

RJ Series IP Cameras

Speed Dome of ONVIF IP network



Installation and Configuration

How to connect the camera How to make the
connection in the network How to configure the camera



Contents of this handbook

The range of cameras NAKED RJ series is a range of IP cameras for network connection developed for use with NVRs.

This manual explains how to connect the camera, how to make the basic adjustments and how to configure the parameters for the network connection.



Introduction

The DSE speed dome IP cameras RJ series are IP Network Cameras with H264 / H265 at maximum resolution **up to 5MP**.

These cameras "NAKED" that is not equipped with on NAS and SD card recording their option, either hardware accessories such as audio inputs, alarms etc ..

They are developed to work with network video recorders NVR ONVIF ranging always provided in combination to handle the recording and remote access functions.

The units are connected to a LAN network via the RJ45 port as a computer or other network drives and images can be displayed on a PC using Internet Explorer browser.

The power of the cameras is possible with the 12VDC adapter (included). It is not supported

POE power due to the absorption illuminator.

The sensing element of this array is a CMOS SONY EXMOR, a benchmark in the field, used successfully in our most IP cameras equipped (RH series).

The RJ Series cameras fully support the ONVIF international protocol and are compatible with any IP recording software or network video recorder (NVR) multi-protocol capable of handling this standard.





Technical data

See updated at tables:

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



Installation

CONNECTIONS

The cameras speed dome series RJ have 2 sun connections: a mains socket and a 12VDC power plug.



- NETWORK PORT RJ45 - RJ45 FEMALE connector to connect the LAN. To connect to a hub or network switch using a standard LAN cable. To directly connect a single PC using a crossover cable (crossover).
- 12VDC - plug which connect the power supply 220VAC / 12VDC by at least 3A (included)

VERIFICATION OF CONNECTIONS

After connecting the camera to the power supply check that it performs an automatic rotational movement which certifies the proper nutrition. If the camera does not perform any movement check the power supply.

After connecting the network cable to the switch verified that the LEDs of the switches that correspond to the port that is used to start flashing. If you check remain off the network cable.

MOUNTING THE CAMERA

INSTALLATION MANUAL

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The cameras are to be fixed to the wall with the supplied mounting bracket. The connecting cord extends through the bracket.

The camera housing is watertight and can be exposed to rain. The connections must be protected from the weather.

The cable entry may be provided at the center of the bracket if the cable passage is walled. Alternatively a lateral cable entry is available in the lower part of the bracket.





Network Configuration

After providing power to the camera via the 12VDC power supply and after having connected the camera to the network switch with the LAN cable, the configuration of the network parameters must proceed in such a way to be able to make the cameras accessible by computer. The cameras are supplied with **IP address 192.168.1.160 factory**.

CLIENT SOFTWARE VIDEO SURVEILLANCE (VSC)

The CD supplied with the camera software is included **VSC for Windows** it is good to install on any PC on the network. The function of this software is to detect the presence of the camera in the network, regardless of its address, and allow you to change the camera address in order to make it consistent with your network. We recall that because the camera is visible from the other PCs on the network it is necessary that the first 3 address parts are the same as other network PC and is equal also the subnet mask. And 'advisable to connect a network camera at a time, and insert new ones after you have set earlier.

The VSC program also allows you to view live camera images.

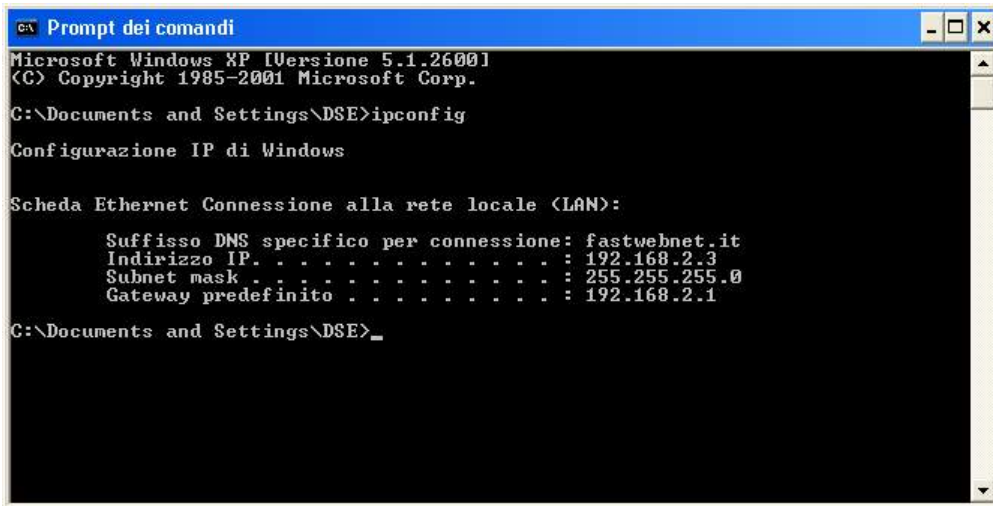
PRELIMINARY CHECKS

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 camera that is not equal to any other device already present in the network. If you are uncertain about the operation of your network, you can use certain commands in DOS PROMPT.

On a network PC 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.



```
Microsoft Windows XP [Versione 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\DSE>ipconfig

Configurazione IP di Windows

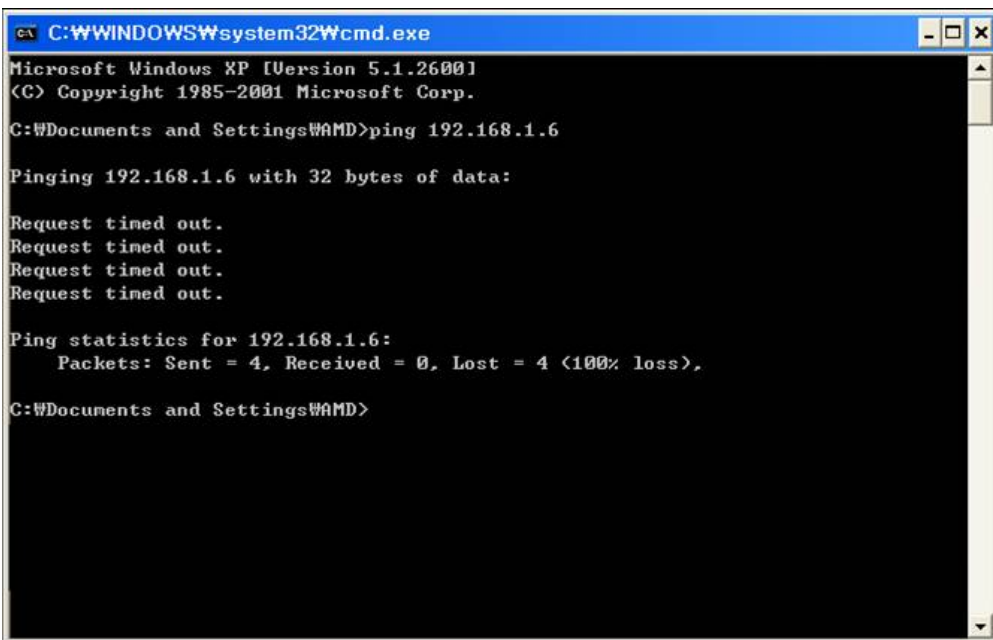
Scheda Ethernet Connessione alla rete locale (LAN):

    Suffisso DNS specifico per connessione: fastwebnet.it
    Indirizzo IP. . . . . : 192.168.2.3
    Subnet mask . . . . . : 255.255.255.0
    Gateway predefinito . . . . . : 192.168.2.1

C:\Documents and Settings\DSE>
```

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. The camera can therefore assign an address chosen by the 192.168.2.XXX type, where XXX stands for a number between 0 and 255.

IS' 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. If there is no device responds to that address, you will receive 4 REQUEST TIME OUT as in the following example:



```
C:\WINDOWS\system32\cmd.exe

Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\WINDOWS\system32\cmd.exe>ping 192.168.1.6

Pinging 192.168.1.6 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.6:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\WINDOWS\system32\cmd.exe>
```




All cameras support the automatic IP address assignment from a DHCP server. This mode, however, is not recommended because in the event of power failure or restart of the equipment it is possible that the cameras IP address change necessitating a reconfiguration of the NVR.

SETTING ADDRESS WITH VIDEO SURVEILLANCE PROGRAM CLIENT

After connecting the camera you need to change the address of the camera to assign one consistent with its own network (first 3 parts of the address common to all network equipment).

The VSC on the CD program makes this very simple operation without having to change the network settings of the PC on which you are working. Proceed as follows:

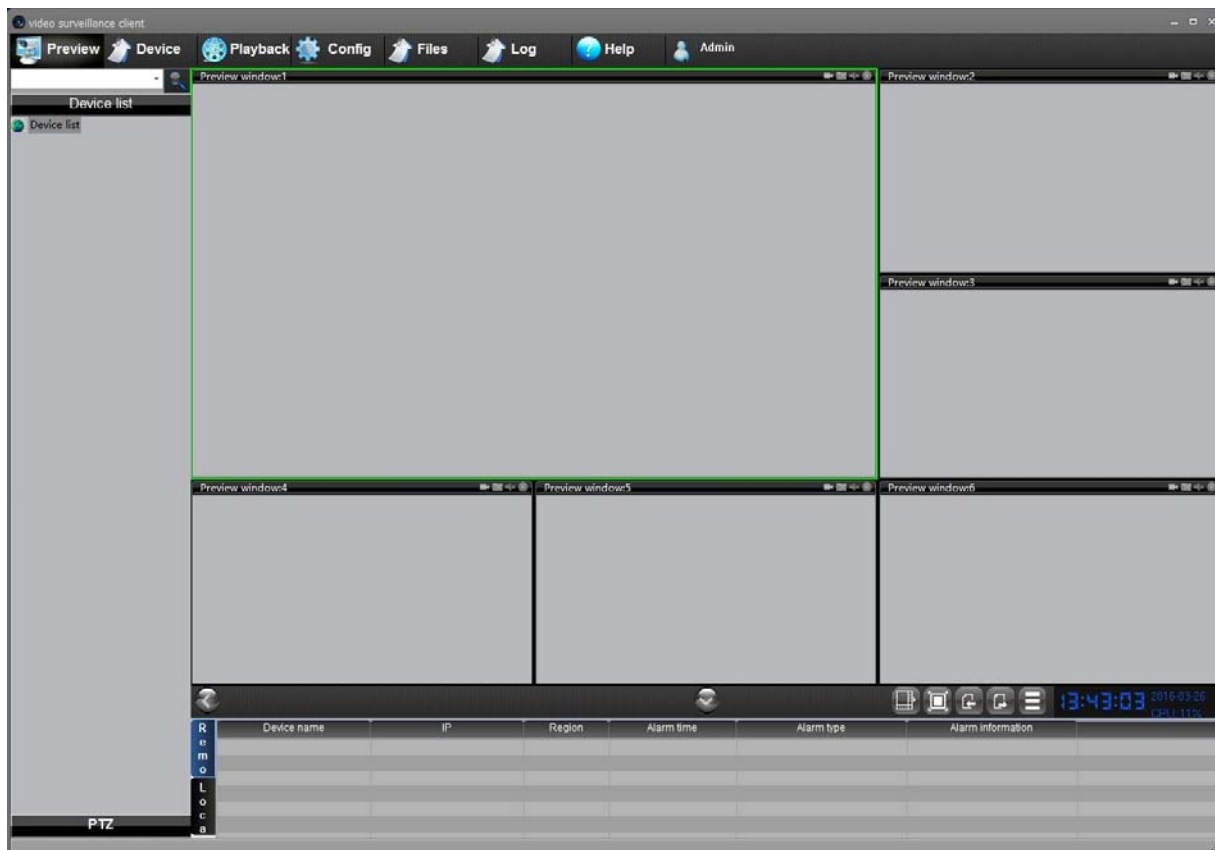
1. Insert the CD into a PC player and explore the content. You will find an installation file
--- .exe, double click on it and install the software on your PC. During installation, you can specify the program installation folders and saving files
2. Once the installation is complete, launch the VSC program from its desktop icon





3. At the first start the program asks you to create an administrator account

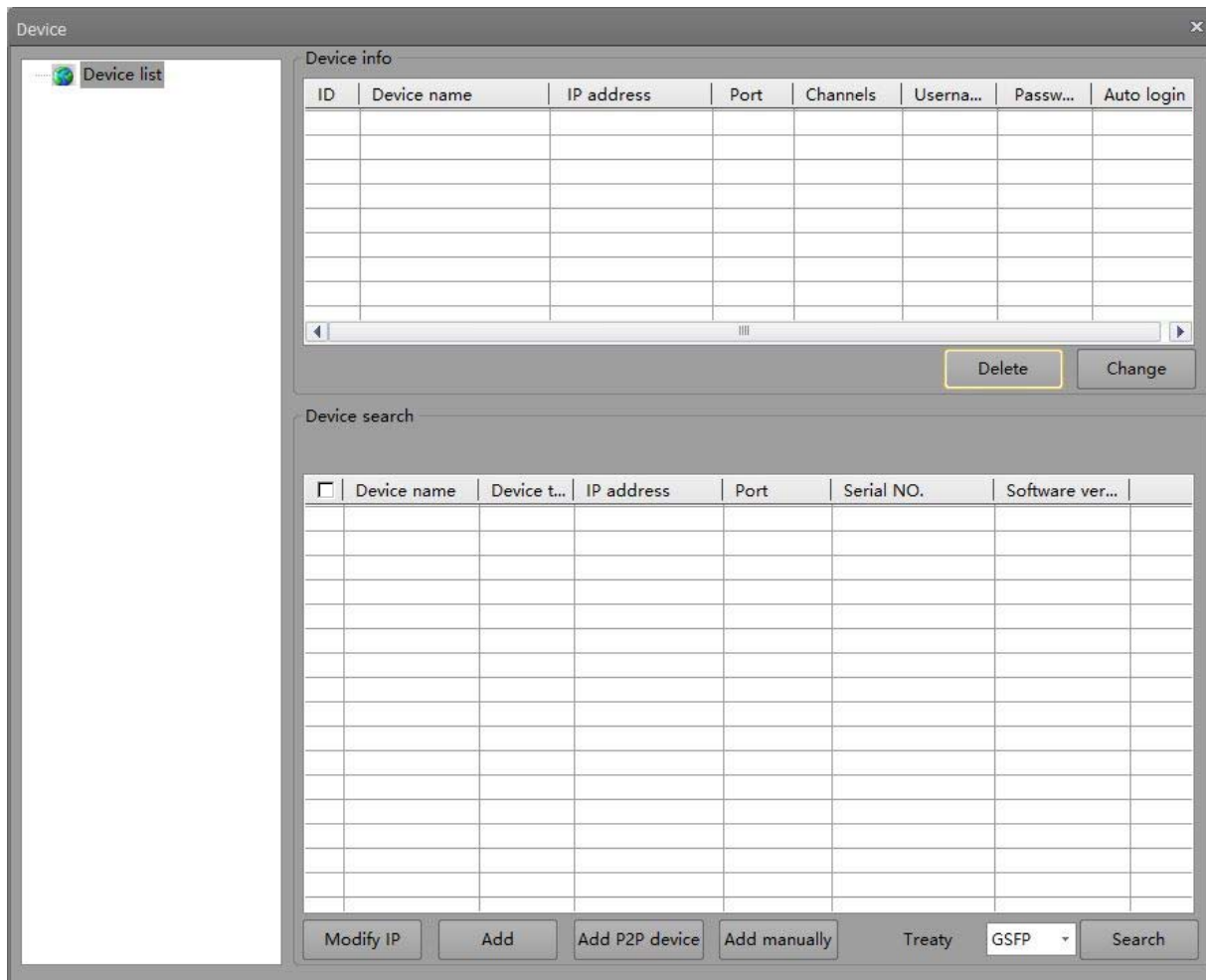
program. Enter a user name and password at will that will be remembered.





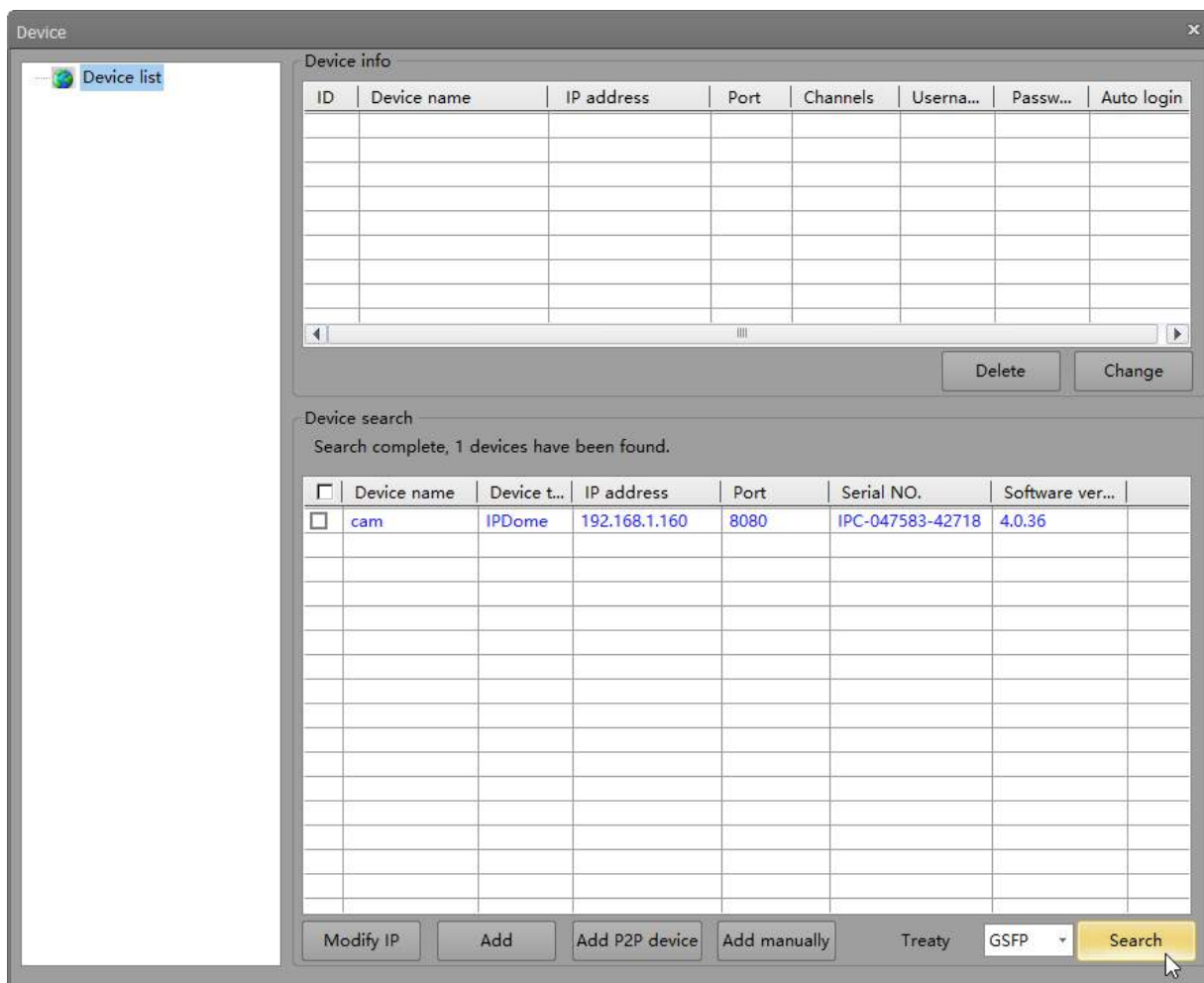
4. Click the DEVICE button on the top bar to open the search page and management

cameras



5. Click on the SEARCH button on the bottom right. The program begins to scan the

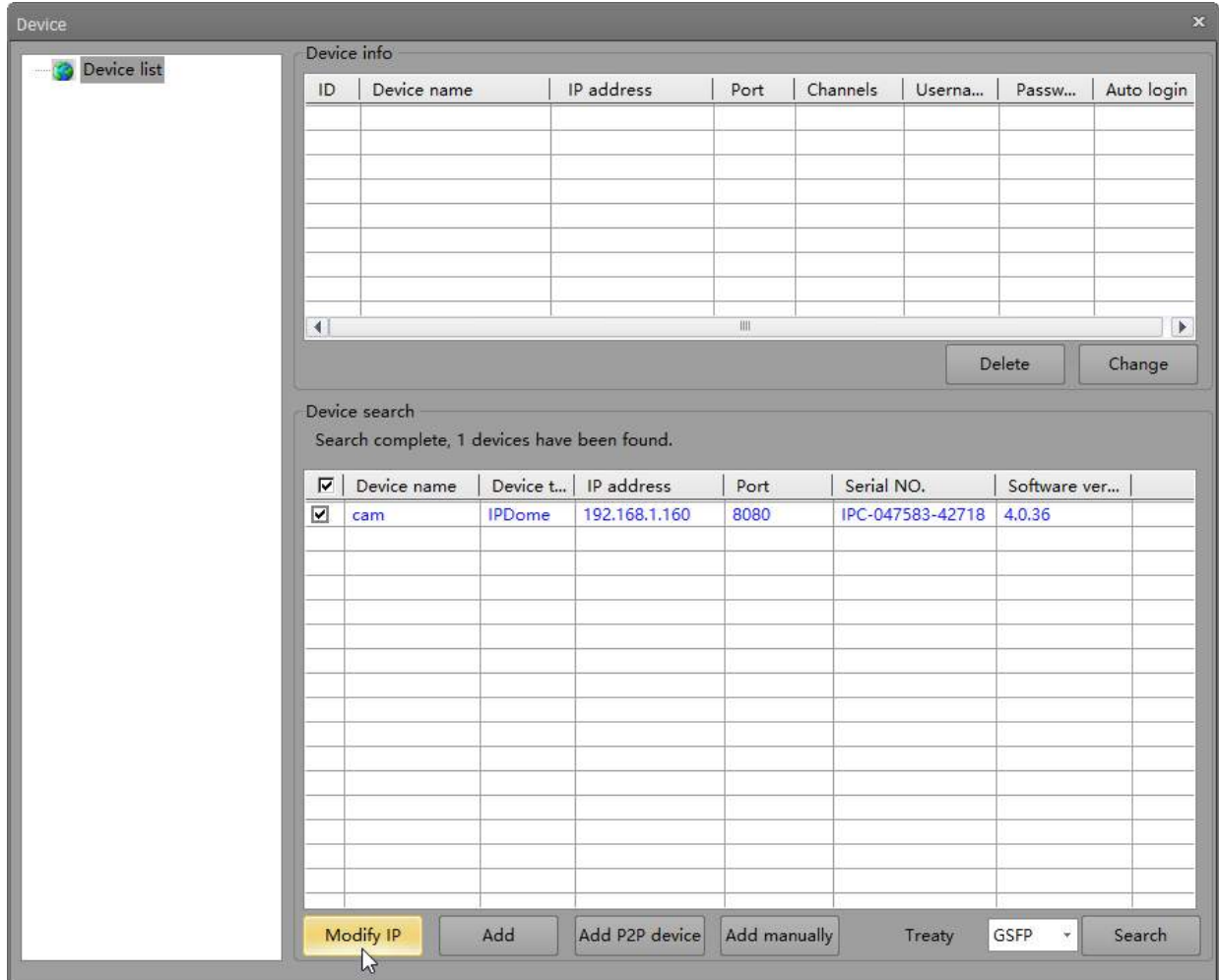
IP cameras in this series on the network. Wait to complete the search. The program is able to detect even cameras with different address class from that of the PC on which you are working. When the search will see the list of detected cameras. If the camera is not detected check the functionality of network links.



In the above image it was taken over a new camera with its factory IP address 192.168.1.160 IP ADDRESS that appears in the column. To change the address



Factory select the camera in the list and click IP MODIFY



6. This will open a window containing all of the camera's network settings that we

change at our pleasure. In the example below we have modified the camera's factory address 192.168.2.161 because obviously we are working on a network that uses class 192.168.2.xxx addresses. We chose 161 in purely arbitrary because, for example, we decided to give our 6 cameras addresses from 161 to 166. We kept the subnet mask factory

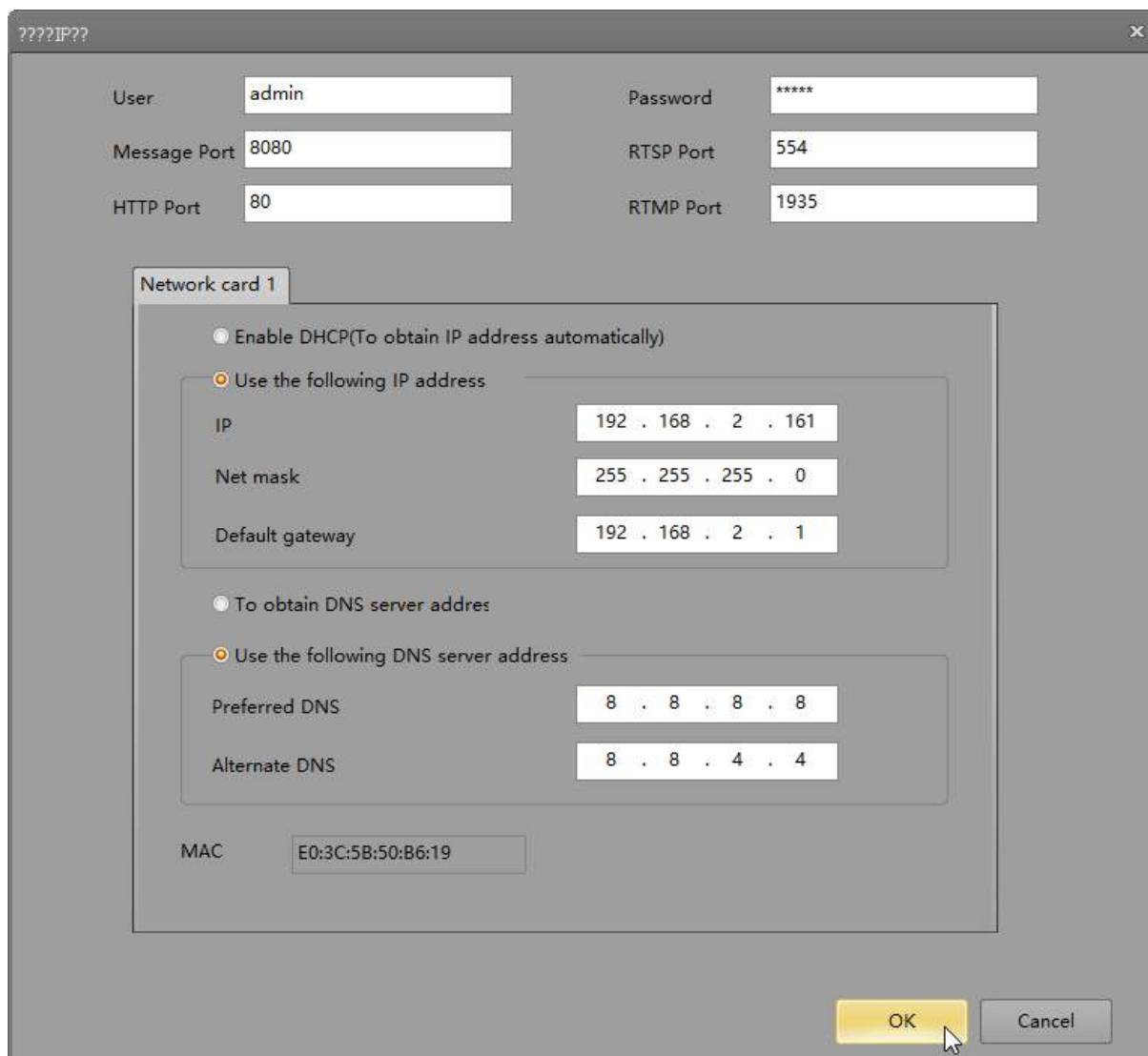
255.255.255.0 because our network, as most internal networks using this subnet mask.

The following arguments are not essential for the operation, but in any case we have included in the DEFAULT GATEWAY the address of the router of our network 192.168.2.1 and DNS servers we kept those of the factory which are then free those of Google. We do not modify the communication ports because they do not need.



The above is of course only an example, to understand what reasoning should be followed in setting up a correct address.

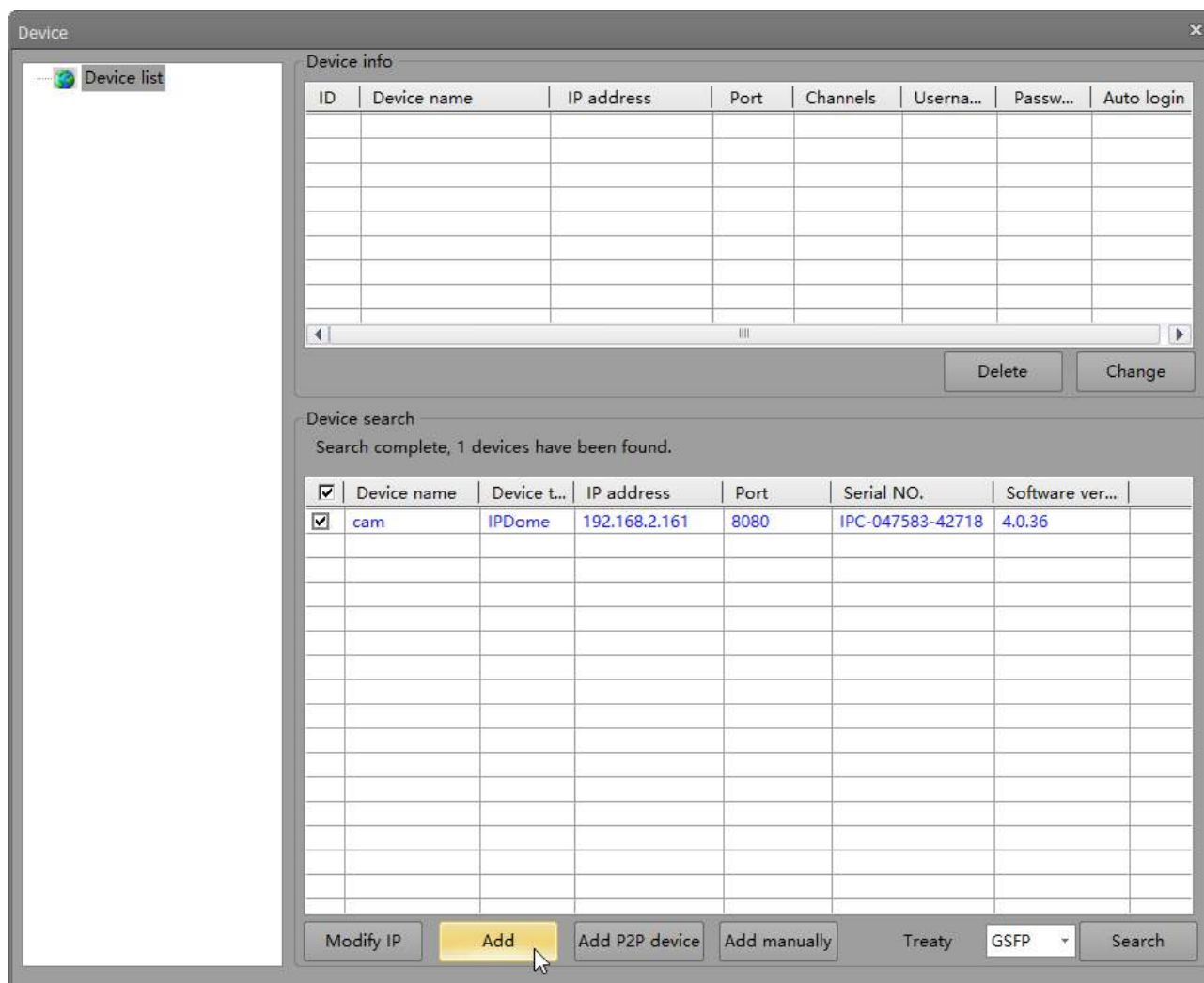
To validate the new configuration must be ensured that the camera credentials, at the top of the window are correct: Factory **USER: admin PW: 12345**



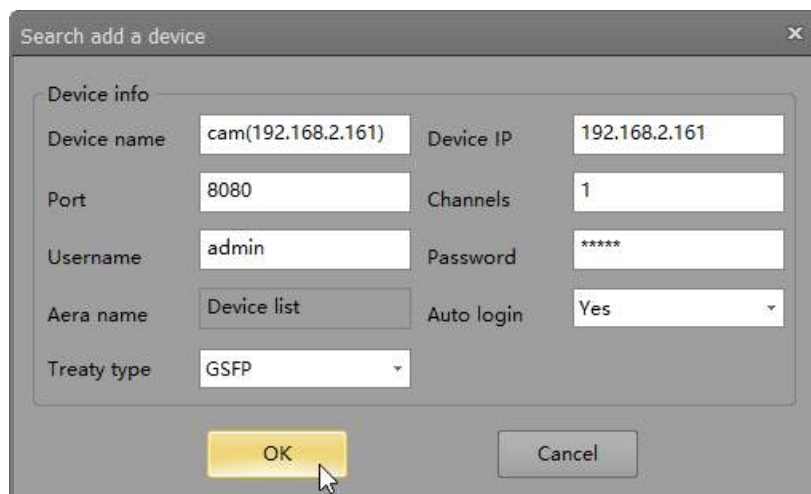
Click OK to transfer the new settings to the camera

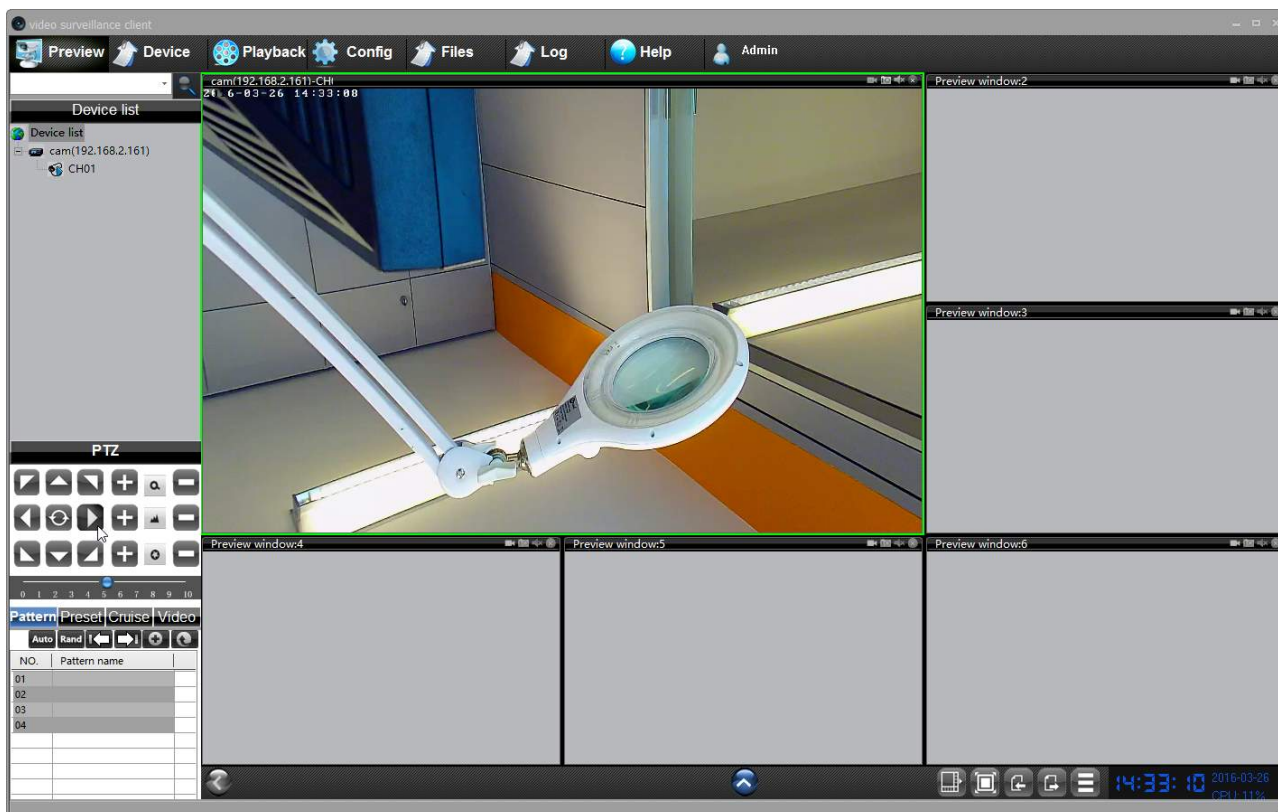
7. Press the SEARCH button to verify that the new parameters have been well

endorsed by the camera. In the example below we see that the camera reappears in the list with the new settings and then we have successfully concluded the new address setting.



In the next window if necessary, insert a camera name and confirm





The program allows you to connect all system cameras, verify the quality of the image and video streaming and control all the functions of the speed dome with the bottom panel to the left. E 'can also set up automatic movements such as presets, tours, etc.

USE OF VIDEO SURVEILLANCE PROGRAM CLIENT AFTER INSTALLATION

In addition to being useful in the installation of cameras in the VSC program test you can also leave eventually installed on one or more PCs on the network for direct visualization and control of the camera without going NVR. It also lets you save videos in the coming local PC acting as a backup recording in addition NVR.

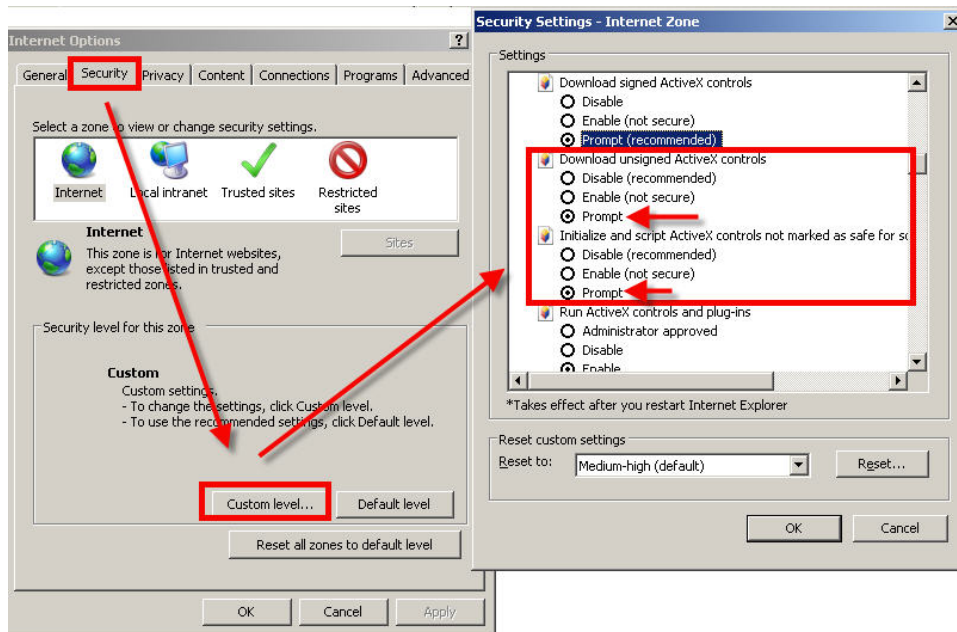


with browser access

Once properly set the network parameters, you can make the first access to the camera using the IE browser. Do not use other browsers like Edge, Chrome etc. they are not supported.

ENABLE PERFORMANCE OF ACTIVEX

Internet Explorer has security settings that may prevent the installation of the ActiveX component. Before making the connections necessary to enable the execution of ActiveX not marked as safe. In Internet Explorer, select TOOLS / INTERNET OPTIONS

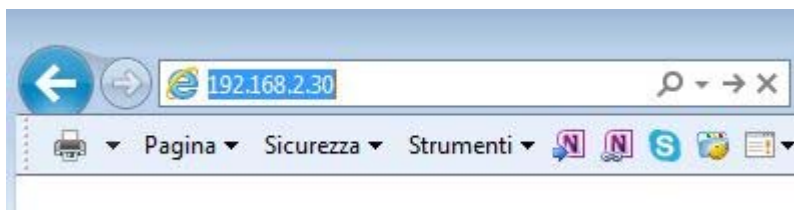


In the folder PROTECTION choose the area of interest (Internet or local network) and click CUSTOM LEVEL. Enable all items for the download and execution of ActiveX especially those NOT marked as safe. E 'can set the items either ENABLE or ASK FOR CONFIRMATION. Finally, save and restart the browser.



ENTER THE ADDRESS IN THE BROWSER

To access the camera using the browser, type in the address box, the IP address that you assigned. In the example below we perform a link on the internal network to the camera with IP address 192.168.2.30.



It is not necessary to specify the connection port since the cameras use factory port 80 which is the one usually used by browsers.

If for any reason you change the HTTP port on the camera settings, then the door to call then follow up the IP address will be necessary to specify in the browser. In this example we are calling the 192.168.2.30 IP on port 85.



INSTALLING ACTIVEX

In order to make sure that the RJ series IP cameras are displayed on the browser you must install the ActiveX components. IF you login without installing activeX you can not see the video.

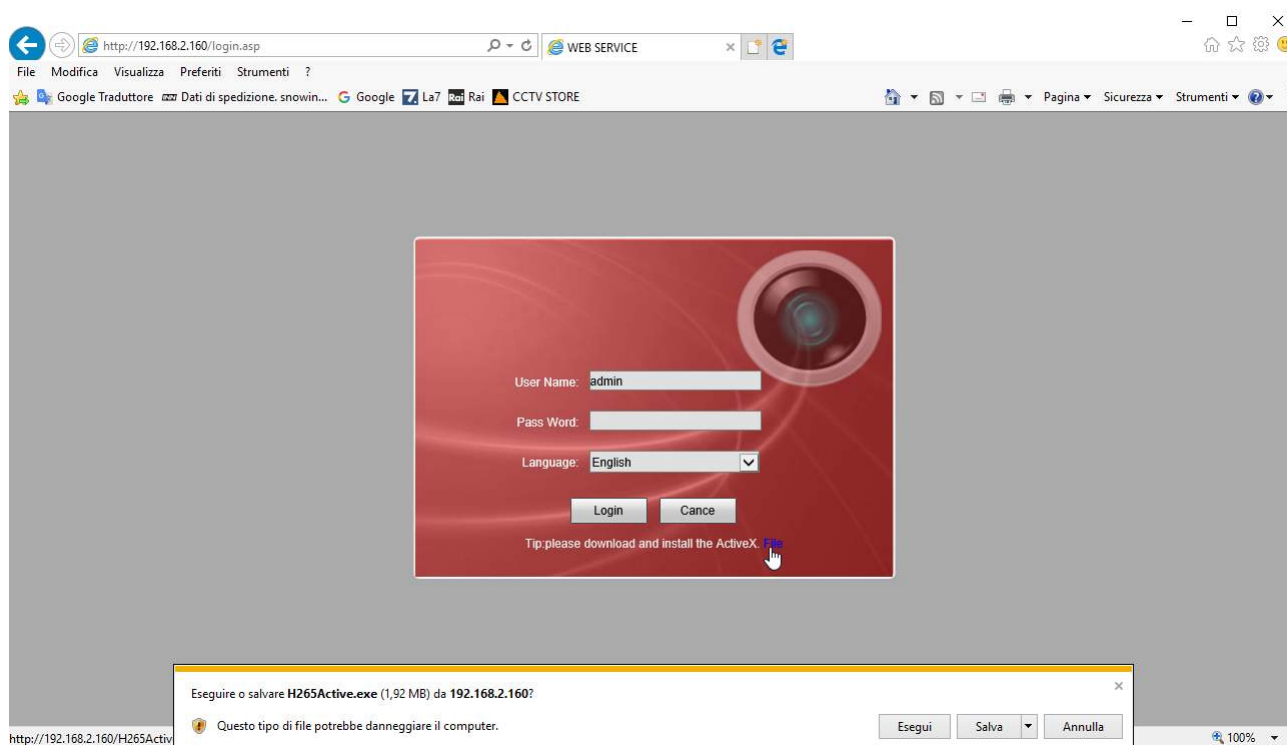
On first access you make, you must click the link in the login window FILE

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Below window appears that lets you choose between PERFORM and the SAVE program. Both options can work, just remember to close your browser before you start the installation.

Always click NEXT until after installation.

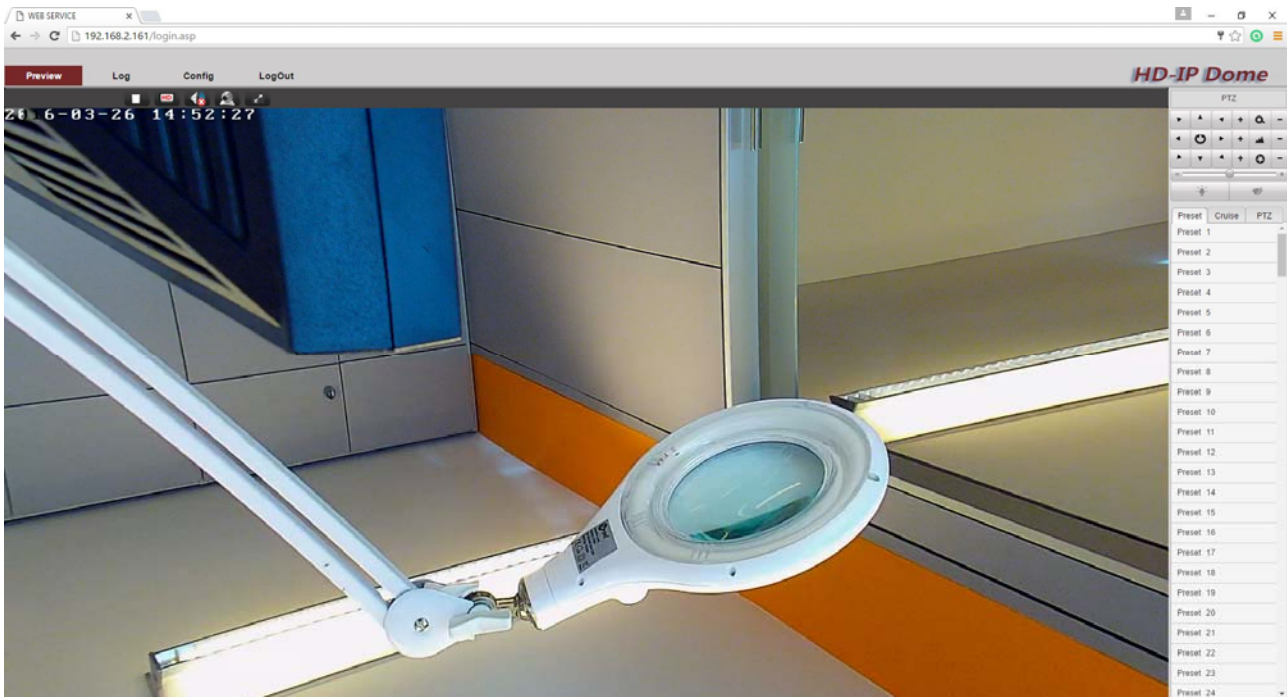
From this moment on, the plugin installed and will not have to do this operation on this computer.

LOG-IN

The data of the RJ cameras factory passwords are:

USERNAME: admin

PASSWORD: 12345



The options in the browser window are described in detail later in this manual.



Login with ONVIF NVR

The RJ series IP cameras are cameras provided "NAKED", that is not able to independently record to SD card or NAS.

There are also accompanied by recording programs on a PC but only a configuration and test software tool.



These cameras must be connected to a network video recorder (NVR) or external recording software.

To do this you use the ONVIF standard, now at version 2.6, which fully supports these cameras.

To connect cameras to NVR or software ONVIF refer to the recording equipment manuals. As a rule, NVR recognize the communication parameters to communicate with the cameras automatically.

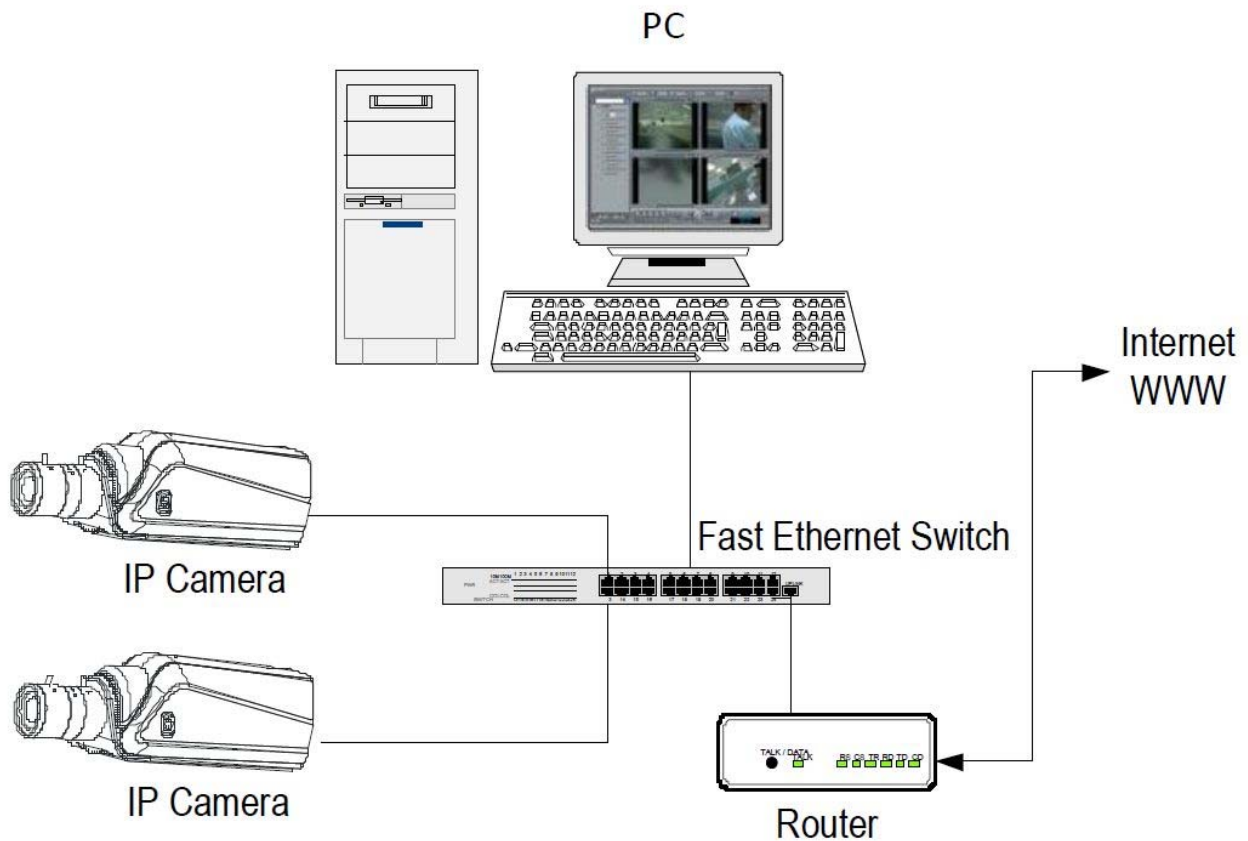


from web access router

The link to "Naked" cameras over the Internet as a rule is not made by calling individual cameras but making the NVR connection. For this type of connection is necessary to refer to the manual of NVR. E', however, can also connect to the web directly to the cameras with the Internet Explorer browser. To do this you need to make a configuration inside the router following the directions in this chapter where we explain the mapping of the communication ports.

MAPPING WITH WEB ACCESS DOORS ROUTER

An installation of IP cameras is often placed inside a LAN connected to the Internet via a router as in the following scheme





If we use for viewing the cameras internal PC to the network, the addresses of the cameras (usually the 192.168.XXX.XXX type) are directly accessible. If you wish to connect via the Internet using a PC placed elsewhere, the internal network addresses will no longer be reached directly, because the only IP address visible from the web will be what our router will by its WAN side that is towards the Internet outside world.

This address is assigned by the provider (ISP). And 'advisable to get from the provider a fixed address each time you connect. If there is a chance you need to use DDNS services (see configuration manual).

It is not sufficient, however, type in the browser the IP address of the WAN side Router to connect to the cameras. The router acts as a filter and drops every external call that a call from within the network is not paid before. In order to connect the cameras it 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.

In practice, access the router configuration and insert instructions so that this direct calls coming from outside, to the inside IP address of the cameras. Obviously the directing is only performed for the communication ports that are used by the cameras and that will be detailed below.

The communication ports used by RJ Series cameras are as follows:

- **HTTP PORT:** Default 80. The cameras use this port to communicate with browsers like IE. Browsers such as Internet Explorer use the factory port 80 for communication. For example, if we type in the browser address bar: http://212.12.34.201 will be called the IP address 212.12.34.201 on port 80. If in the configuration of the camera is set to a different HTTP port (eg. 81, 82 etc.) 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. http://212.12.34.201:81 we type will be called the IP address 212.12.34.201 port 81.
- **PORT MSG:** Default 8080. The cameras use this port for sending data



- **PORT RTSP:** By default 554. E 'used by the camera for sending video to RTSP clients such as VLC, Real Player etc ..
- **PORT RTMP:** Default 1935. 'used by the camera sending the video to the client as RTMP Flash
- **PORT ONVIF:** Default 8000. And 'the port used by the cameras for dialogue with NVR onvif. This leads, in some models can not be changed. Set port 8000 nell'NVR to charge the camera.

If behind the router counts more than one camera and you want to reach them individually from the outside you must be assigned to each of them a different http port. For example 80,81,82 doors etc.

In the NAT router settings you will have the direction of each door towards the inside address of the own camera.

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

Remember that web access to IP cameras in this range is much easier if done through the NVR, why the information provided in this chapter are present only for informative purposes for particular applications.

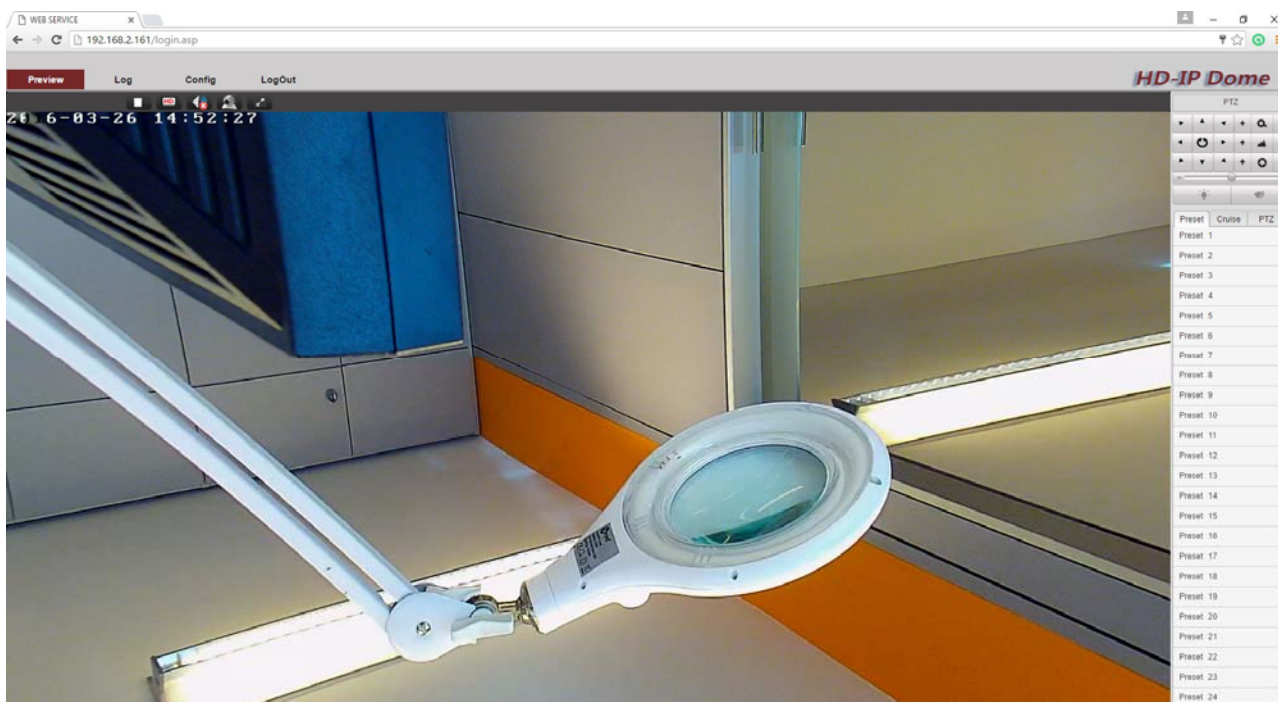


Browser - LIVE Controls

In previous pages we explained how to access the cameras with your PC using the Internet browser.

If you have never done before access with the browser on your camera should resume the manual and follow the instructions above to connect successfully.

This section of the manual start from the login window to enter user name and password to access that factory admin / 12345





METHOD 'PREVIEW'

The interface window is divided into four areas that you can choose the top menu.

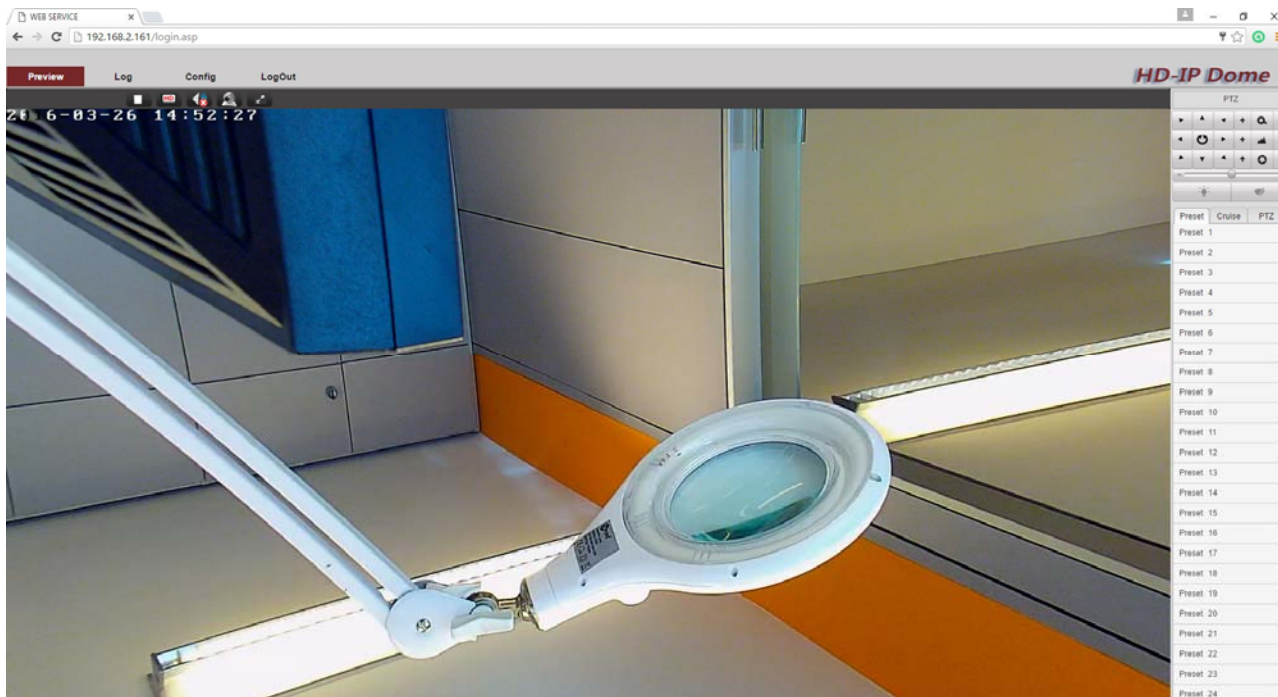


PREVIEW - LIVE Vision and control of camera movements LOG - Search the camera event memory

CONFIG - Configuring Camera Options

LOGOUT - Output

PREVIEW Choose to display the real-time camera.



PULSANTIERA LIVE

As you watch the live camera image you have available some control buttons above the image.



1 2 3 4 5

1 - STOP / PLAY - Stops and starts playing the Live image

2 - SD / HD - This button is defined as a video stream from the camera to receive Whereas the RJ cameras can handle two different streams. Choosing HD you receive the Main-Stream full-resolution, choosing SD receiving the camera Sub-Stream which is

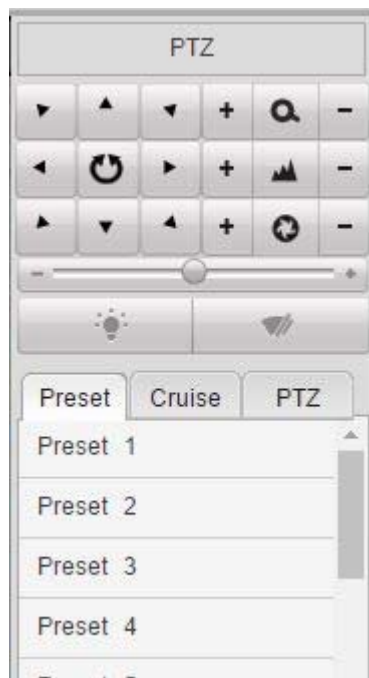
a video stream lighter to use with low bandwidth available, for example via the Internet. The characteristics of these streams are defined in the configuration.

3 - AUDIO - Not used on these models

4 - 3D - Clicking this button makes it a special control method called 3D which is very convenient to zoom in details within the image. In this mode it is possible to define a particular image by dragging the mouse and automatically move the camera panning and zooming so as to frame at best. In addition, in the 3D mode, you can zoom in using the mouse wheel and move the camera in all directions by clicking on the edge of the image to which you want to move. To disable the 3D mode, click the button again.

5 - FULL SCREEN - To see the image full screen without browser outline. Press Esc to exit full-screen mode. And 'possible to control the FULL SCREEN function even with a double click of the mouse.

PTZ CONTROL



In this window, you manually control the camera movements and also manage the automatic displacements.

PTZ CONTROL MANUAL



The camera's movement is manually controlled with directional arrows.

The middle button in the middle of the arrows start the automatic horizontal scanning AB between two points of limit switches (see below)

To the right of the navigation arrows are the lens control buttons, in the order (from top to bottom): ZOOM, FOCUS and IRIS. In this parameter, the zoom is always

controllable while FOCUS and IRIS can not be controlled if the camera settings provide for the automatic functionality.



At the bottom, below the arrows, it is possible to adjust the reaction rate of the camera with the cursor +/- and force the ignition IR illuminator with the LIGHT button. The WIPER button, bottom right, is not active on this model.

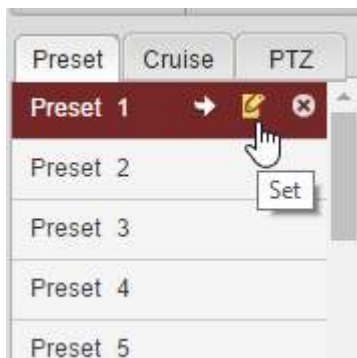
AUTOMATIC MOVEMENTS

Like all speed dome cameras, even the RJ series can perform preconfigured automatic movements: PRESET, CRUISE, and SCAN TRACK

PRESET

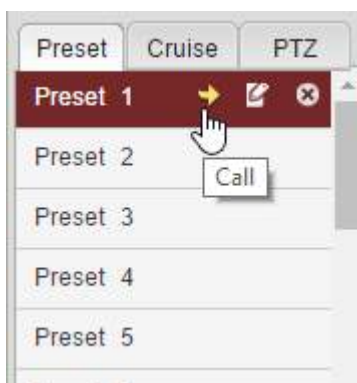
The presets, commonly known as PRESET, are preset camera positions characterized by a precise value of X / Y coordinates, zoom and focus. You can easily call if necessary. You can define up to 255 presets.

To define a preset position the camera, choose the preset number and press the SET button.



The camera stores the presets will be available for use as needed.

To recall the preset, select the number and click the CALL button.



To delete a preset, select the number and press the DELETE button on the right.

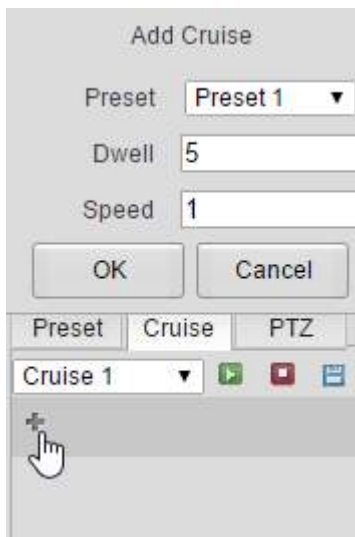
Each operation is confirmed by the camera with a message overlay.

CRUISE

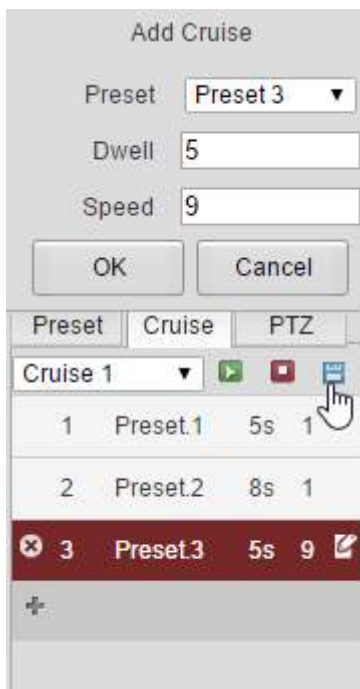
As CRUISE, or TOUR, it means the automatic movement of the camera between presets with a residence time on each of them programmable. This camera can handle up to 8 CRUISE sequences recallable at pleasure. Each cruise can store up to 16 presets.

Before setting up a cruise sequence you must have set all presets that interest us as explained in the previous chapter.

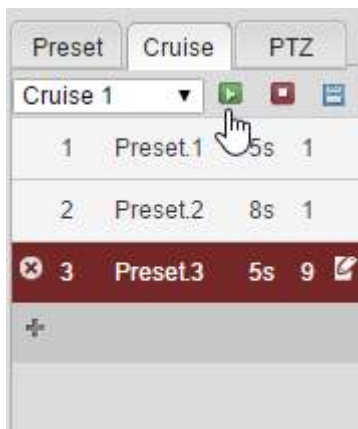
To set up a cruise choose the cruise number and press the + add icon to enter the first of the preset cruise.



You should select a preset and defined residence time screen (DWELL) or speed (SPEED) then press OK to confirm. Continue in this manner until you have completed the cruise sequence desired. When finished, press the blue icon to save



And 'possible to start and stop the cruise with the green and red buttons



The camera automatically stops the movement in the event of another command receipt.

TRACK

As TRACK, or PATTERN, we mean a sequence of movements of the camera registered user and callable at will.

This camera can handle up to 4 recordings TRACK recalled at will. To record a custom sequence, bring the camera at the starting point and press the RECORD button



Perform all movements that you want and after press STOP TRACK

Press RUN TRACK and TRACK STOP to start and stop the track sequence set.



The camera automatically stops the movement in the event of another command receipt.

SCAN

As SCAN, it means the continuous horizontal motion of the camera for a panoramic shooting. This camera supports two SCAN mode: 360 ° or between two end points A and B.

To start the 360 ° scan press the RANDOM button. With the upper cursor it is possible to define the speed of rotation. The camera running SCAN keeps the initial tilt and zoom.



In order to use the scan function between two limit switches must first of all define the two limit switches by positioning the camera and pressing RIGHT LIMIT (right limit) and LEFT LIMIT (left limit). In this way it precisely defines the area to be scanned avoiding to frame, for example, the wall behind the camera. To start scanning between limit switches press the AUTO button or the middle button in the middle of the arrows of displacement.



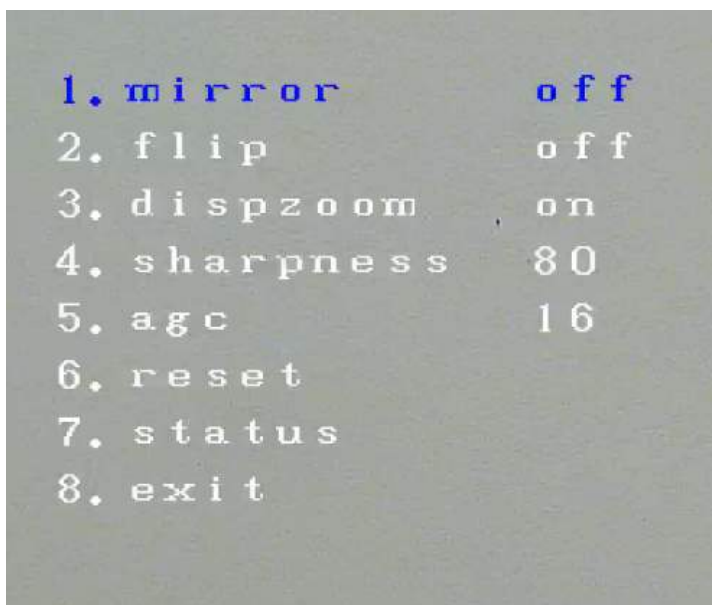
The camera automatically stops the movement in the event of another command receipt.



Browser - Camera Menu

During the live camera view with the browser you can access a camera module by calling the setup menu **95 presets**.

Using this main menu allows some room module settings to use when you have no way to access the camera configuration via a browser (see below)



And 'possible to navigate in the menu with the up / down and modify the parameters with the left / right arrows

MIRROR - Horizontal flip the image

FLIP - Vertical flip the image, which is useful if the camera is installed upside down

DISPZOOM - Enable and disable the overlay of the zoom level (1x..30x)

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SHARPNESS - Adjusts the sharpness of the image

AGC - Adjust the automatic gain control. Most of the AGC value allows greater visibility in the dark with natural light, but also introduces more video noise.

RESET - Restores factory settings

STATUS - Display the operational status of the camera

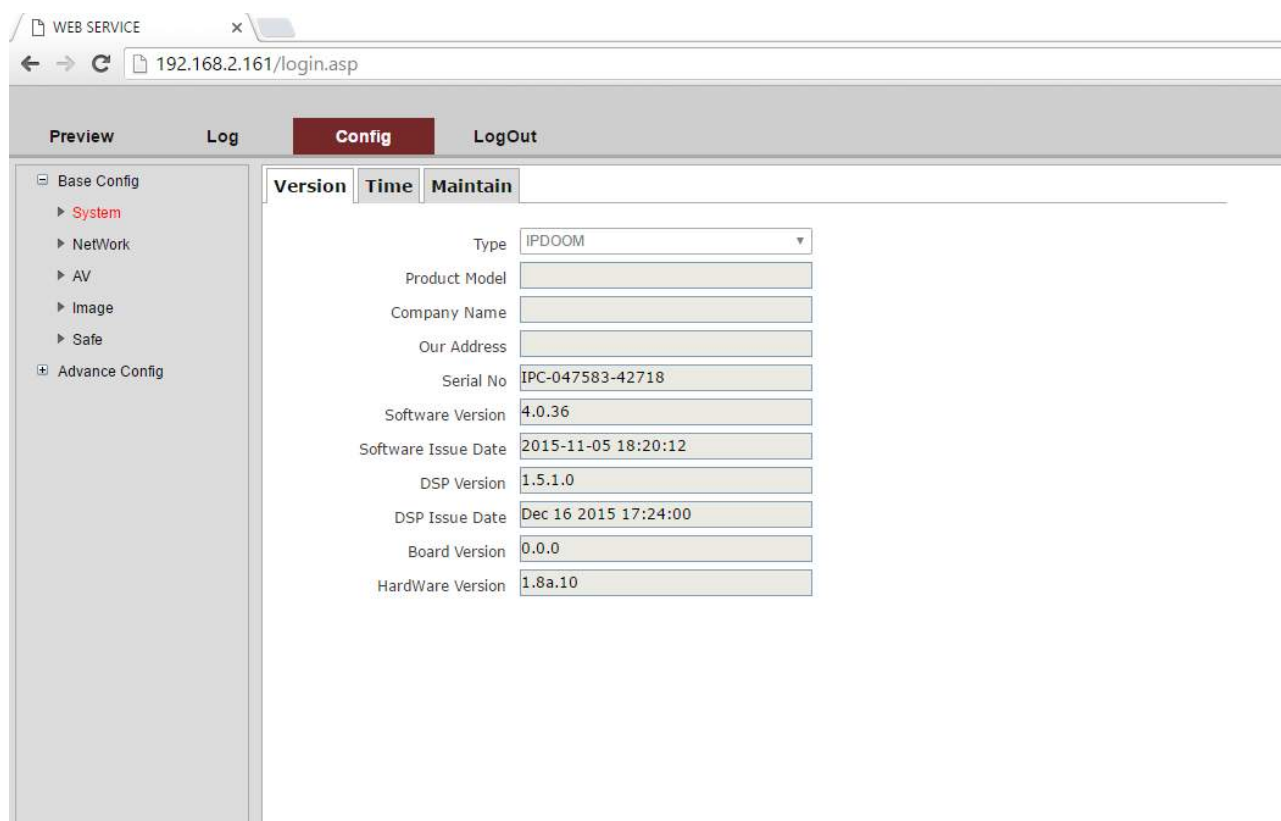
EXIT - Exits the menu of the camera module



Browser - Configuration

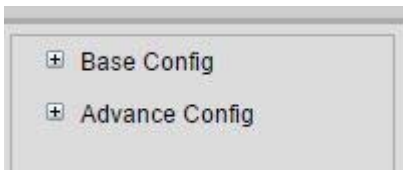
Using your Internet browser, you can configure the operation of the camera options.

Click the SETUP tab to access the configuration.



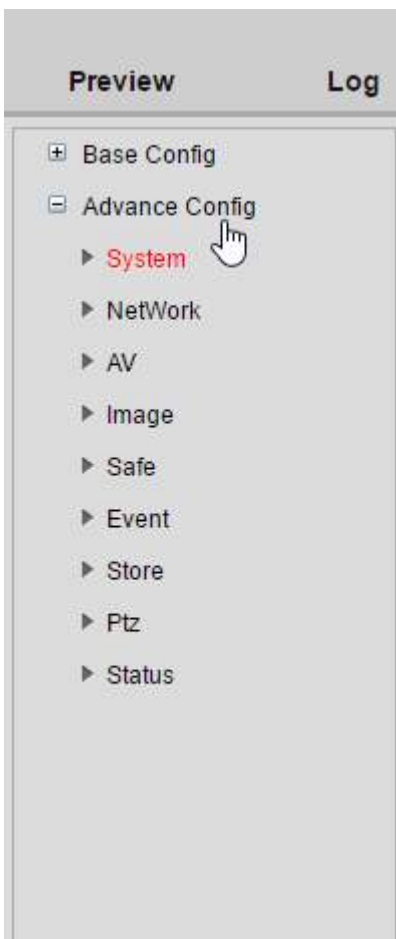
BASIC CONFIGURATION AND ADVANCED

The configuration you can scroll using two different menus: BASIC CONFIGURATION and ADVANCED CONFIGURATION



In the BASE configuration, the less essential items are masked to avoid unnecessarily confuse the less experienced and avoid unwanted programming.

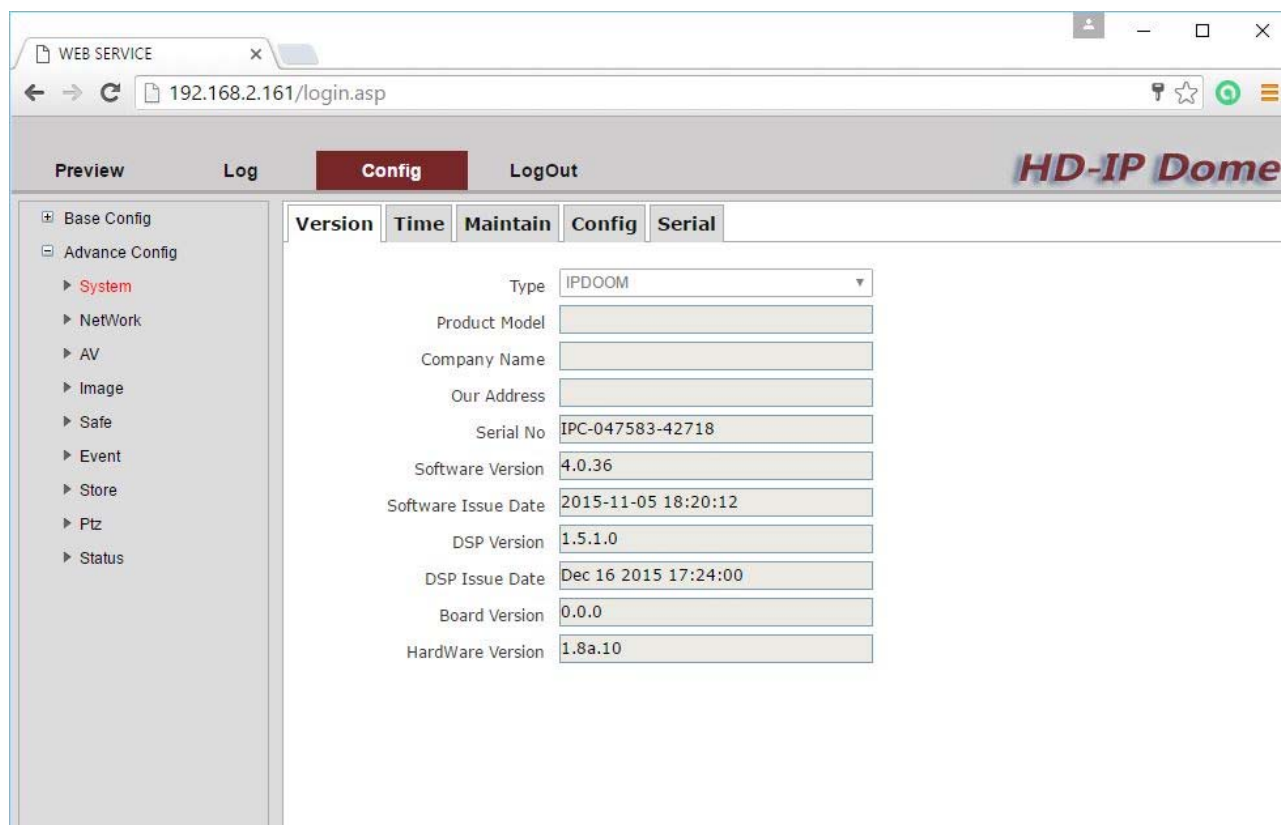
In this manual we refer to ADVANCED programming where there are all of the camera configuration entries



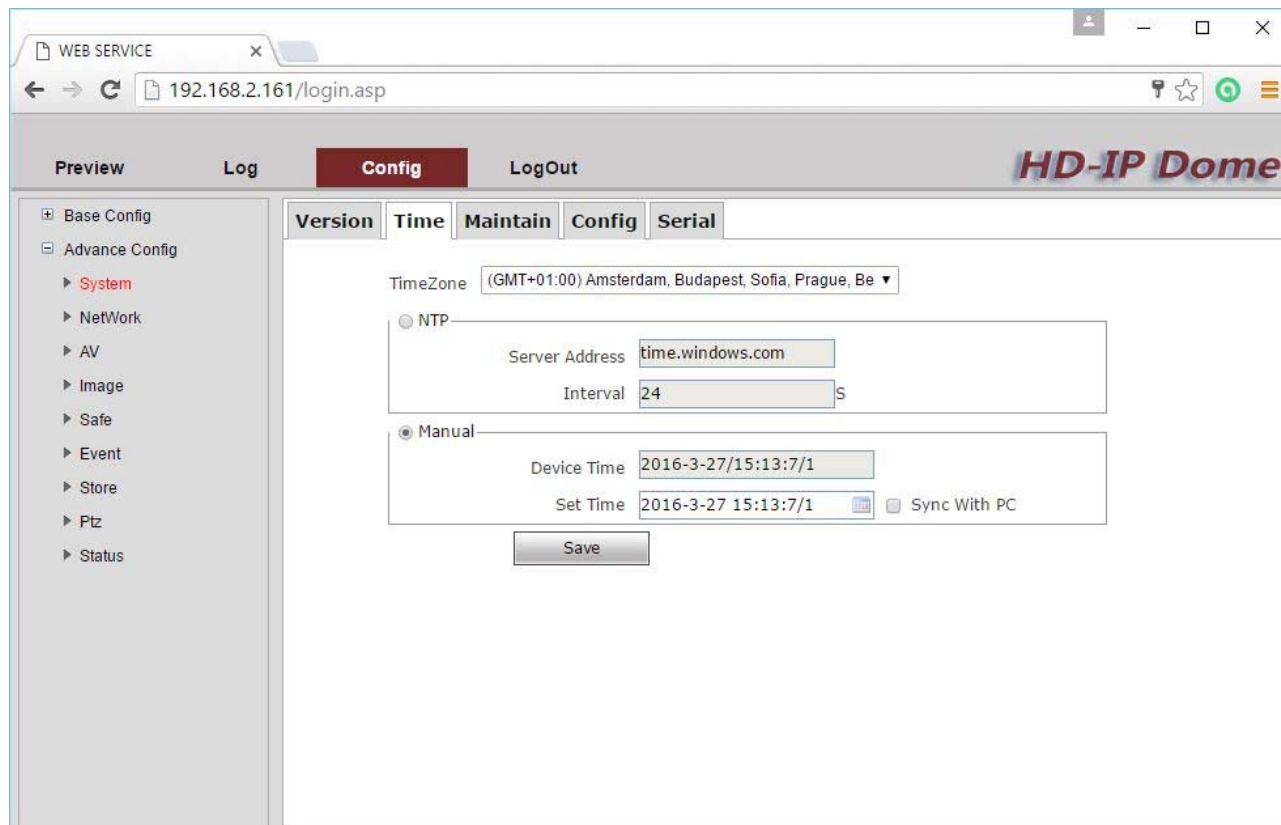


SYSTEM

The first programming page is called SYSTEM and contains five folders.



In VERSION folder contains all the information on the camera status. This is an information page can not be modified

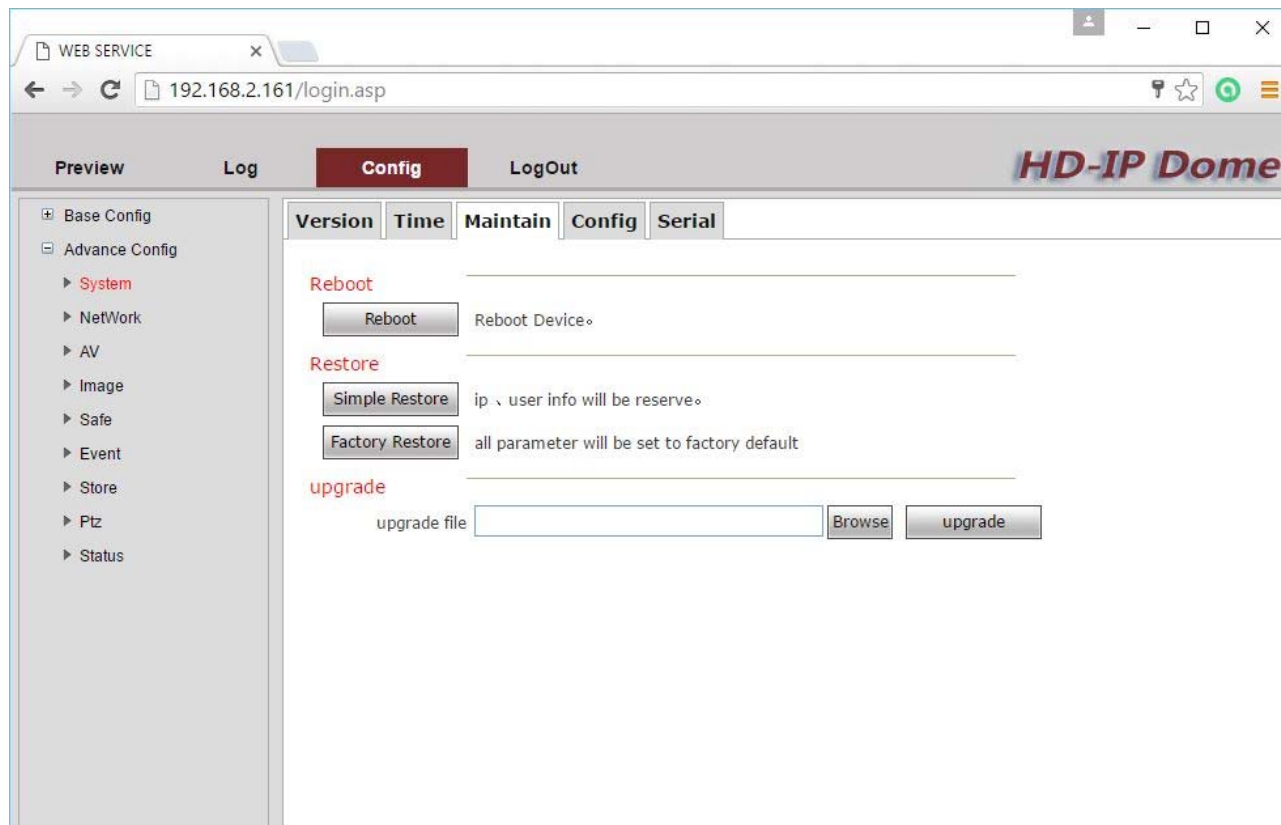


The SYSTEM / TIME page includes time adjustment of the camera

TIME ZONE - Select the reference time zone. For Italy GMT + 1.

NTP - Here it is possible to make sure that the camera automatically synchronizes the time and date via the internet with an NTP (Network Time Protocol). Enter the server address, and the timing of each synchronization.

MANUAL - It can set the date and time manually or synchronize the camera's time with the PC time (SYNC WITH PC). The DEVICE TIME box displays the current set in the camera now.



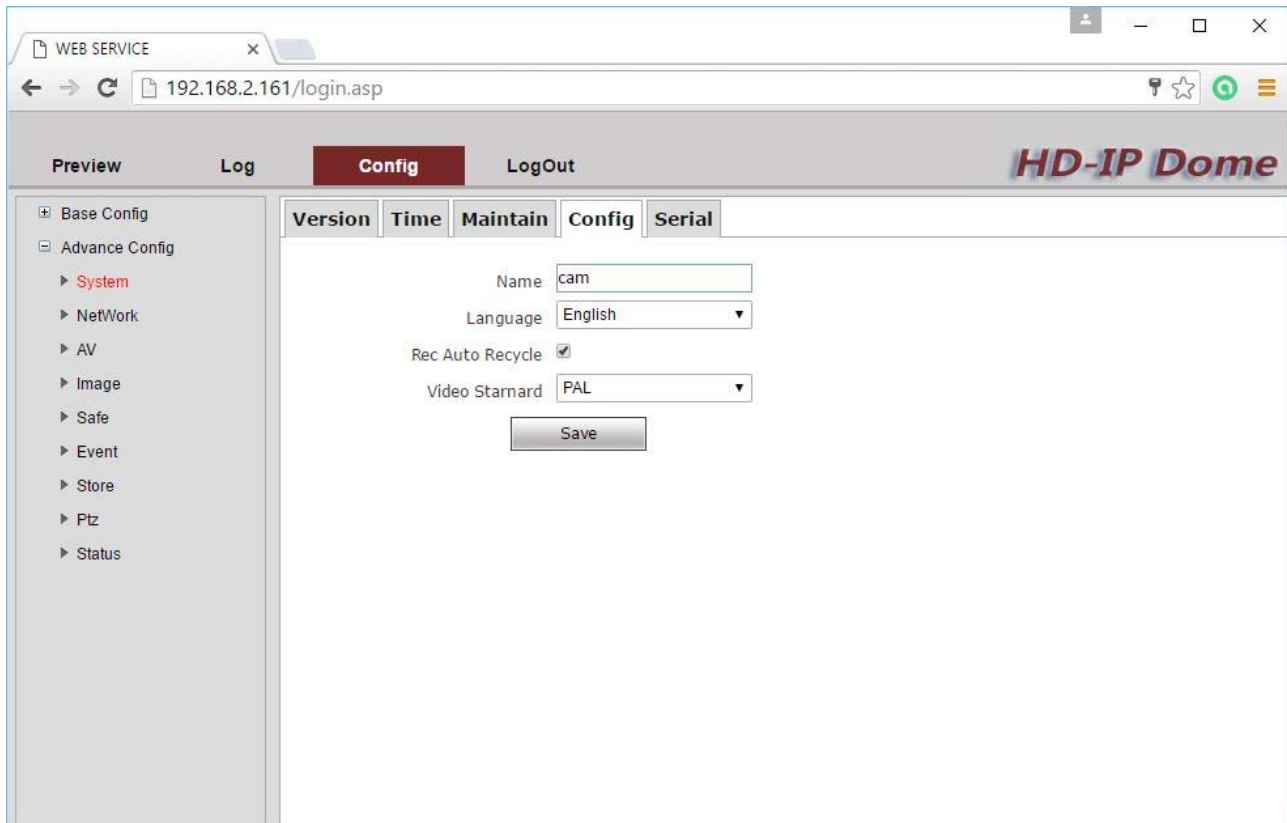
The page SYSTEM / maintain includes some advanced maintenance functions

REBOOT - Reboot the camera

SIMPLE RESTORE - Restores the camera's factory settings but maintains the network parameters and user passwords.

Factory Restore - Restore all factory settings of the camera

UPGRADE - E 'can make the firmware update, only if requested by the technical DSE



The SYSTEM CONFIG page includes some system options

NAME - Assigns an identifying name of the camera used in the logs and other functions

LANGUAGE - English Available

REC AUTO RECYCLE - Not used

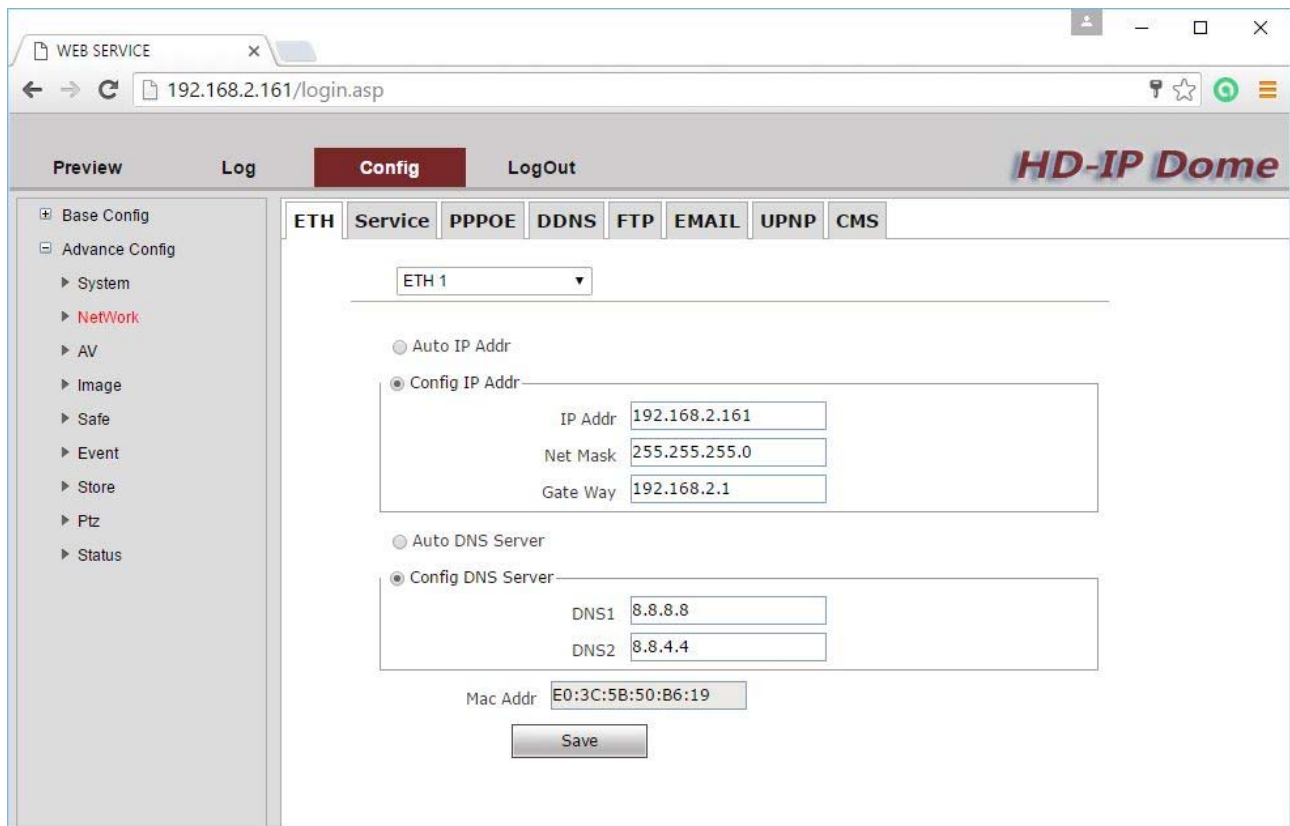
VIDEO STANDARD - Not used on these models

The SERIAL SYSTEM page is not used by this model



NETWORK

The network page includes the camera network data and is composed of 8 cards



Folder **NETWORK / ETH** regulates the interface of the camera Ethernet network parameters

AUTO IP ADDRESS (DHCP): The cameras support both manual IP address assignment is automatic assignment from a DHCP server on the network. The latter is typically not used because it could cause the change in the address time of the camera. The DHCP mode may be of help if you are uncertain about the network configuration to be assigned to the camera. You can start the camera in DHCP mode, so that it automatically takes the correct parameters, then exclude the DHCP and copy the parameters in the static configuration.

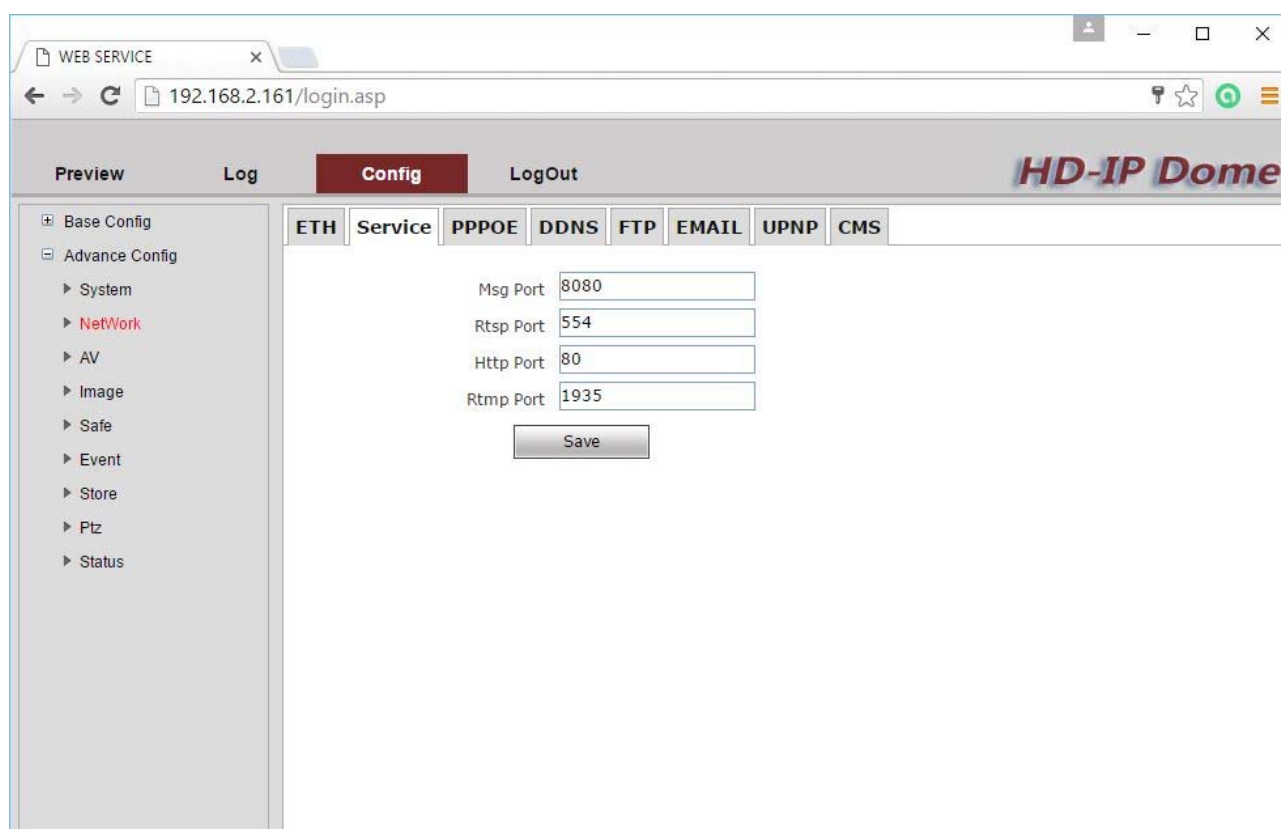
IP / SUBNET MASK / GATEWAY: Here you can enter the network settings manually. These are the classical parameters that allow the device to communicate with your network. Normally these parameters are assigned during installation with the software



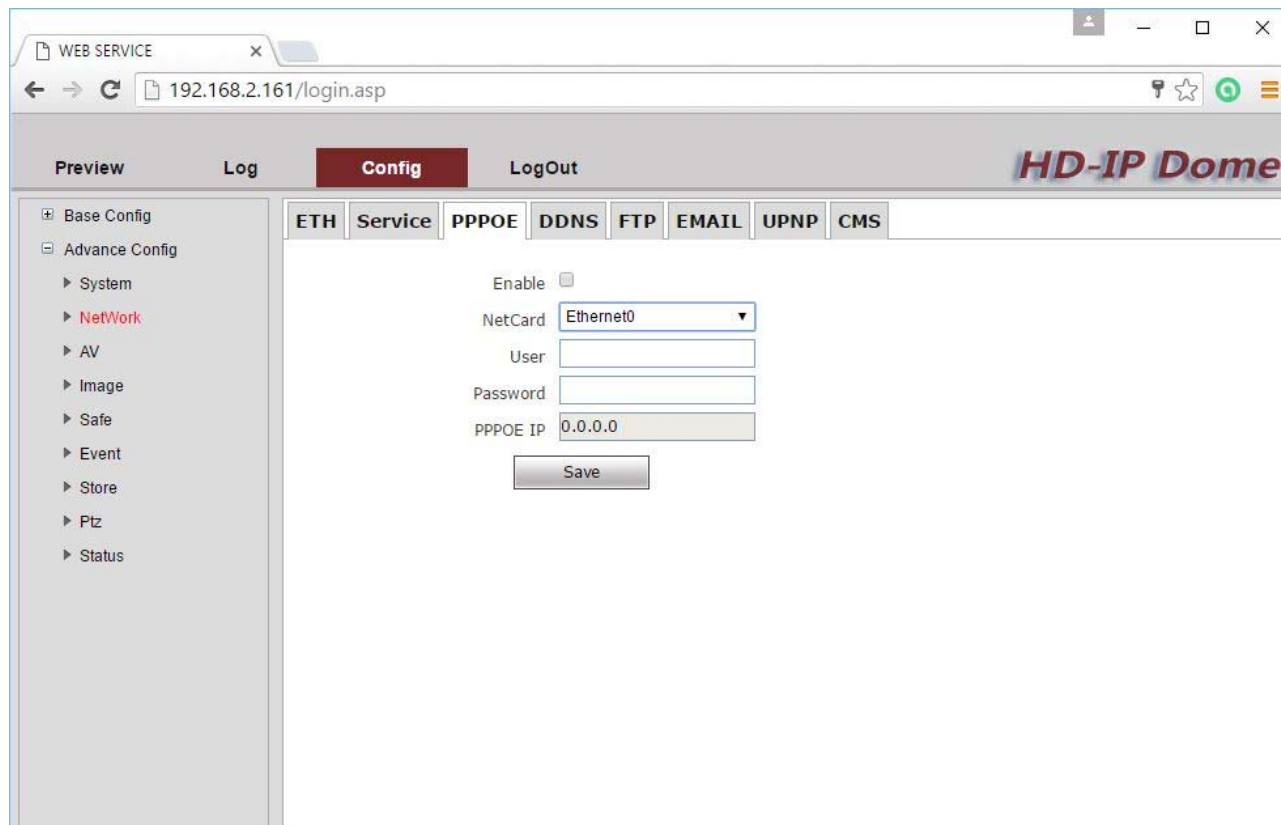
IPCSEARCH as shown in the installation section. It 'also possible to modify them in this tab.

PRIMARY / SECONDARY DNS - And 'the DNS server address that allows the camera to interpret the web site addresses. You can use the Internet DNS provider (ISP) or other free network, such as those of google factory set.

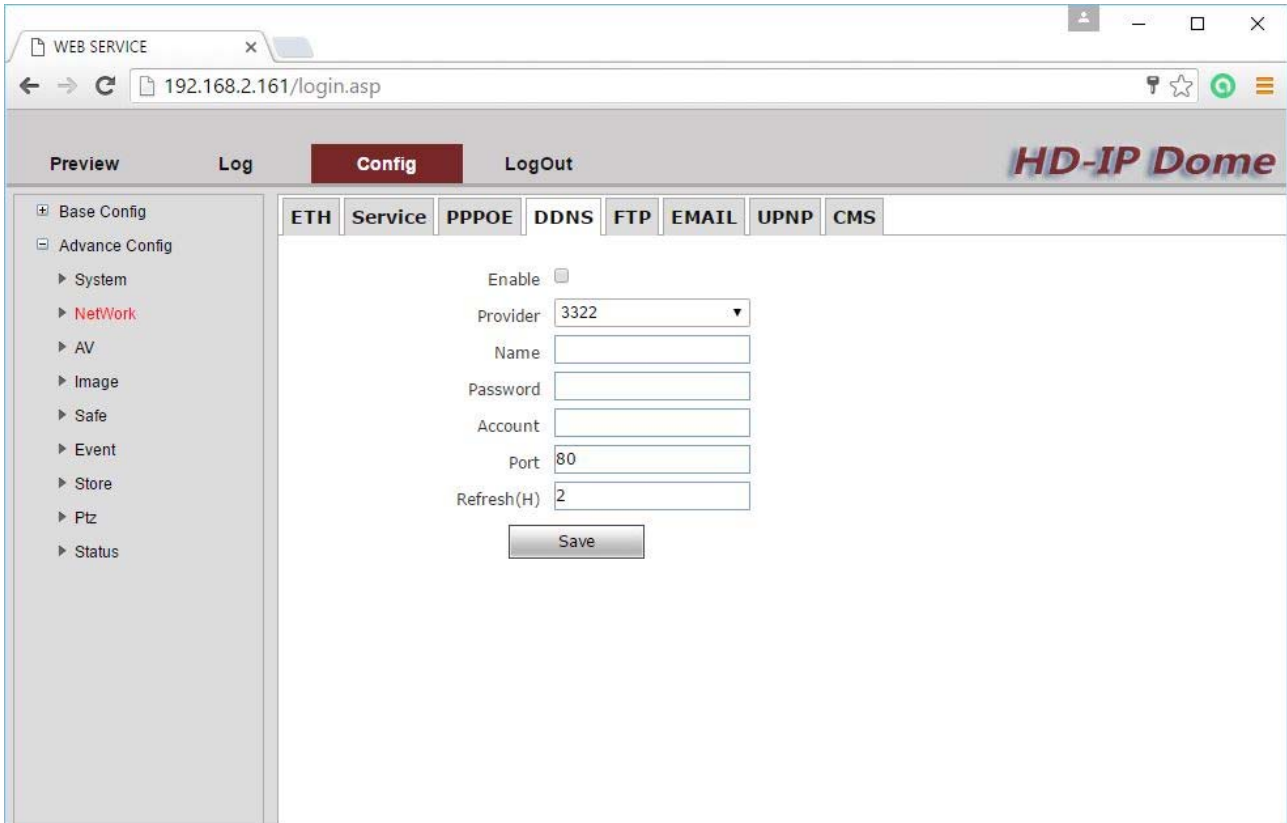
MAC - ID of the camera unique, unchangeable.



Folder **NETWORK SERVICE** specifies the network ports used by the camera. It is recommended not to change these settings unless you have enough experience as it is likely to make the camera unreachable.



Folder **PPPOE NETWORK** It is used when the camera is connected directly to an ADSL modem that requires authentication with the pppoe protocol. It is a situation quite rare today, however in this folder you can enter authentication data.



Folder **NETWORK DDNS** It allows you to manage with the camera connecting to a DDNS server that is used for the web link when you do not have static IP.

In Naked cameras it is extremely rare that you access the camera directly, without passing by 'NVR. If you need access to particular applications through the Internet directly to the camera it is definitely advisable to have a fixed IP address so that you always know the exact address to connect. If you can get a static IP from your ISP, these cameras support services DDNS (Dynamic DNS) that continuously monitor the IP address of the camera to the Internet and allow you to compensate for the lack static IP. These services, available online, provide the user with a domain name that you type in the client. The DDNS provider redirects communication to the IP address that the camera has at that moment.

The RJ Series cameras support the most common DDNS services and are able to send to the DDNS provider periodically Internet IP address assigned to them.

PROVIDER - 2 are supported DDNS providers: 3322 and DYNDNS

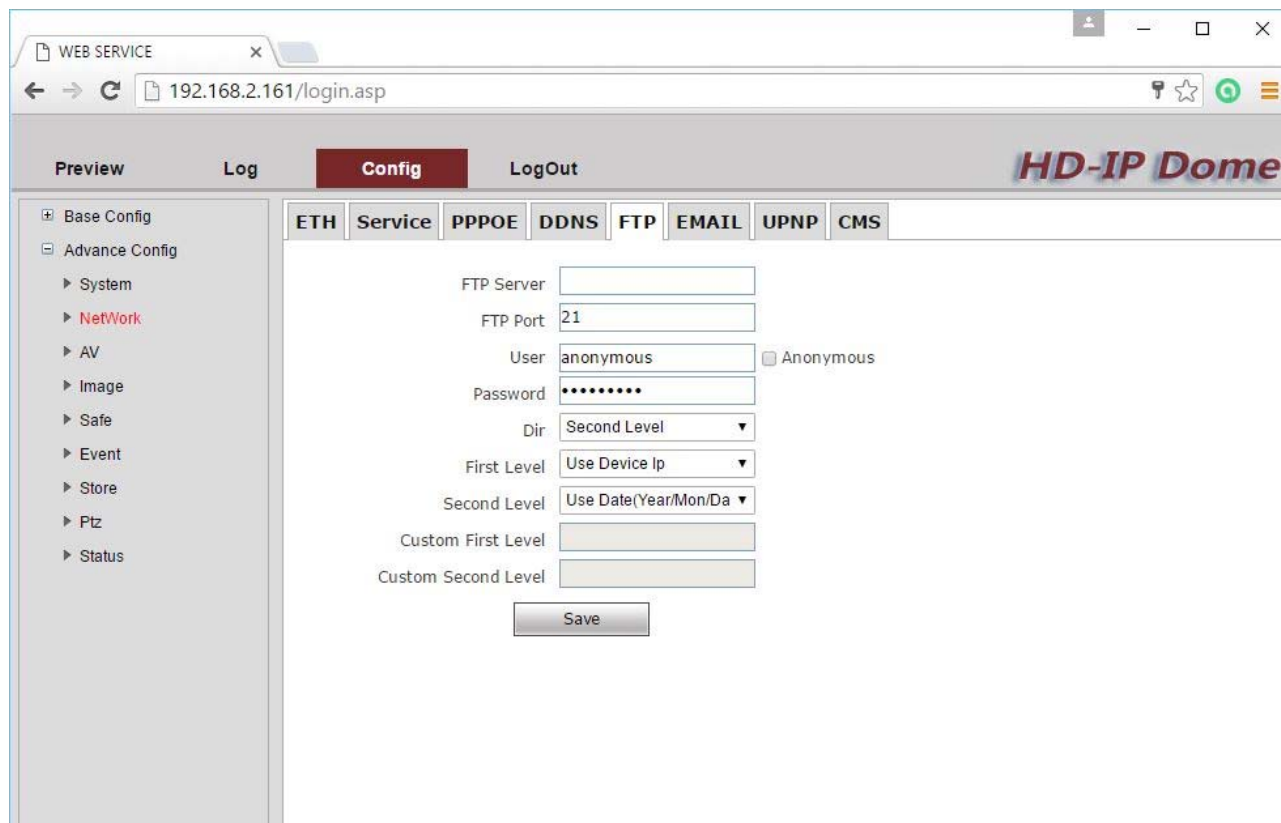
NAME / PASSWORD - Enter the access data from the provider



ACCOUNT - DDNS domain name provided by your ISP

PORT - Communications port to use for communication with the provider

REFRESH - Cadence sending data to the server (every xx hours)



Folder **NETWORK FTP** It allows you to enter the FTP server data. The cameras can upload images to a website via FTP on a time basis. It's very used in applications webcam application. The sending photos activation is done in the EVENT folder that we will see later. Here you can set the mode of communication with the server.

FTP server - IP address of the FTP server

FTP PORT - The communication port, typically the 21

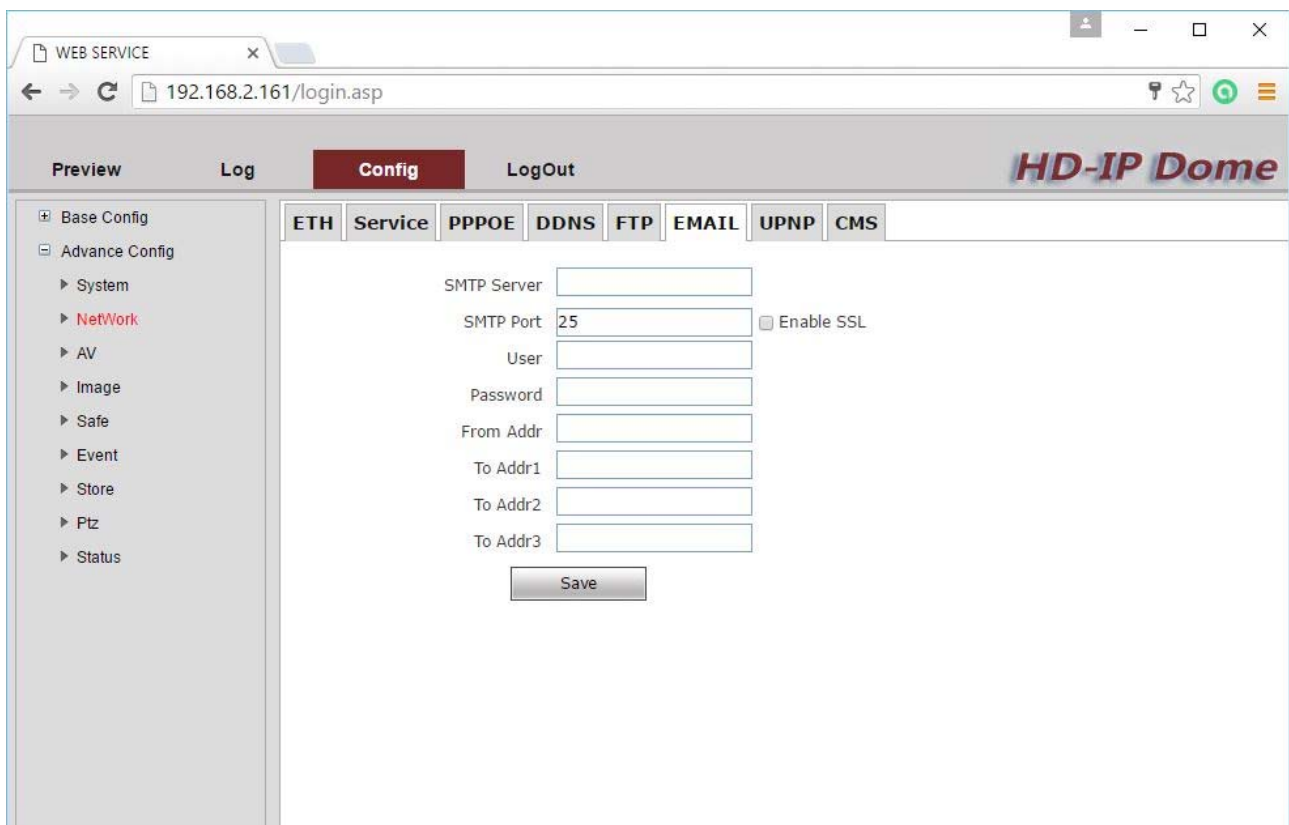
USER / PASSWORD - All the FTP servers require authentication to access it should be indicated here, otherwise select ANONYMOUS



DIR - Here is to display the camera about the folder to save the files to the FTP server. E 'can choose to save in the main ROOT directory or you can indicate a top-level folder or second level. Depending on this choice will enable the boxes to indicate the folders first and second level to use the FTP server.

FIRST LEVEL - Specify the top-level folder (located in the root directory of the FTP server). You can make sure that the camera alone generate a folder with the name, IP, or the camera's date, or you can enter a name of your choice CUSTOM that plugs into the bottom box (CUSTOM FIRST LEVEL)

SECOND LEVEL - As above for a possible second-level folder

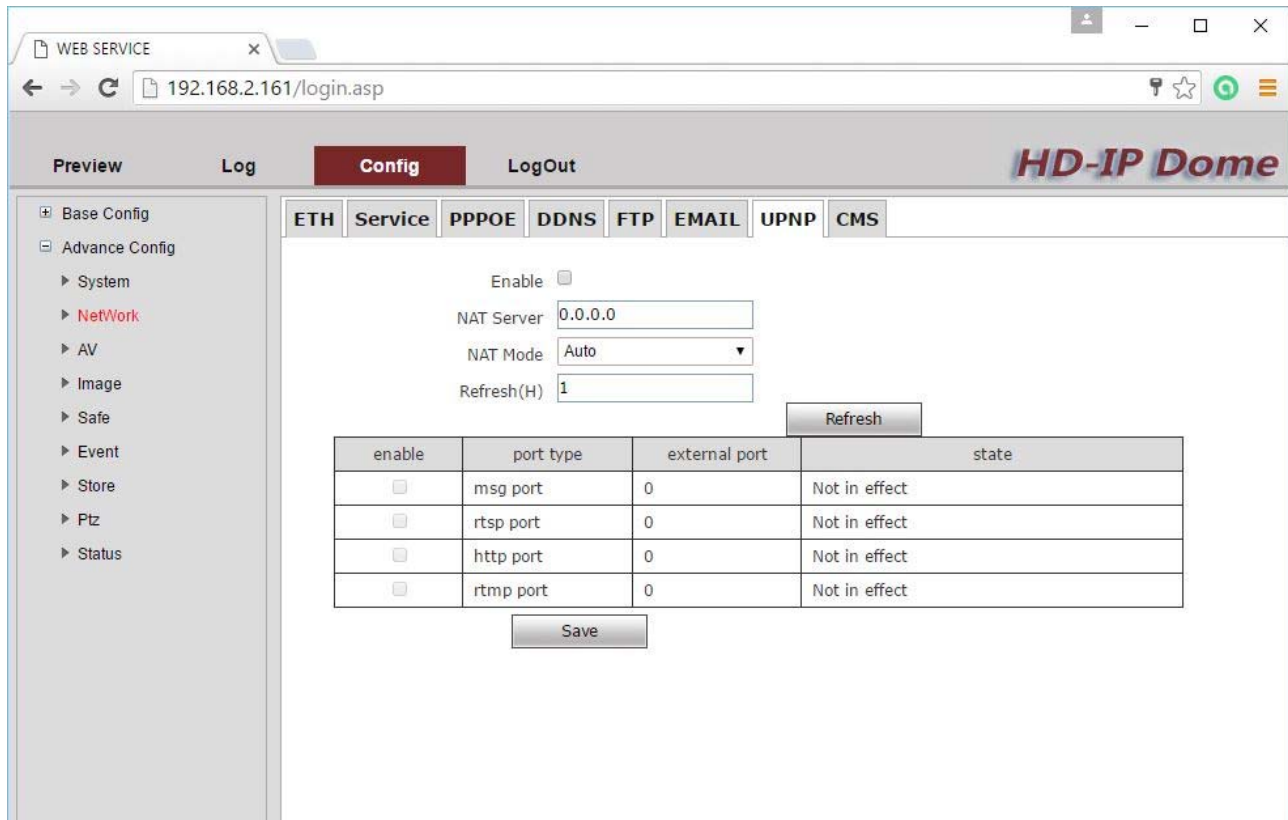


Folder **EMAIL NETWORK** It allows you to enter the SMTP server for sending emails. Cameras can send alarm EMAIL, although typically this function is commonly entrusted NVR.

E 'can indicate the address of the SMTP mail server, port and authentication data to be used to access the SMTP server if it requires authentication. If the server uses SSL encryption, you must enable it.

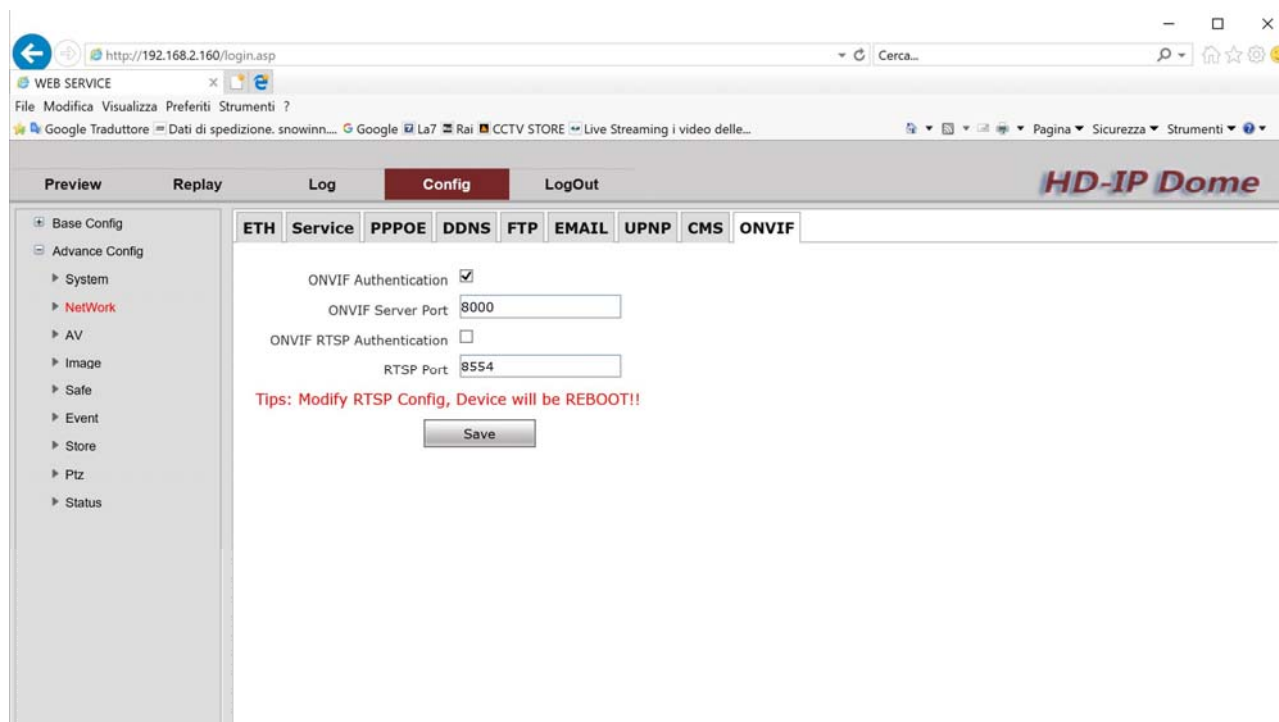


You must also enter the email address to use as the sender (FROM ADDR) and up to 3 recipients (TO ADDR 1,2,3). You can also enable password authentication if the server is requesting.



Folder UPNP NETWORK It allows to enable the use of this protocol, through which the camera can alone map ports of the router to allow access from the Internet. It is necessary that the router supports this function and that it is permitted in its programming. This function is now rarely used because different network situations may render it ineffective. If you want to connect from the outside towards the camera we recommend the manual mapping of ports on the router or the use of an NVR with P2P function to prevent the mapping.

The folder NETWORK CMS is not used on these models



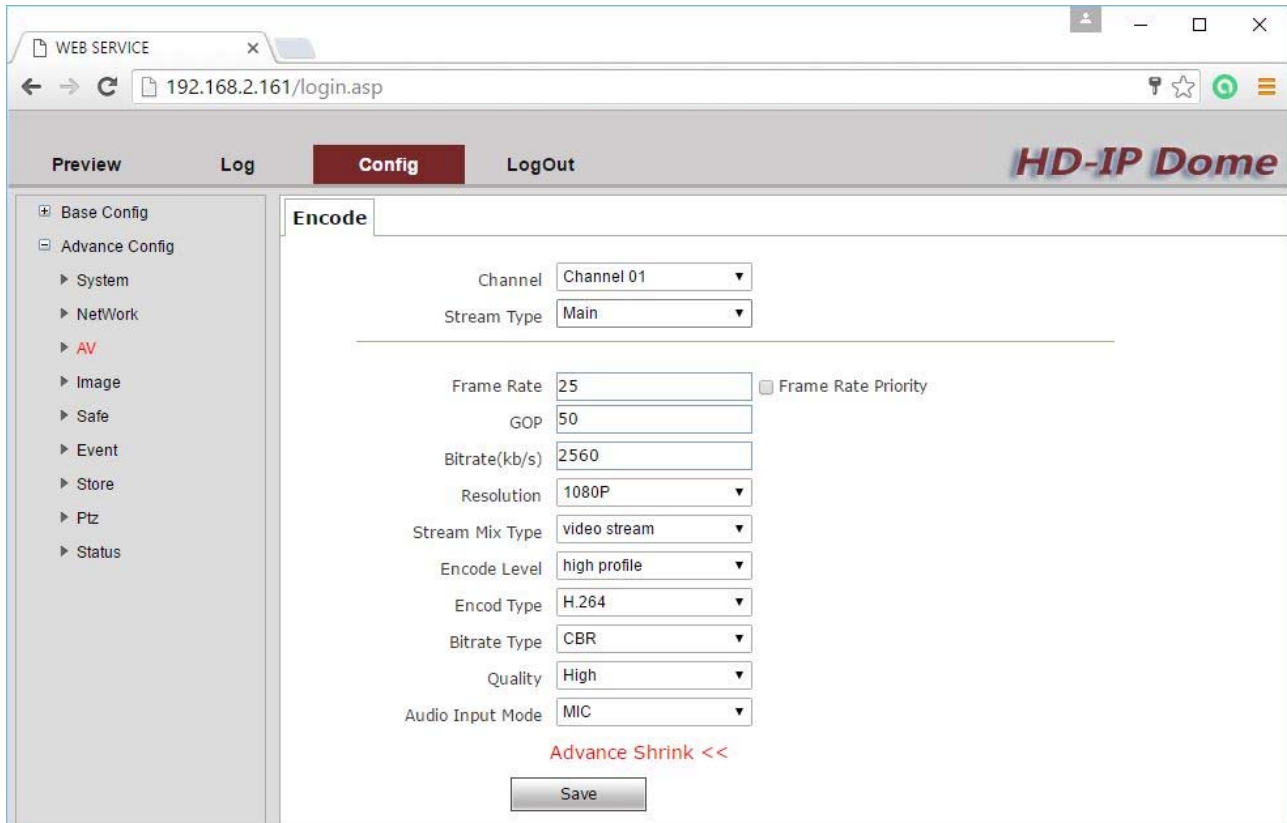
Folder **ONVIF NETWORK** It is available on several models and allows you to change the port onvif ONVIF and RTSP port used to communicate with the NVR.

And 'possible or not to require authentication with user name and password to allow connecting NVR.



AV

The page includes AV encoding data that sets the camera streaming video.



CHANNEL - Not used

STREAM TYPE - The camera manages two streams: **MAIN STREAM** (main stream) of higher resolution and **SUB STREAM** (secondary stream) lighter to use with little bandwidth availability. Since connected client you can define which stream to use. Here you choose whether you want to configure the MAIN or SUB stream and will appear in the boxes below the encoding parameters related to one or the other.

FRAME RATE - It 's the number of frames per second that make up the video stream (max. 25). Consider that 25 f / sec corresponds to the so-called real-time ie the television standard in which the human eye does not perceive the individual frames but a single uninterrupted sequence. Generally you can reduce this parameter up to 10/12 f / sec without perceiving large video fluidity differences and thus saving a lot of bandwidth. We recommend this reduction especially in the SUB STREAM.



FRAME RATE PRIORITY - Select whether you want to stream always keeps the maximum frame rate setting and in low bandwidth available video quality is sacrificed.

GOP (Group of pictures) - E 'a parameter that affects the H264 compression of the stream. It represents the distance between two consecutive I-Frame.

A movie with H264 compression is composed of many P-frames and I-Frames from some places at regular intervals. The interval between two I-frames is called GOP. If the GOP value is 50, for example, there will be an I-Frames every 50 P-Frames. The I-Frames are much larger than P-frames, so the higher the number, the heavier stream video.

If you increase the value they will be less GOP I-Frames in streaming and this will make it lighter streaming. By contrast, the small number of I-frames will result in a strong compression, and some loss of video quality.

Reducing the GOP will have more and more I-frames in the stream and the result will be an increase in video quality, but also the occupied bandwidth.

The minimum possible value of GOP is 1 and corresponds to a movie consists of only I-Frames, practically a movie in high-quality compression MotionJPEG, but very heavy. The GOP is recommended factory (50).

BITRATE - And 'the occupation of maximum usable bandwidth from the camera in Kbit / sec

RESOLUTION - And 'the streaming video resolution. For the main stream, it can be set to 1080P (Full HD 1920x1080) and 720P (HD 1280x720), while for the sub stream can be set to VGA (640x480) or QVGA (320x240)

STREAM MIX - Maintain Video Stream factory option

ENCODE LEVEL - indicates the type of compression to use H264 (Base-Line, Main-Profile, High-profile). Keep the factory option High-Profile

ENCODE TYPE - Supported H264, H265 and MJPEG.

BITRATE TYPE - This option It gives the possibility to choose between two different bandwidth management mode occupied:

CONSTANT BIT RATE (CBR) and VARIABLE BIT RATE (VBR). In the CBR mode, the camera maintains a constant bit rate and provides the highest quality



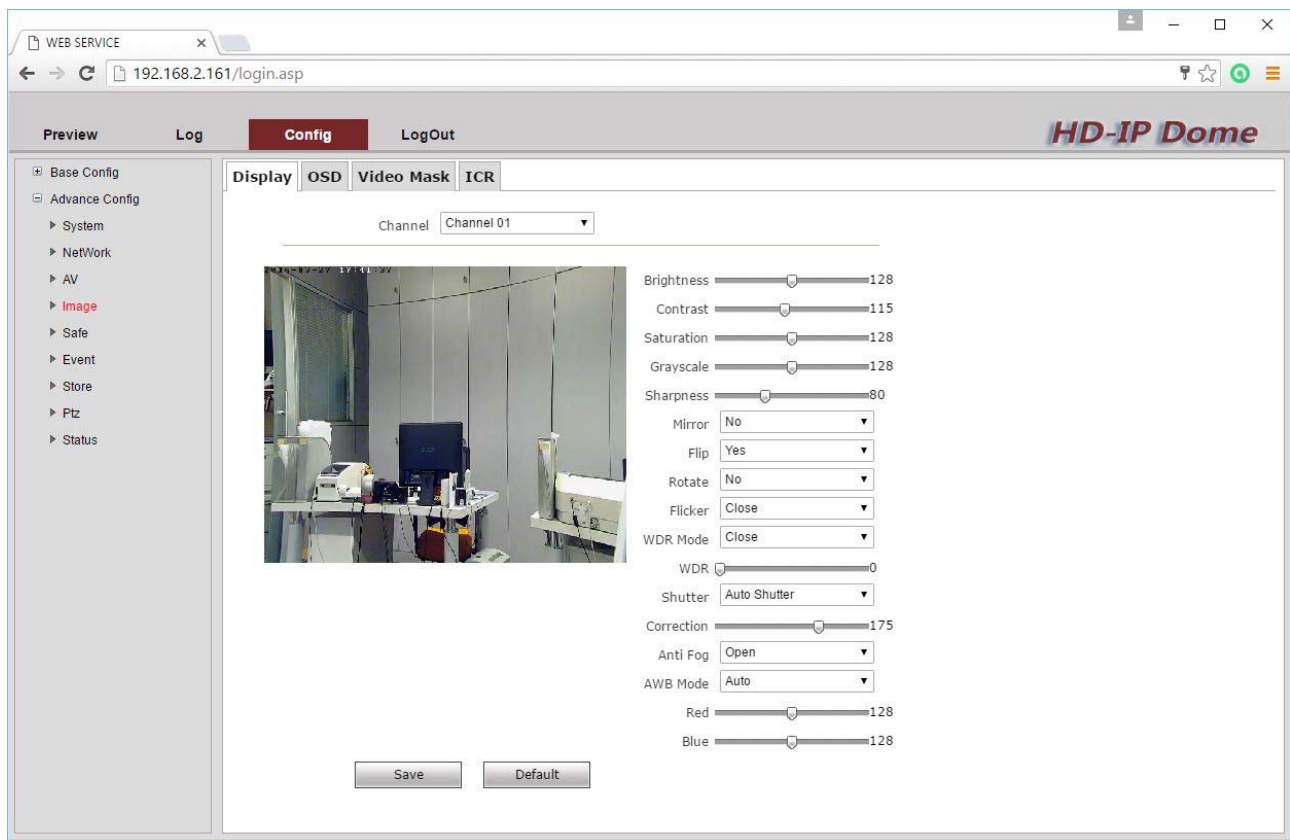
Video allowed by this band. In the VBR mode instead of changing the bit rate camera in different operating conditions in order to maintain a constant video quality.

QUALITY - Sets the average video quality (High, Medium, Low). Better quality means less compression and more bandwidth occupied

AUDIO - Not used

IMAGE

The IMAGE page allows you to work on the image shown live



The board **IMAGE DISPLAY** It contains the camera module adjustments to define the video made. The test image allows you to see the results of the adjustments that will take effect after pressing the SAVE button.

BRIGHTNESS - Dimming



CONTRAST - Adjust contrast

Saturation - Color Saturation adjustment

GRAYSCALE - grayscale adjustment

SHARPNESS - Adjust Definition

MIRROR - Horizontal flip the image. Useful when shooting under rear view.

FLIP - Vertical flip the image. Useful if the camera is installed upside down.

ROTATE - Rotate the image 90 and 270 °. Useful for abnormal mounting positions

FLICKER - Activate to shoot video screens at 50 or 60Hz

WDR - Wide dynamic range digital. It allows to improve the recovery when they are present in the image areas with different brightness.

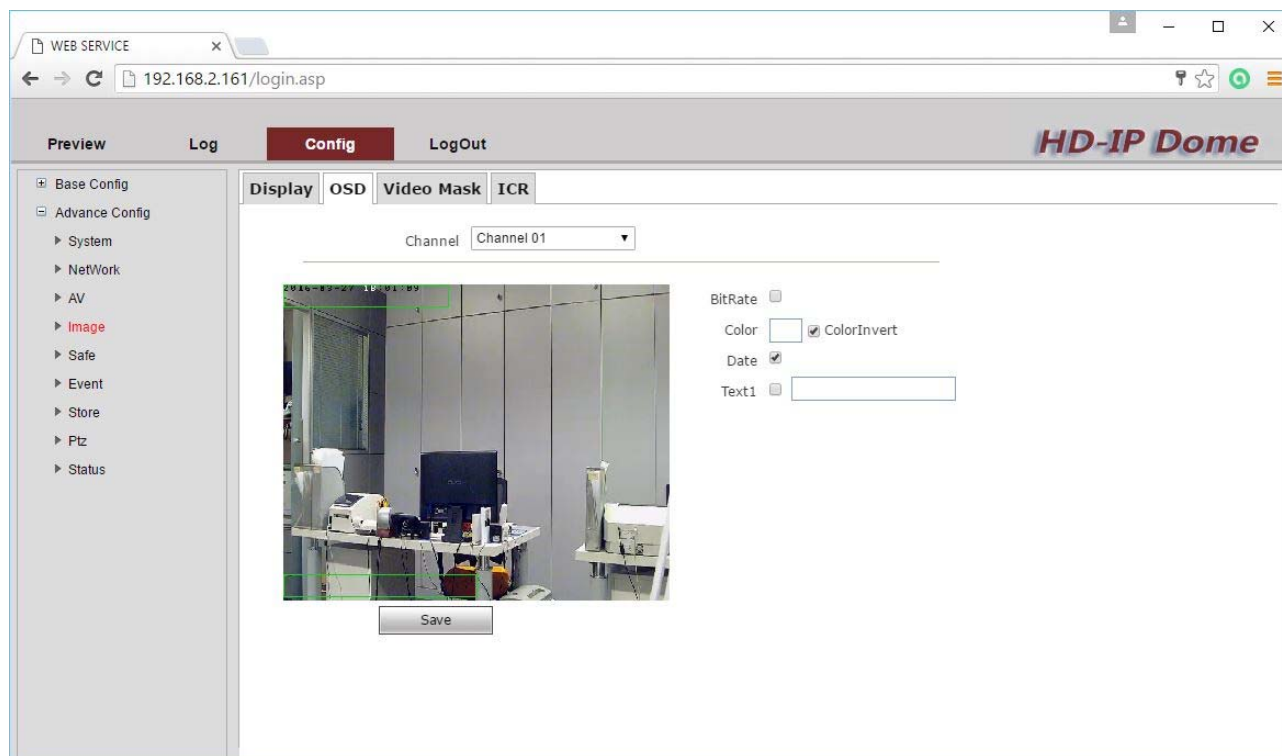
SHUTTER - Adjust the speed of the diaphragm. It is generally best to use the AUTO (default) but you can also have the choice of a fixed speed from 1/25 sec to 1/10000 sec for particular applications

CORRECTION - spoke to compensate deformations caused by lens aberration

ANTI FOG - Improves vision in foggy conditions digitally

AWB - Several white balance options to better make the white color depending on the type of ambient lighting.

RED / BLUE - Adjusting the color tone



Page **IMAGE OSD** It allows you to configure your overlays you wish to report live on the camera image

BITRATE - Show overlay the bandwidth and frame rate in real time. Useful to enable for diagnostic purposes.

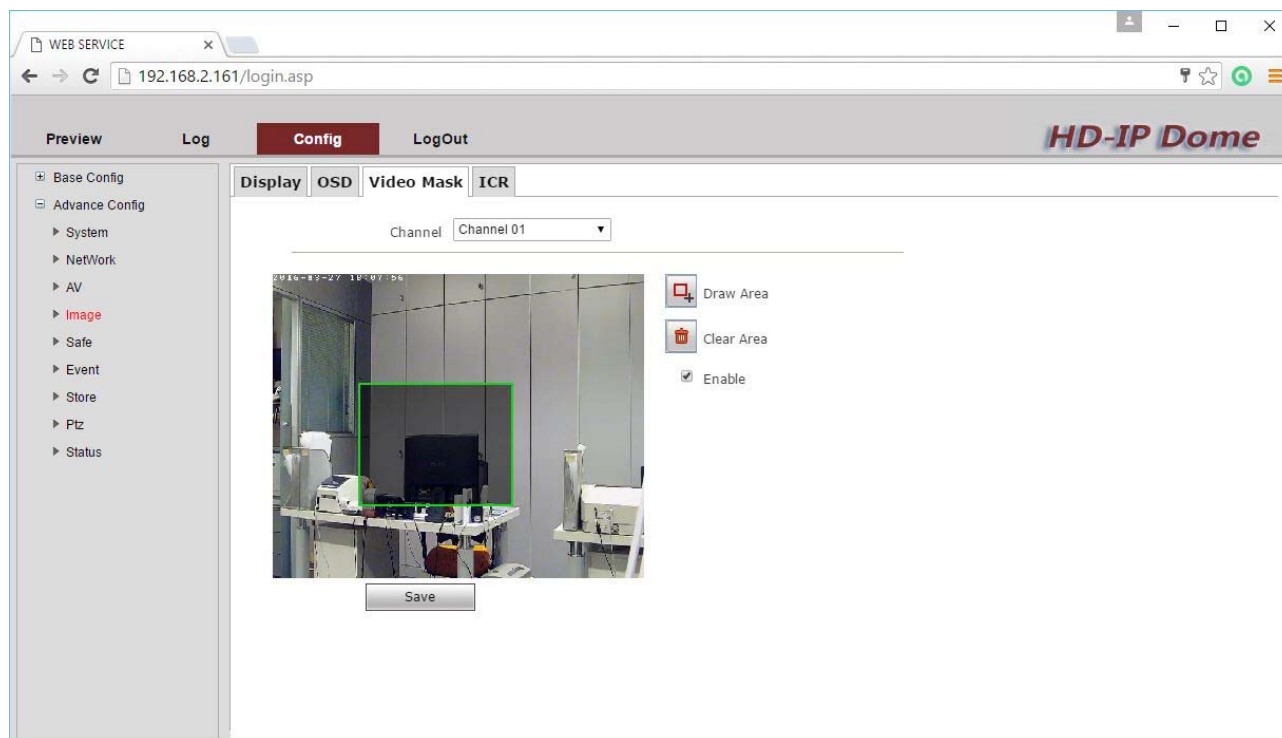
COLOR - Select the font color

COLOR INVERT - Automatically changes the font color where the background makes them difficult to read

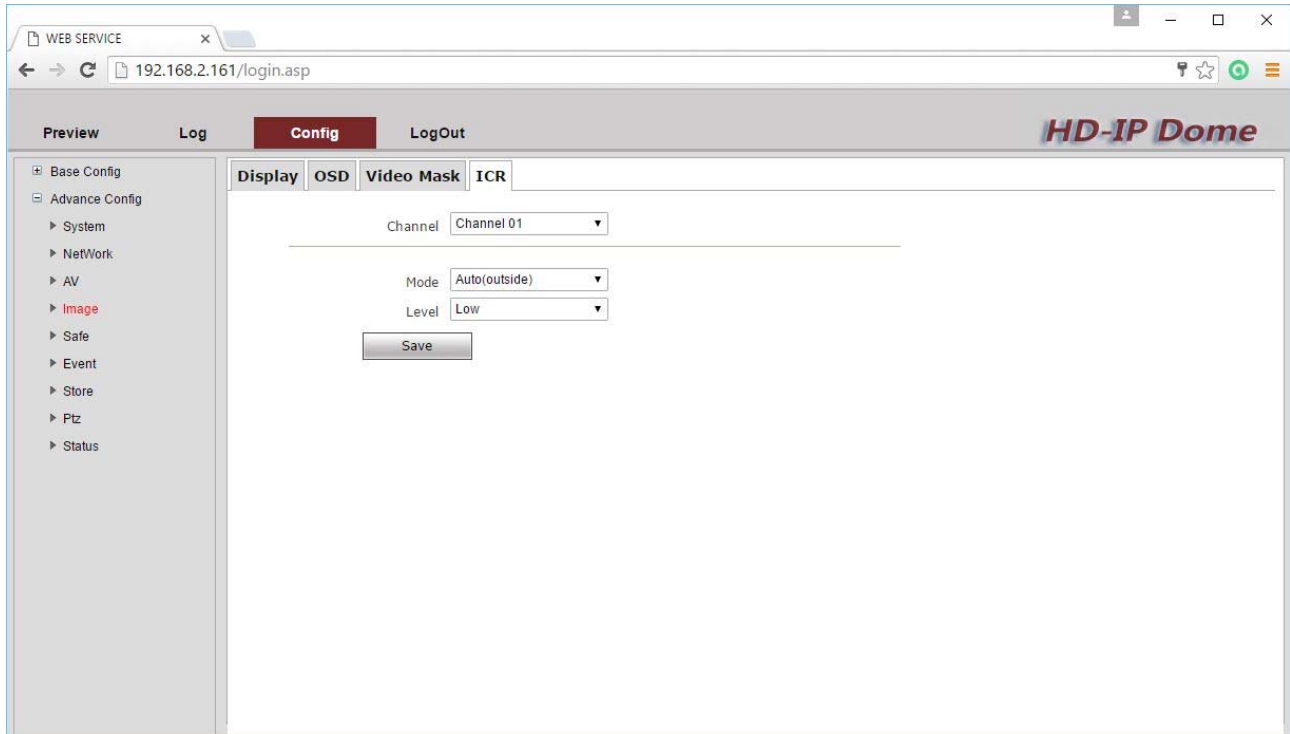
DATE - Display the date and time over video

TEXT1 - it shows a custom overlay text that can be, for example, the camera name

test Pictured are the two panes of display overlays that you can drag your mouse in the desired position.



On the page **IMAGE MASK** you can mask the vision of shooting areas for possible privacy needs. Note that in the motorized cameras this feature is rarely used since the camera can move and with it the mask. To set the mask press AREA DRAW and drag the mouse. You can track up to four boxes. To remove the masks press CLEAR MASK



The window **IMAGE ICR** It allows to adjust the removal of the camera IR filter that takes place in the transition from daytime vision to night. To understand this adjustment should first be recalled that in all the colors jump cameras in front of an IR filter sensor can reduce the passage of infrared components of light that are not visible to the human eye. Without using the IR cut filter the camera would produce strange colors that do not match those that we usually see. In a color camera devoid of day / night function, the IR cut filter presence makes it impossible to use the infrared lighting.

In order to allow the passage of infrared light in the night mode, the cameras of this series integrate a mechanical device capable of physically removing the IR cut filter at nightfall. This function is called ICR (Infrared Cut-Filter Removable) and guarantees the performance of the camera day / night.

In this page you can define how to handle the removal of the filter.

AUTO (outside) - Factory option (recommended). The removal of the filter takes place automatically according to the light

AUTO (inside) - Same as above, eg indoors

DAY - The camera will always use the DAY mode with color vision

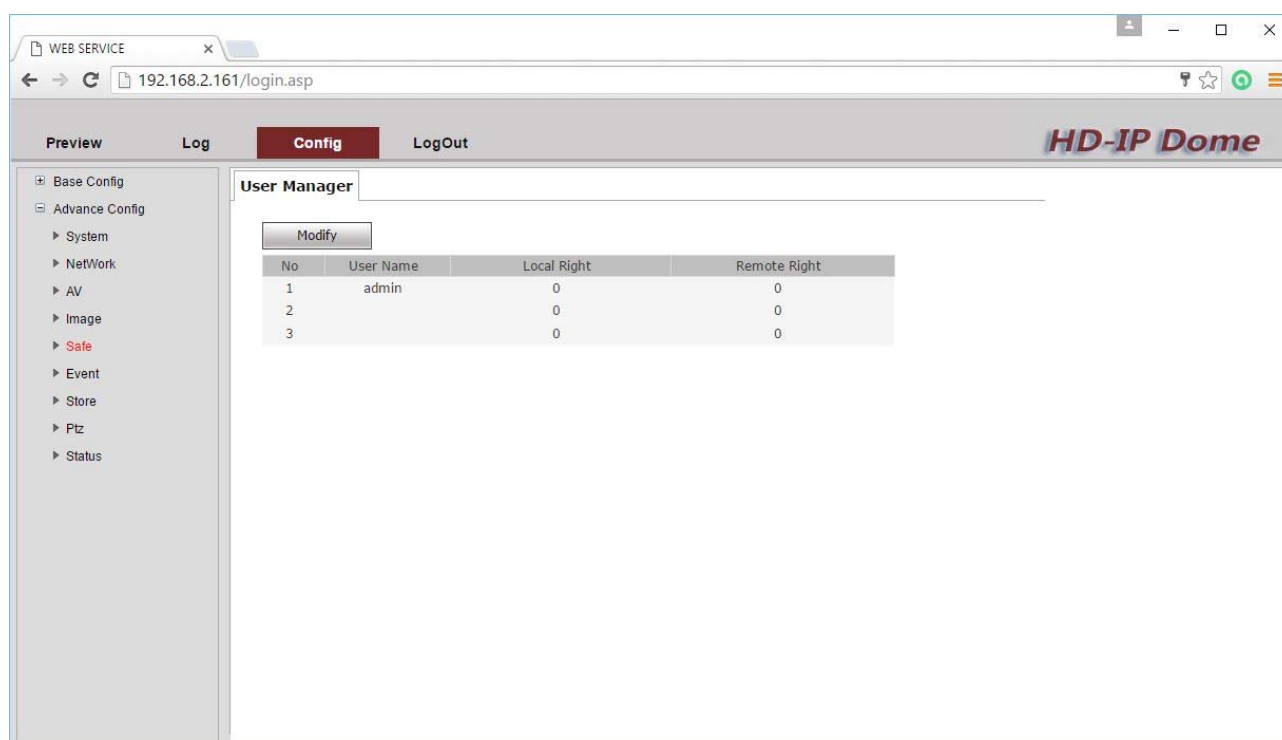


NIGHT - The camera will always use the NIGHT mode (B / N)

TIMER - To control the passage DAY / NIGHT based on time of day (4 time slots)

SAFE

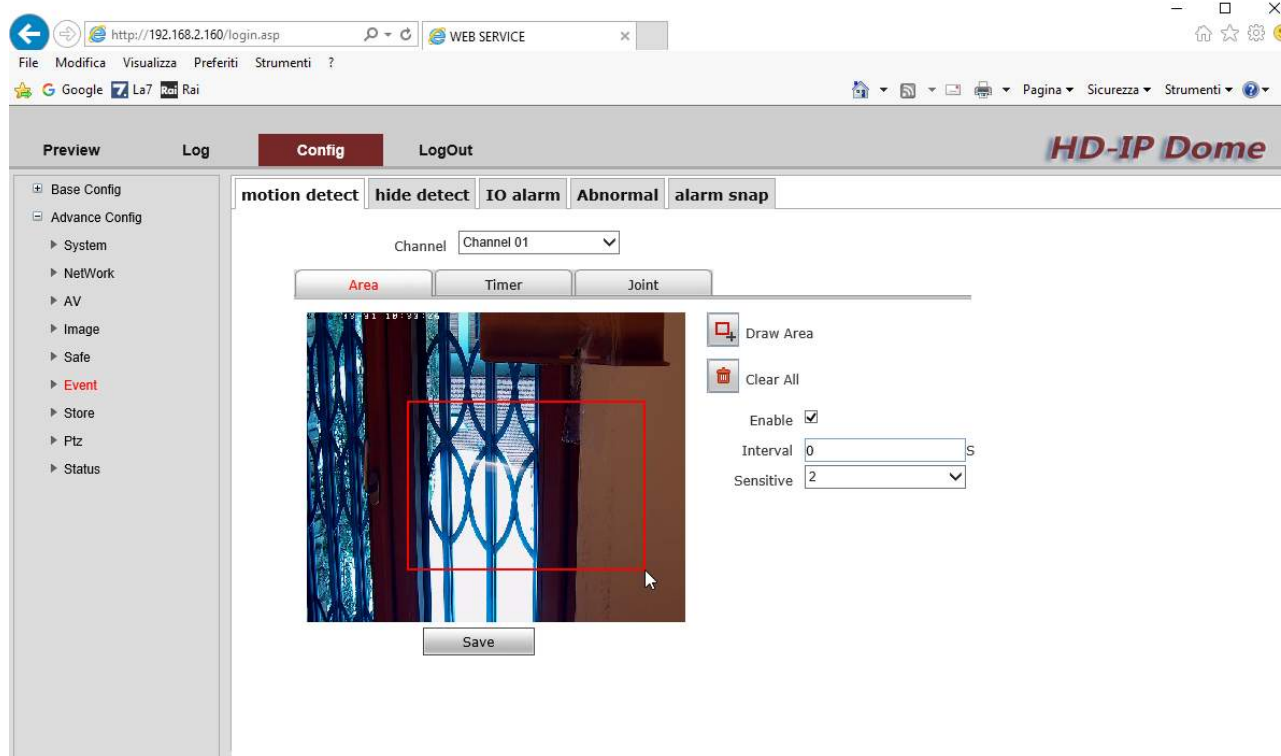
The SAFE page allows you to manage access to the camera password



You can enter three passwords, the first of which, for the admin user is already set. All users have the same level of access to the camera but are identified separately in the memory of the camera events

EVENT

The EVENT page allows you to manage alarm events. For the configuration of this section, it must be handled with Internet Explorer as in other browsers some advanced configuration options may not be accessible.

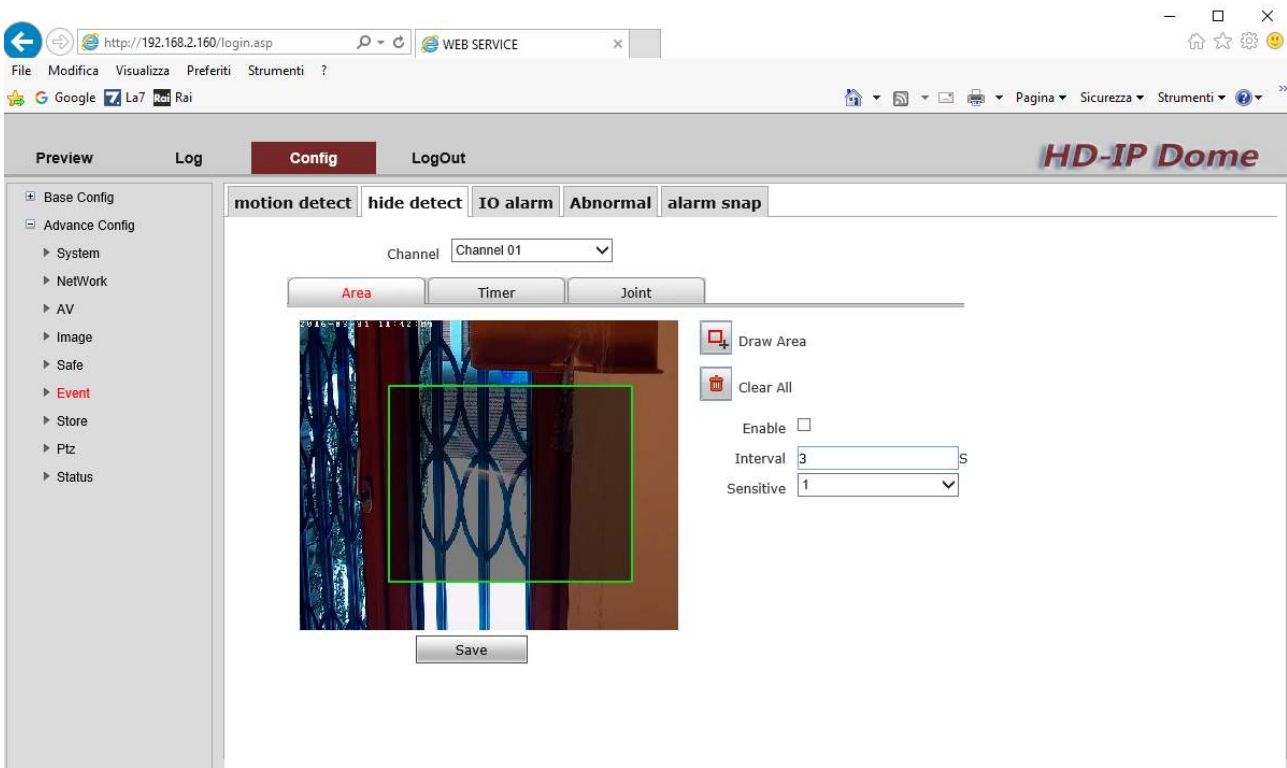


Page EVENT - MOTION DETECTION It allows to set the motion detection function using the built-in camera. This function allows to trigger the alarm actions if an intrusion is detected in the field of view of the camera. The function can of course use only if the camera is left as stops with the moving camera always triggered in the motion alarm.

It is also recalled that as a rule agrees to manage motion detection in a centralized manner by the NVR rather than individually from the camera.

AREA - Set a detection window by dragging the mouse. The survey will only work in this area. E 'can set a sensitivity level of 1 to 5 (SENSITIVITY) and a delay (INTERVAL) to prevent, as far as possible unwanted trips.

TIMER - And a weekly timer 'available to enable motion detection only during certain hours depending on the day of the week.



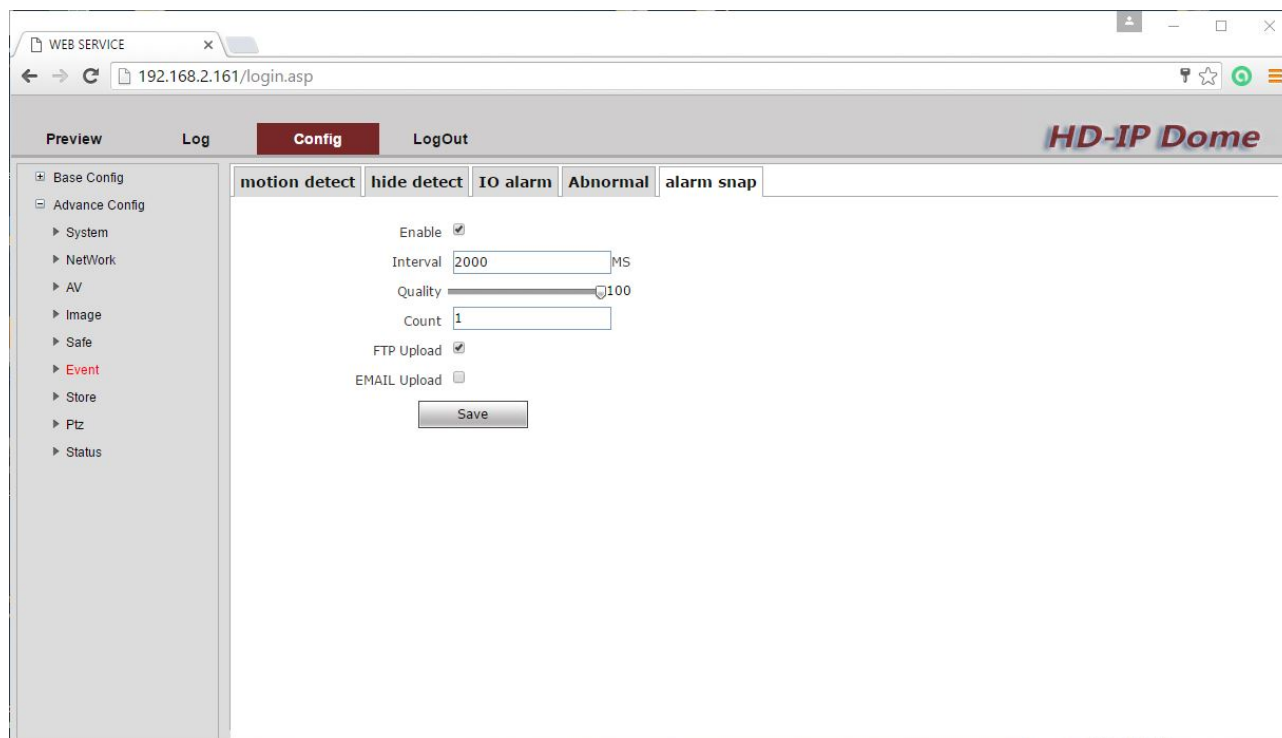
Page EVENT - HIDE DETECT It allows to set the detection of anti-blinding built-in camera. This function allows to trigger alarm actions if it is occluded the camera field of view with a masking. Even this function can only be used if the camera is left stationary.

AREA - Set a detection window by dragging the mouse. The survey will only work in this area. E 'can set a sensitivity level of 1 to 5 (SENSITIVITY) and a delay (INTERVAL) to prevent, as far as possible unwanted trips.

TIMER - and a weekly timer to enable the anti masking 'only available during certain hours depending on the day of the week.

JOINT - Here you can define actions to be taken in case of blindness alarm. You can perform the following actions: Action Auto Recall

PTZ (preset, tour, pattern etc) and send pictures via e-mail (other actions are not enabled)



Folder **EVENT - ALARM SNAP** need to send pictures to FTP servers or emailed at regular intervals.

INTERVAL - The send frequency in milliseconds

QUALITY - The image compression

COUNT - The number of frames to send

FTP UPLOAD - Enables sending via FTP to the server set in the Network section

EMAIL UPLOAD - Enables sending via email to the recipients set in the Network section

The IO ABNORMAL ALARM folders and are not used on these models

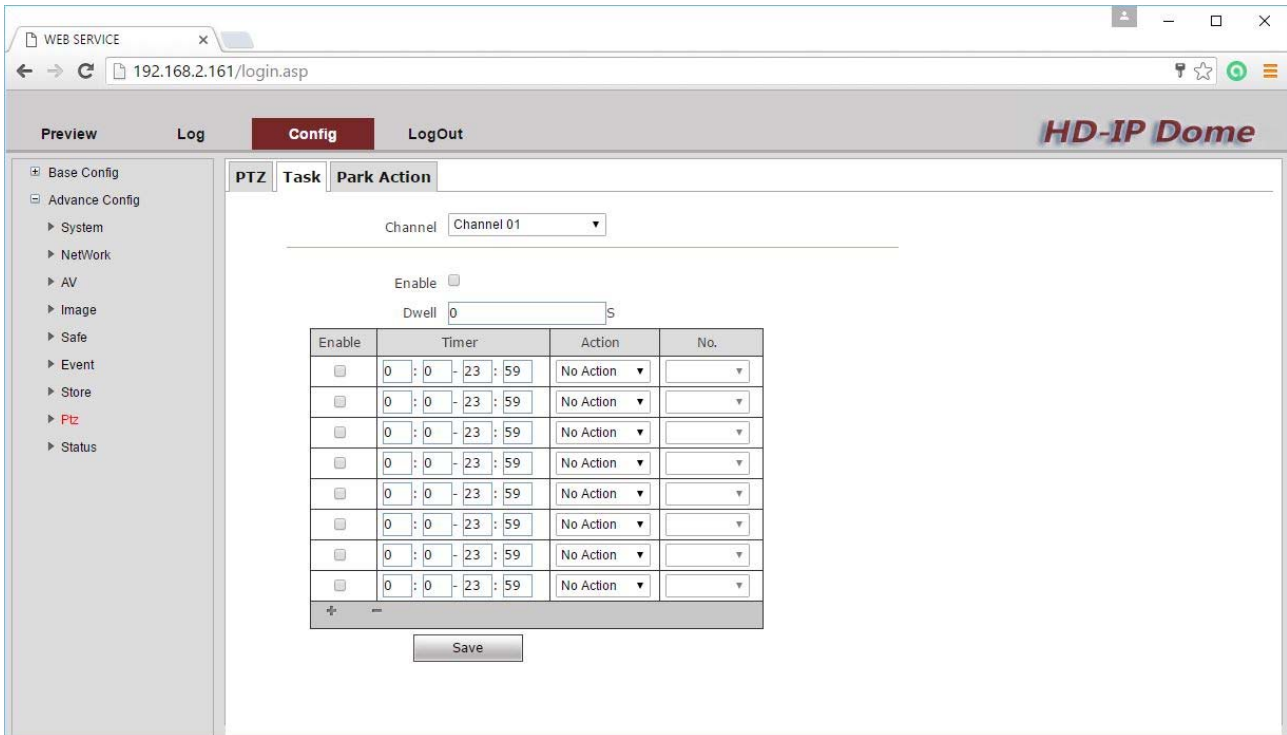
STORE

The STORE page is not used on these models



PTZ

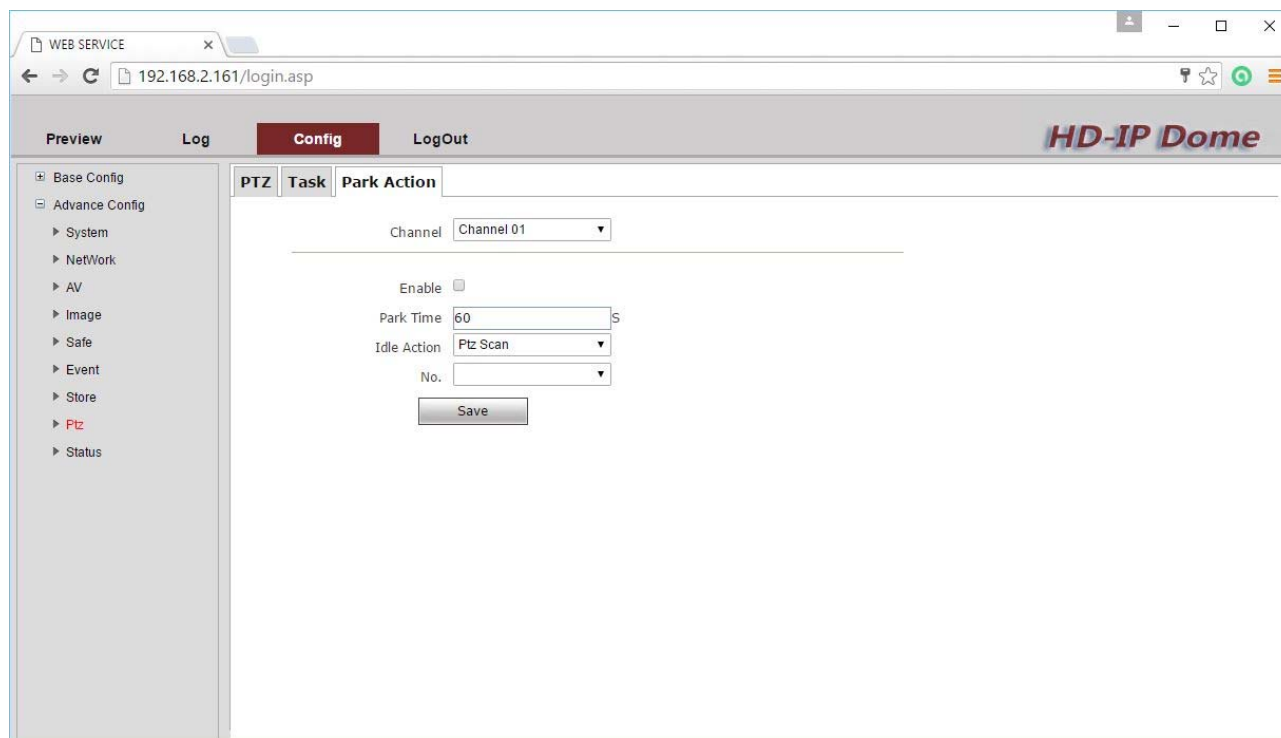
The PTZ page is used to program the automatic actions that the camera will perform without the operator's command



The PTZ PTZ-card is not used on these IP models

The board **PTZ-TASK** It allows programming of automatic actions to be performed at a certain time. 8 Hourly programming are available for automatically recall PRESET way, CRUISE, SCAN between limit switches, and TRACK SCAN 360 °.

In order to start these functions obviously you must first have them set as described above in the manual.



The board **PTZ-PARK** It allows an automatic action that the camera will execute after a certain period of absence of the operator's commands. This function is also known as IDLE, or PARK HOME and serves to prevent the camera from being left inadvertently by the operator in a position different from that provided for the best surveillance.

PARK TIME - Time of absence can start the automatic action

IDLE ACTION - Automatic action to be invoked in the absence commands

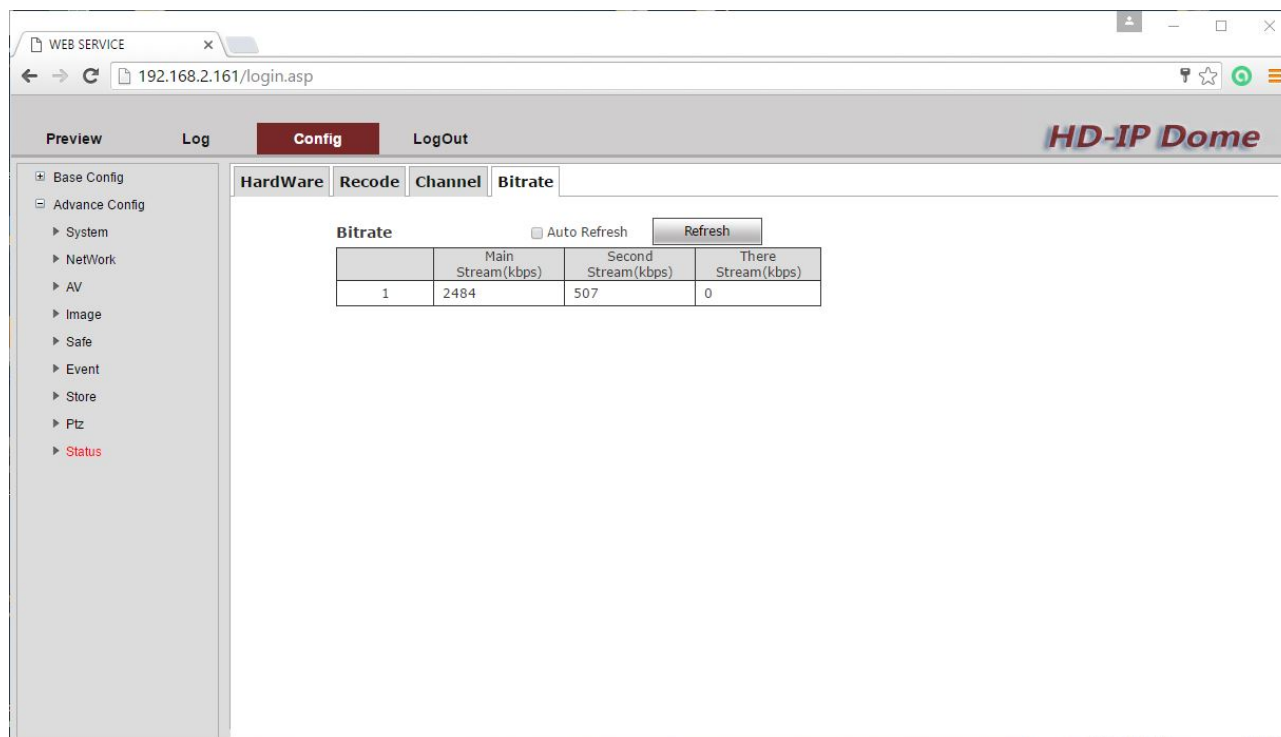
E 'can automatically recall PRESET way, CRUISE, SCAN between limit switches, and TRACK SCAN 360 °.

In order to start these functions obviously you must first have them set as described above in the manual.



STATUS

The STATUS page shows the status of the real-time camera





Browser - LOG

Using your Internet browser, you can read the memory of the camera events

Click the LOG tab to access the memory



No	Time	Major Type	Minor Type	Channel	User	Remote
1	2016-3-27/13:47:49	system	Start up	0	admin	127.0.0.1
2	2016-3-27/13:47:51	system	Start up	0	admin	0.0.0.0
3	2016-3-27/13:49:48	operation	Set time	0	admin	192.168.2.14
4	2016-3-27/15:17:17	parameter	Record Paramtert	0	admin	192.168.2.14
5	2016-3-27/15:17:50	parameter	Record Paramtert	0	admin	192.168.2.14
6	2016-3-27/17:37:3	operation	Ptz	1	admin	192.168.2.14
7	2016-3-27/17:37:4	operation	Ptz	1	admin	192.168.2.14
8	2016-3-27/17:37:6	operation	Ptz	1	admin	192.168.2.14
9	2016-3-27/17:37:7	operation	Ptz	1	admin	192.168.2.14
10	2016-3-27/17:37:10	operation	Ptz	1	admin	192.168.2.14
11	2016-3-27/17:37:10	operation	Ptz	1	admin	192.168.2.14
12	2016-3-27/17:37:12	operation	Ptz	1	admin	192.168.2.14
13	2016-3-27/17:37:14	operation	Ptz	1	admin	192.168.2.14
14	2016-3-27/17:37:18	operation	Ptz	1	admin	192.168.2.14
15	2016-3-27/17:37:19	operation	Ptz	1	admin	192.168.2.14
16	2016-3-27/17:37:19	operation	Ptz	1	admin	192.168.2.14
17	2016-3-27/17:37:20	operation	Ptz	1	admin	192.168.2.14
18	2016-3-27/17:37:20	operation	Ptz	1	admin	192.168.2.14
19	2016-3-27/17:37:21	operation	Ptz	1	admin	192.168.2.14
20	2016-3-27/17:37:21	operation	Ptz	1	admin	192.168.2.14
21	2016-3-27/17:37:22	operation	Ptz	1	admin	192.168.2.14
22	2016-3-27/17:37:32	operation	Ptz	1	admin	192.168.2.14
23	2016-3-27/17:37:37	operation	Ptz	1	admin	192.168.2.14

Total 211Item Current 23Item First Page Previous Page 1/10 Next Page Last Page

On this page you can read the contents of the camera event memory searching by date, time and type



Special commands for NVR

If you control the camera with a NVR system PRESET are provided which serve to carry out the main configurations and launch the main automatic movements without access through the browser.

The commands are listed in the following table. It is functional only from NVR, they do not work with a browser.

On some NVR, depending begin handling the presets from 0 or from 1 may need to reduce all preset numbers in a figure table.

No.	Function	Operation	Description
1	Start recording 1 track	Setup preset 42	Control TRACK 1
	Stop track recording 1	Delete preset42	
	Track 1 Start	Calling preset 42	
	Start recording track 2	Setup preset 43	Control TRACK 2
	Stop track recording 2	Delete preset 43	
	Starting track 2	Calling preset 43	
	Start recording track 3	Setup preset 44	Control TRACK 3
	Stop track recording 3	Delete preset 44	
	Starting track 3	Calling preset 44	
	Start recording 4 track	Setup preset 45	Control TRACK 4
	Stop track recording 4	Delete preset 45	
	Starting track 4	Calling preset 45	
2	Open the module menu camera	Setup / Calling preset 46	Control MENU



3	Set left limit SCAN	Setup / Calling preset 47	Control SCAN A-B
	Set right edge SCAN	Setup / Calling preset 48	
	Start SCAN A-B	Setup / Calling preset 49	
4	Start SCAN 360	Setup / Calling preset 50	speed 1
5	Pan & Tilt speed 1	Setup / Calling preset 51	Set movement speed
	Pan & Tilt speed 2	Setup / Calling preset 52	
	Pan & Tilt speed 3	Setup / Calling preset 53	
	Pan & Tilt speed 4	Setup / Calling preset 54	
	Pan & Tilt speed 5	Setup / Calling preset 55	
6	Scanning speed 1	Setup / Calling preset 61	Set speed SCAN
	Scanning speed 2	Setup / Calling preset 62	
	Scanning speed 3	Setup / Calling preset 63	
	4 Scanning speed	Setup / Calling preset 64	
	Scanning speed 5	Setup / Calling preset 65	