

IP POE Plug & Play kit

IP cameras and NVRs



Installation manual - Menu 5.0

How to install the system
How to connect to the network How
to insert additional cameras

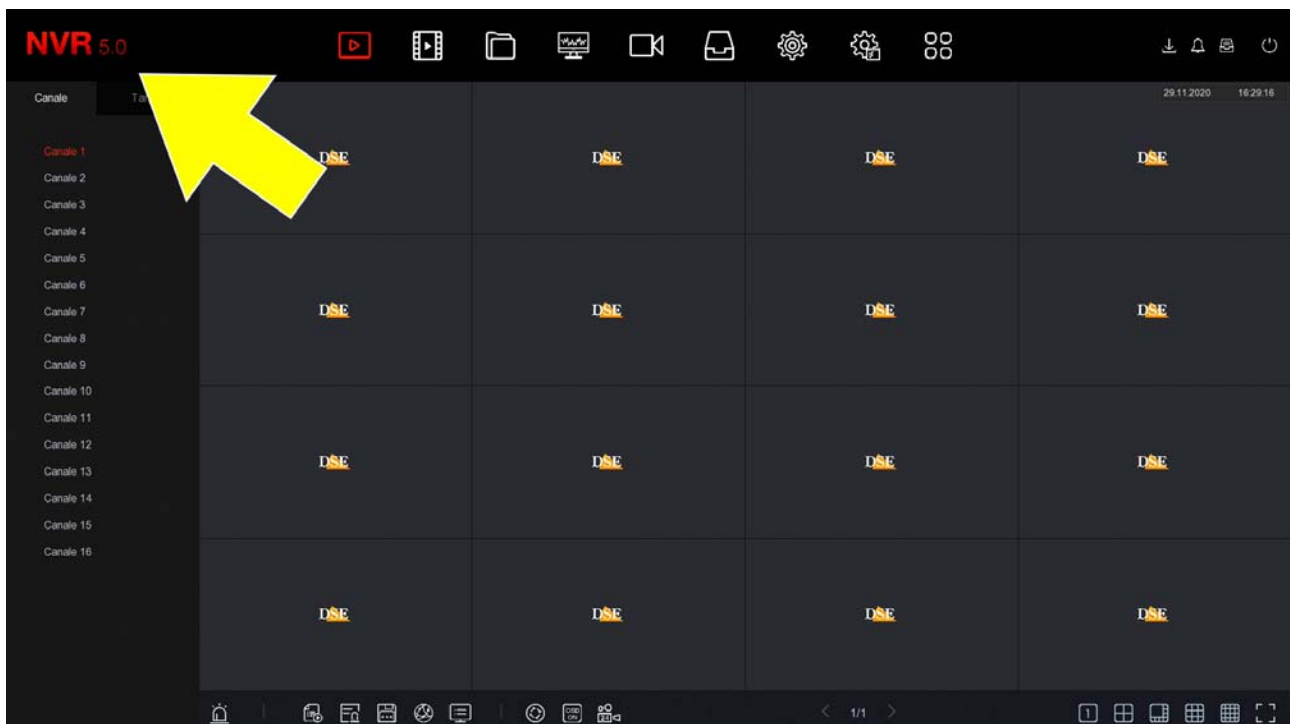
Contents of the manual

The RKK series POE kits are designed to create small wired video surveillance systems ready to work in a few minutes and can be installed without any specific knowledge.

This manual explains how to install cameras and VCR, how to make basic adjustments and how to connect from a computer on the internal network.

For advanced configuration, remote access from the app and software, refer to the specific manuals.

This manual refers to the NVR / DVR with graphical interface Version 5.0 that you see below



If your NVR / DVR has our classic interface, instead of 5.0, you can download the specific manual for your version, or you can continue reading this manual considering that you will find the same options on your screen, only with different graphics.

Package Contents

The kit you purchased is a complete video surveillance system. The package includes:

1 - VCR (NVR)



2 - From 1 to 8 POE IP CAMERAS FOR OUTDOOR / INDOOR

3 - ACCESSORIES

THE KIT DOES NOT INCLUDE **network cables** for cameras and **the hard disk** to be inserted inside the NVR, which you have to buy separately in the size you prefer.

NETWORK CABLES - For the cameras you will need UTP CAT5E or higher network cables, with RJ45 connectors. You can order our ready-made patch cords in the length you prefer up to max. 20 m, or you can buy the network cable in a skein to be cut to size with the connectors to be crimped at the end. If you use cables that you already have you must make sure that they have a pure copper core because CCA cables are not good for POE power supply.

HARD DISK - For your NVR you can buy any SATA Hard Disk up to 8TB. For a longer duration use our video surveillance Hard Disks specially designed to work 24 hours a day. If you order the hard disk together with the kit, it will be delivered already installed.

Connect the cameras

The cameras of this system are designed not to require any configuration. You just need to connect the cameras to the NVR's POE network ports and they will configure themselves automatically.

1 - CONNECT THE CAMERAS

The cameras are equipped with some connectors. The only one you need to consider is the RJ45 network connector that you need to connect to a LAN port on the back of the NVR. You can ignore the DC power plug and any audio connectors and reset button as they are not normally used with these kits.



2 - INSTALL THE CAMERA

You can fix the camera on the wall or even on the ceiling and orient it thanks to the articulated bracket. The plugs and the drilling template are provided. The bracket is equipped with an Allen key (B) that you must unscrew with the L wrench provided to be able to orient the joint (A). At the end of the operation tighten the screw (B) firmly to lock the bracket

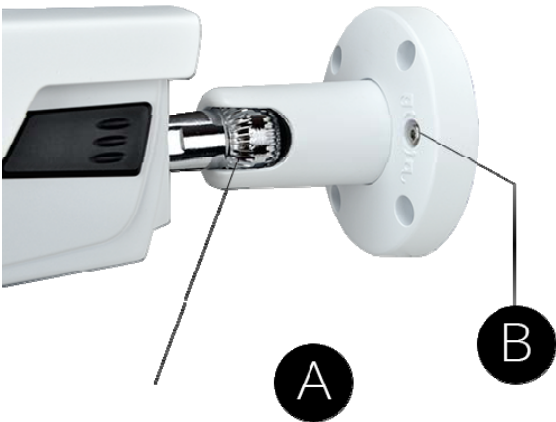
For optimal shooting, avoid the presence of objects, such as walls, beams, vegetation or other objects next to the camera because they could create refractions in the night shot. It also prevents nearby objects, such as the wall next to the camera, from entering the shooting field, because brightly lighting up during night vision would make the rest of the image very dark.

INSTALLATION MANUAL

RKK SERIES - POE CAMERAS / NVR KIT



Page: 5



Install the Hard Disk

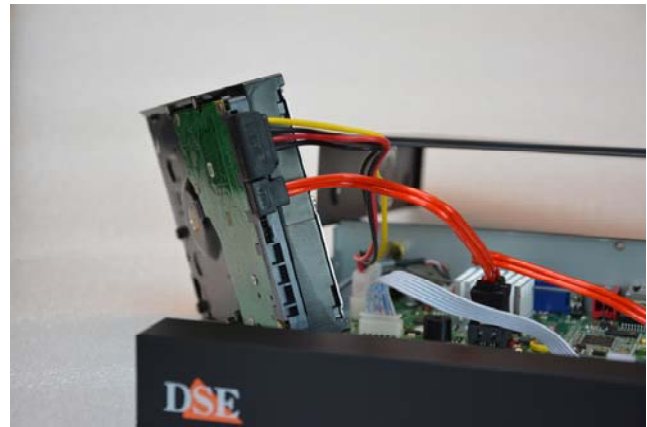
If you want your system to record, you need to install a Hard Disk inside the VCR. Any 3.5 "computer SATA hard drive is fine, but for a longer life it would be better to purchase a dedicated model for video recording.

The maximum hard disk capacity that you can mount is 8 TB.

If you ordered the hard disk together with your kit you will receive it already assembled so you can skip this section.



Remove the cover by unscrewing the 5 screws:
2 on each side and one rear



Connect the hard drive with the two power
and data cables you find inside

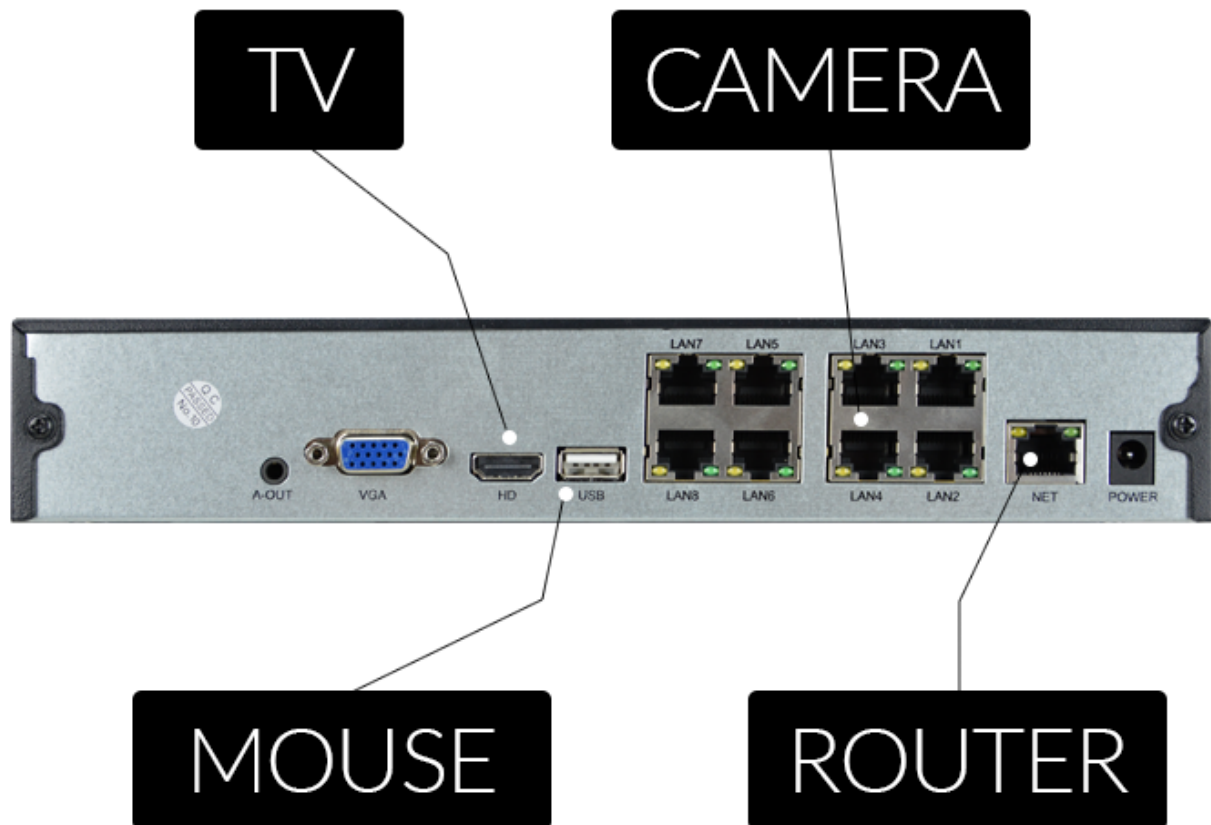


Secure the hard drive with the 4 screws provided that you
screw from under the base. Then close the
cover.

On the next boot, the NVR will reveal the newly installed Hard Disk and ask you to start formatting in order to use it.

Connect the NVR

The central unit of your system is a network video recorder with POE ports, a device that is also called an NVR. To use it you need to make some connections on the back. The diagram below may vary slightly depending on the model of the kit.



A-OUT - AUDIO / HEADPHONES

This is an audio output for speakers or headphones with a 3.5 mm stereo jack. If you have purchased separate cameras with audio you can hear from this output. Remember that the HDMI output for the monitor also carries audio so this output is present as an additional option.

VGA - CONNECT A COMPUTER MONITOR

To use your NVR you need a monitor where you can see the cameras and configure the options. If you use a computer monitor, with the VGA port, you must connect the cable to the blue port of the NVR, called VGA.

HD - CONNECT A TV

TV can also be a great monitor for your NVR. To connect it you need an HDMI cable to plug into the HDMI port of the NVR. To see the images on the TV you must remember to select on your TV the external HDMI input that you used for the NVR. This is usually done by pressing the SOURCE button on the remote control.

USB - CONNECT THE MOUSE

The NVR is controlled with the mouse, like a computer. Connect the mouse that came with the product to the rear USB port.

LAN 1..8 - CONNECT CAMERAS

Depending on the kit you purchased you can find 4 or 8 POE ports on the NVR back. They are numbered LAN1... 8. Connect your cameras here with a network cable. As soon as you connect them, check that the two LEDs, steady green and flashing yellow, turn on. Connect the cameras to inputs 1..8 following the order in which you want to see them on the screen (1..8). These kits are Plug & Play so you don't have to configure anything, the NVR will automatically configure the cameras for you. After connecting the cameras it is good to restart the NVR so that it restarts with the connected cameras.

NET - CONNECT THE ROUTER

To be able to view your cameras via the Internet, you need to connect the NVR to your network. You have to use a normal network cable and insert it on one side into the port **NET of the NVR** and on the other hand to a free port on your router or switch. The NVR is factory set to automatically configure itself to the network (DHCP).

POWER - CONNECT THE POWER SUPPLY

INSTALLATION MANUAL

RKK SERIES - POE CAMERAS / NVR KIT



Page: 9

The power supply, supplied with the DVR, must be connected to the DC12V connector on the back of the NVR. As soon as the plug is connected, the NVR will turn on and you will see an image appear on the monitor. If you don't see anything appear, check the connection with the monitor.

ATTENTION: Do not confuse the power supply of the NVR POE that delivers 52VDC with others at 12V as you could damage the equipment in an irreparable way.

Make the first ignition

As soon as you plug in the power adapter, the NVR starts up and displays an image on the screen. If you don't see the picture you need to check the cable and monitor settings.

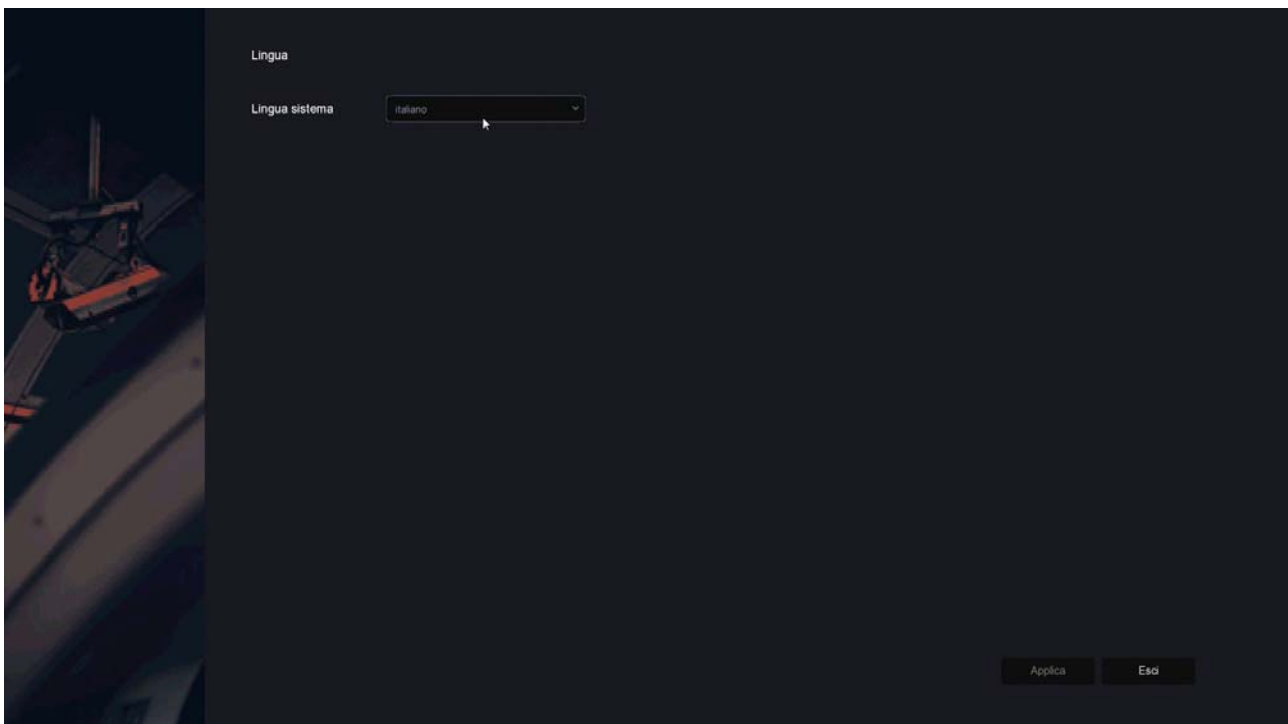
If you have connected the cameras to the NVR, wait a few minutes and you will see them, already on the screen, without having to do anything.

The first time you turn on a wizard that helps you set up your system in minutes.

This part of the manual briefly describes the options available in the wizard. A more detailed description can be found in the configuration manual. All windows of the setup wizard are also accessible later in the setup menu.

1 - CHOOSE YOUR LANGUAGE

The guided configuration procedure starts when the device is turned on. After using it once, you can disable it in the DVR / NVR configuration to not use it in future startups. The first option to choose is the menu language. Over 20 languages are available. This manual refers to the Italian language.



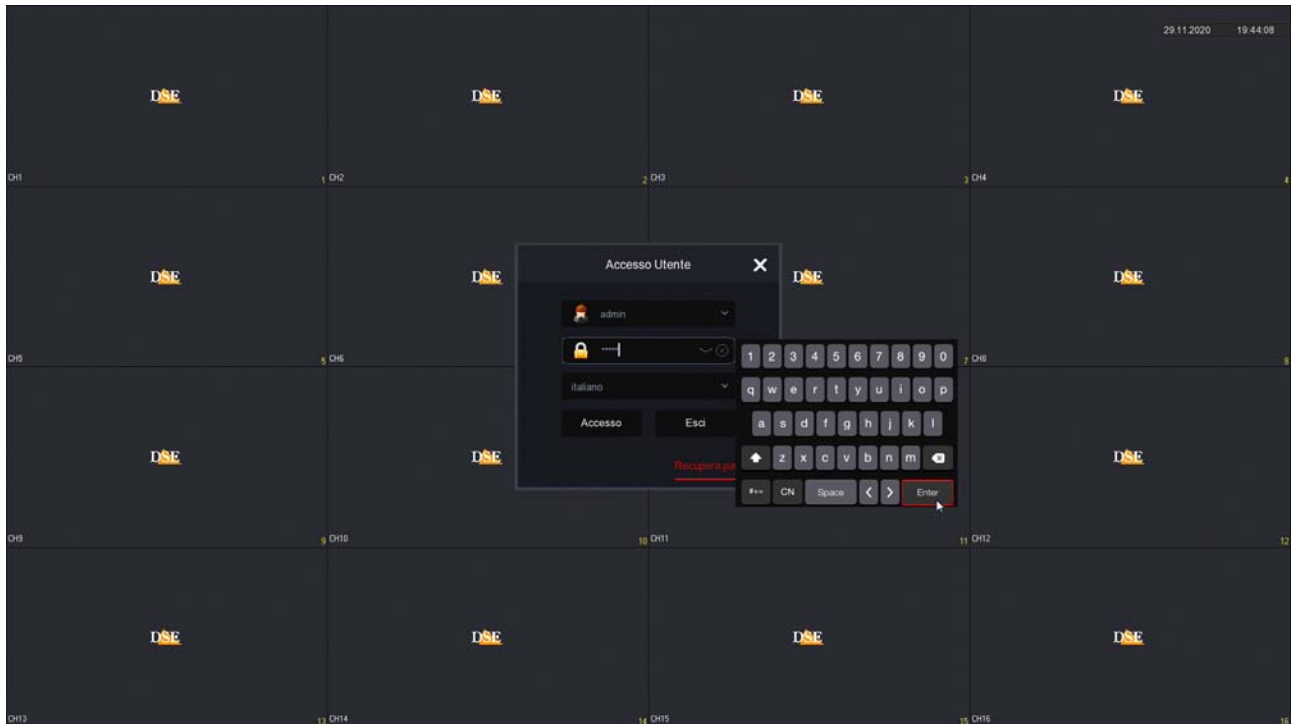
2 - LOG IN TO THE SYSTEM

Enter the factory password to access the DVR / NVR:

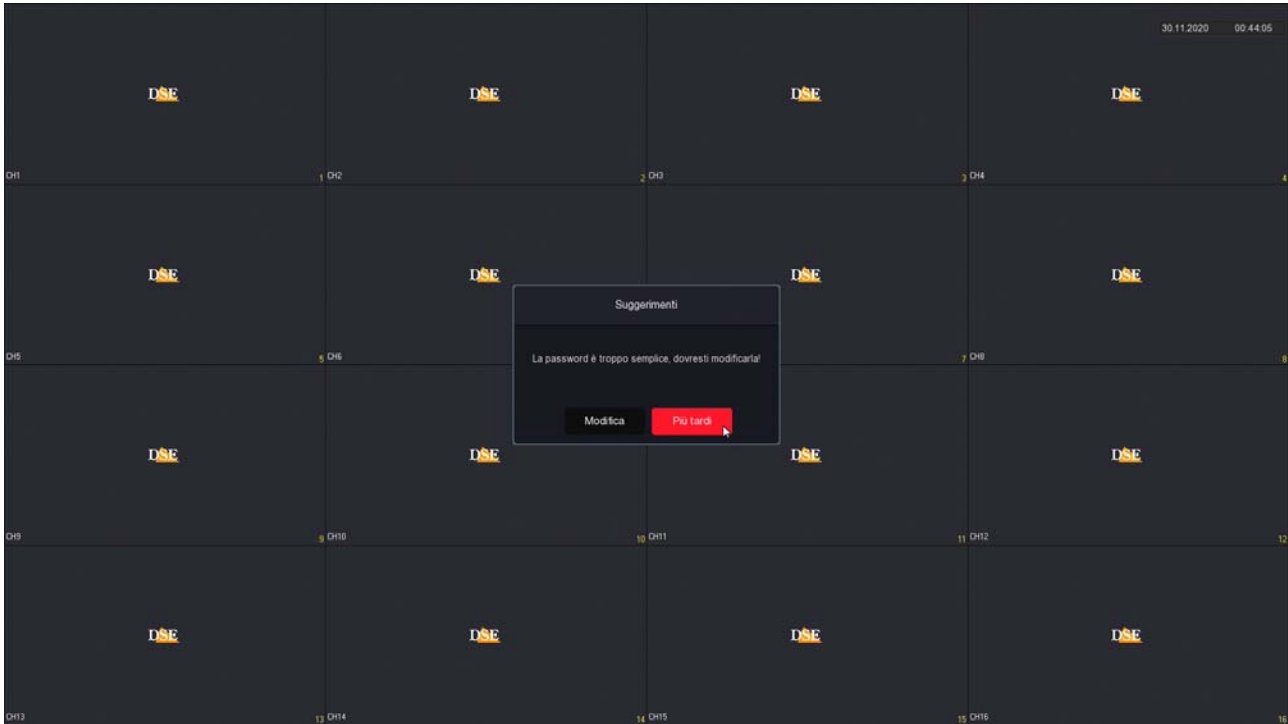
USER: admin

PASSWORD: 12345

Then press LOGIN.

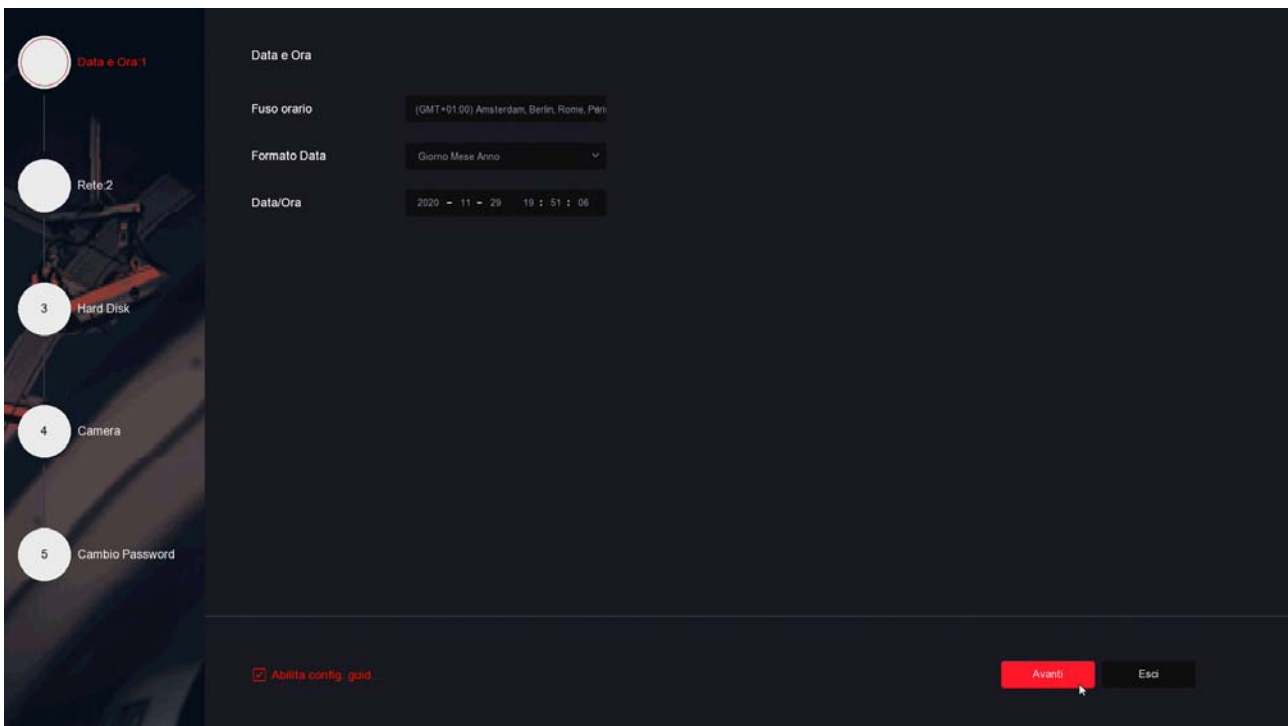


After pressing the ACCESS button, the system reminds you that it would be advisable to customize the password. It is an important operation, to protect your privacy, but it is better to choose to do it later, at the end of the guided configuration menu.



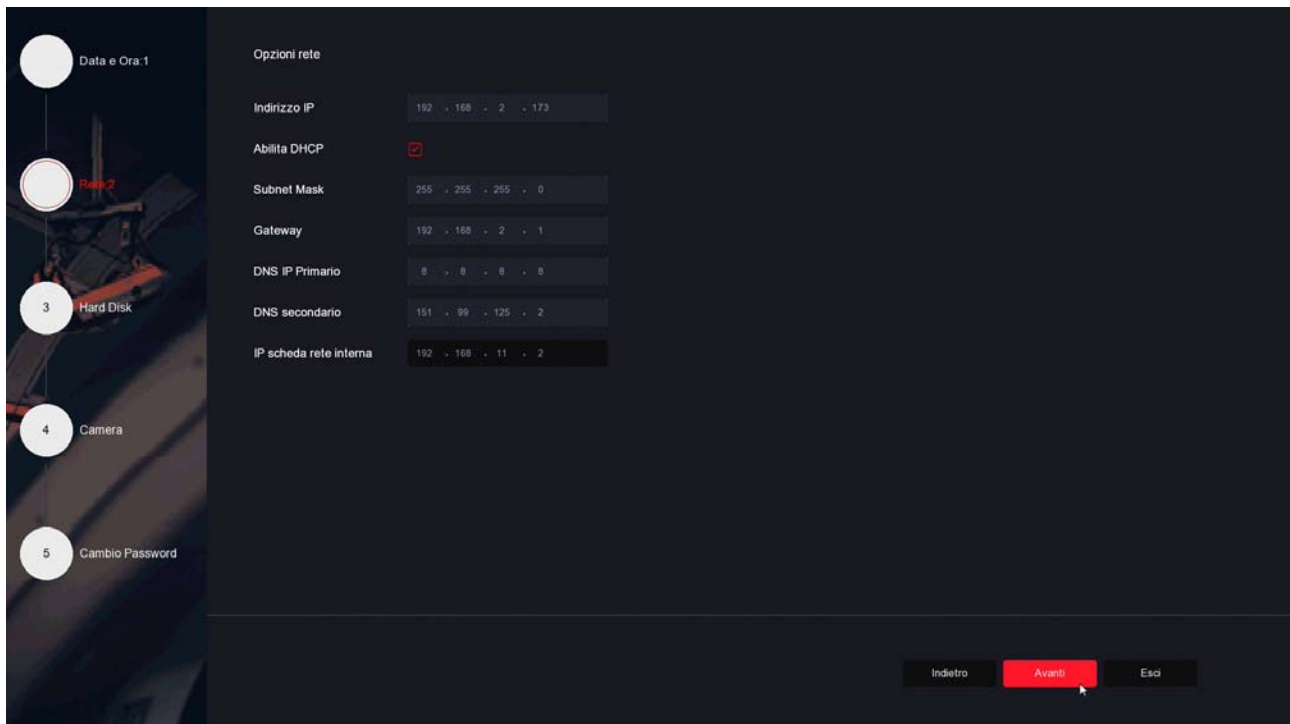
2 - SET DATE AND TIME

First you need to set the system date and time. GMT + 1 and the Day / Month / Year format. Choose the Italian time zone



3 - SET UP YOUR NETWORK

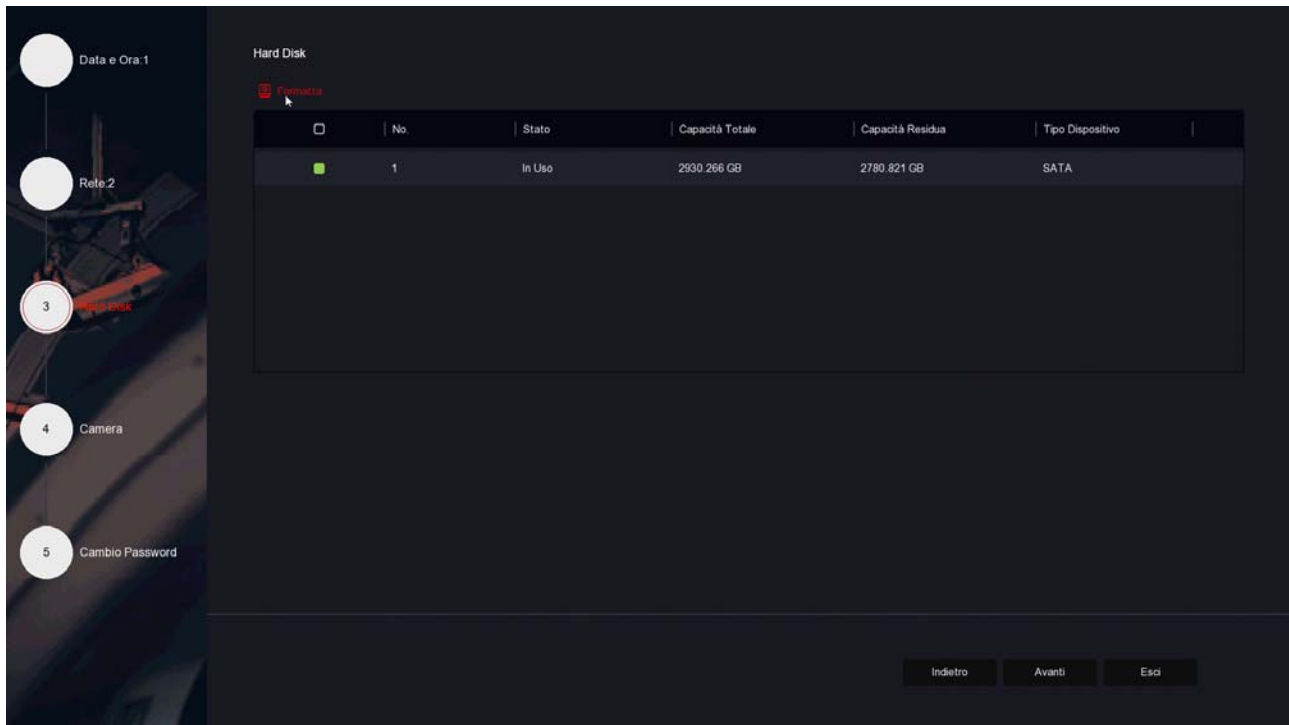
In this step you can set the network parameters for the DVR / NVR that allow it to communicate with the external network connected to the network port. If you are not sure what parameters to enter, leave the factory DHCP option which allows the DVR / NVR to obtain the parameters automatically from the network router. You can always change them later.



4 - FORMAT the HARD DISK

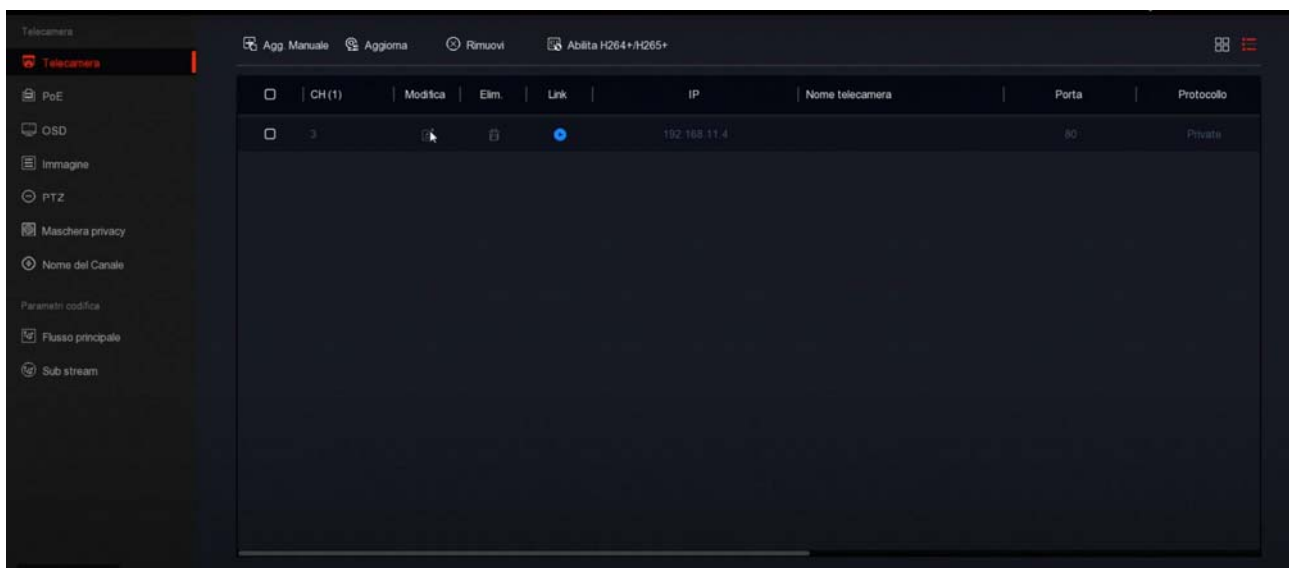
In this step you should find the hard disk you have inserted into the DVR / NVR. If you ordered the hard disk with the kit you will find the hard disk already formatted, indicated as IN USE and you can go to the next step.

If, on the other hand, you have inserted a new disk in the NVR, select it and click FORMAT to make sure that the DVR / NVR can use it. If you do not find the hard disk in the list check that the two internal cables are connected and that the power supply of the DVR / NVR is the correct one, if necessary try to replace the hard disk because it may be faulty.



5 - CHECK THE CAMERAS

In this section you will find the cameras connected to the NVR. The cameras of the RKK kits, and also all our RK series cameras, are self-configuring when they are connected to a POE port of one of our NVRs. Normally you should find all the connected cameras already in line with the blue dot that certifies the good connection.

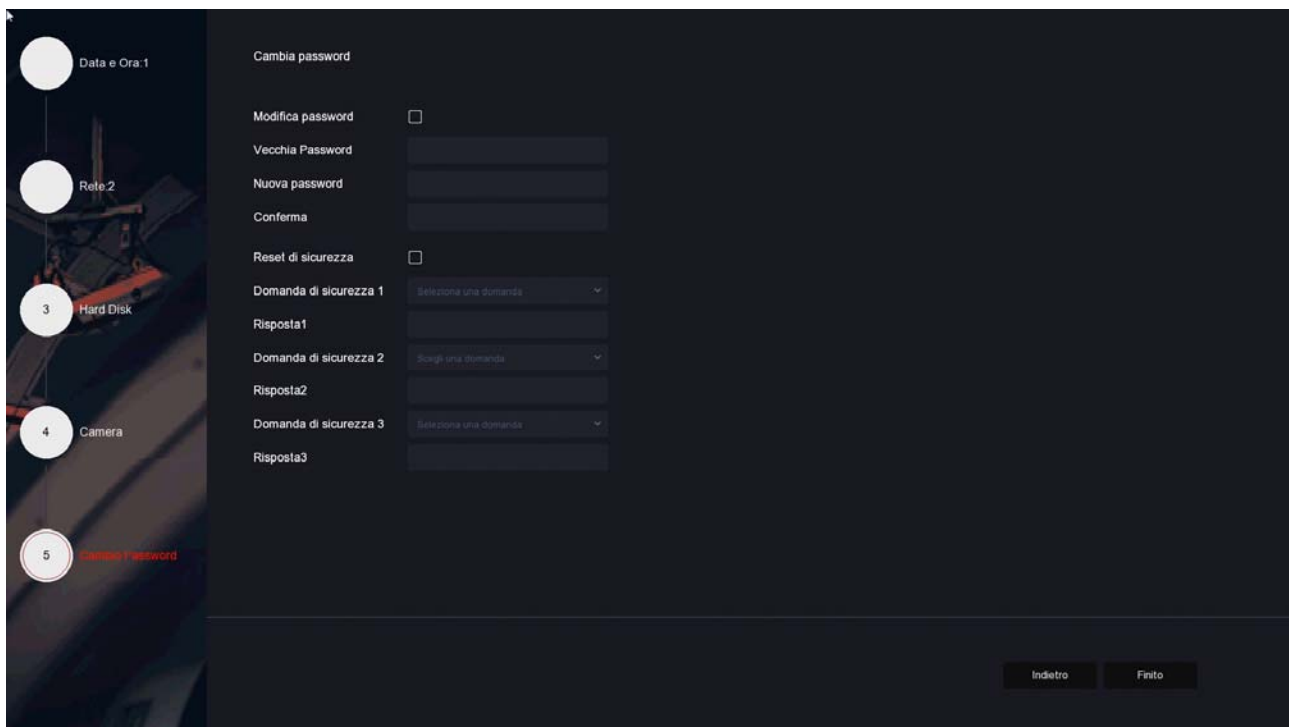


If you don't see a camera you have connected check if the LEDs of the port you connected it to are on. You may have used a cable that is too long or incorrect.

6 - SET THE PASSWORD

In this final step you can possibly change the access password to your NVR / DVR. If you want to do this, first of all you must be sure not to forget it, because it is a safety device and to recover a forgotten password, you will have to contact us and go through a rather laborious procedure.

The password must contain at least 8 characters with a letter and a number inside. You must also set the 3 answers to the security questions, before saving the new password, because they will allow you to easily recover the password via email, should you forget it.

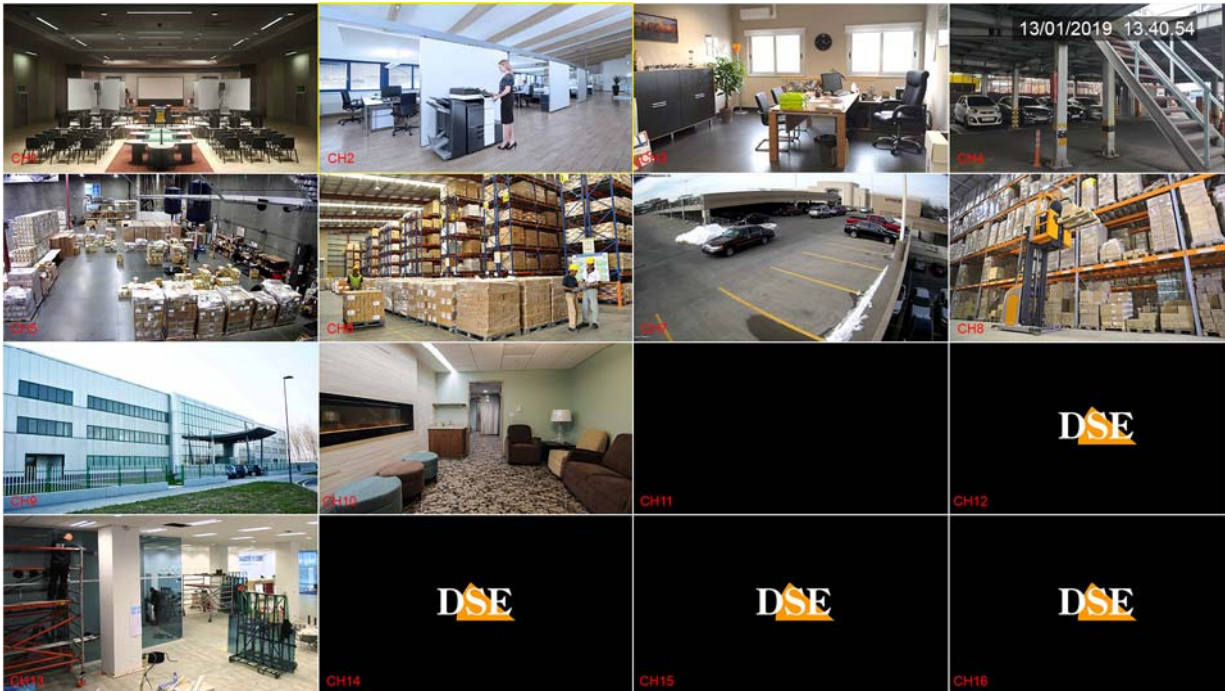


FINISHED!

At the end of the wizard your CCTV system is already working.

Viewing of live cameras

Now that you have installed your VCR you can see the cameras on the monitor. In this chapter we give you some tips to make the most of live viewing.



The factory view foresees the multivision of all the cameras on the screen. You can easily change this basic view.

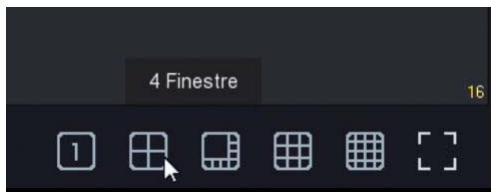
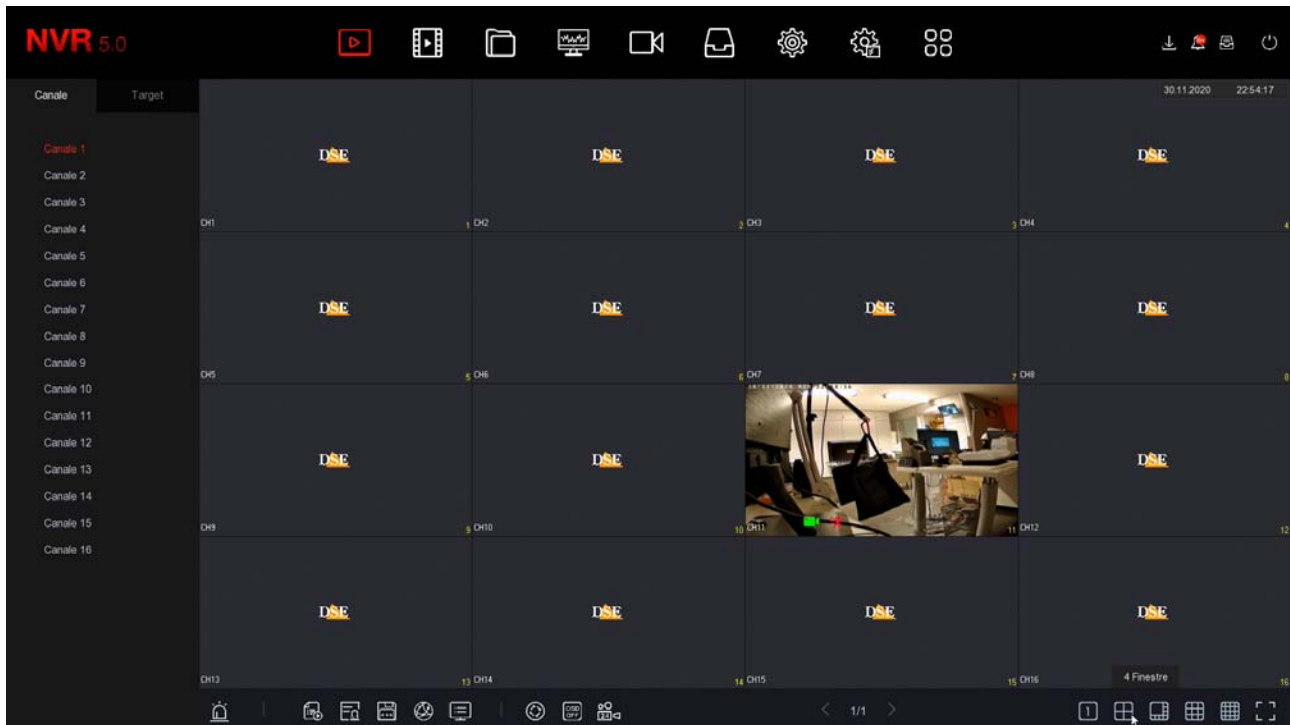
EDIT SCREEN DIVISION - Right click to open the menu and in the menu that appears choose another screen division with the buttons at the bottom right. It can be useful especially if you don't use all the channels of the NVR / DVR.

INSTALLATION MANUAL

RKK SERIES - POE CAMERAS / NVR KIT



Page: 17



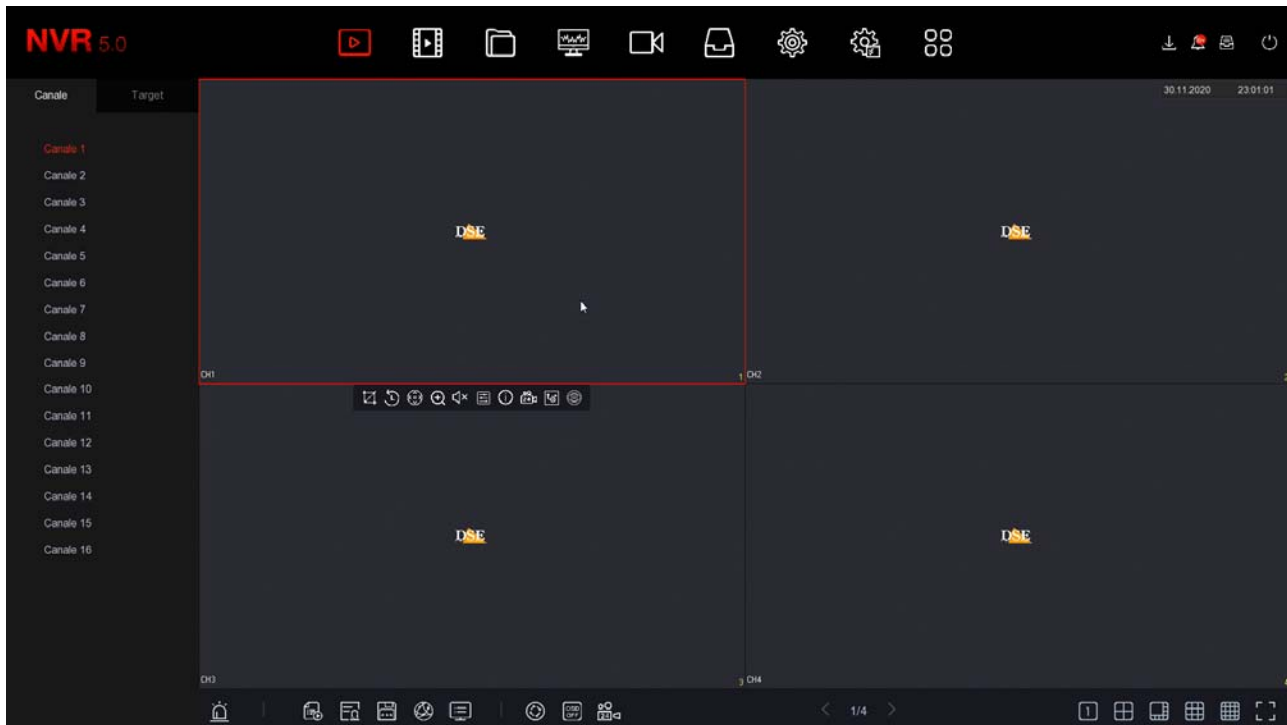
In the general settings of the NVR you will be able to choose a preferred subdivision to be recalled at startup.

In live view you can also do the following.

FULL SCREEN - You can bring a camera to full screen by double clicking with the mouse.

DRAG CAMERAS - If you want, you can drag a camera with the mouse to change its position in the monitor.

CHANNEL CONTROL - Clicking on a camera opens a control panel for that camera.



1 2 3 4 5 6 7 8 9 10



1 - CAPTURE - Save a photo of the image in real time

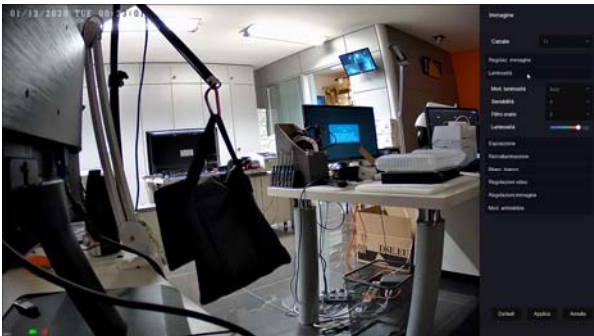
2 - INSTANT PLAYBACK - If you press this icon, you automatically play the last 5 minutes of recording. This is a very handy feature for instantly reviewing what just happened.

3 - PTZ - With this button you open the panel for the PTZ control of motorized cameras. This function automatically brings the camera to full screen.

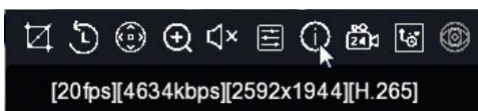
4 - DIGITAL ZOOM - If you activate this function, you open the digital zoom mode where you can zoom in on a particular image and you can control the zoom by dragging the zoom box with the mouse. Click the right mouse button to return to normal viewing.

5 - AUDIO - Press this icon to activate playback of the channel's audio and adjust the volume. To hear the audio you must have connected a speaker to the audio output of the DVR / NVR or a TV to the HDMI output.

6 - ADJUSTMENTS - With this button you can adjust the video parameters of the image: brightness, contrast, saturation, tones, as well as other parameters depending on the camera.



7 - INFO - If you leave the mouse on this icon for a moment, the data of the video stream will appear in real time.



8 - RECORD - Use this button to activate continuous recording on this channel. This command manually activates recording regardless of the automatic adjustments of the DVR / NVR.

9 - STREAM - Here you can choose whether to receive the main or secondary stream. Normally the DVR / NVR uses the main stream in full screen view and the secondary stream in multivision.

10 - Not used

CHANNEL ICONS

During live viewing, two overlay icons indicate the status of the channel



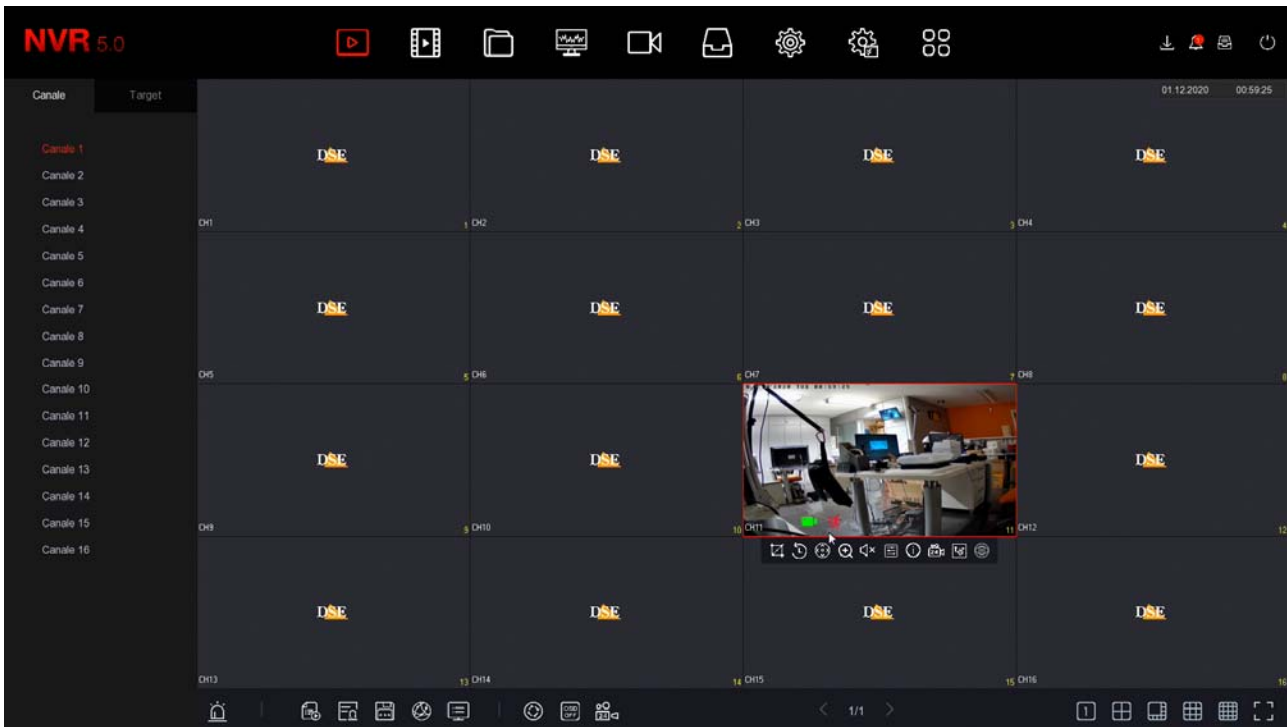
Channel in recording



Motion detection alarm channel

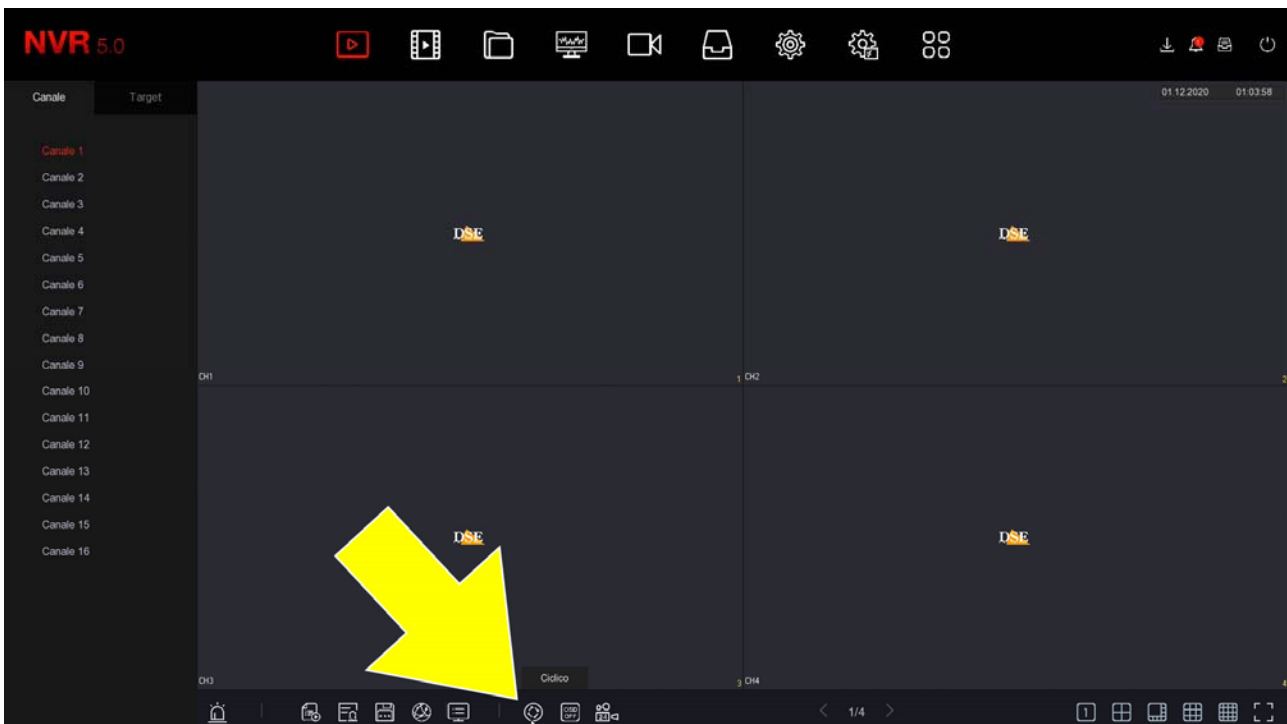


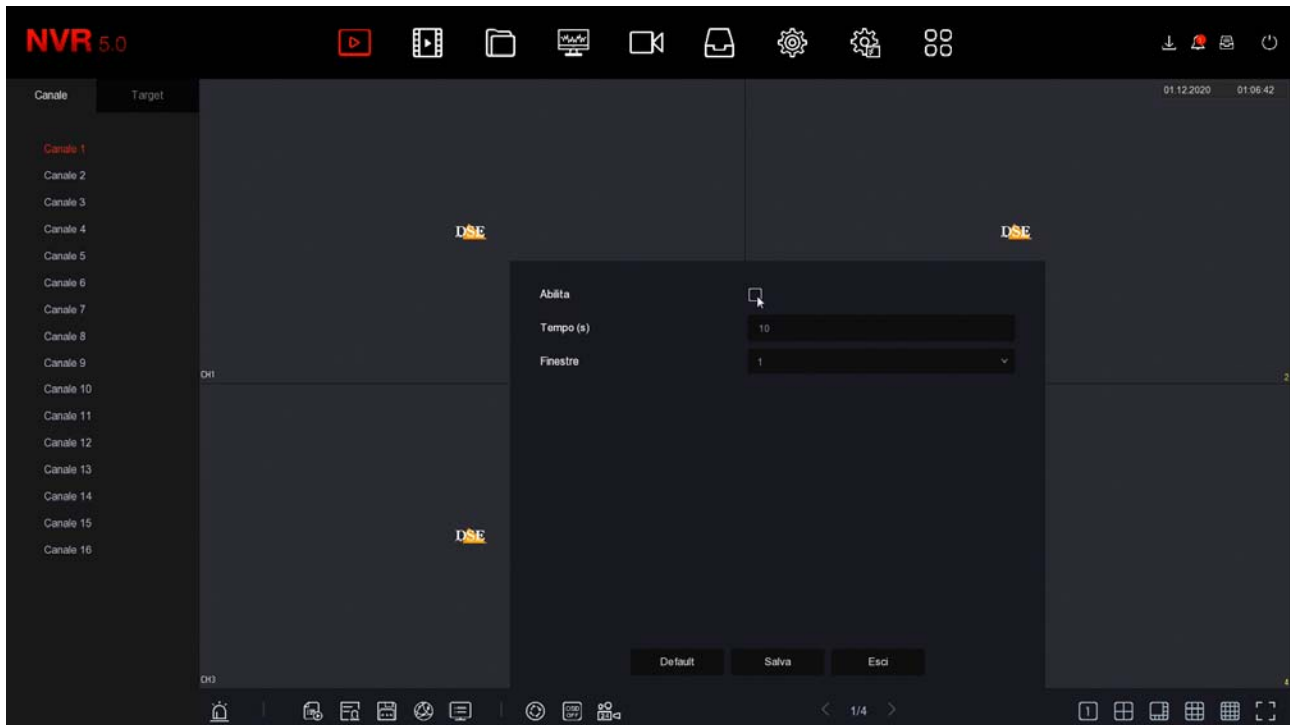
Human detection alarm channel



CYCLIC

The cyclic camera scan allows you to see all the cameras in sequence instead of the classic multivision of all the channels. If you want to use this function press the CYCLIC button in the live menu

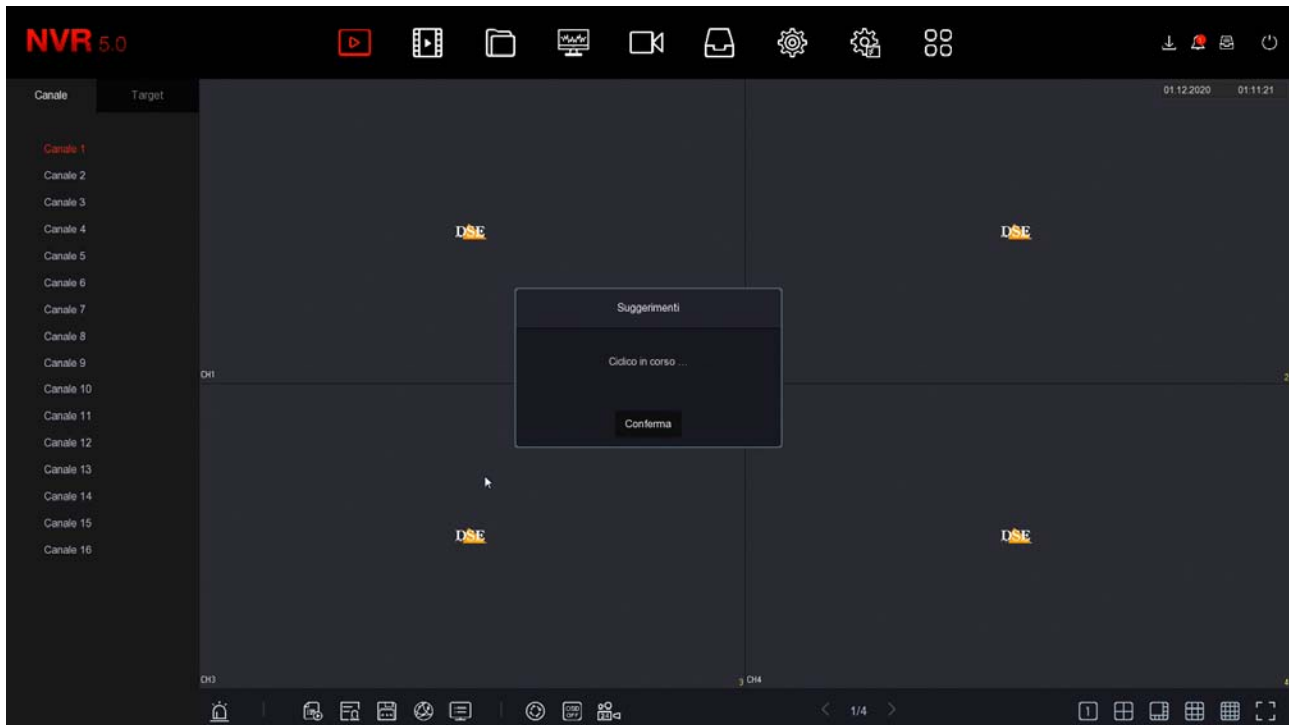




ENABLE - If you enable the cyclic, the display will follow the cyclic settings and many normal functions, such as viewing all cameras in multivision, will not be possible. You will have to disable the cyclic to return to normal monitor management

TIME - It is the dwell time of each window during the scan (seconds). WINDOWS - In the DVR / NVR with more than 4 channels, in addition to scanning a single camera at a time, you can cycle windows with 4 or more cameras.

ATTENTION: During the cyclic scan you cannot control the other live functions and to regain total control of the functions you must first disable the cyclic. The DVR / NVR warns you with this message,



OTHER LIVE CONTROLS

Below the live view windows are some buttons for quick system information and additional controls in live view.



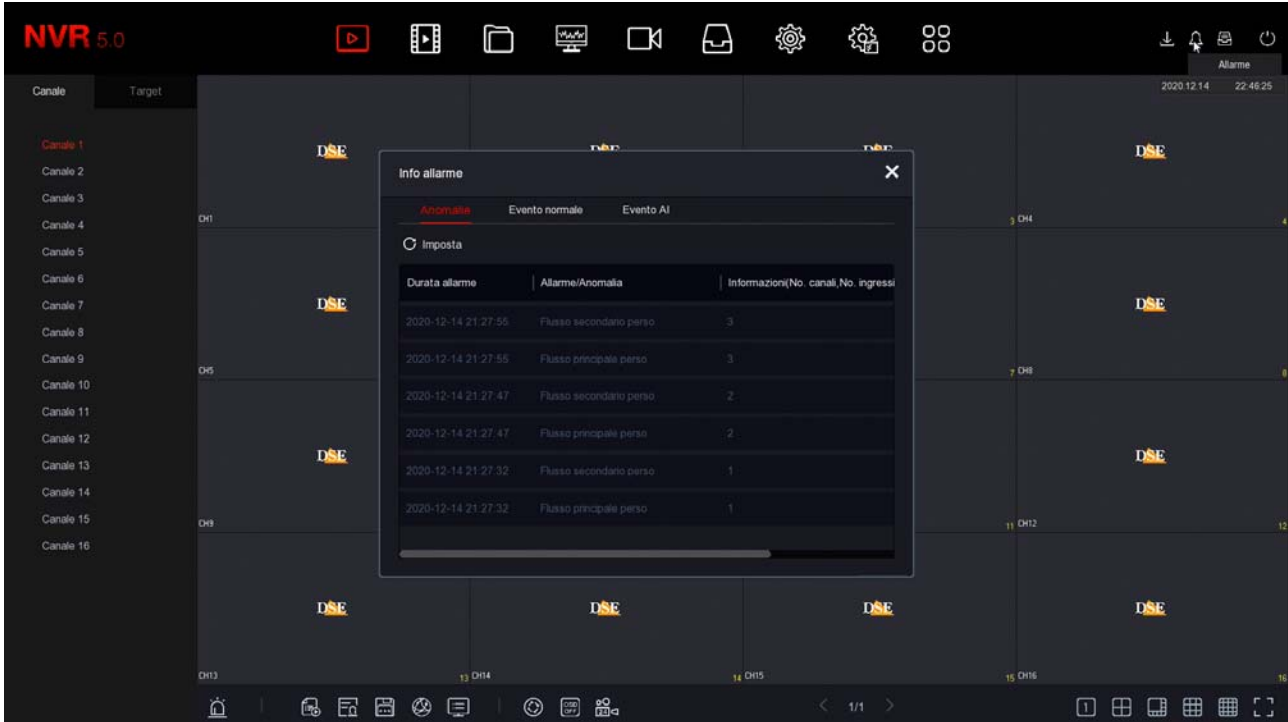
- 1 - ALARM OUTPUTS - Shows the status of the alarm outputs
- 2 - RECORDING STATUS - Shows the status of the channels and the recording
- 3 - ALARM INPUTS - Shows the status of the alarm inputs
- 4 - DISK - Shows the status of the Hard Disk
- 5 - NETWORK - Show network status with DVR / NVR network settings
- 6 - INFO - Show system information
- 7 - CYCLIC - Configure cyclic scanning of on-screen cameras
- 8 - OSD - Enable / Disable channel overlays
- 9 - RECORDING - Activates instant continuous recording on all channels

GENERAL BUTTONS

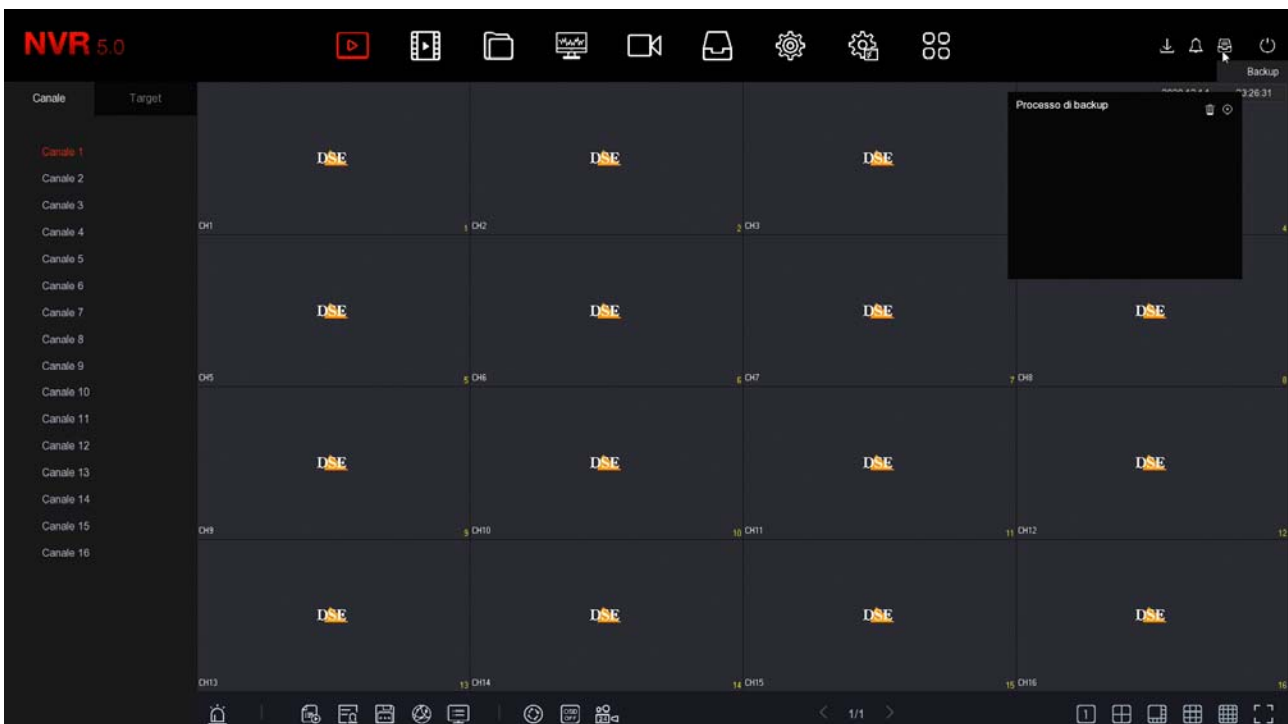
At the top right are some buttons for quick access to pop-up windows



opens a popup panel with the log of the latest Alarms divided by Anomalies - Motion - AI



opens a pop-up panel showing the backup progress in progress



INSTALLATION MANUAL

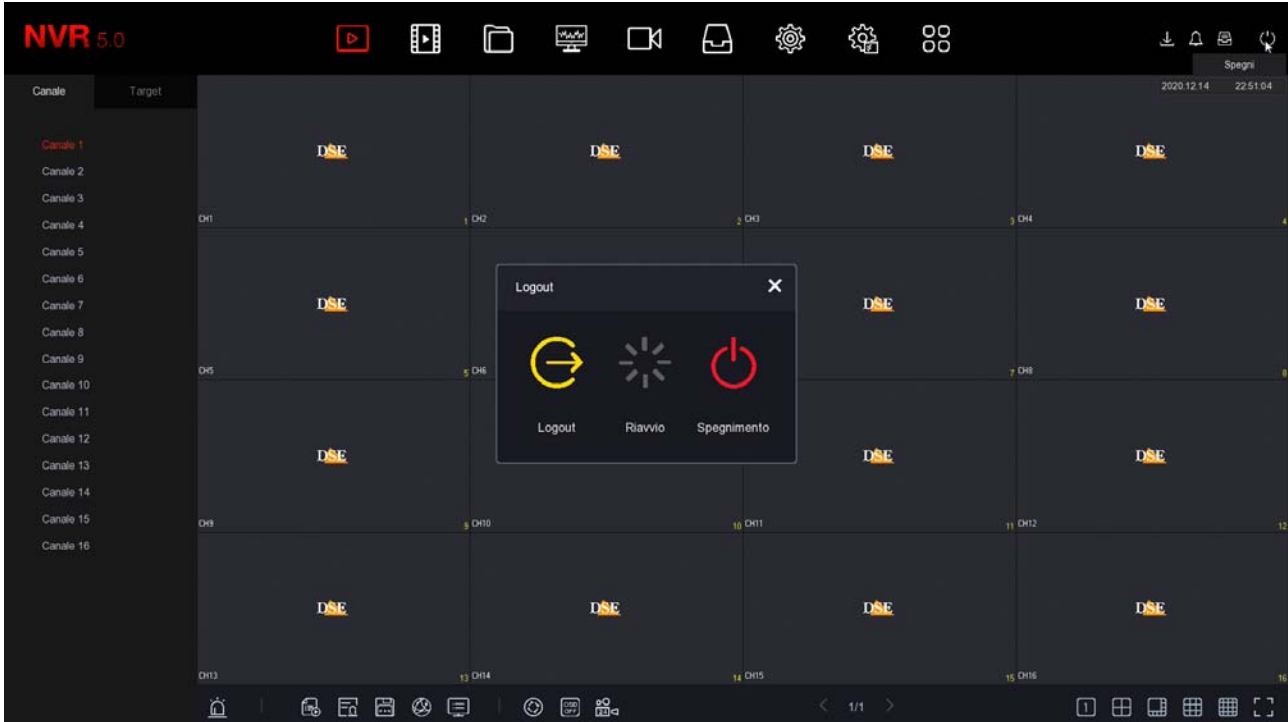
RKK SERIES - POE CAMERAS / NVR KIT



Page: 24



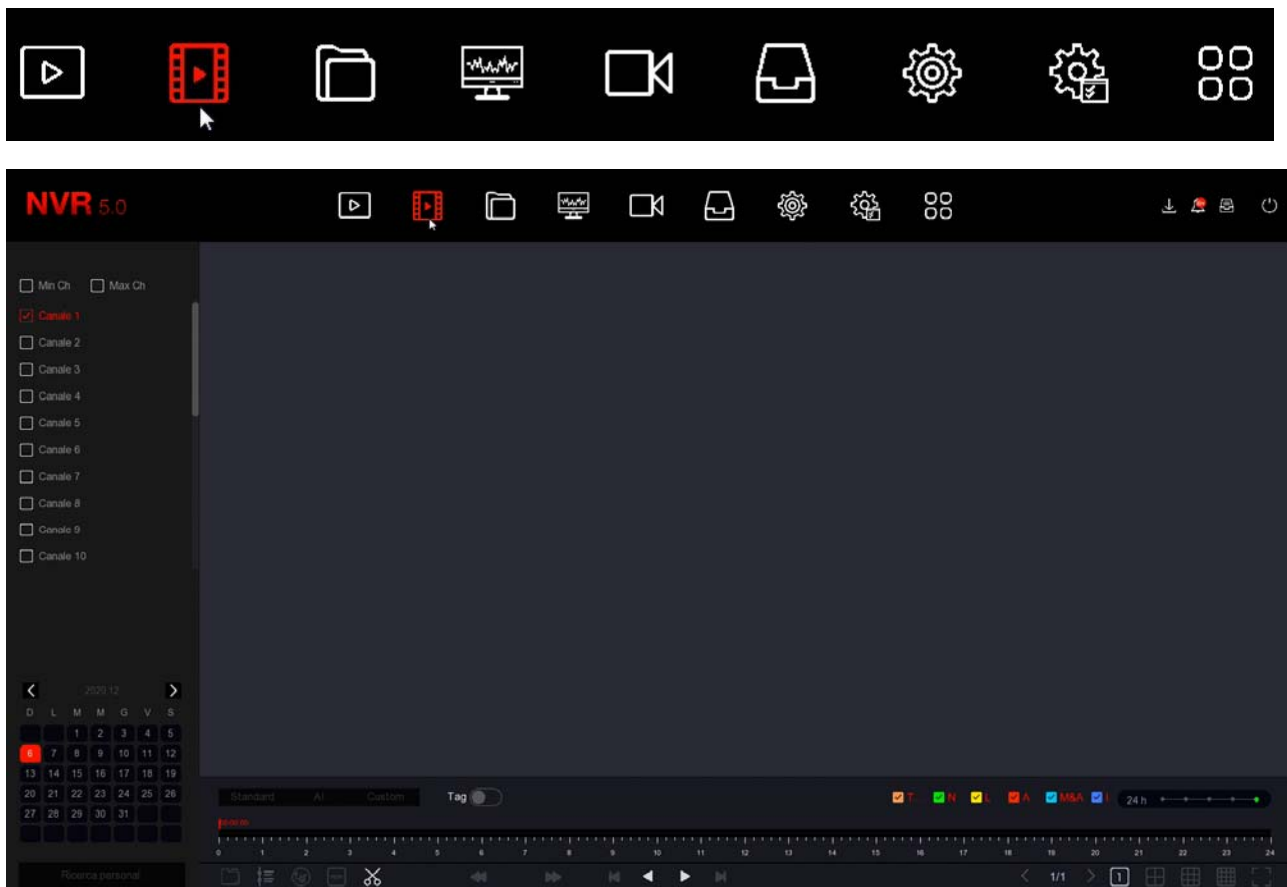
opens a popup panel where you can: Log Out, Reboot and Shut Down



Review the recordings

To review the recordings stored by your NVR please do the following.

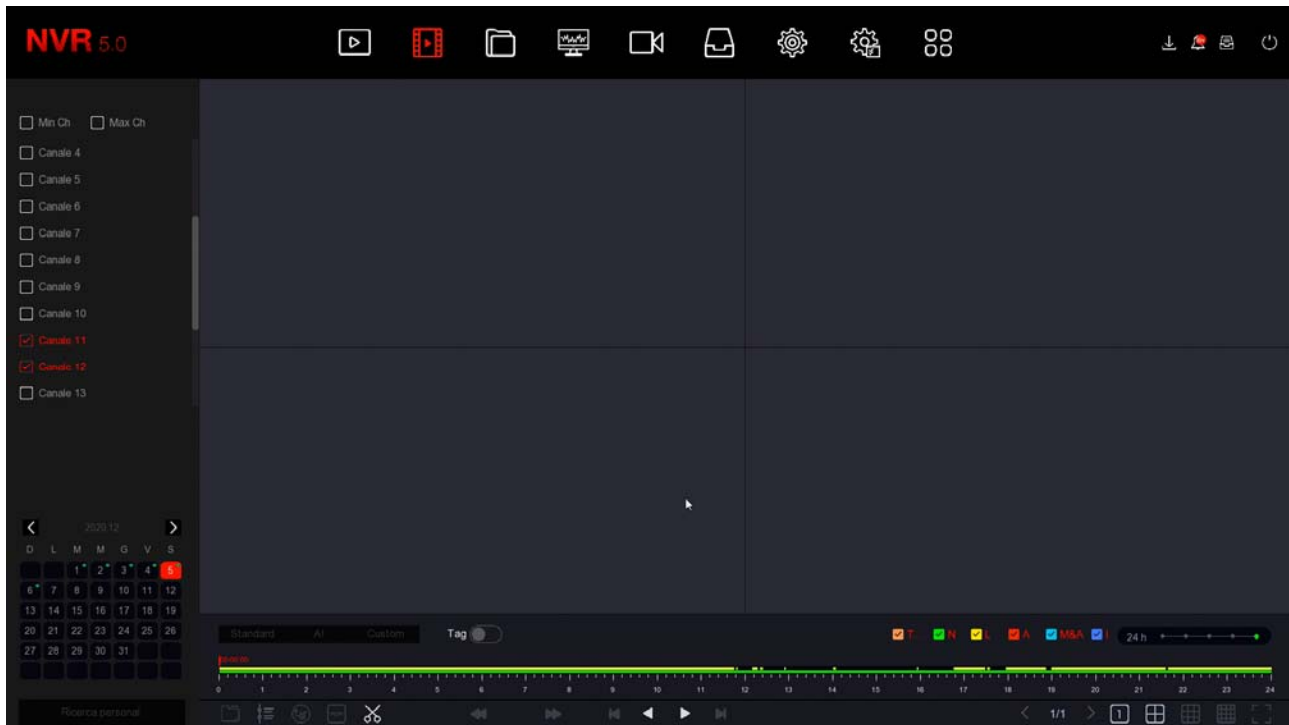
1 - OPEN THE PLAYBACK WINDOW Click the PLAYBACK icon at the top of the menu



2 - CHOOSE THE DAY AND THE CAMERA YOU WANT TO REVIEW

Choose the day you want to review in the calendar on the left. Days with recordings are marked with a colored dot. Click on one of these. Above the calendar, select the channels you want to play. The recordings will automatically appear in the bottom timeline representing the 24 hours of the day

Each NVR has a maximum number of cameras that can be played simultaneously. If you click MAX CH. the maximum number of channels allowed will be activated.



3 - REPRODUCE THE INSTANT YOU WANT TO REVIEW

In the time bar below you will find the 24 hours of the day. The recordings are shown in different colors according to the type of recording. The most common are the green bar for continuous recording and the yellow bar for motion detection recordings. If you want you can filter the recording types by selecting the colored icons:

T (All entries)

N - green (Continuous recording) L - yellow (Motion recording)

A - red (Alarm input recording) M&A - blue (Motion recording and alarm input) I - blue (Human detection recording).

Click wherever you want in the timeline to play the images at that exact moment. Consider that each NVR has a limit on the maximum number of cameras that can be played at the same time. If you select a higher number of cameras an INSUFFICIENT RESOURCES message will appear.

4 - CHECK PLAYBACK

With the zoom slider you can vary the scale of the timeline



With the play buttons at the bottom you can fast or slow playback and stop or pause the playback.



Speed up to 16x or slow down to 1 / 8x (slow motion)



Frame by frame forward and backward



Play backwards



Play / Pause

With the scissors button you can cut out a video clip to export to a stick.



Press the button twice in succession to open and close the video clip while it is playing. Then you can save it with the SAVE CLIP button. The button with the scissors in brackets allows you to define a video clip by manually entering the start and end time.

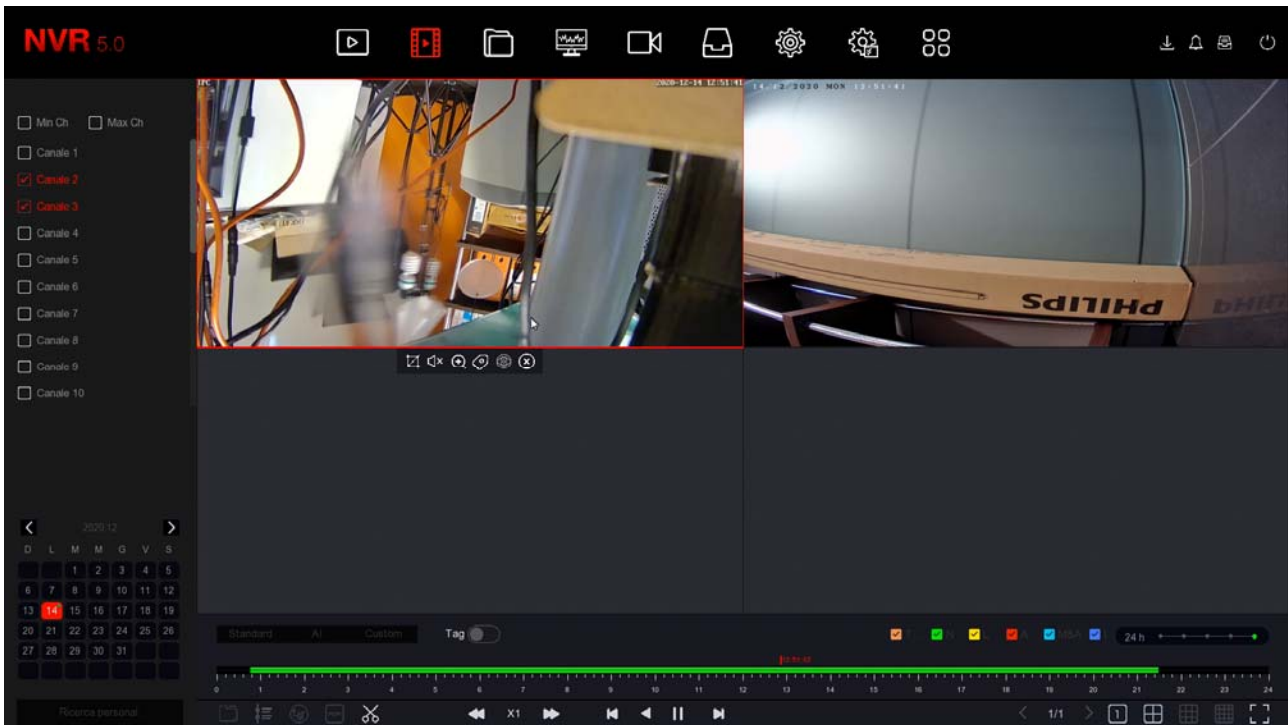
Clicking a video tile during playback opens a channel menu

INSTALLATION MANUAL

RKK SERIES - POE CAMERAS / NVR KIT



Page: 28



capture photos



turn on audio

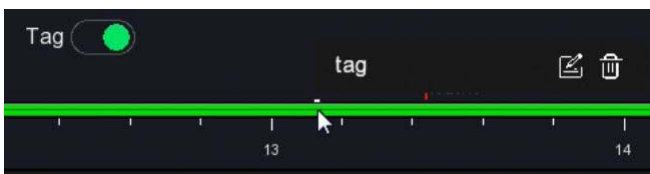


activates digital zoom



enter TAG

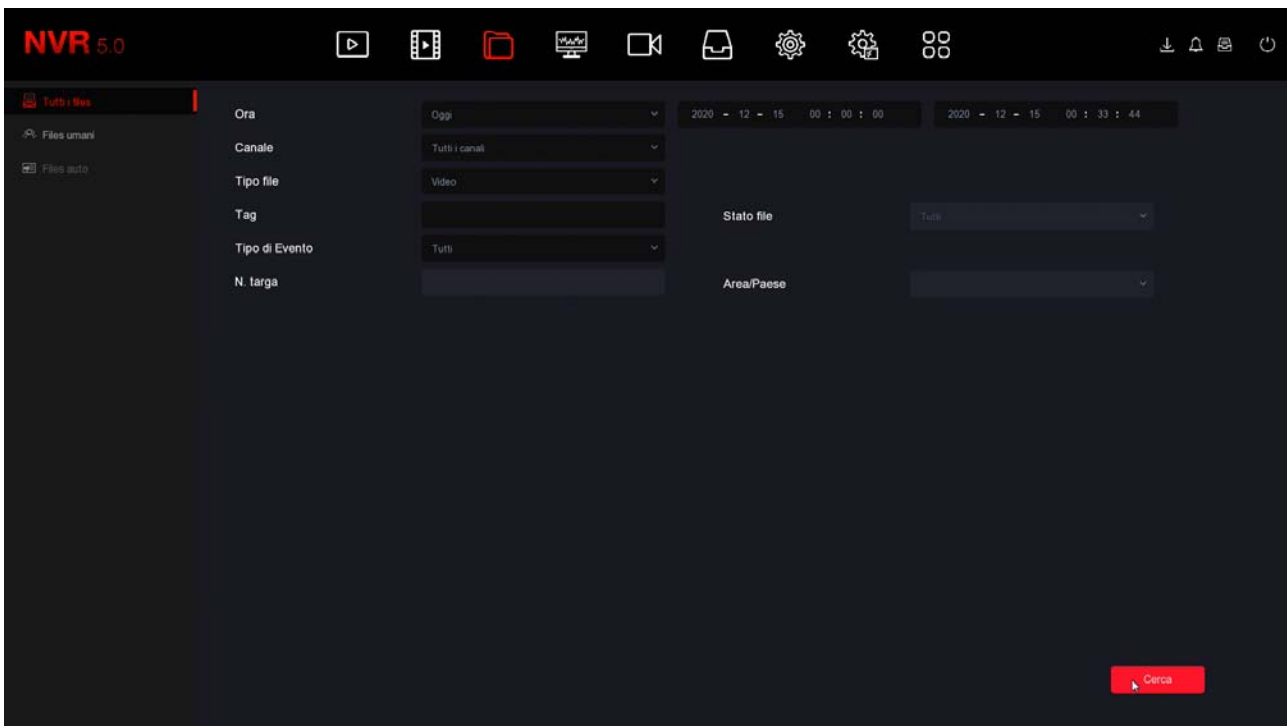
A TAG is a bookmark that you can insert in the timeline so that you can easily find that moment again. You can give each TAG a name, to distinguish it. You can enable the display of TAGs with the appropriate selector



Search and backup of files

In this section you can search for video files recorded following alarm events, such as motion detection or human detection, and export them to external memories. Do the following.

1 - OPEN THE FILES WINDOW Click the FILES icon at the top of the menu



2 - SEARCH THE FILES

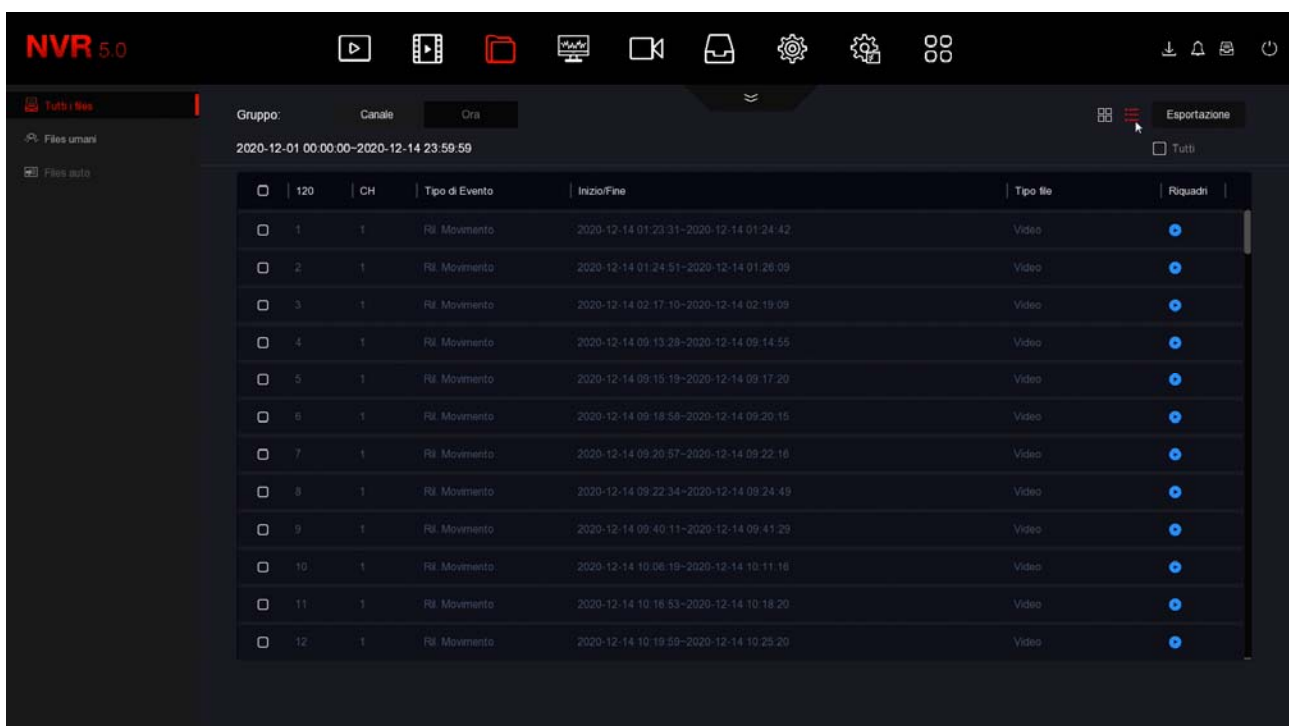
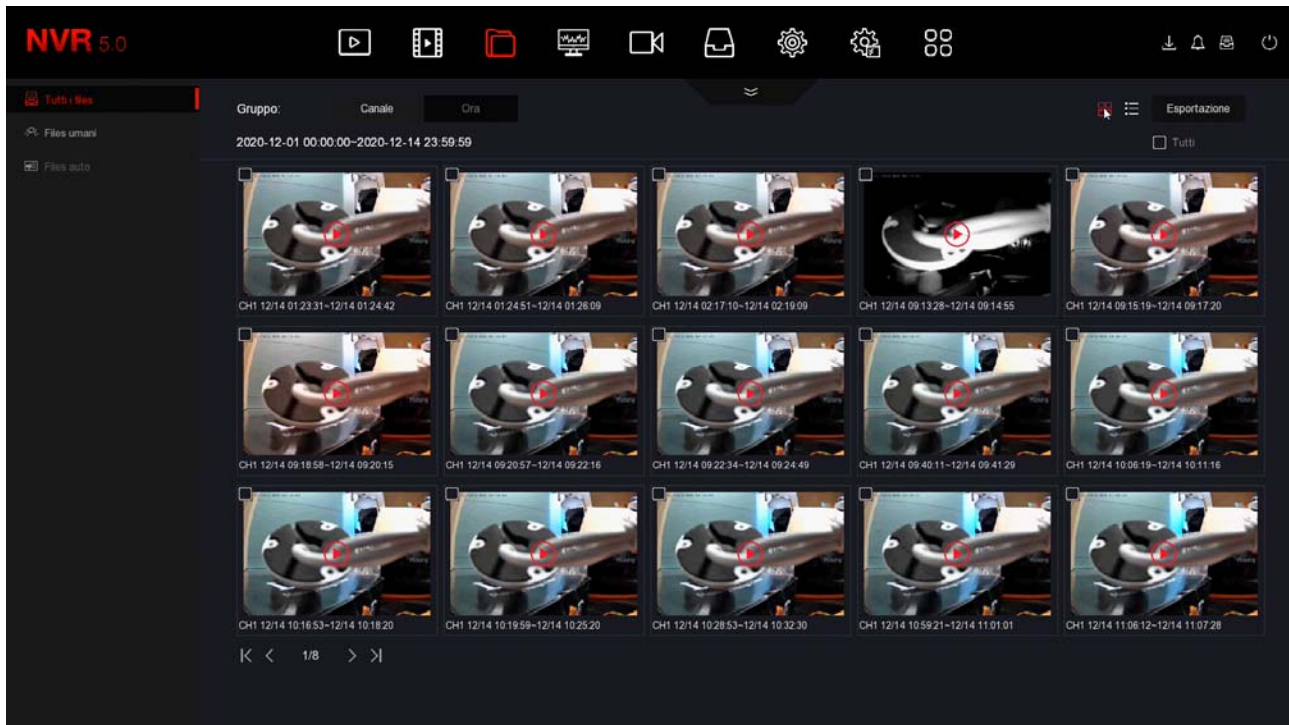
You can search by date / time, channel and type of event. You have two search pages, one for normal events such as motion detection and one specific for human detections. You can then easily review the files and export them to a USB stick with the EXPORT button

INSTALLATION MANUAL

RKK SERIES - POE CAMERAS / NVR KIT



Page: 30





Connect the NVR to your network

To be able to connect to the surveillance system via PC or mobile, you need to connect the NVR to your network. To do this use a network cable and connect **the EXTERNAL NETWORK port named NET or WAN** of the NVR to a free port on your router or switch. Check that the port LEDs light up, this means the connection is correct.

ATTENTION. You must necessarily connect to your network or your router if you want to make the connections remotely illustrated in the following chapters.

Check the network parameters of your NVR

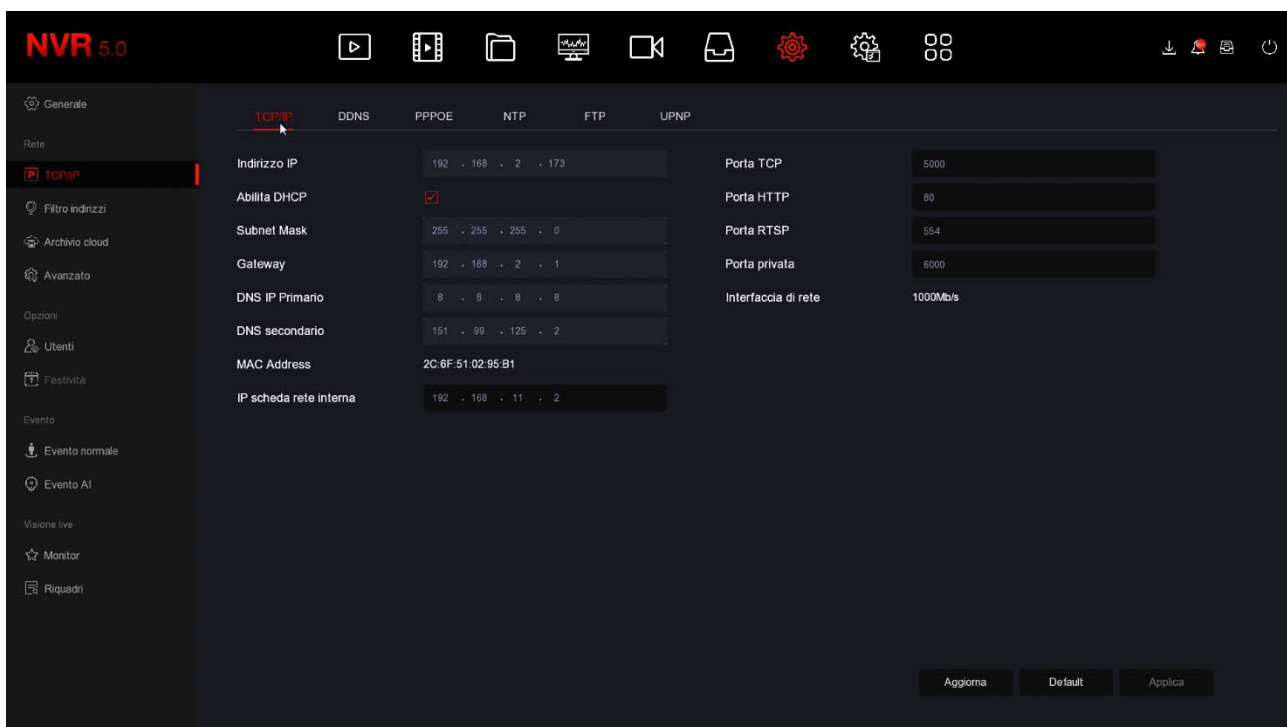
Your NVR automatically configures itself on the network (DHCP), then directly receives the network address and configuration from your router. You don't have to worry about entering any parameters. However, before connecting remotely with PCs and mobile phones, it is good to check the network situation. To do this, follow these instructions

1 - ACCESS THE NVR MENU Right click and choose MENU To access you will need to log in Enter the factory password:

USER: admin
PASSWORD: 12345

2 - OPEN THE NETWORK WINDOW TO CHECK THE IP ADDRESS

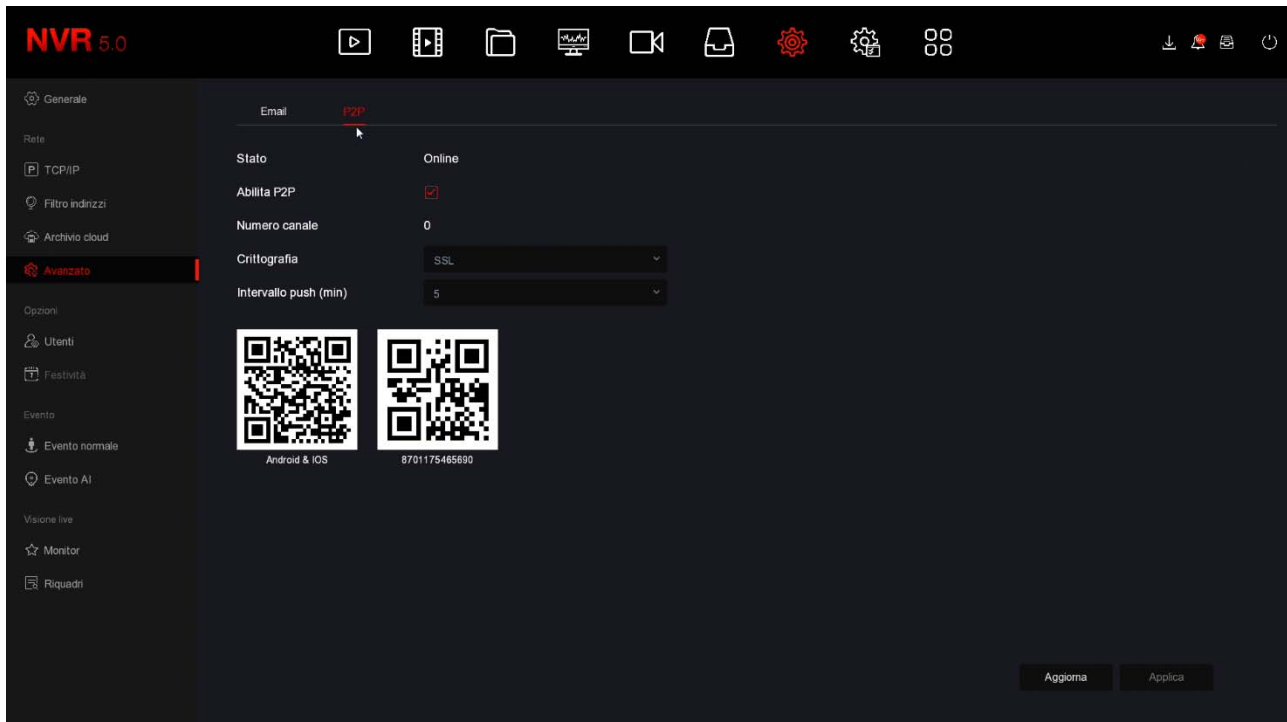
Click the SYSTEM CONFIGURATION icon (top gear) and then CHOOSE TCP / IP Find all the network parameters of your system



In this window check that the checkbox on ENABLE DHCP is active and take note

of the IP address that your NVR has assumed within the network which is the first item at the top (in the example 192.168.2.173. It will be useful if you want to access the NVR from within your network, without going through the Internet .

3 - GO TO THE P2P WINDOW TO CHECK THE CONNECTION TO THE SERVER After checking the IP address of your NVR, open the ADVANCED / P2P folder



On this page check that the P2P function is enabled and that the status is ONLINE. This means that the NVR is communicating well via the Internet with our P2P cloud server which will allow you to access via the Internet without configurations or static IPs. If the status is not ONLINE double check the previous steps because it means that your NVR cannot access the Internet.

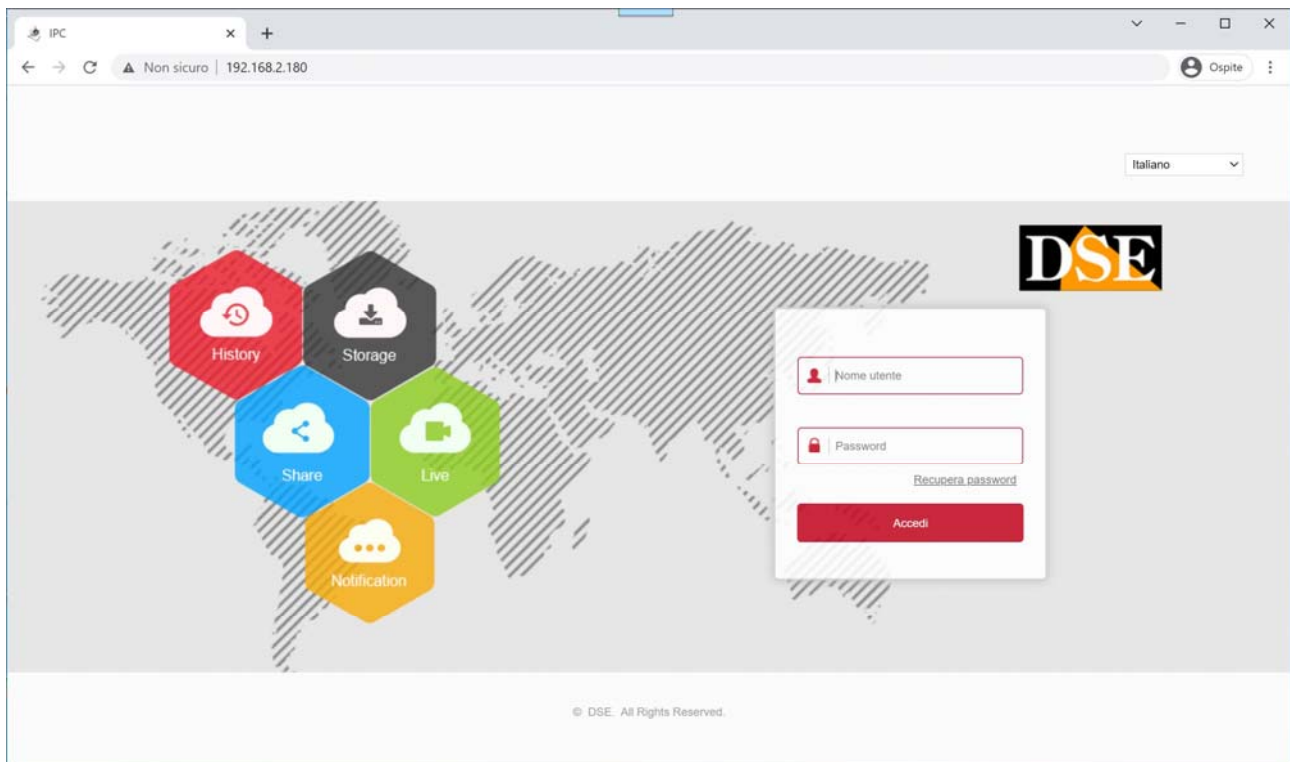
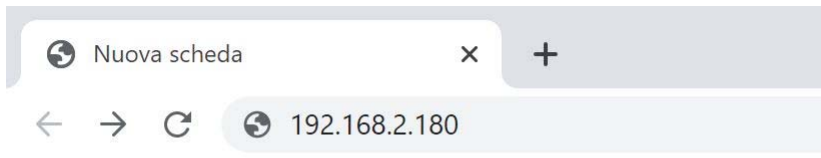
For how to connect remotely with the APP or with the software, see the specific manuals.

Access with browser

Todayour **RK DVRs / NVRs support all common browsers**, such as Google Chrome, Firefox or Edge.

Browser access works only on the internal local network.

To access with a browser, you do not need to install any additional components and just type the internal network address of the NVR / DVR as in this example





Connect with mobile phone or PC via the internet

To connect via the Internet from a PC or mobile phone, consult the remote access manual with the IoVedo.RK app and software.



Add cameras to your kit

The RKK POE kits have a maximum capacity of 4 or 8 POE cameras, depending on the model. If you have purchased a kit with fewer cameras than its maximum capacity, for example a 6-camera kit, which can accept up to 8, you can expand it later by purchasing only the additional cameras.

You can purchase the additional cameras for the kits, or any of our RK series IP cameras. All of these cameras configure themselves when connected.

You can also add other onvif cameras, either by connecting them to the NVR network or by connecting them to the external network. Find the specific procedures for these operations in the installation manual of our RK Series NVRs.