Plug & Play WiFi IP Kit

IP cameras and WiFi NVRs

Installation manual - Menu 5.0

How to install the system
How to connect to the network How to
insert an additional camera

Contents of the manual

The RKK series WiFi kits are designed to create small wireless 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 more detailed information on the advanced functions, you can consult the RK Series NVR configuration manual

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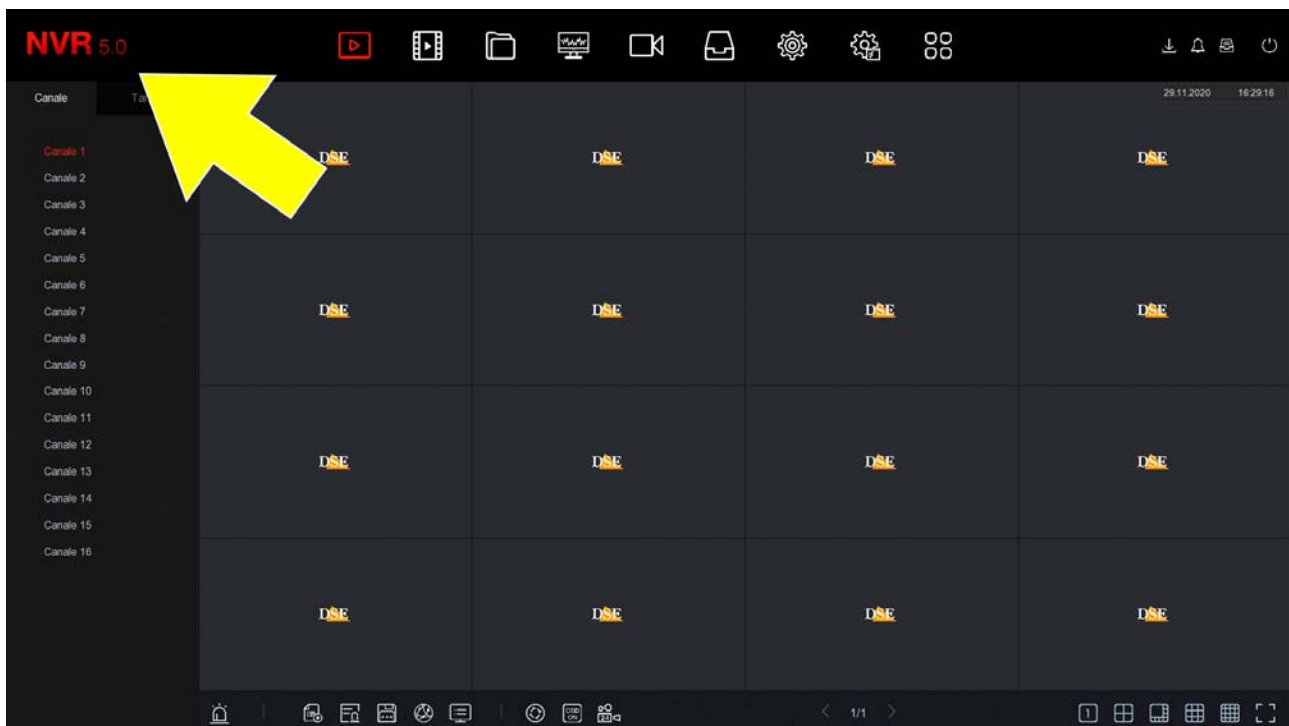
If your NVR / DVR has our classic interface, instead of 5.0, you can download the specific manual for your version, or you can continue reading this manual considering that you will find the same options on your screen, only with different graphics.

Package Contents

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

1 - WI-FI VCR (NVR)

2 - From 1 to 8 WI-FI CAMERAS FOR OUTDOOR / INDOOR

3 - A 12V POWER SUPPLY FOR EVERY CAMERA

4 - ACCESSORIES

Connect the cameras

The cameras of this system are designed to not require any configuration and are delivered already paired with the kit's NVR. You just have to plug the power supply into the socket. Initially you should power the cameras near the NVR, before installing them in their position, in order to conveniently configure the system.

1 - SCREW THE ANTENNAS

Screw the antenna onto the back of the camera. Hold the antenna steady with one hand and turn the locking ring with the other hand. Do not point the antenna towards the NVR, but leave it vertical.

2 - CONNECT THE POWER SUPPLY

For each camera there is a power supply that you have to connect to the DC12V plug (on the right in the photo below). The connector for the wired network is not needed in normal operation.

ATTENTION: Do not confuse the power supply of the NVR (2 / 3A) with the smaller one for the cameras (0.5 A).

3 - 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 Allen key of the bracket must be unscrewed to be able to orient the joint and fully closed once the camera has been positioned.

Orient the antennas

The antennas of these cameras are omnidirectional, so they transmit in all directions. For better signal propagation it is not advisable to point them towards the NVR, but to orient them at 90 ° with respect to the direction of the NVR. Look at the following example.
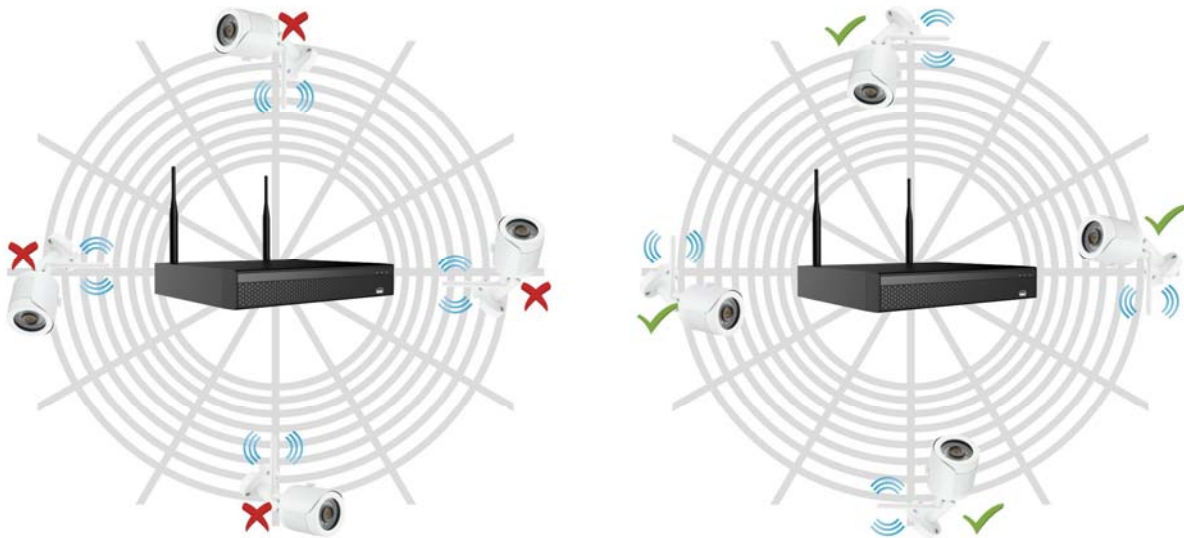
Install the Hard Disk

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 disk with the 4 screws provided

that screw tight from underneath the VCR

Close the lid and screw the 2 antennas onto

back of the appliance

At the next boot, the NVR will reveal the new hard disk installed and will ask you to start formatting in order to use it.

Connect the NVR

The central unit of your system is a WiFi network video recorder, 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
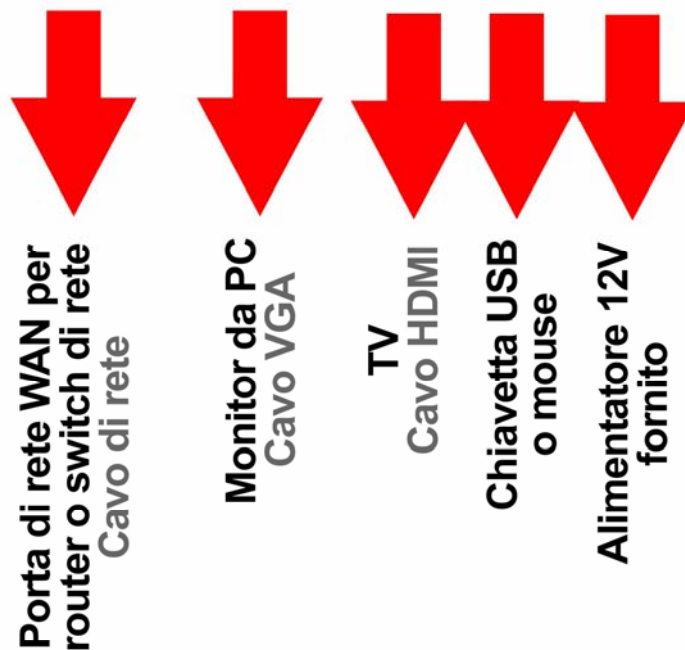
Follow this sequence to connect your NVR

1 - SCREW THE ANTENNAS

Screw the two antennas to the back of the NVR. Eastern straight up.

2 - 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.

3 - 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.

4 - CONNECT THE MOUSE

The NVR is controlled with the mouse like a computer. Connect the mouse supplied with the product to one of the USB ports your NVR is equipped with

5 - CONNECT THE POWER SUPPLY

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 (2A) with the smaller one for the cameras.

6 - 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 straight-type network cable and insert it on one side into the port**WAN 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).
Depending on the model, you will also find 3 LAN ports on the back of the NVR that are not needed for the router, but to connect any wired IPs and are also used for the first configuration of new cameras from the kit purchased later.

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.

The first time you turn on a wizard that helps you configure the main functions of your system in a few minutes.

1 - CHOICE OF LANGUAGE

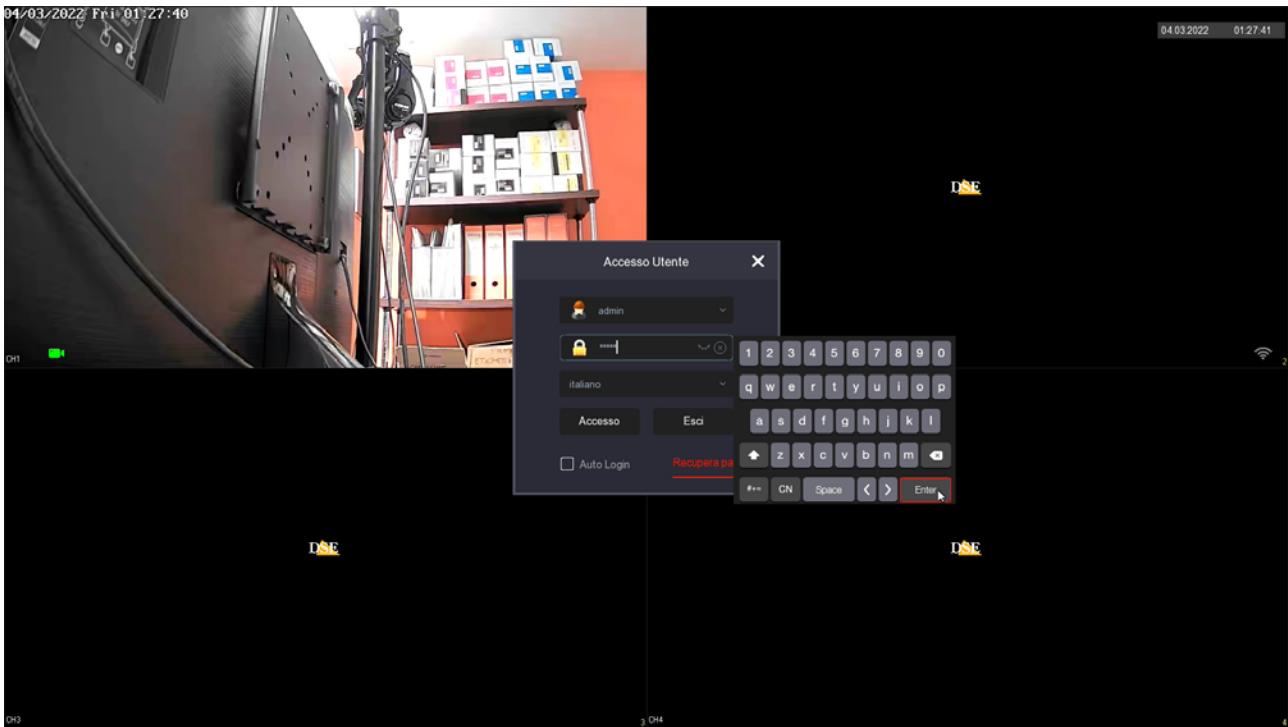The first page of the wizard provides for the choice of language, factory set in Italian. If you do not need to change the language, press EXIT
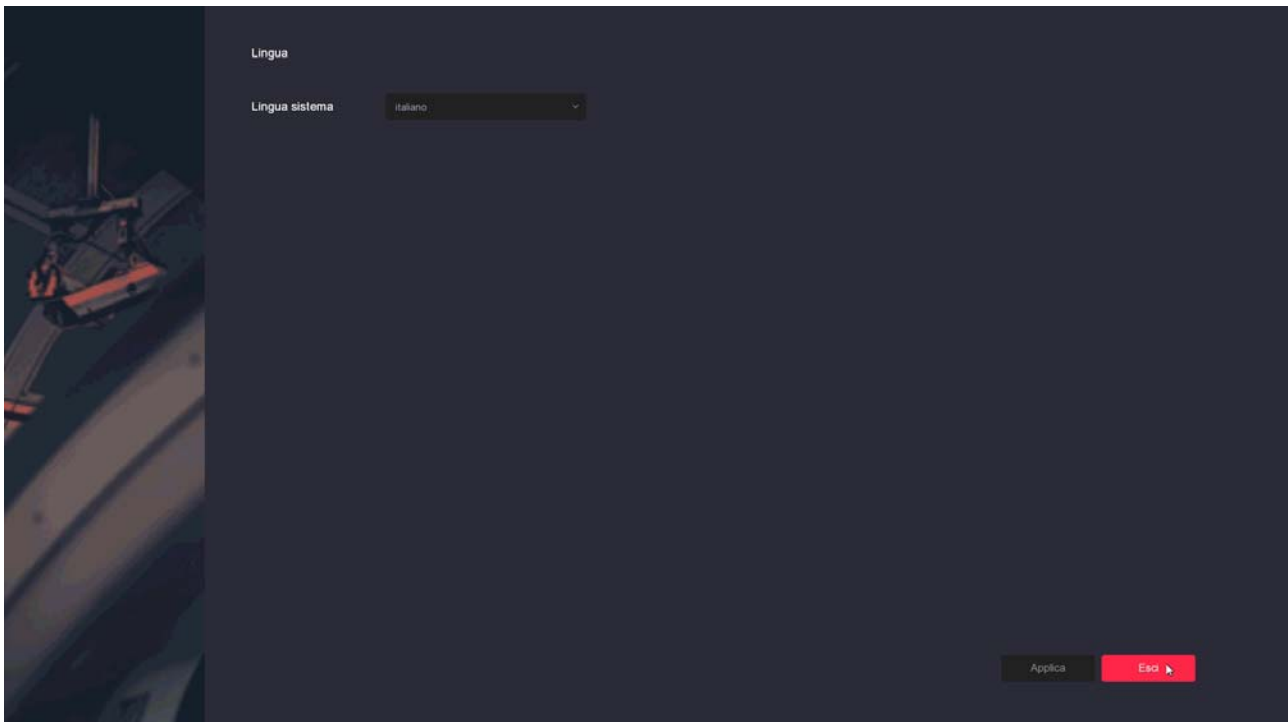
2 - AUTHENTICATION

The second step is authentication. At the first start you can enter the factory password:

USER: admin
**PASSWORD: 12345**

3 - SET THE TIME AND DATE

Here you set the system date and time. The time zone in Italy is GMT + 1.

At the bottom you can uncheck ENABLE CONFIG. GUIDED so that at the next start of the NVR this first programming procedure is not proposed again.
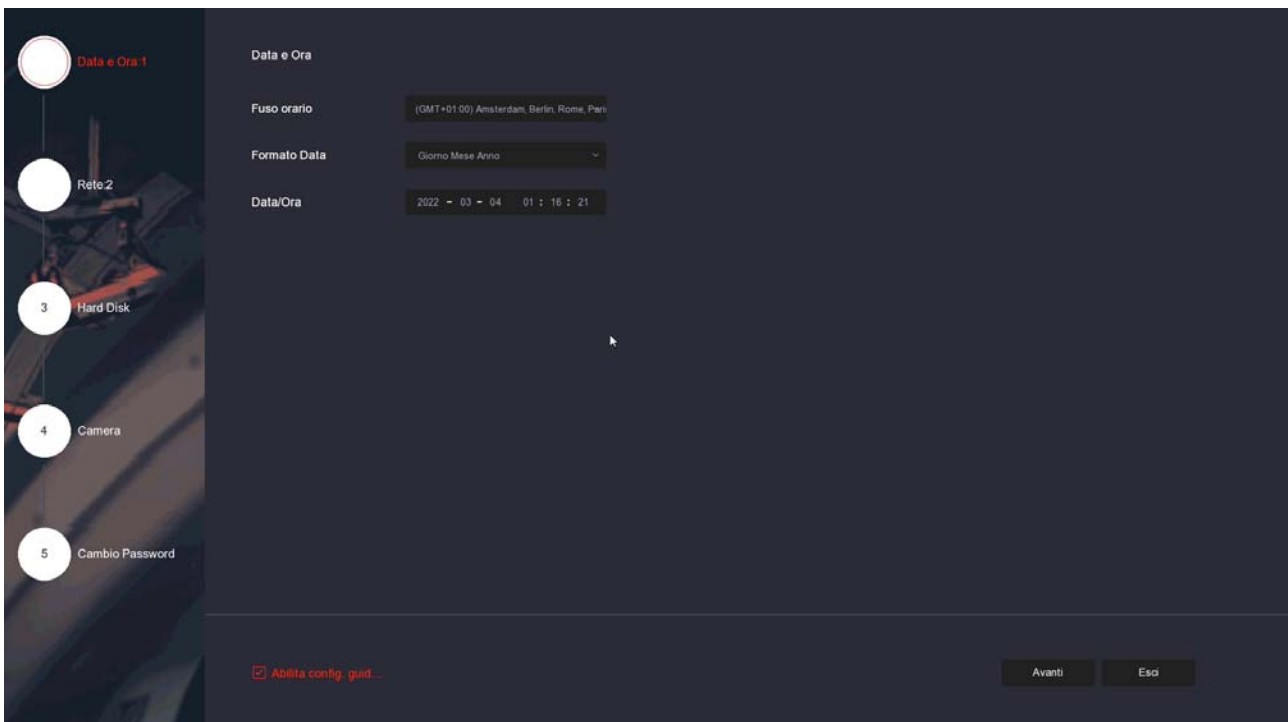
4 - NETWORK

Here the network parameters of the NVR are set in relation to the wired connection network to the router and to the Internet. At the factory you will find the DHCP setting enabled, so that the NVR automatically receives the correct parameters from the router. The network parameters assigned to the NVR automatically are indicated in the boxes. It is recommended to keep this automatic setting and press next unless there are situations in the network to prefer a static IP assignment.
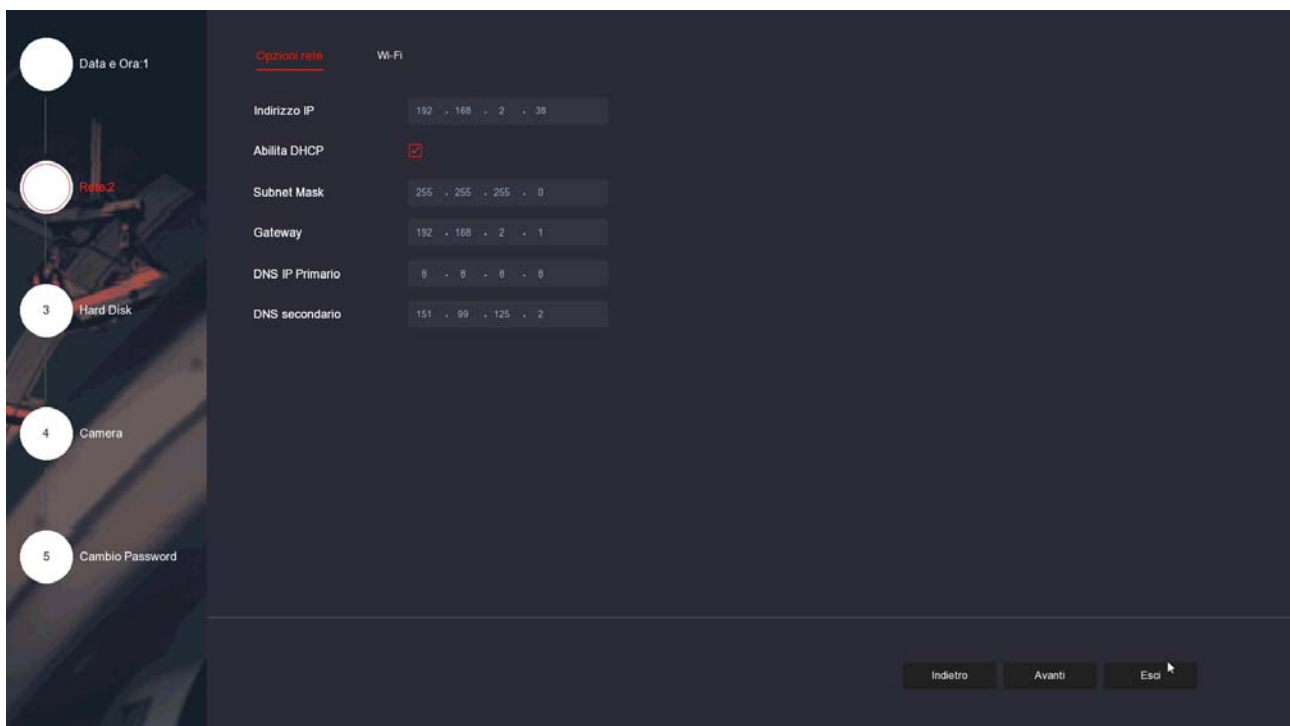

Pressing forward you pass to the parameters of the wifi network of the NVR, to which the cameras are automatically connected. Also in this case it is absolutely advisable to keep the factory settings and proceed with NEXT
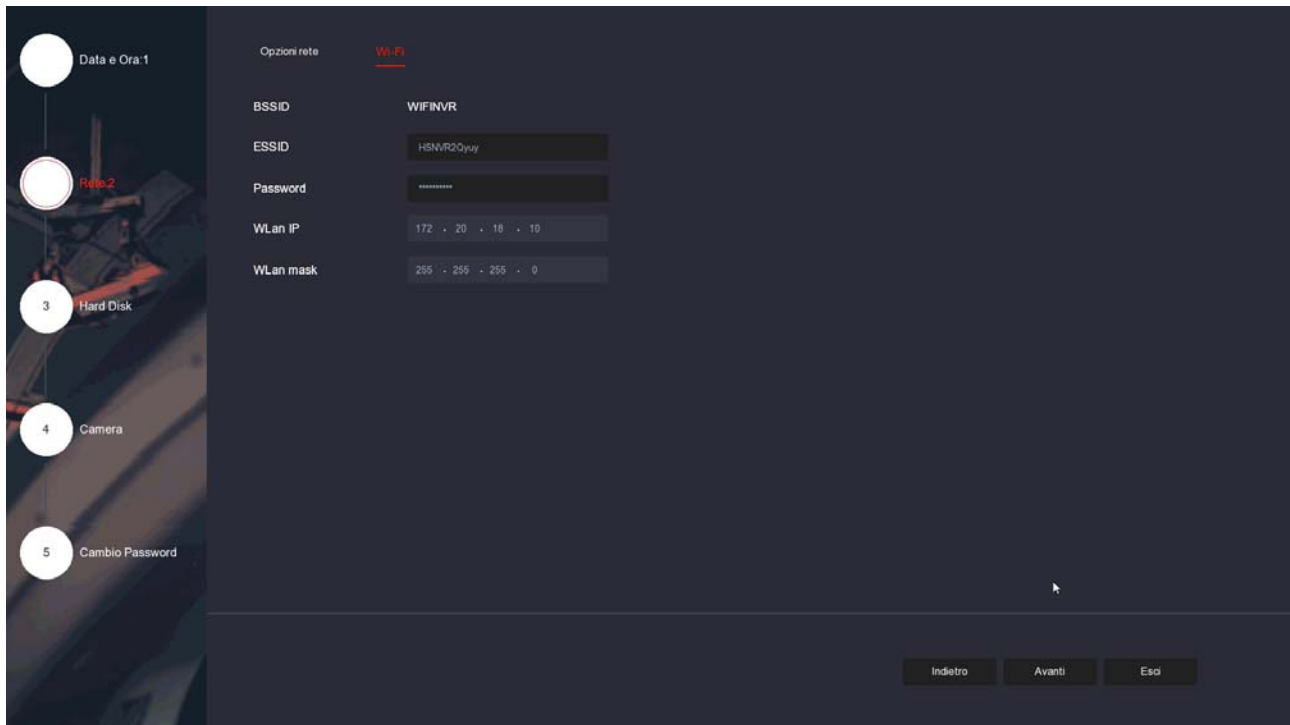
5 - FORMAT THE HARD DISK

This page shows the hard disk inserted in the NVR. If you bought the hard disk together with the kit, we will already mount it inside and format it for which you will find the page as in the example with the hard disk IN USE. If, on the other hand, you have installed a new hard disk inside the NVR you will have to select the disk and press FORMAT in order to delete the content and make it usable by the NVR.
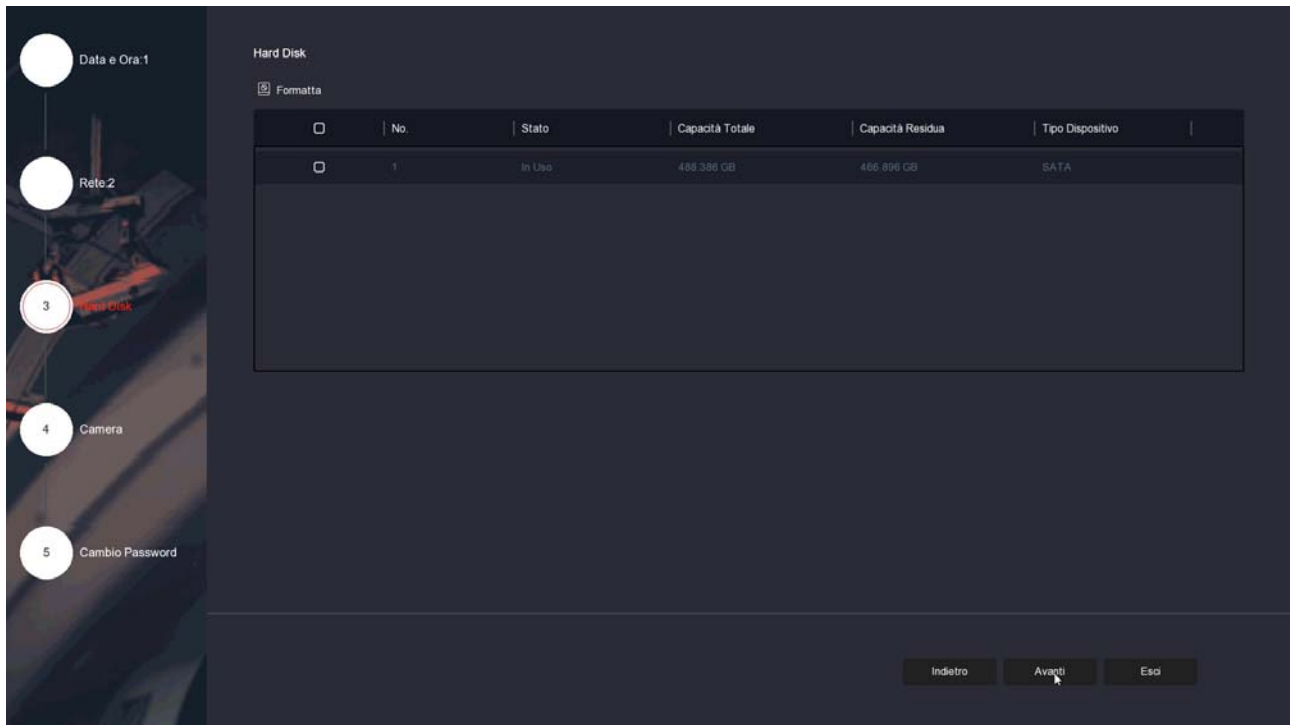
6 - CHECK THE CAMERAS

This is the kit camera control window. If you have already powered the cameras, check that the blue dot certifies the connection was successful. In this example camera 1 is present and connected successfully while camera 2 has the yellow anomaly triangle, probably because the camera is off or too far from the NVR.
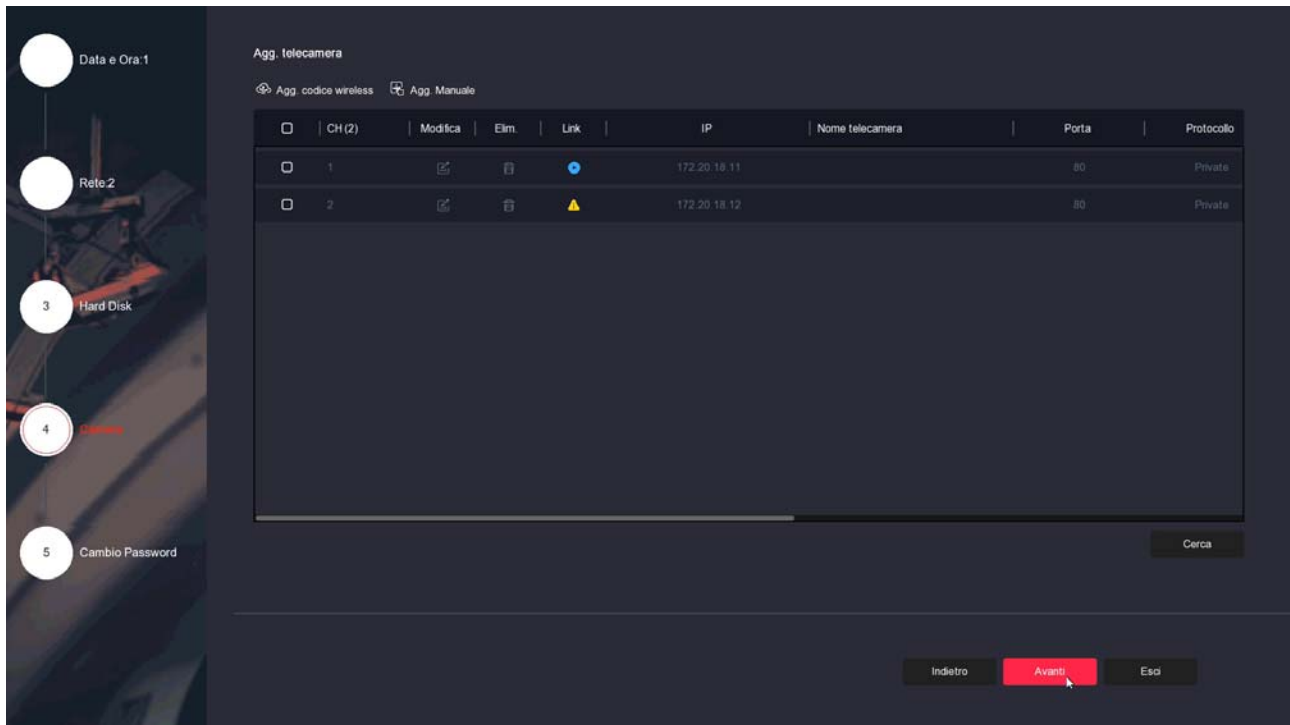
7 - PROTECT ACCESS

The last step of the wizard allows you to change the login password of the NVR. If you decide to change the factory password, you must set an access password to be kept with care, because if you forget it, recovery will be laborious.

CHANGE PASSWORD - Set the new password by typing the old default first: 12345.

SECURITY RESET - Set the answer to 3 questions that will allow you to recover your password if you forget it.
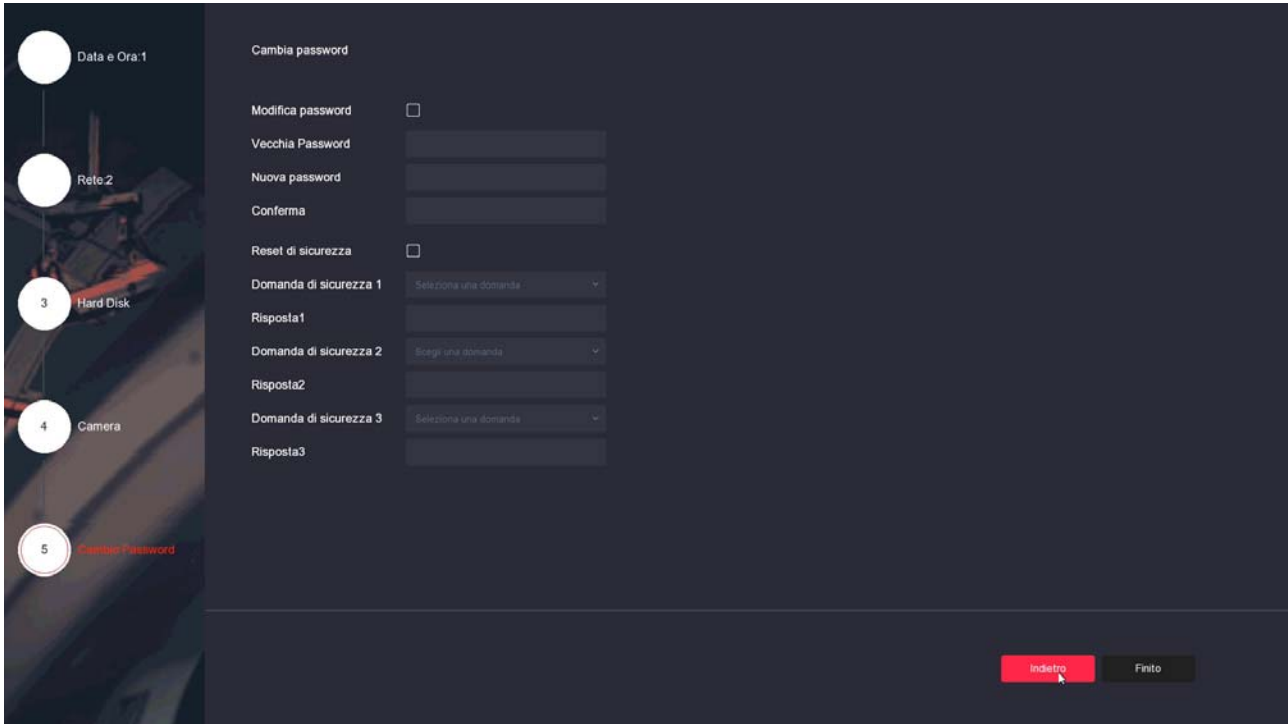
FINISHED!

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

Review the recordings

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

1 - OPEN THE PLAYBACK WINDOW

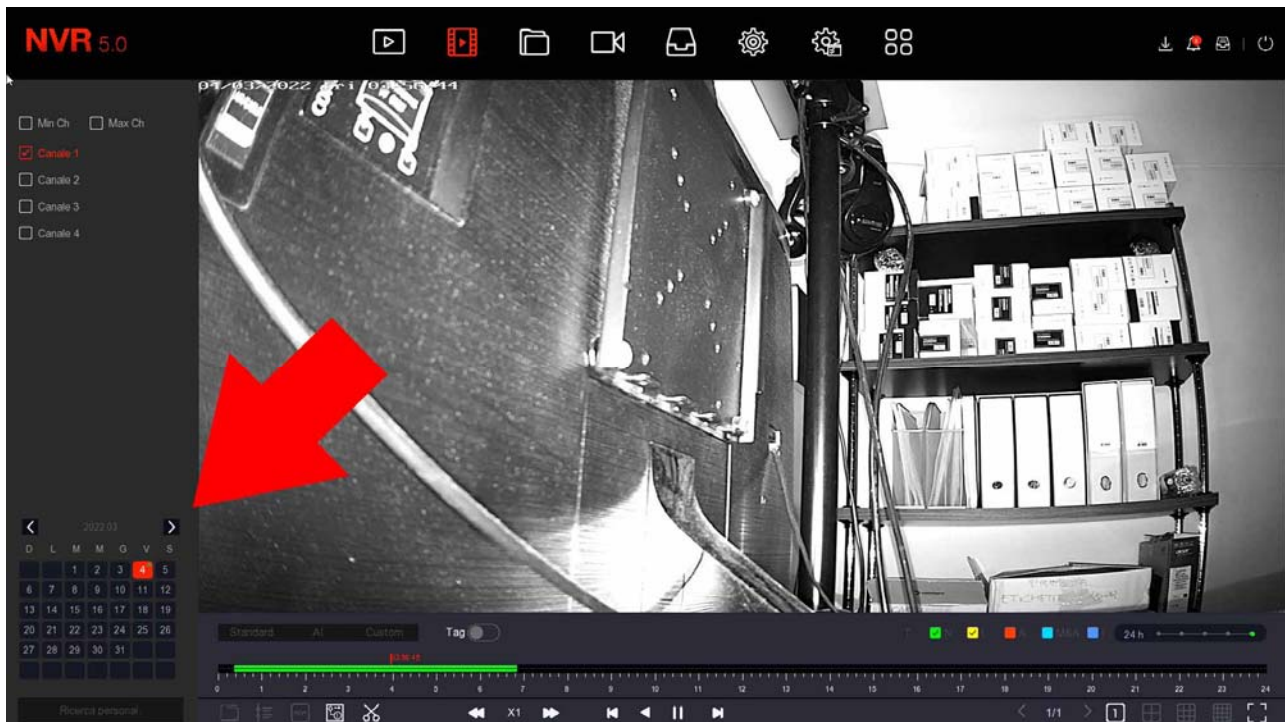Right-click and choose the PLAYBACK icon, second from the left in the top menu

2 - CHOOSE THE CAMERAS TO PLAY Select the cameras

to be reproduced at the top left

3 - CHOOSE THE DAY AND TIME YOU WANT TO REVIEW

Choose the day you are interested in at the bottom left. Days containing recordings are marked with a colored box. Click on one of these.

4 - REPRODUCE THE INSTANT YOU WANT TO REVIEW

In the time bar at the bottom you will find the 24 hours of the day with the continuous recording colored in green and the recordings made by motion detection in yellow. This is the MOTION DETECTION function, which is very convenient for finding what interests you right away. Click wherever you want in the timeline to play the images at that exact moment.

With the 24H slider you can vary the scale of the timeline.

With the command buttons below the timeline you can accelerate playback, stop or pause playback.

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 WAN port**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.

VERSIONS WITH A SINGLE WAN NETWORK PORT

If your NVR has only one network (WAN) port, use it to connect to your router or switch on your network

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 - CHECK YOUR NETWORK SETTINGS

Right-click and choose the SETTINGS gear icon at the top, then choose TCP / IP from the list on the left
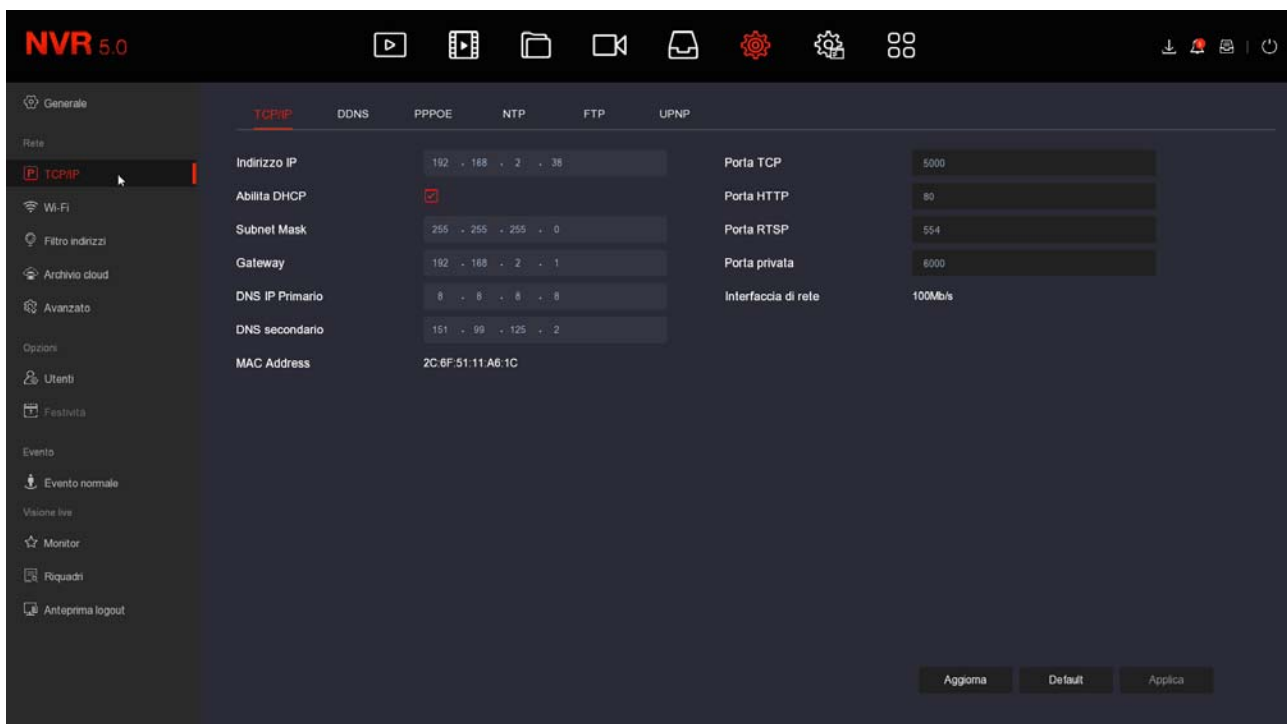
Check that automatic assignment of DHCP network parameters is enabled.
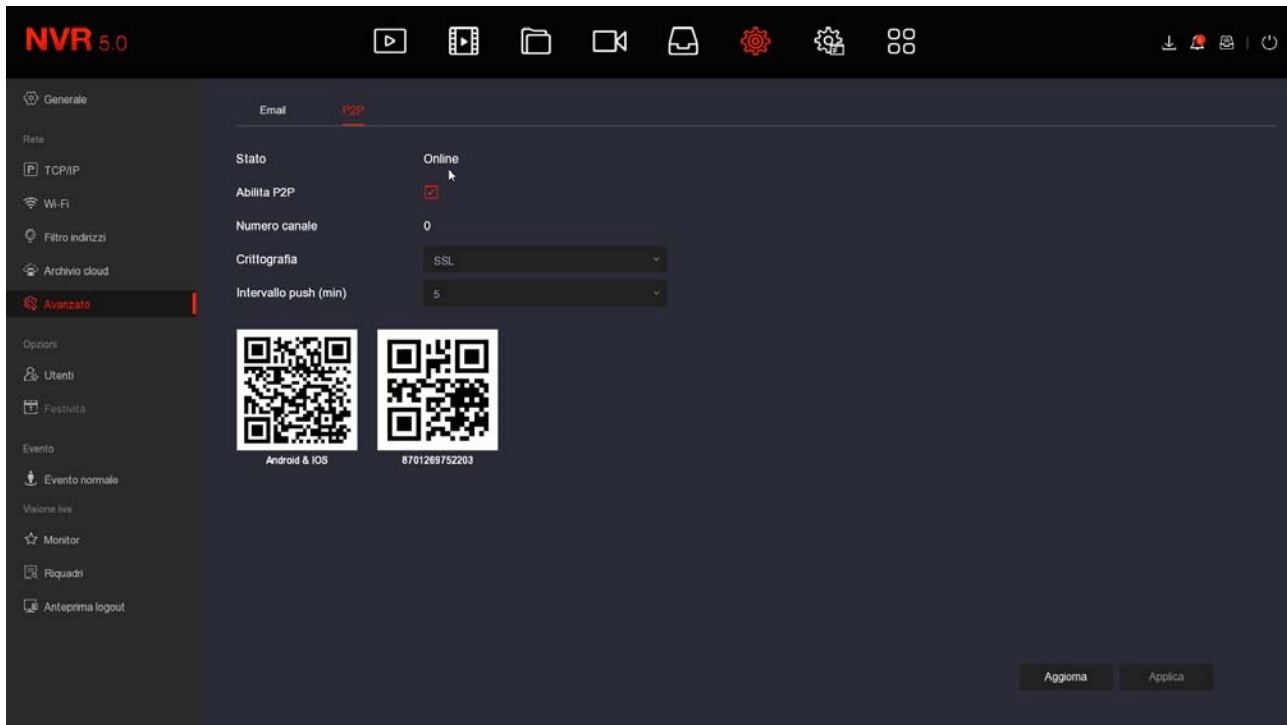
2 - CHECK THE CONNECTION TO THE P2P SERVER

After checking the IP address of your NVR, open the P2P folder in the ADVANCED section

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 that 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 with the APP remotely, see the manual of the IoVedo.RK app and the IoVedo.RK software.

Connect with the browser on the internal network

If you have a computer connected to the same network as your WiFi Kit, you can view your cameras simply with the browser. You can for the Internet**Internet Explorer**. Don't use other browsers like Edge, Chrome etc as they won't work. At the first access you will be asked to download and install the Plug-in necessary for the connection. Follow these instructions.

1 - ENABLE THE EXECUTION OF ACTIVEX

Internet Explorer contains security settings that can prevent the installation of the ActiveX component. Before connecting, you must enable the execution of ActiveXs not marked as safe. Open Internet Explorer and choose INTERNET TOOLS / OPTIONS
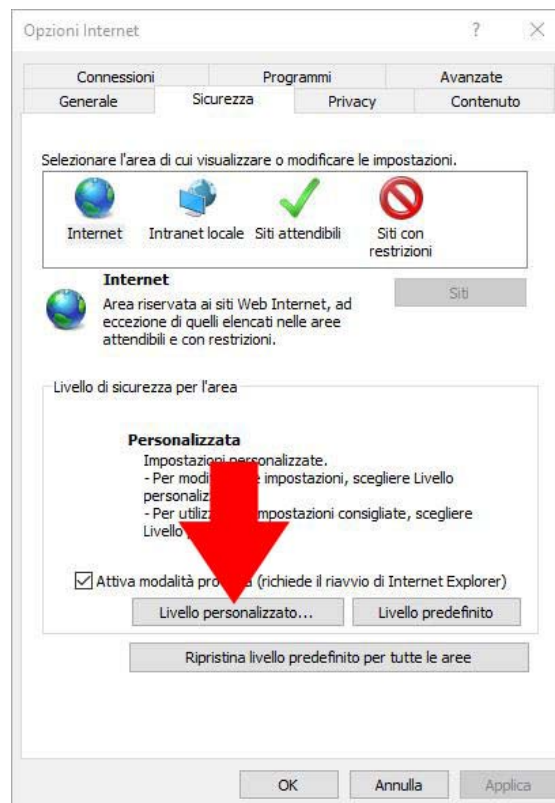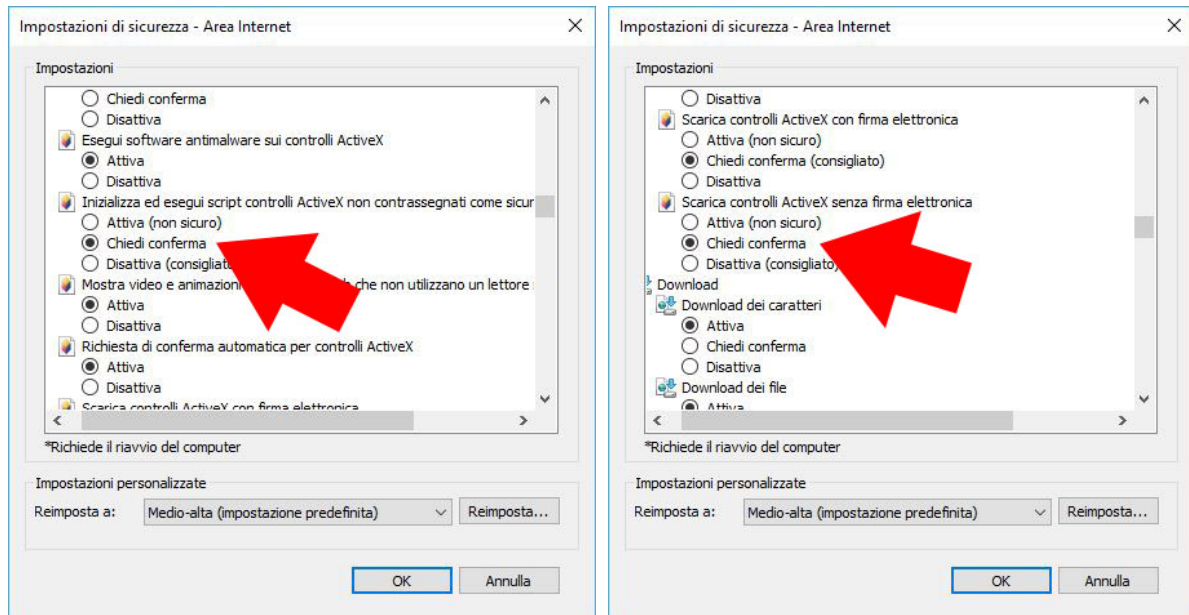
2 - ENTER THE NETWORK ADDRESS OF YOUR NVR

In the previous chapter we saw how to know the IP address that your NVR is using in the local network by opening the settings menu in the NETWORK section. Enter the IP address of the DVR in the Internet Explorer bar
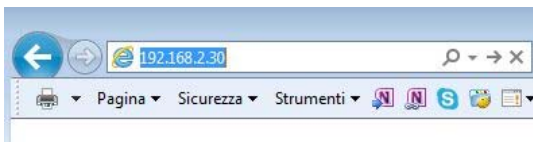
3 - AUTHORIZES THE INSTALLATION OF THE COMPONENTS

The first time you log in, you must authorize the installation of the necessary components. The best thing is to download the file and install it like any other program.

Remember to close the browser before installing the activeX component and reopen it at the end of the installation.
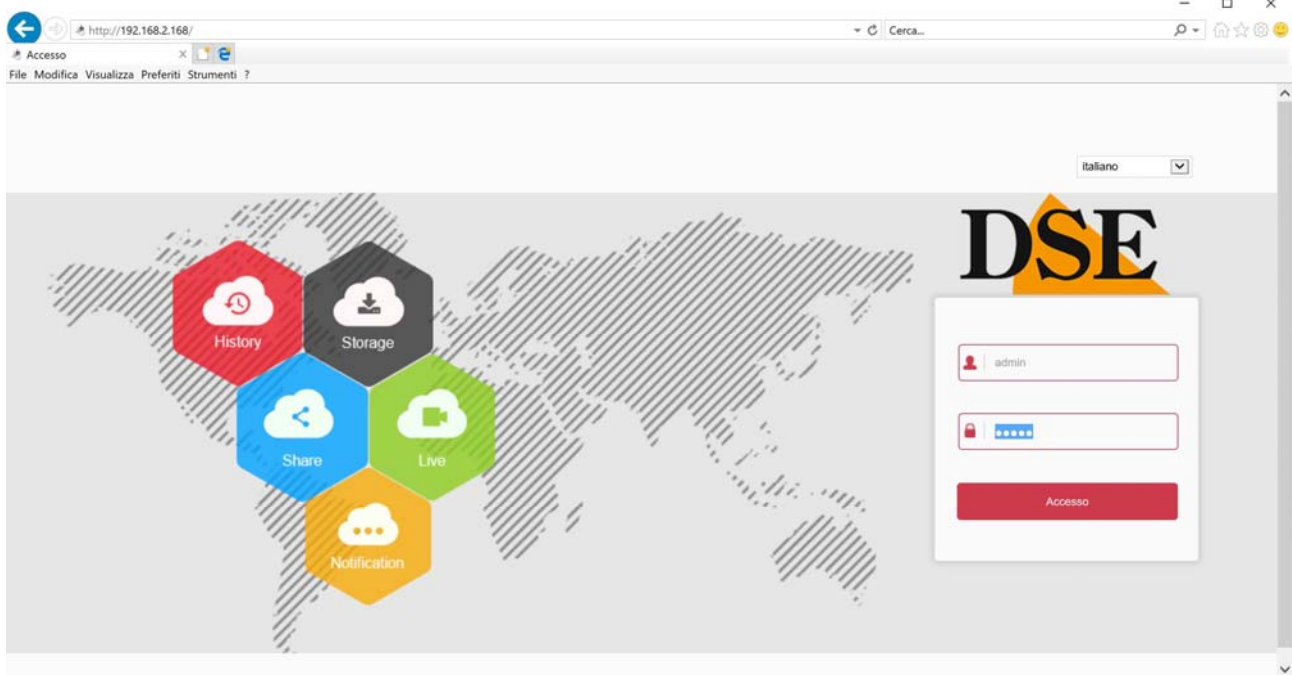
4 - ENTER THE PASSWORD
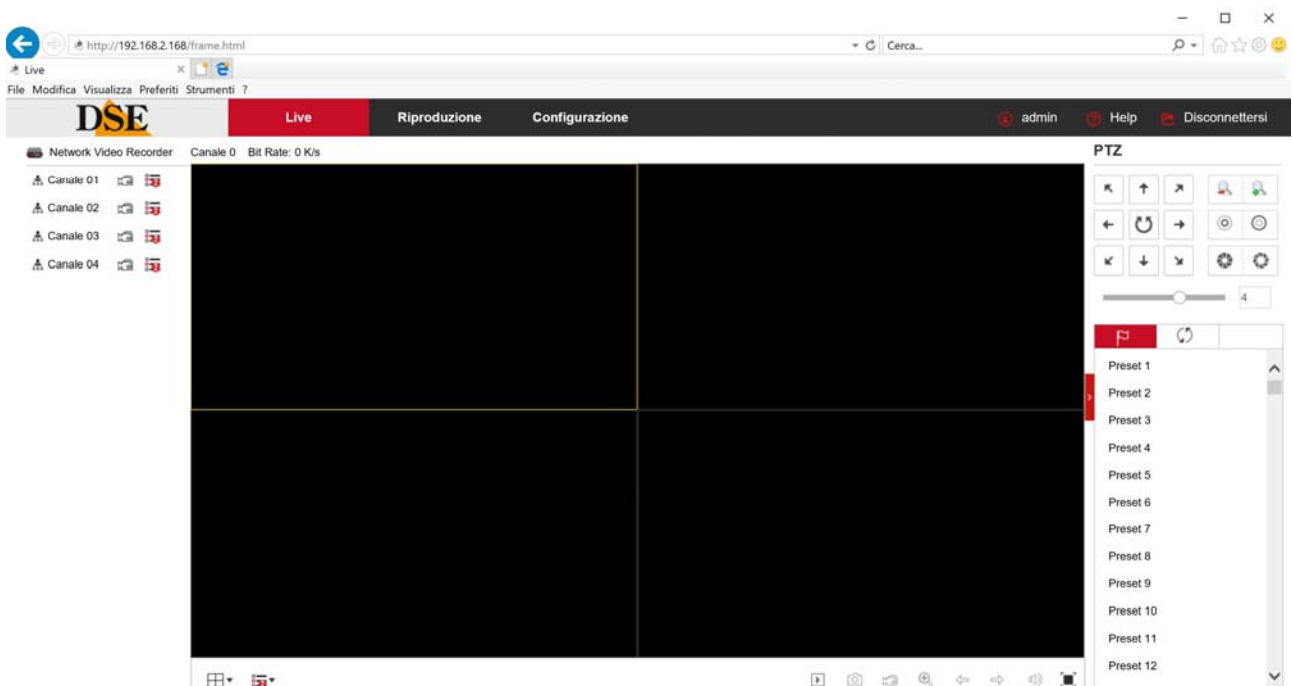
Enter the password to access your NVR (admin: 12345)

5 - FINISHED

You are now connected and can see live camera images by clicking on the camera icon. You can also review the recordings by clicking PLAY and change the system configuration that we will see in the advanced settings manual.

Connect with IoVedo.RK software and app

To connect with your mobile phone, consult the IoVedo.RK app manual.

To connect from a computer without a browser, consult the IoVedo.RK software manual. Both of these clients work both on the internal network and via the Internet through our P2p cloud server.

Add an additional camera to your kit

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

This is quite a frequent need because often, after installing the system, one realizes that it would have been better to buy a few more cameras. Fortunately, with RKK kits it is easy to purchase the additional camera and add it to your kit at a later time. You must follow this procedure which also applies if you want to add other RK Series WiFi cameras, other than those in the kit.

It is advisable to pair the camera by being close to the NVR and install it in its final position only once the pairing has been carried out.

To connect an additional RK wifi camera to your kit, follow the steps below. The procedure is slightly different depending on whether the supplied camera has a network socket or not. RKK cameras, specific for wifi kits, do not have a network socket. Instead, you find the network socket in all our standard RK Series wifi cameras.

ADD A SERIES CAMERARKK- WITHOUT NETWORK SOCKET

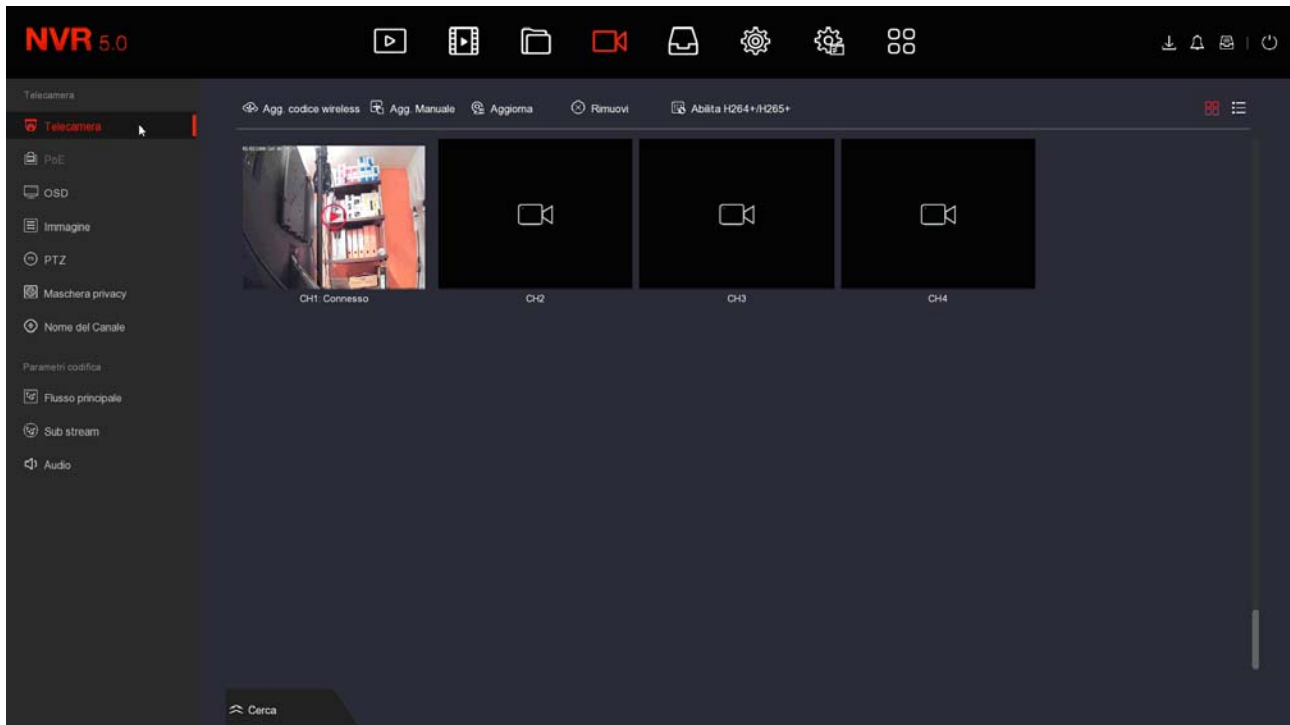1 - Power the new camera with its power supply

2 - Open the NVR MENU and access the CAMERAS section (camera icon at the top) In this example it is a kit that can manage up to 4 cameras to which only one camera is connected. Let's see how to add a second one.

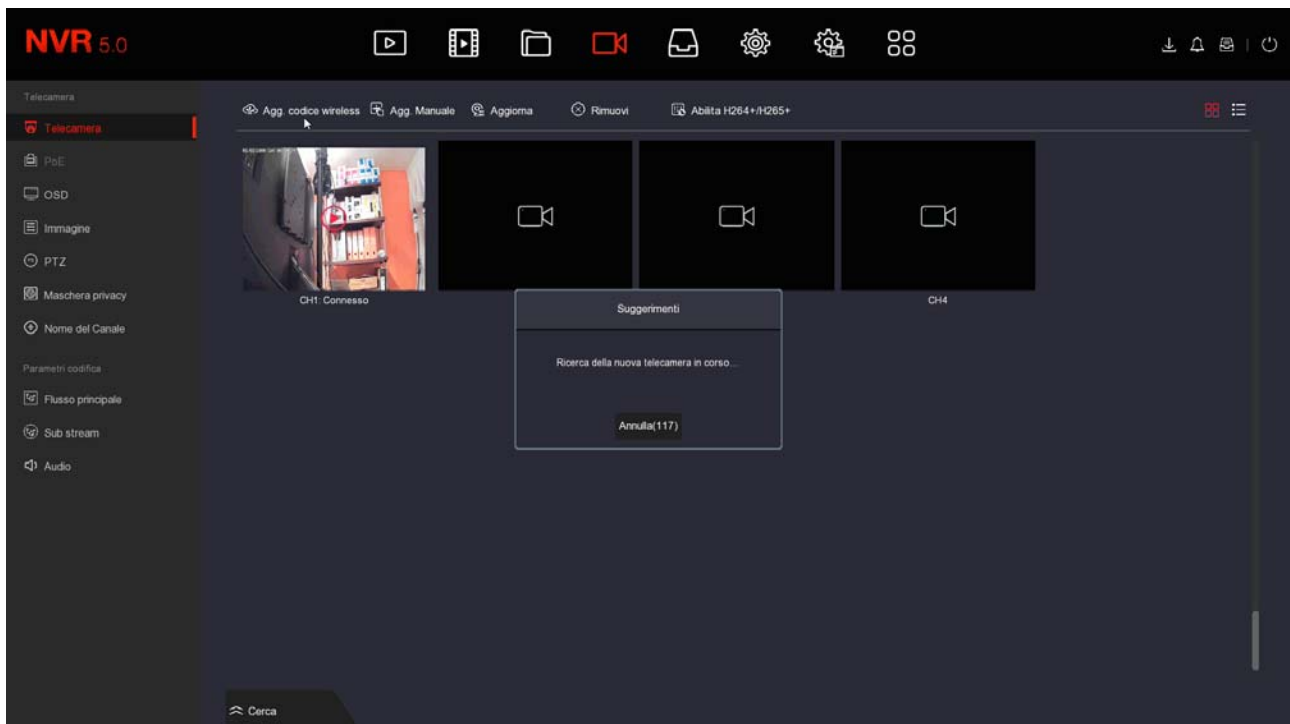3 - Press the ADD button. WIRELESS CODE to start searching for the camera to be paired. A search window opens with a 120 second timer.

4 - Before the 120 seconds expire, press the button present between the connections of the

camera, next to the power connector. Press and hold the button for 10 seconds until the red LEDs on the front of the camera start flashing.

FINISHED - Wait for automatic pairing to complete. Now the camera is connected to the NVR and you can use it in wifi like the others.

ADD A SERIES CAMERARK- WITH NETWORK SOCKET

1 - Power the new camera and connect it with a network cable to the rear network port of the NVR. If your NVR only has one WAN network port, connect the new camera there, temporarily disconnecting the external network or router.

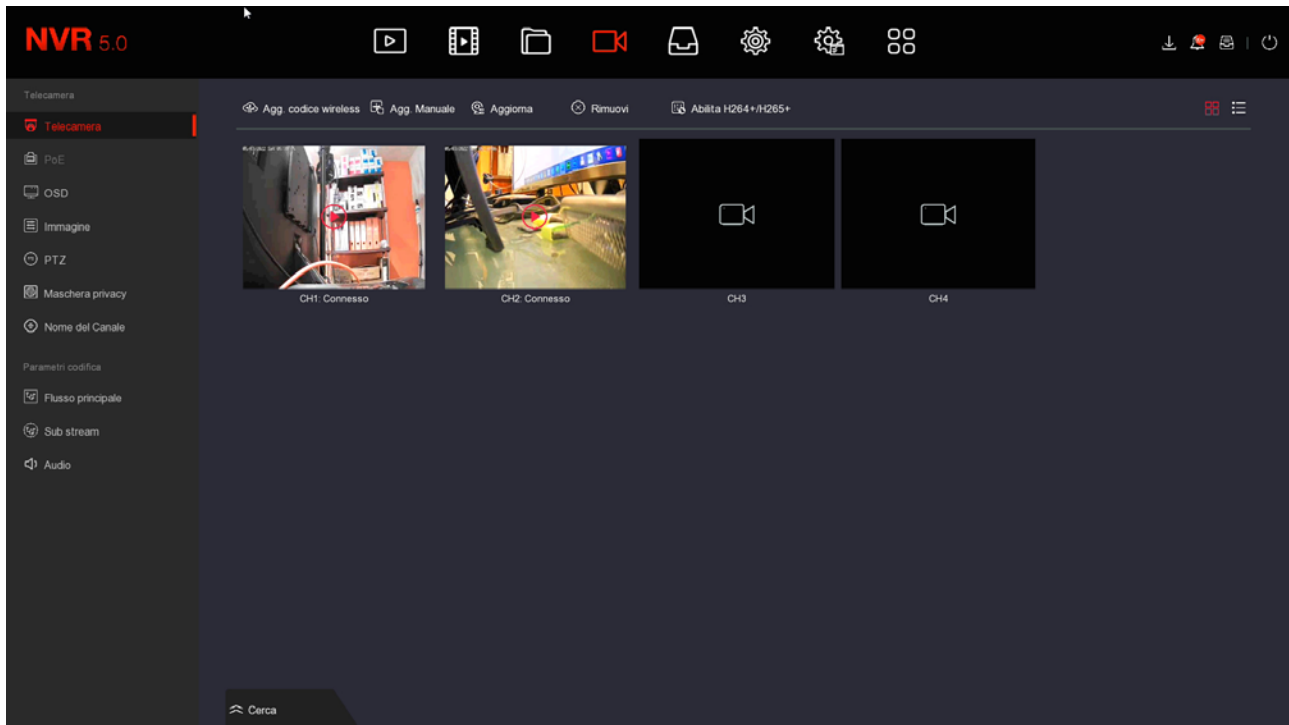2 - Open the NVR MENU and access the CAMERAS section
In this example it is a system with 2 connected and functioning cameras to which we want to add a third one.

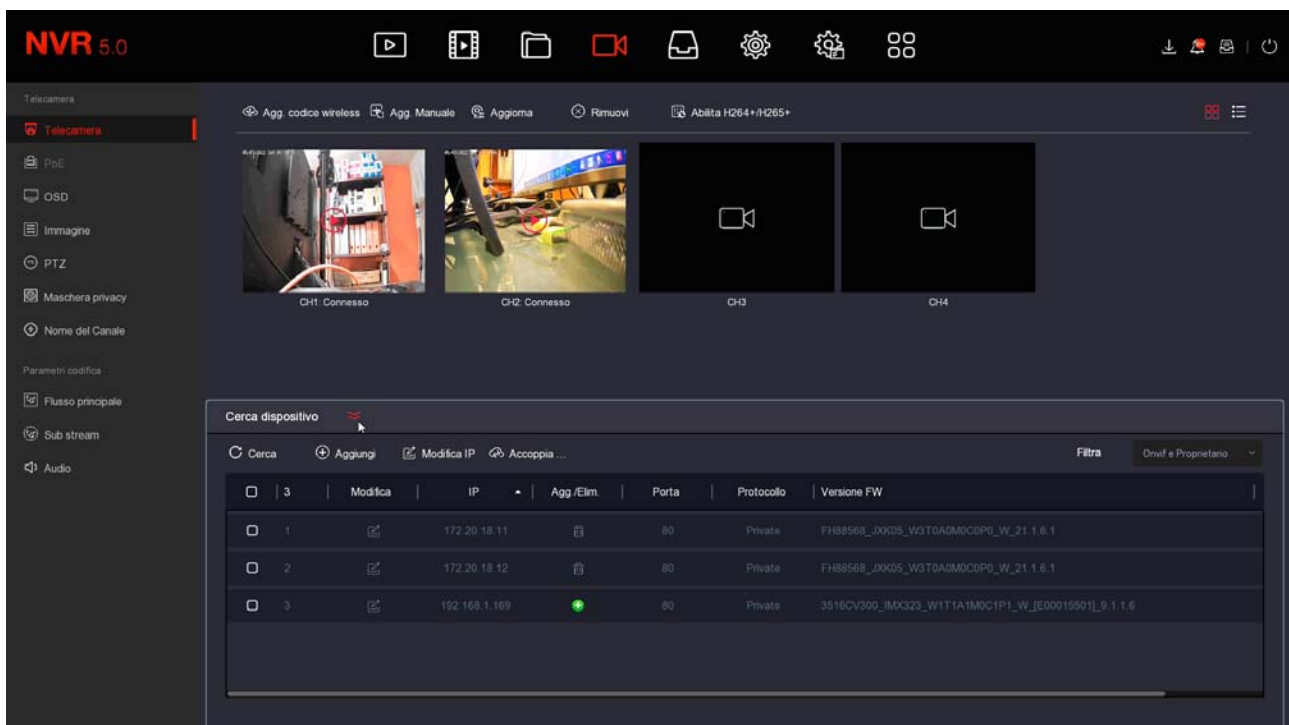3 - Press the SEARCH button at the bottom of the window to start the camera search

In the FILTER box leave the basic setting ONVIF AND OWNER. The NVR searches for RKK cameras and will find, in addition to any wifi cameras already installed,

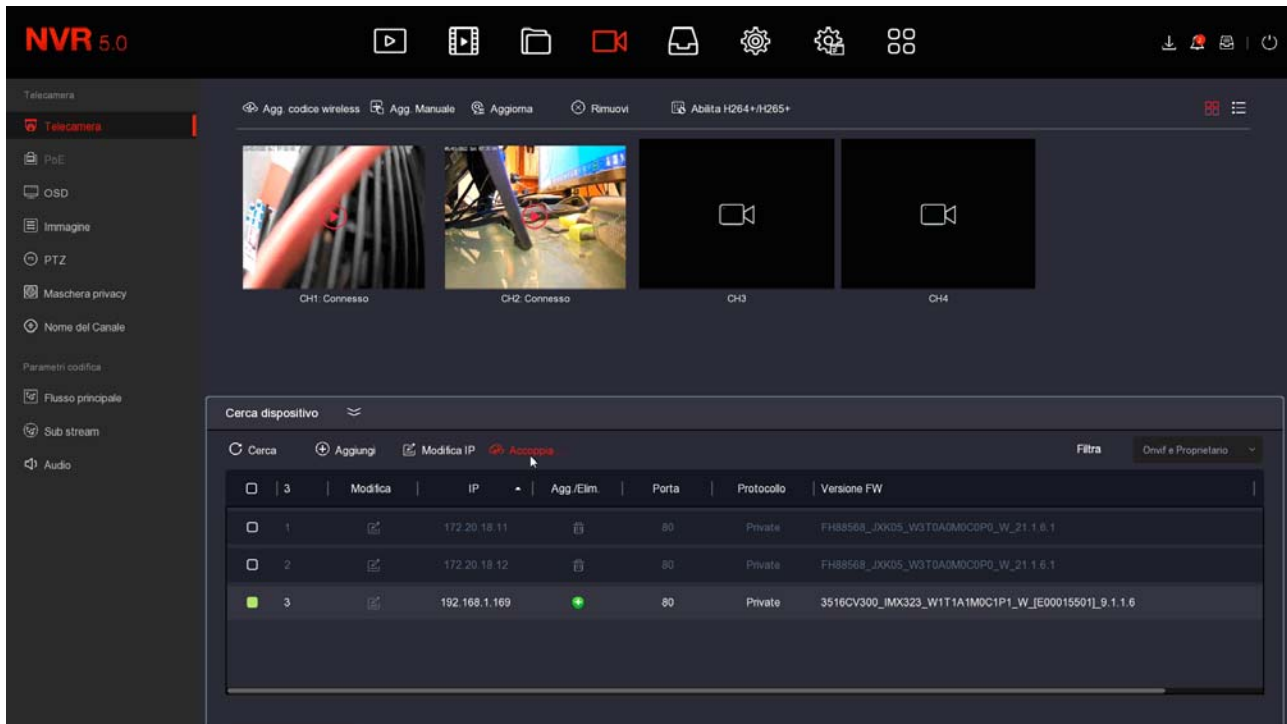even the new one you connected with the cable. This new camera will probably have a completely different address than the ones already installed, but don't worry; the NVR will configure the camera automatically.

4 - Select the new camera and then click the PAIR button. Wait for the pairing to complete and close the window by right clicking.

FINISHED - Now you can disconnect the network cable between the camera and the NVR and use the camera in wifi like the others.

Add an external camera to the NVR

RKK wifi kits use an RKK series wifi NVR which is also capable of receiving IP cameras connected on the external network. Furthermore you can also connect onvif wifi cameras to the wifi network of the NVR. For this type of advanced connections you can find useful information in the RK series NVR installation manual.