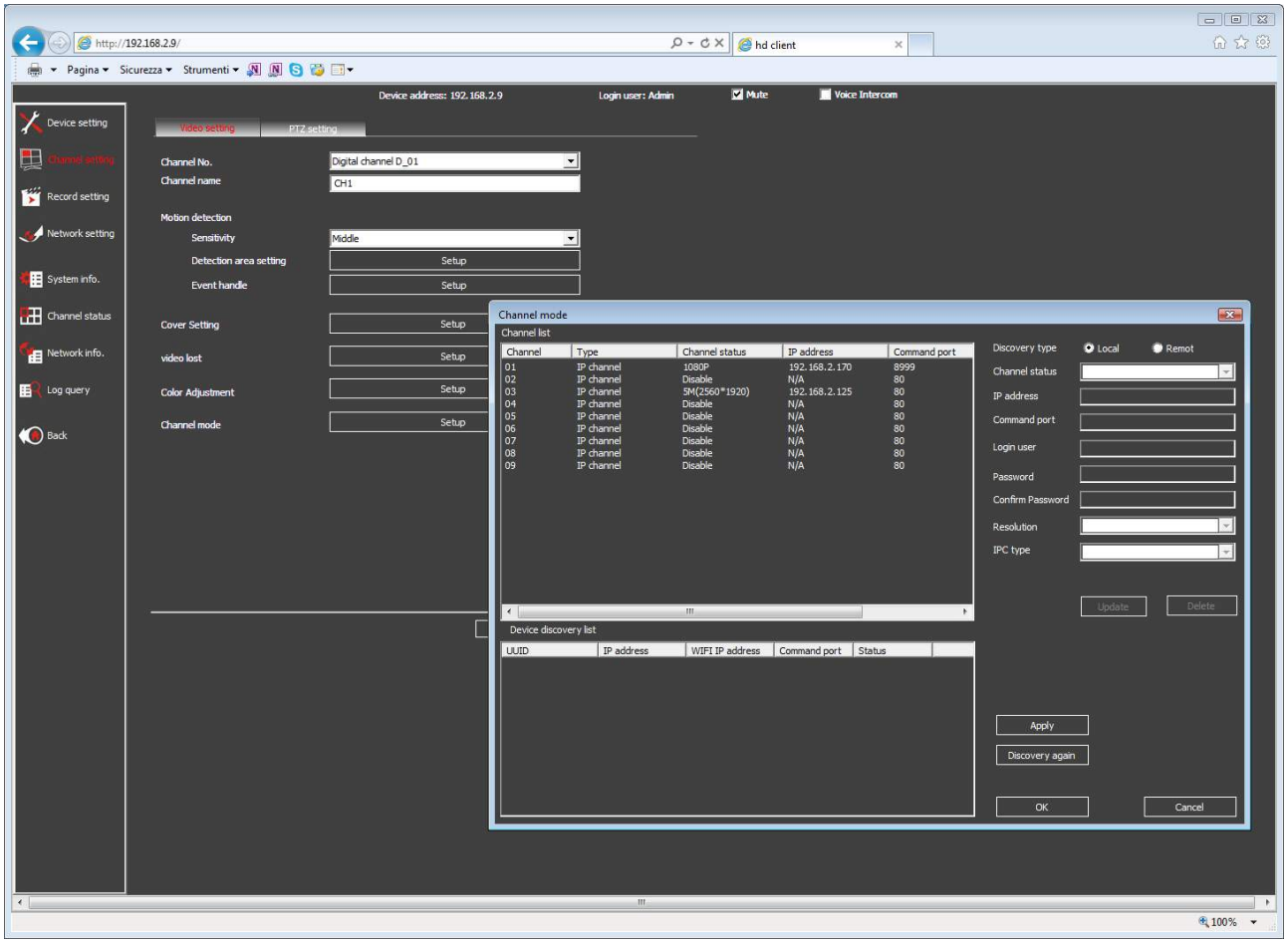
All these parameters can also be modified in the configuration menu as described in the manual.

ADDITIONAL OPTIONS CONFIGURATION CAMERAS

In the configuration manual explains how to access the camera management page and intervene further with the possibility of inserting also manual and channel organization. The manual input is required to connect a camera is not connected to the same LAN VCR.

CONFIGURATION REMOTE CAMERAS WITH BROWSER

The camera configuration is also possible to remotely working with Internet Explorer. It is recommended not to use this remote configuration to the first installation, but to restrict the use in subsequent additions particularly in the case the VCR is not easily accessible. To access the camera from browser configuration (see next section) it acts in the section CHANNEL SETTING / CHANNEL MODE



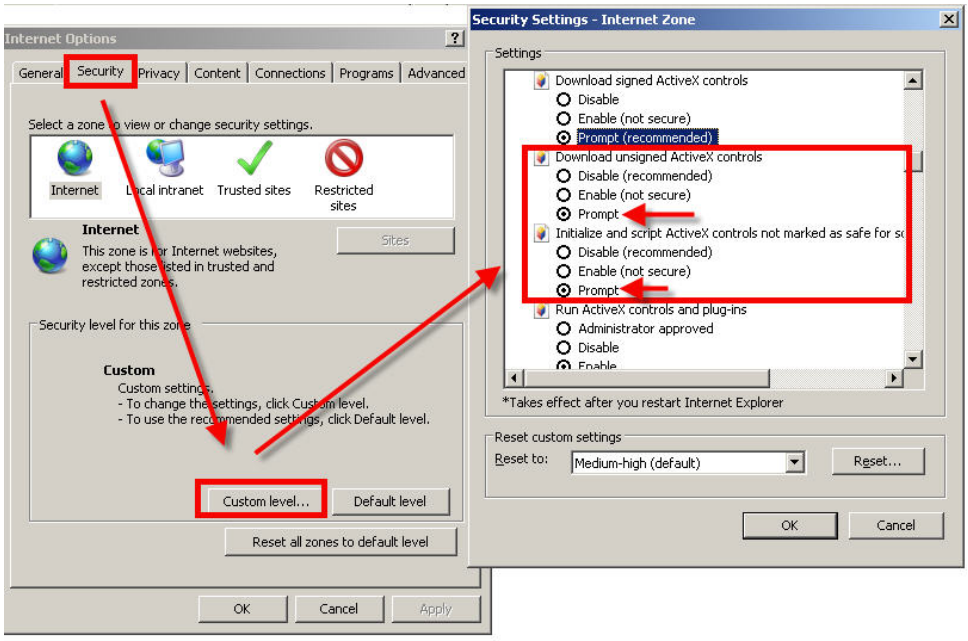
Connection with IE browser

The easiest way to connect to a VCR DN series through a computer using the Internet browser. The reference is to use browser **Internet Explorer**

albeit with appropriate plug-in is also possible to use other browsers (see below).

ENABLE PERFORMANCE OF ACTIVEX

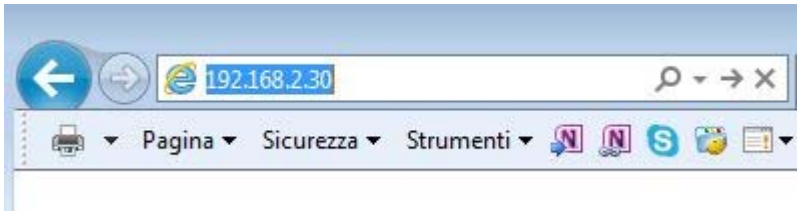
When you first connect the device installed in the Internet Explorer browser the necessary activeX components. Without these components, your browser can not display the image. However, Internet Explorer contains security settings that may prevent the installation. Before attempting to connect must be enabled **download and execution of ActiveX not marked as safe.** In Internet Explorer, select TOOLS / INTERNET OPTIONS



In the folder PROTECTION choose the area of interest (Internet or local network) and click CUSTOM LEVEL. Enable all items for the **download and execution of ActiveX particularly those NOT marked as safe.** E 'can set the items either ENABLE or ASK FOR CONFIRMATION. ASK FOR CONFIRMATION setting the browser will prompt you to click OK to confirm the installation of the component. Finally, save and restart the browser.

ENTERING THE ADDRESS OF THE RECORDER AND WEB PORT

To access with Internet Explorer, type in the address box, the IP address that you assigned to the NVR. In the example below we provide a link on the internal network to the DVR an IP address of 192.168.2.30.

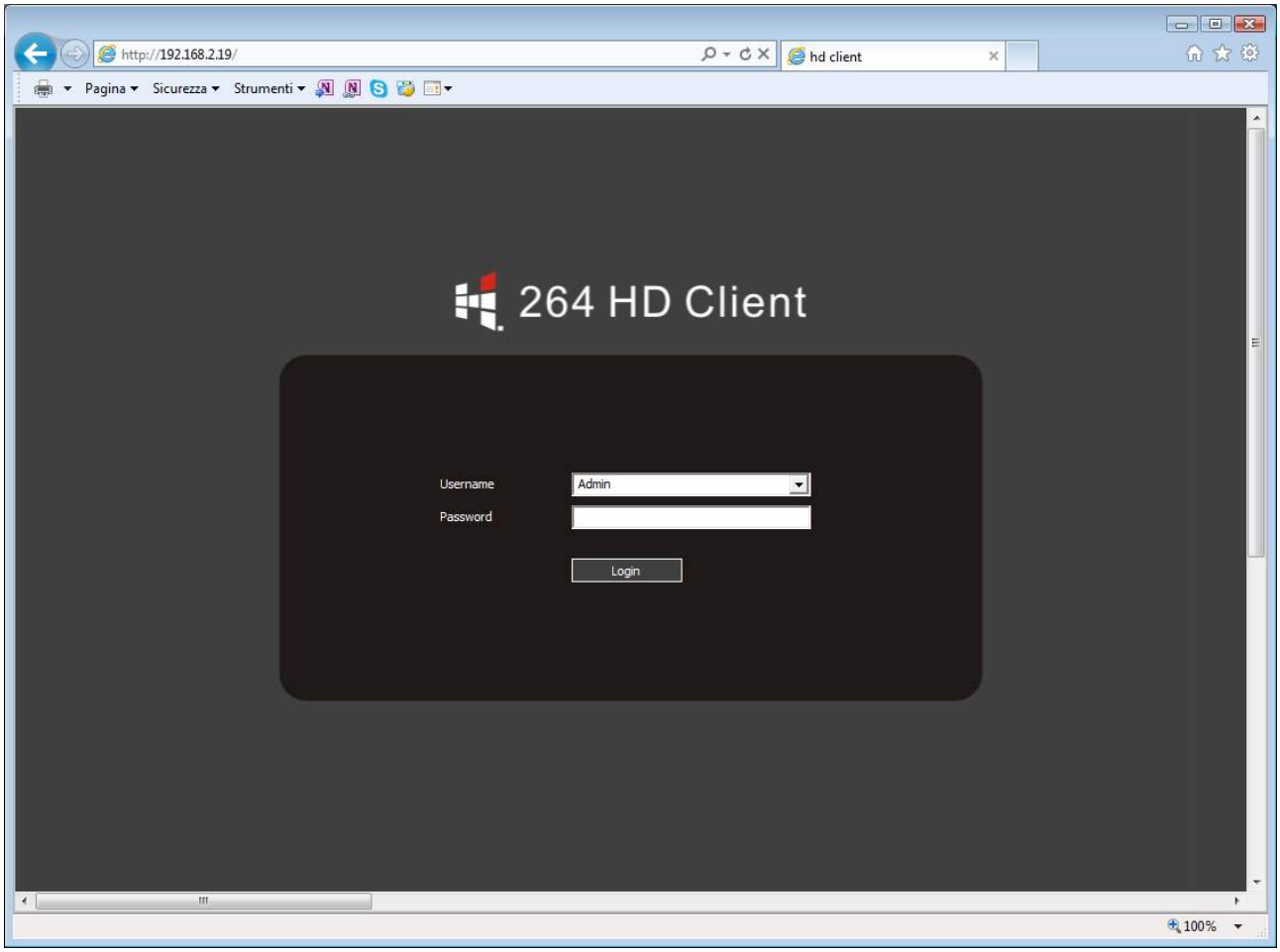


All VCRs DN series incorporate Factory WEB port 80. Port 80 is the one that browsers use if they have not been clarified another.

Note that if you change the web port in the device configuration you will need to specify it in the address bar. The following after the IP address of the video recorder is the web port is designated 85

It will present the log-in window of NVR

WARNING - For the full functionality of all options is recommended to run Internet Explorer as administrator (right click / run as administrator)

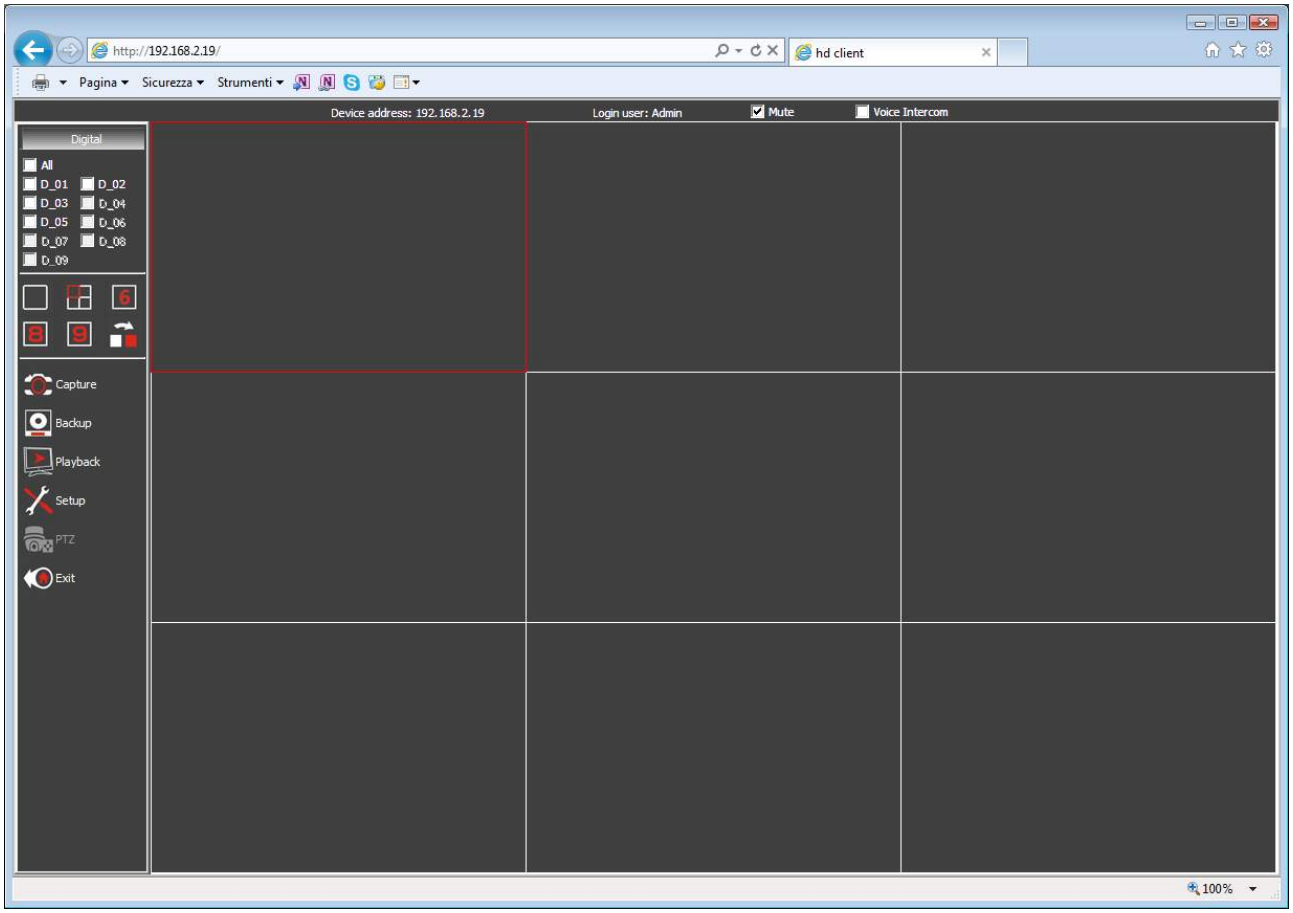


If you have not changed the factory can use user credentials: **Admin** and leave the password field blank.

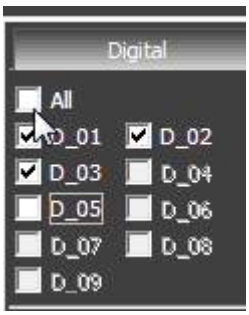
At the first access, depending on the security settings you have chosen there could be shown a confirmation request to install the component activeX where necessary to give consent. If the installation of activeX component does not happen the screen will be divided into quadrants, and not be necessary to review the Internet Explorer security settings and check some settings for the implementation of the activeX is not left disabled.

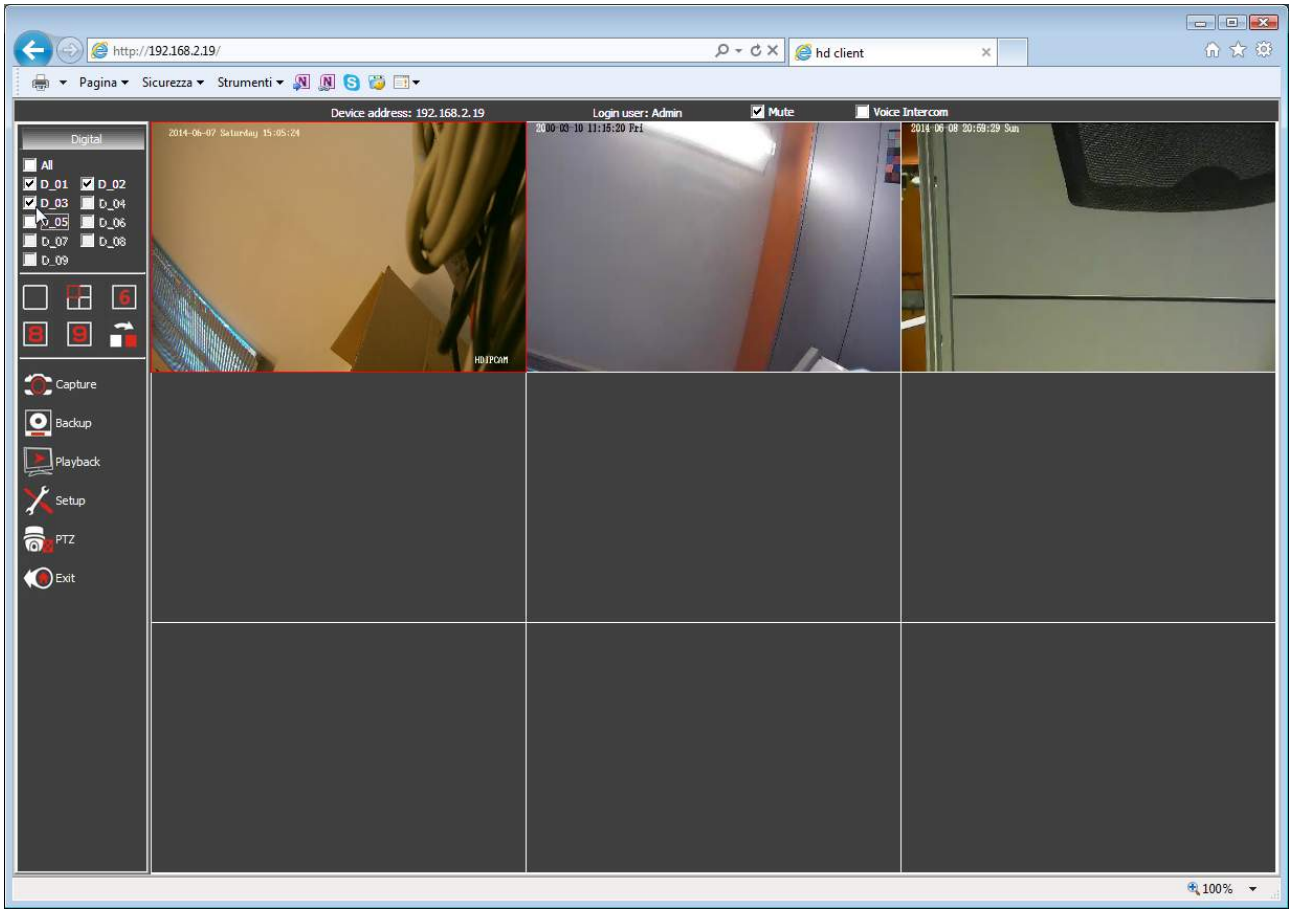
LIVE VIEWING

Here is the exemplary playback screen of the DN-IP8.

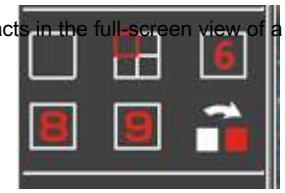


To start watching the cameras simply select ALL in the top left corner. In this way they will automatically open the channels for which a camera has been programmed. E 'can close and open each channel placing or removing the checkmark. Not the channels that do not have a camera configured are accessible.

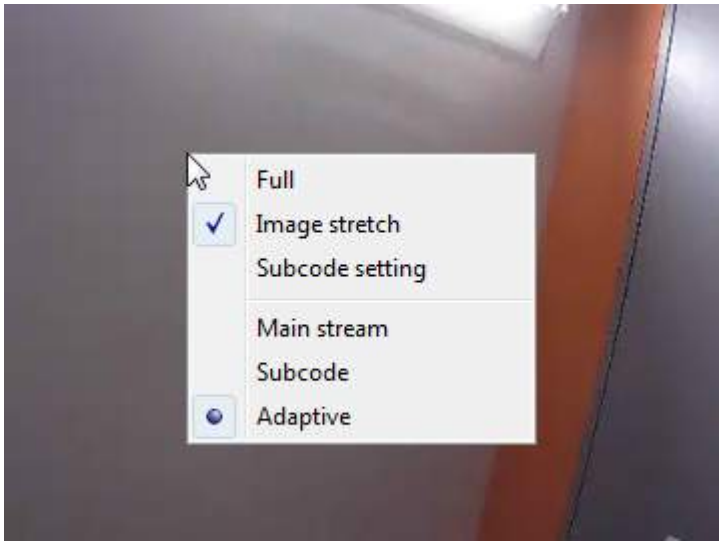




In the vision of the live cameras remotely it is possible to change the split screen as desired with the buttons that allow you to divide the screen into different modes depending on the number of channels of the VCR. The last button multivision acts in the full-screen view of a camera and allows you to move to the next channel.



By clicking the right mouse button on each image you can set the following options:

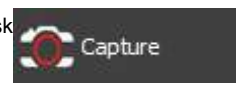


FULL - Take full screen IMAGE STRETCH - If enabled, the image windows are resized automatically to fill the available pane. If disabled it is always preserves the original aspect ratio. E 'can also change this setting in SETUP. SUBCODE SETTING - Allows you to adjust the camera settings substream (Frame Rate and Bit Rate)

MAIN STREAM / SUBCODE / ADAPTIVE - Allows you to choose whether to receive the main stream of the cameras (MAIN STREAM) or SUB-STREAM, more suitable in connection with insufficient bandwidth available, for example via the Internet. It 'also available ADAPTIVE option to automatically choose the stream to the client to be used depending on the bandwidth availability. E 'can also change this setting in SETUP.

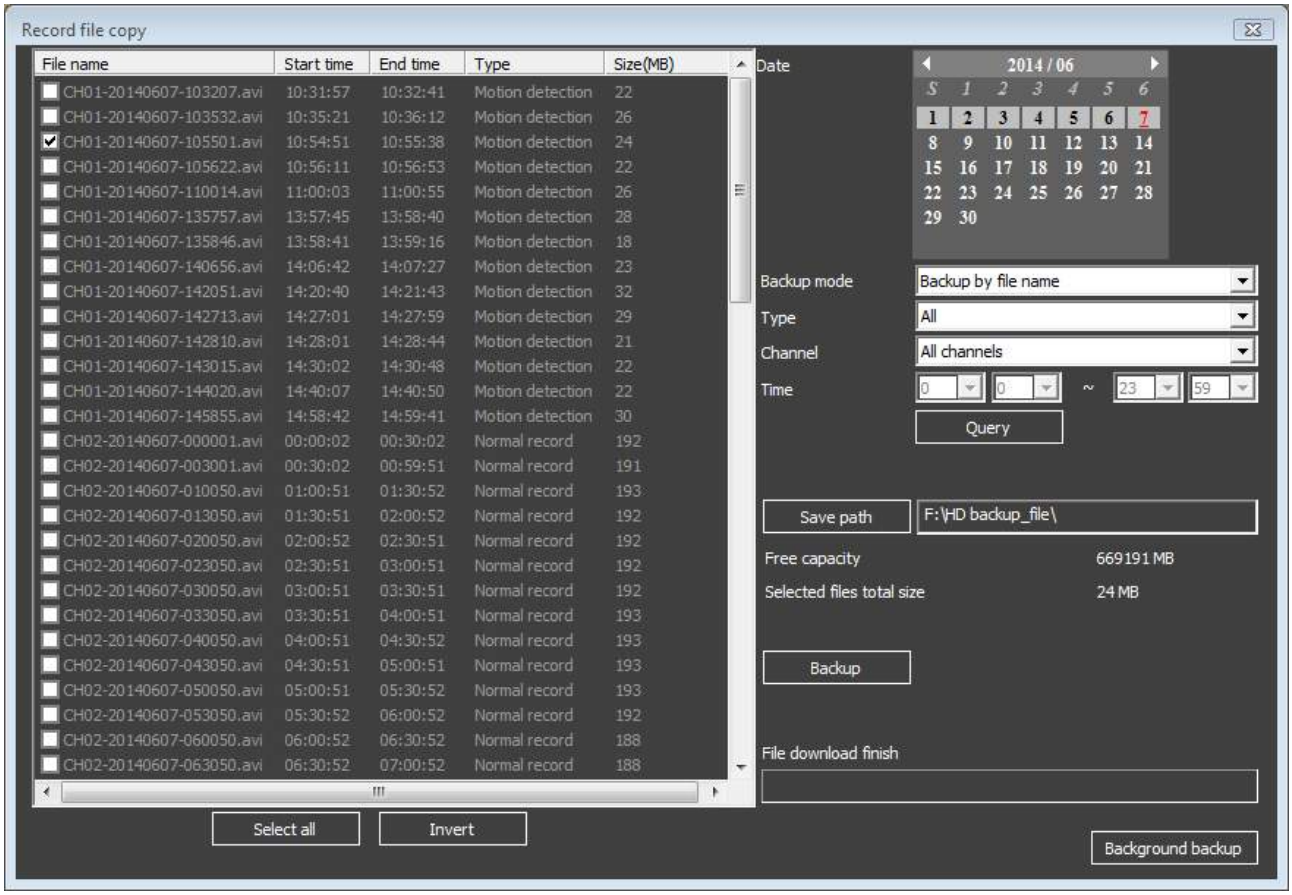
CAPTURE FRAME

During live view, you can press the CAPTURE button and save a photo of all the active channels in the hard disk of the local PC desk (BMP). The rescue persorso can be set in the SETUP section (see below)



BACKUP

The BACK button is used to download movies stored on the hard disk recorder of the local computer.



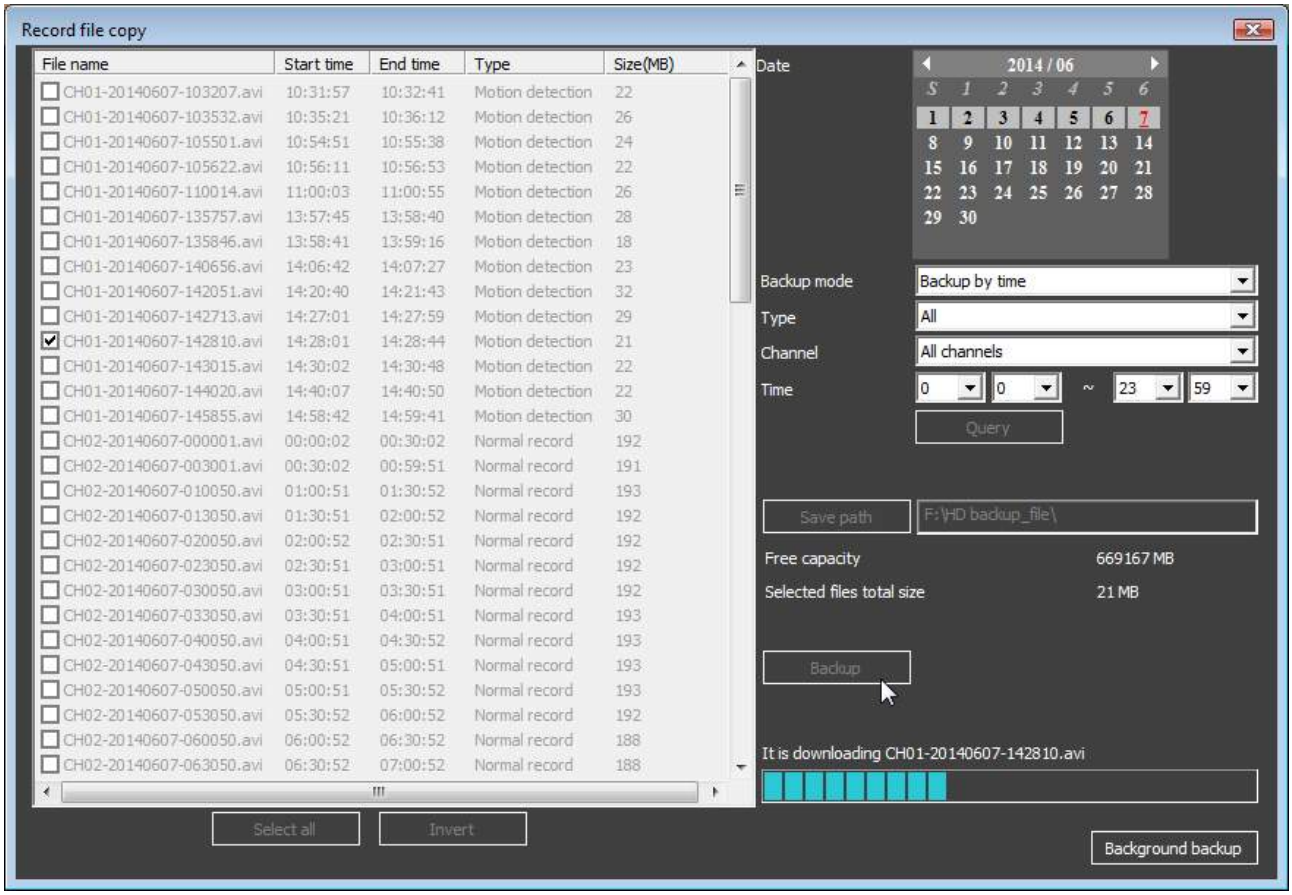
The controls on the right allow you to search video files and then download them to your PC. DATE - Choose the day when you want to search the recorded video. BACKUP MODE - Sort video files to be searched by name (BY NAME) or by time (BY TIME) TYPE - Lets you choose what type of recording to search (All, Continuous, Motion, Alarm, Technical Event, Blindness)

CHANNEL - Select the channel to search for recordings or leave ALL to search all channels.

TIME - Define the time of the search strip

QUERY - Press this button to start the search in the NVR memory. The list of recordings stored on your VCR will appear in the left window. SAVE PATH - Choose the path to save the files

BACKUP - After selecting the files to be downloaded in the table on the left, press the button to start the download



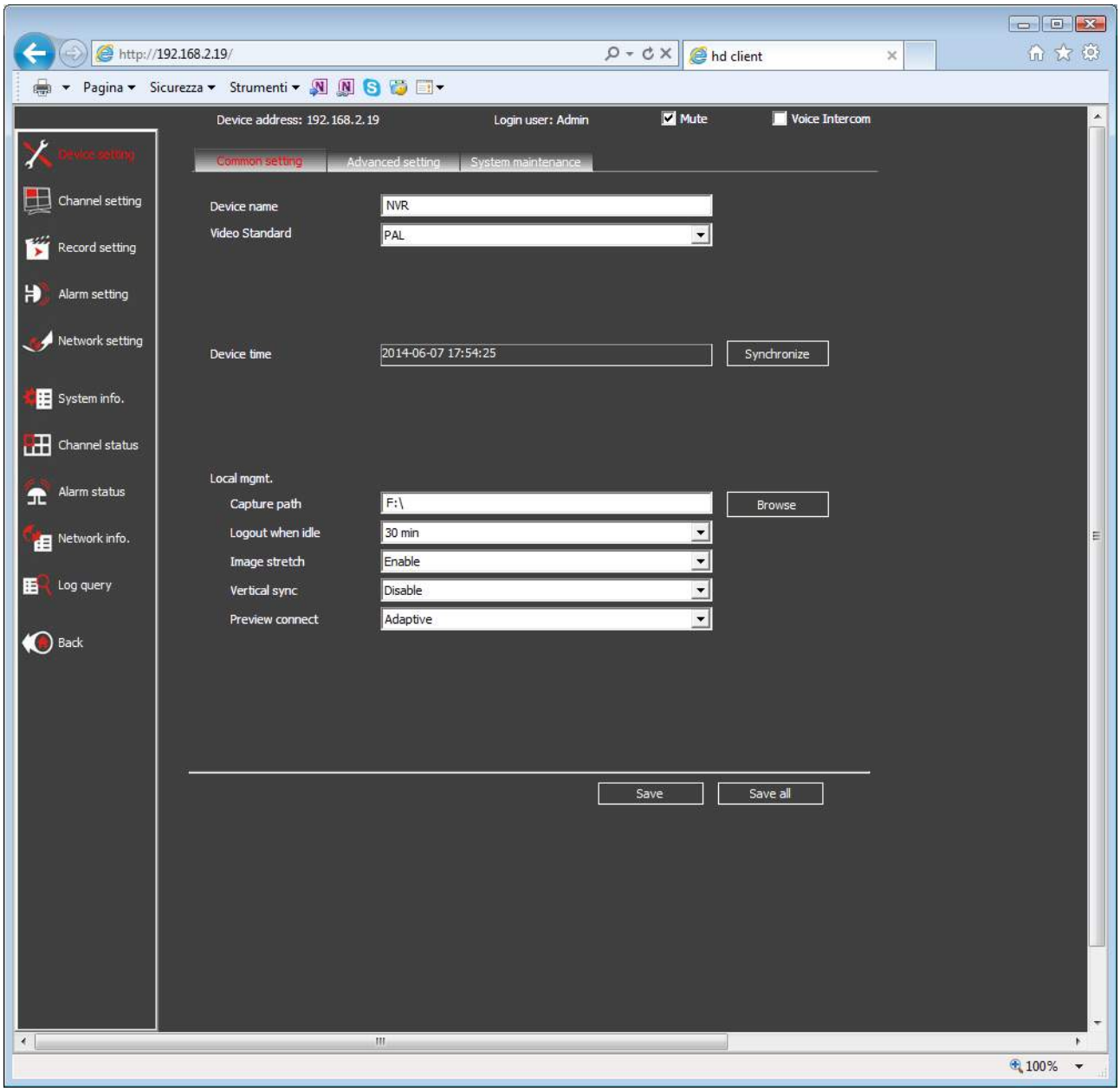
The downloaded video files are saved on a PC in AVI format to be able to be played by any player (WMP, VLC etc.)

WARNING - If you found the downloaded files in the destination directory, check diu you start Internet Expolorere as administrator.

SETUP

The SETUP button is used to access the remote configuration of the device.

In this section you can program all the DVR setup options, the same as they are configured in the local OSD device.



For details on individual options, refer to the setup manual. The only part of this section does not concern the DVR / NVR is remote section DEVICE SETTING / LOCAL MGMT. where they set up options regarding the behavior of the browser Internet Explorer on your local PC.

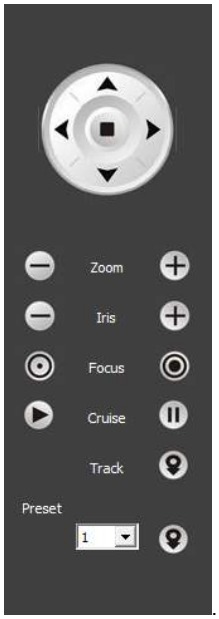
CAPTURE PATH - Define where to save fotogrammai caught with the button CAPTURE LOGOUT WHEN IDLE - Defines the idle time after which there will be an automatic logout from the program.

IMAGE STRETCH - If enabled, the image windows are automatically resized to fill the available pane. If disabled it is always preserves the original aspect ratio. E 'can change this setting by clicking the right button on the live images.

PREVIEW CONNECT - Allows you to choose whether to receive the main stream of the cameras (MAIN STREAM) or the lightest secondary flow (SUB-STREAM) best suited in connection with insufficient bandwidth available, for example via the Internet. It 'also available ADAPTIVE option to automatically choose the stream to the client to be used depending on the bandwidth availability.

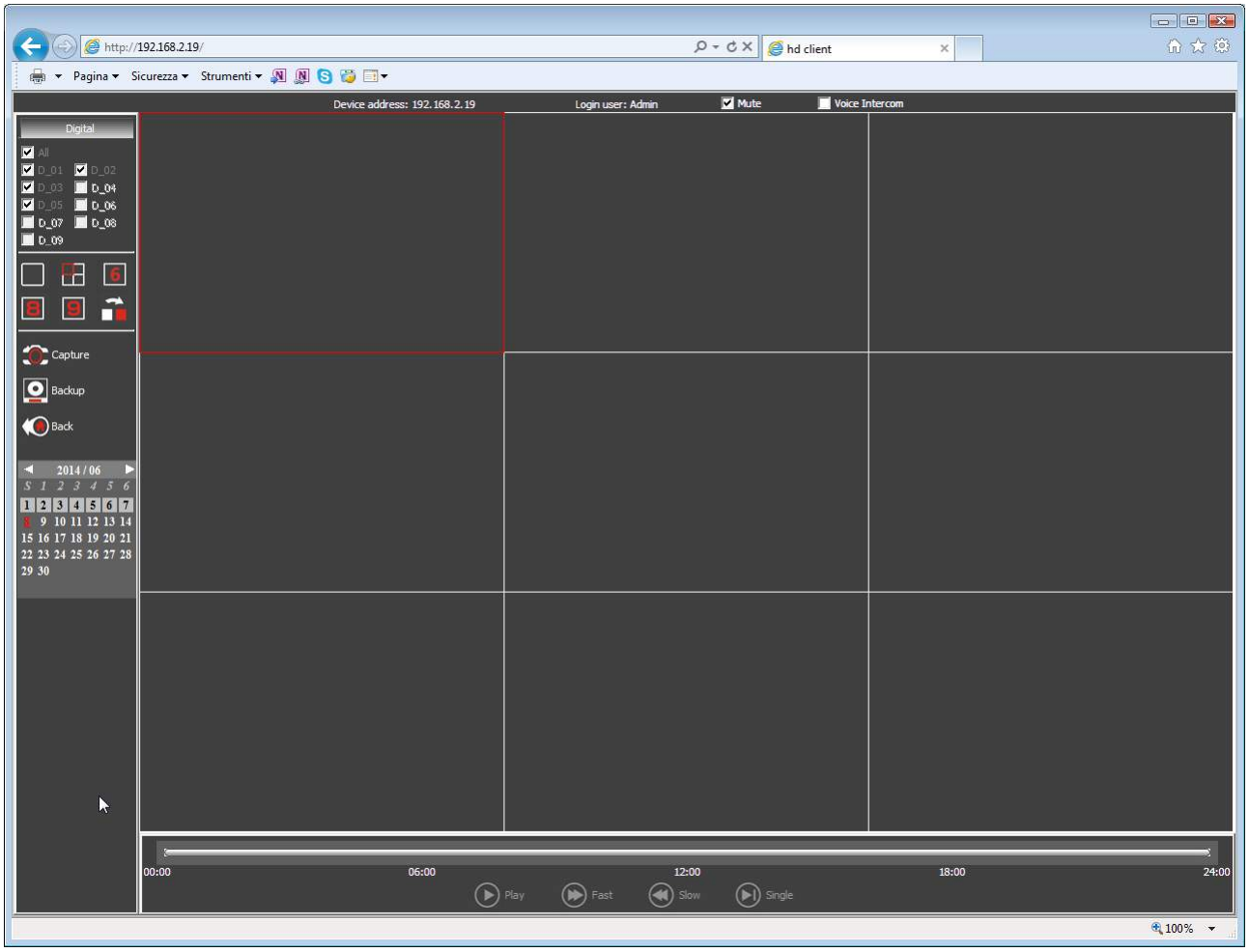
PTZ

The PTZ button to control the movements of speed dome cameras



PLAYBACK

Through remote access with the browser you can search among the records stored in the NVR and play. The playback button lets you open the search page



To review the records must be selected on the left the channels you want to play, and the day to search. At the bottom there is a timeline cone 24 hours of the day to move in reproduction at will by simply clicking Dulla scroll bar. E 'can slow down or speed up playback up to 16x.

In the riporoduzione window to the CAPTURE BACKUP commands are available to save stills and video with the same features already described in the live view.

MAXIMUM NUMBER OF CONNECTED CLIENTS

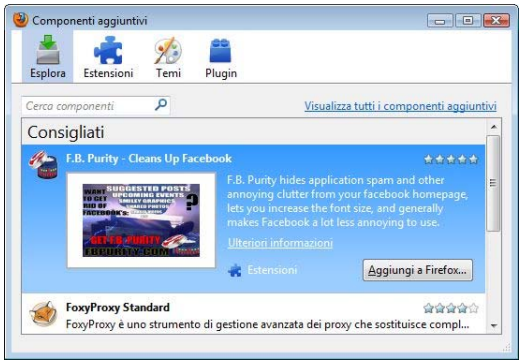
E 'can connect to a VCR DN series up to a maximum of 30 clients connected simultaneously in various types (IE, CMS, 3G)

ACCESS TO OTHER BROWSER

Although IE is the reference browser for remote connection, you can also use

other browsers such as Firefox or Google Chrome. To do this you need to install a free add-on called IE Tab V2.

The installation is performed by accessing the browser add-ons management and looking into the search box: IE TAB Following the example with Firefox



This plugin, once installed lets you press a button to recreate in Firefox or Chrome an Internet Explorer window.

Internet Connection

A VCR is normally connected to a LAN that connects to the Internet via a Router. If we connect to NVR / DVR using an internal PC to the network, the VCR address (typically the 192.168.XXX.XXX type) will be directly accessible. If you wish to connect via the Internet using a PC placed elsewhere, the internal network addresses will no longer be accessed directly as the only visible from the web IP address will be that that our router will by its WAN side that is towards the Internet outside world.

The IP address of the router has to the Internet is assigned by the provider (ISP). To know just open a type www.mio-ip.it site or check the router configuration page. And 'advisable to get from the provider a fixed IP address each time you connect. If there is a chance you need to resort to the DDNS service or use our cloud service (see below).

It is not sufficient, however, type in the browser the IP address of the WAN side Router to connect to your VCR. The router acts as a filter and drops every external call that an outgoing call from inside the network is not paid before. To be able to connect to the VCR is therefore necessary to insert inside the router ports of directing instructions which, depending on the router manufacturers are called NAT, PORT FORWARDING, PORT MAPPING etc.

The mapping instructions of the doors are set in the router configuration and serve to make sure that the router directs the external incoming calls, to the internal IP address of the video recorder.

Obviously the directing is only performed for the communication ports that are used by the VCR and that will be detailed below.

For information on how to operate in the router, refer to your router's manual or technical support of its builder.

COMMUNICATION PORTS TCP / IP

The communication ports used by DN series recorders are as follows:

WEB PORT: Default 80. And 'the port used by the recorder to communicate with the browser. Browsers such as Internet Explorer use the factory to port 80

communication. For example, if we type in the browser address bar: http://212.12.34.201 will be called the ' 212.12.34.201 IP address on port 80.

If the DVR setup you set a port other than the web 80 (ie. Port 85 by default) it needs to be clarified in the browser which port to use for the call after pointing

the address with ":" to separate it. If, for example. we type

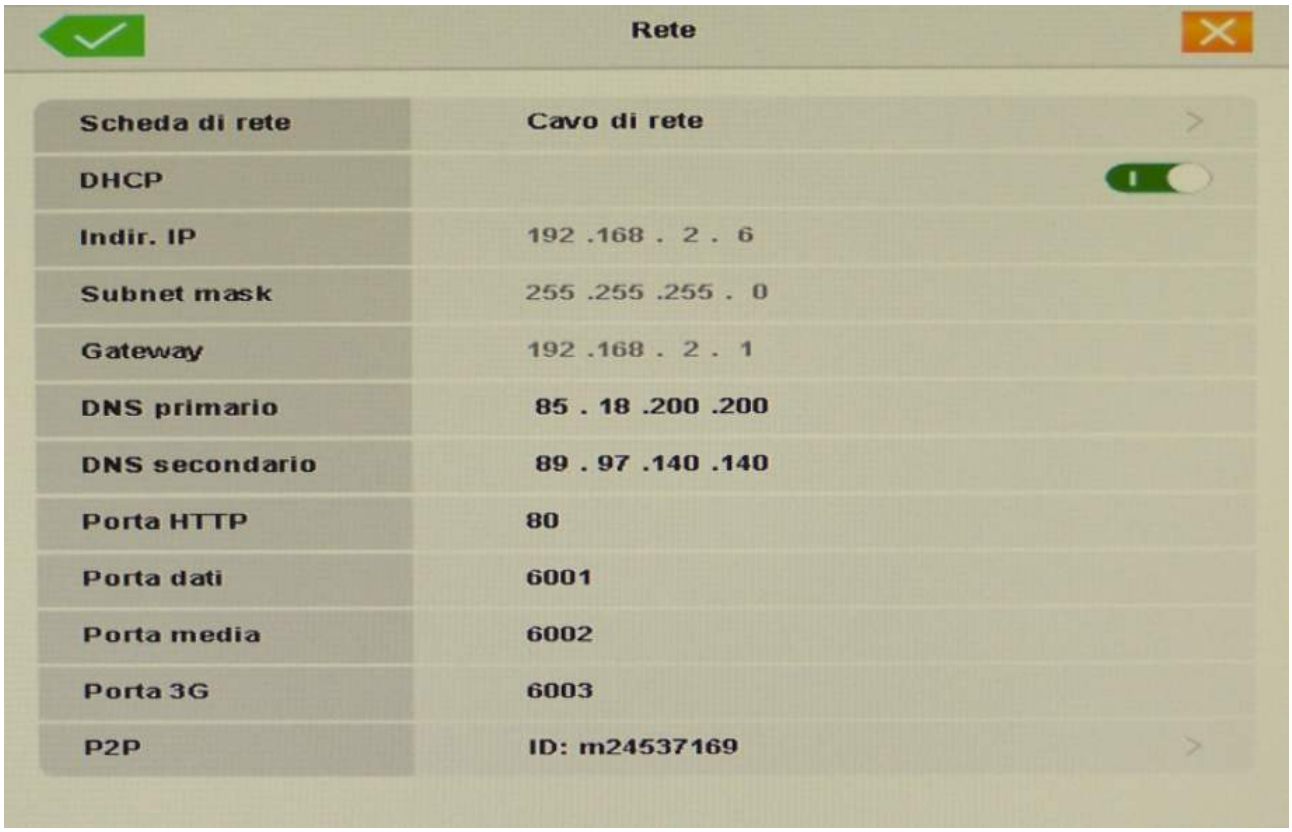
http://212.12.34.201:85 will be called the IP address of 212.12.34.201 on port 85.

CMD PORT: Default 6001. And 'the port used by the program to send data to the centralized management software CMS and even to the most recent versions of the APP for mobile devices.

MEDIA PORT TCP: Default 6002. And 'the port used for streaming video

PORT 3G: The default port used by 6003. It was the first versions of the APP for smartphones. The latest APP using 6001 data port

E 'can change the factory gates in the configuration of the NVR



All these ports are mapped from the WAN side of the router to the internal IP address of NVR / DVR. Note that many routers require that each directing NAT is also combined with a rule in the firewall section that determines the opening of the affected port.

Consult your router's manual for details on how to program the port mapping

INTERNET CONNECTION P2P WITHOUT MAPPING OF DOORS

The DN series VCRs are able to allow connection via the Internet even without having performed the port mapping thanks to P2P technology.

This makes network installation of these very simple video recorders, even if you do not have computer skills or if you do not have access to the router's configuration. To use this type of access is necessary to use our CLOUD services that are described in the following chapter. The mapping of ports on your router, if feasible, is still always advisable to allow more connection options and not be dependent on an external source.

CLOUD P2P Service

Each user of an NVR / DVR DN series with the product acquires the possibility to enjoy free use of a CLOUD service to its online service to make connection to the NVR via the Internet simple.

These services allow to solve with a few mouse clicks the two main issues in the Internet connection to the NVR, ie:

- **Signing of a DDNS service if you do not have a fixed IP Internet**
- **Mapping of router ports**

THE PROBLEM OF DDNS

To connect to a VCR through the Internet you must know the IP address of the router that connects to the Internet. To find out which IP address has its own router from the WAN side that is towards Internet just consult the router configuration or by qualasiasi internal PC to the network visit a site like www.whatismyip.com or similar. If you can get from your Internet service provider (ISP) a **fixed IP address,** Just take note of this IP address in order to call your router at any time. Many times, however, the providers do not release fixed IP addresses or require the customer to purchase them. Without a router you will have a variable IP address may therefore modifcarsi fixed IP over time making it impossible for the remote connection.

In this case you can use DDNS services that allow you to know at any time the IP address of your router / NVR. The DN series VCRs support many popular DDNS network services like dyndns, no-ip, 3322 etc. However these services are often paid but not always easy to set up.

With CLOUD services of the DN series VCRs you do not need or get a fixed IP address from your provider, or take out a subscription DDNS.

MAPPING THE PROBLEM OF THE DOORS

Almost always among the VCR and the Internet stands a ROUTER. This device can become a major obstacle in the remote connection as it does not allow external calls to penetrate to the internal network. To allow this step you need to enter the router programming of mapping instructions which we discussed in earlier chapters.

Operate these instructions is not always easy because each router has its own configuration menu terminologies to rules often not unique.
In addition to this difficulty you may find yourself in situations where the router configuration is inhibited by the provider or not possible due to complesità the network scenario. With CLOUD services DN series of video recorders, thanks to P2P technology can connect your NVR / DVR without the need to perform any configuration on the router, and you will be ready to be accessed remotely in minutes.

THE PROBLEM WAN IP NOT VISIBLE

The CLOUD servers is essential to get around a problem that can affect users macroreti as Faswteb or users with 3G Internet access: the non-visibility of your WAN IP on the Internet.

The Internet providers can, according to their business strategies, to make sure that your IP address wan side is not directly visible on the web, but it actually belongs to a sealed macrogrid not reachable from the outside.

Thick this is due to technical or casue is designed to be able to sell paid a public IP, that is really visible on the web.

Our P2P servers get around this obstacle as they are able to reach the VCR even if the IP address of the router is not public.

The CLOUD SERVER FOR NVR SERIES DN

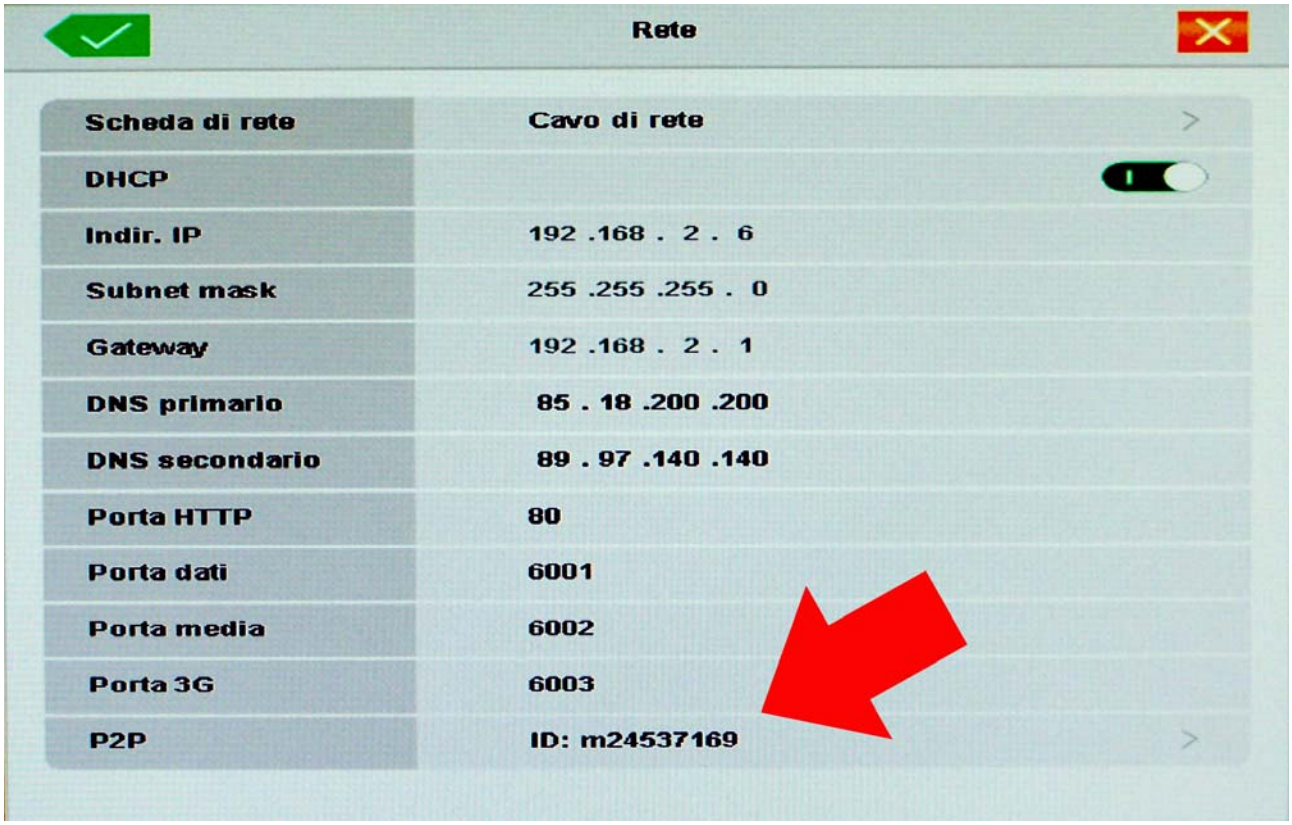
The cloud server for video recorders DN series is available at the following address:

WWW.DDDNS.ORG

THE SERIAL NUMBER (ID) RECORDER

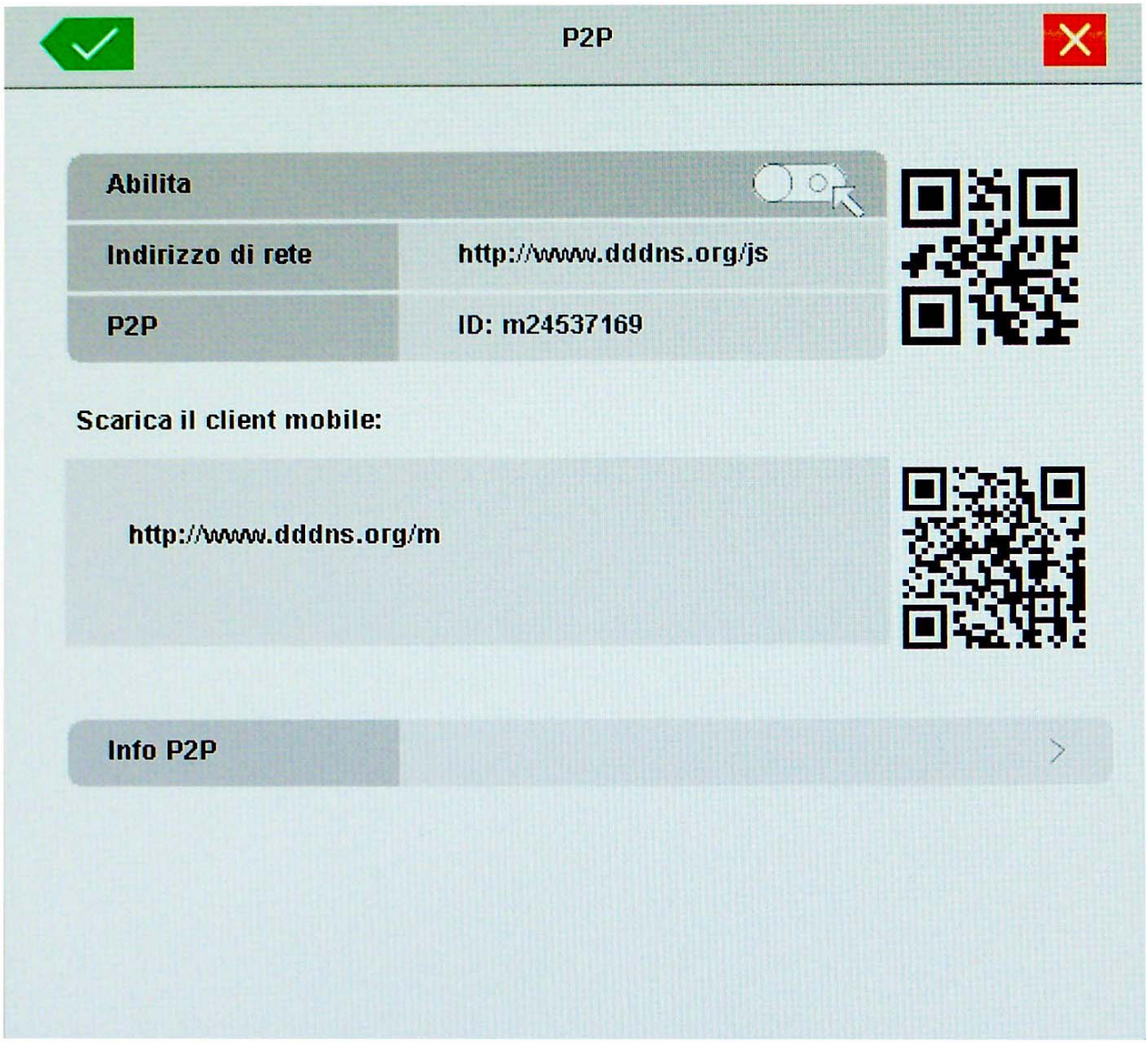
L 'NVR / DVR you have bought is already registered in our cloud server and is distinguished by a unique ID. The ID of the video recorder is the configuration panel NETWORK menu. And 'even remotely readable link.

To enter the NVR ID in mobile with mobile applications is also a QR code will be scanned to avoid manual typing.



ACTIVATION OF CLOUD SERVICES

The first thing to do in order to benefit of cloud servers and enable the cloud server management P2P in the NVR / DVR configuration, as explained in the configuration guide. The cloud server setting is located in Settings / P2P NETWORK must click on the item and enable the management of servers CLOUD.

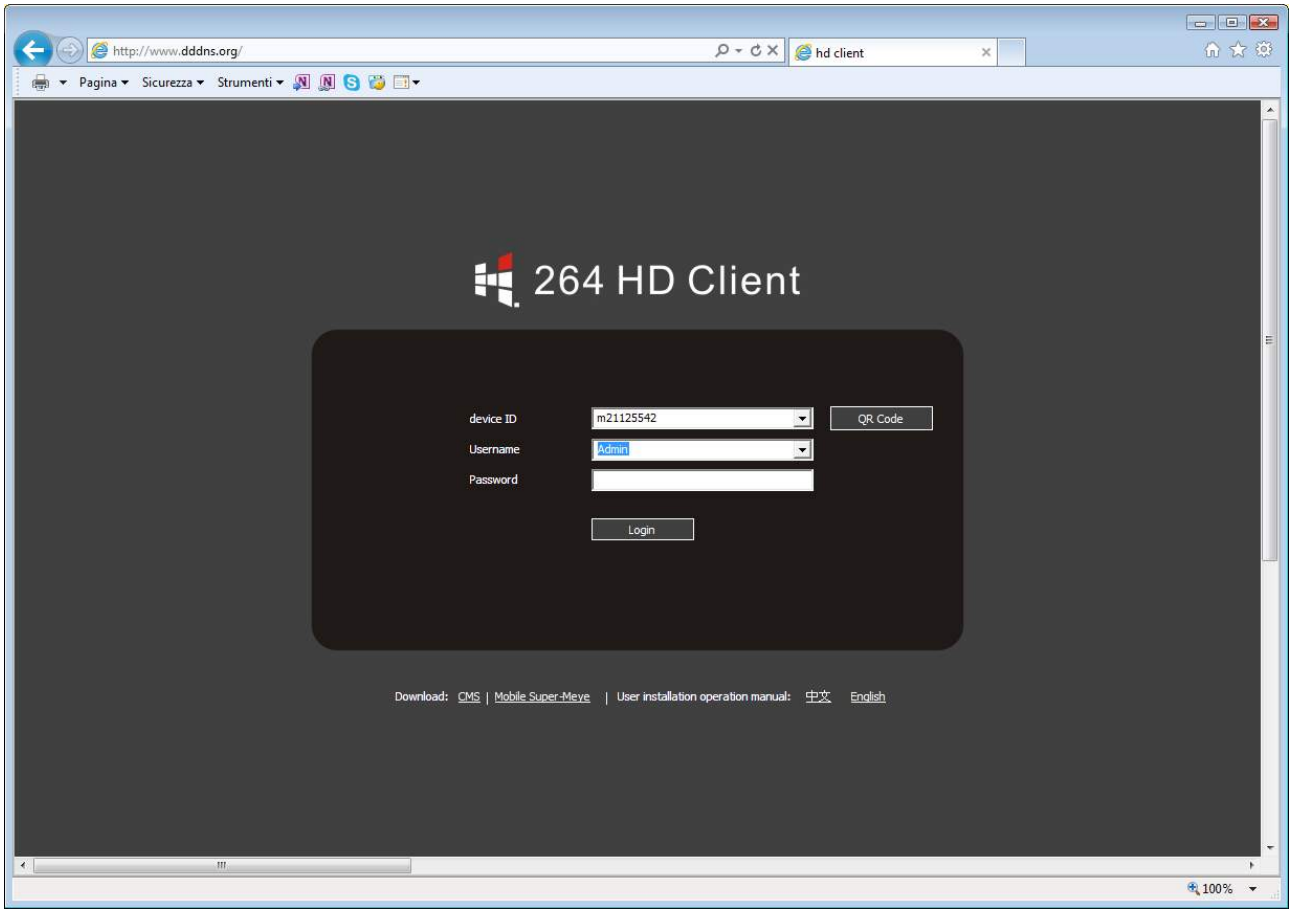


ACCESS TO CLOUD

To use the cloud server P2P connect from your PC to your site WWW.DDDNS.ORG Remember to use your browser **Internet Explorer.**

After installing the software components that should be authorized simply insert in the mask log-in ID of the NVR, the user name and password.

Click LOGIN to access the DVR without the need for static IP, DDNS and mappatuta router ports.



ACCESS TO CLOUD WITH PROGRAM AND MOBILE CMS

E 'can use the DN series CLOUD services not only via Internet Explorer browser, but also with the client program for Windows CMS and the app for smartphone / tablet. See the manuals of the two applications for details.

firmware Update

The internal software of video recorders can be updated if this is necessary. Before you upgrade you must get the update files from technical support DSE.

The file must be copied into a USB memory stick.

Insert the key into a USB port of the NVR and update the firmware in the programming menu, UPDATE FIRMWARE button.

E 'can also carry out the firmware update from a remote PC with Internet Explorer browser interface section SETUP / DEVICE SETTING / SYSTEM maintanance