



# Plug & Play POE IP Kit

## **IP Cameras and NVR**



# <u>Installation Manual - Menu 5.0</u>

How to install the system How to network How to add additional cameras

**RKK SERIES - POE CAMERA/NVR KIT** 

Page:2



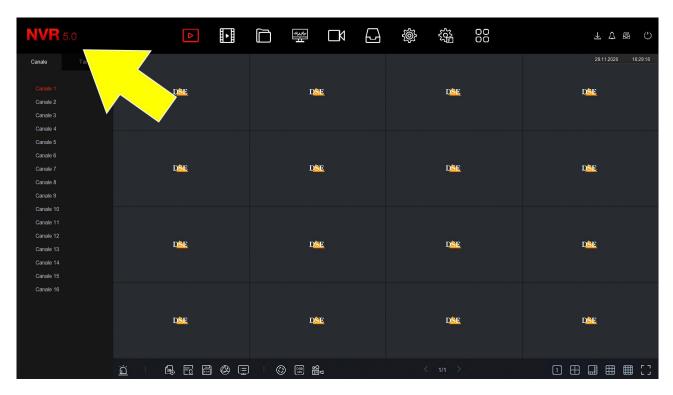
# **Contents of the manual**

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

This manual explains how to install cameras and video recorders, how to carry out the basic settings and how to connect from a computer to the internal network.

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

This manual refers to NVR/DVR with GUI Version 5.0 that you see here under



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

## **RKK SERIES - POE CAMERA/NVR KIT**





# **Package Contents**

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

1 - VIDEO RECORDER (NVR)





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

3 - ACCESSORIES

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

NETWORK CABLES – For the cameras you 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 up to max. 20 m, or you can buy the network cable in a skein to cut to size with the connectors to crimp at the end. If you use cables that you already have you must make sure that they have a core in pure copper because CCA cables are not suitable for POE power supply.

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

## **RKK SERIES - POE CAMERA/NVR KIT**

Page:4



## Connect the cameras

The cameras in this system are designed to require no configuration. You must just connect the cameras to the POE network ports of the NVR and they will automatically configure themselves.

#### 1 - CONNECT THE CAMERAS

Cameras come with a few connectors. The only one you need to consider is the RJ45 network that you need to connect to a LAN port on the back of the NVR. You can ignore the DC power and any connectors for audio and reset button because normally They are not used with these kits.



#### 2 - INSTALL THE CAMERA

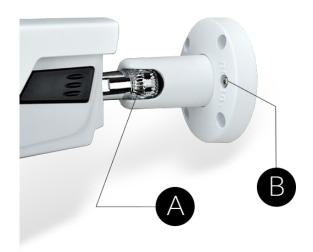
You can fix the camera to the wall or even to the ceiling and orient it thanks to the articulated bracket. They are supplied with dowels and drilling template. The bracket is equipped with an Allen key (B) that you must unscrew with the L-key supplied to be able to orient the joint (A). At the end of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

For optimal shooting, avoid the presence of objects, such as walls, beams, vegetation or other side of the camera because they could create refractions in the night shot. Also avoid that nearby objects, such as the wall next to the camera, enter the field of view, because brightly during night vision would make the rest of the image much dark.

## RKK SERIES – POE CAMERA/NVR KIT







**RKK SERIES - POE CAMERA/NVR KIT** 

Page:6



# **Install the Hard Disk**

If you want your system to be able to record, you need to install a hard disk inside the video recorder. Any 3.5" SATA computer hard disk will do, but for a larger duration it would be advisable to purchase a model specifically for video recording.

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

If you ordered the hard drive 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 on the back



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



Secure the hard disk with the 4 screws provided screw from underneath the base. Then close the cover.

On the next boot, the NVR will detect the newly installed hard disk and prompt you to start the formatting to be able to use it.

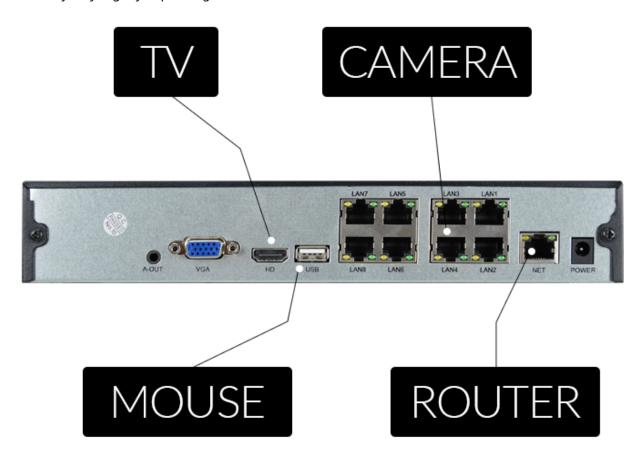
**RKK SERIES - POE CAMERA/NVR KIT** 

Page:7



## **Connect the NVR**

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





DSE SRL - ITALY - WWW.DSE.EU

#### RKK SERIES - POE CAMERA/NVR KIT

Page:8



#### A-OUT - AUDIO / HEADPHONES

This is an audio output for speakers or headphones with 3.5mm stereo jack. If you purchased a some of the 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 VGA port, you need to connect the cable to the blue port of the NVR, called VGA.

#### **HD - CONNECT A TV**

Even your TV can be a great monitor for your NVR. To connect it you need a cable HDMI to be inserted into the HDMI port of the NVR. To see the images on the TV you must remember to select the external HDMI input on your TV that you used for the NVR. Typically this is does by pressing the SOURCE button on the remote control.

#### **USB - CONNECT MOUSE**

The NVR is controlled with the mouse, like a computer. Connect the mouse that comes 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 back of the NVR. 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 wish to see them on the screen (1..8). These kits They are Plug&Play so you don't have to configure anything, the NVR takes care of configuring automatically the cameras for you. After connecting the cameras it is good to reboot 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 need to use a regular network cable and insert it into the port on one side**NET of the NVR** and on the other to a door free of your router or switch. The NVR is factory set to self-configure on the network automatically (DHCP).

#### **POWER - CONNECT THE POWER SUPPLY**

## **RKK SERIES - POE CAMERA/NVR KIT**

because you could damage the equipment beyond repair.



Page:9

The wall power supply, supplied with the DVR, should be connected to the DC12V connector on the back of the NVR. Once 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 to the monitor.

CAUTION: Do not confuse the POE NVR power supply that supplies 52VDC with other 12V ones.

## **RKK SERIES - POE CAMERA/NVR KIT**

Page:10



# Make the first ignition

As soon as you connect the power plug, the NVR starts up and shows an image on the screen. If you don't see the image, you need to check the cable and the 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.

When you first turn it on, a wizard starts up to help you configure your system. in a few 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 at a later time in the configuration menu.

#### 1 - CHOOSE THE LANGUAGE

When you turn it on, the setup wizard starts. 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. There are over 20 languages available. In this manual reference is made to the Italian language.



## **RKK SERIES - POE CAMERA/NVR KIT**

Page:11



#### 2 - LOG IN TO THE SYSTEM

Enter the factory password to access the DVR/NVR:

**USER: admin** 

**PASSWORD: 123456** 

Then press LOGIN.

Some firmware, prior to 2025, use password

**USER: admin** 

**PASSWORD: 12345** 



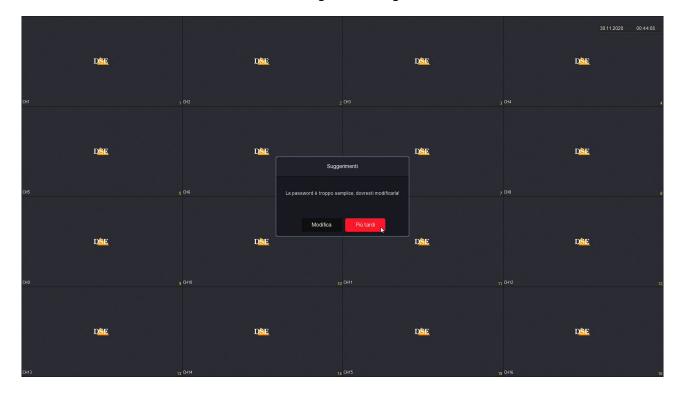
## **RKK SERIES - POE CAMERA/NVR KIT**







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



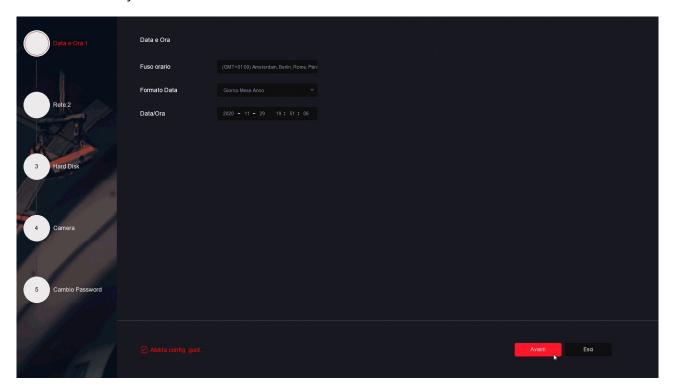
#### 2 - SET DATE AND TIME

## **RKK SERIES - POE CAMERA/NVR KIT**





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



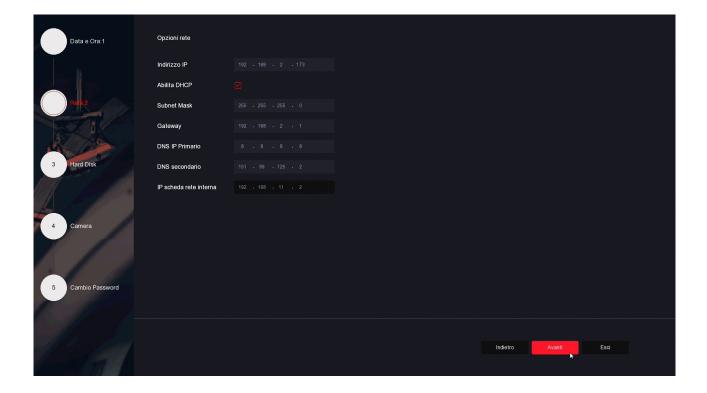
#### 3 - SET UP THE NETWORK

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 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.

## **RKK SERIES - POE CAMERA/NVR KIT**







#### 4 - FORMAT THE HARD DISK

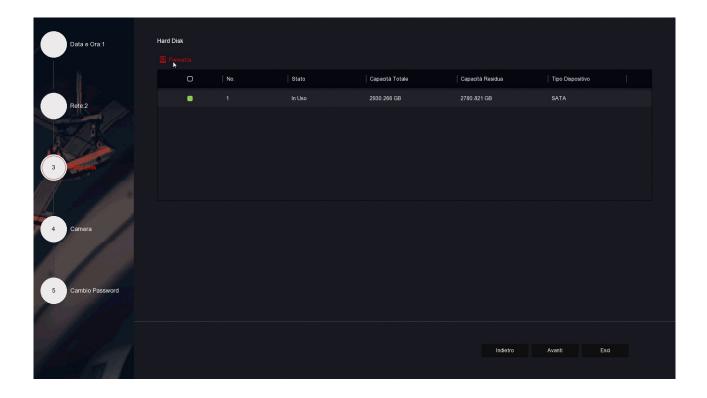
In this step you should find the hard disk that you inserted into the DVR/NVR. If you ordered the hard disk with the kit you will find the hard disk already formatted, indicated as IN USE and you can move on to the next step.

If you have inserted a new disk into the NVR, select it and click FORMAT to do so. so that the DVR/NVR can use it. If you don't find the hard disk in the list, check that the two internal cables are connected and that the DVR/NVR power supply is the correct one, possibly try replacing the hard disk because it could be faulty.

## **RKK SERIES - POE CAMERA/NVR KIT**

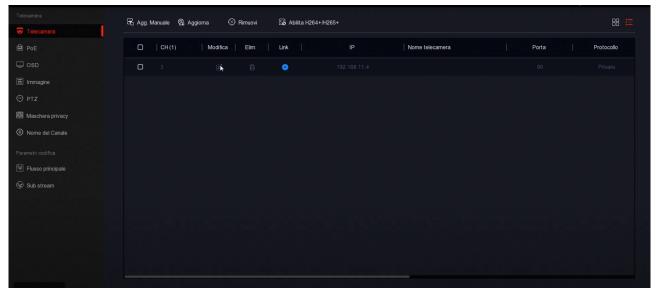
Page:15





#### 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 of our RK series cameras self-configure when connected to a port POE of one of our NVRs. Normally you should find all the connected cameras already online with the blue dot certifying the good connection.



If you don't see a camera you've connected, check the LEDs on the port you've connected it to. are on. You may have used too long or the wrong cable.

## **RKK SERIES - POE CAMERA/NVR KIT**



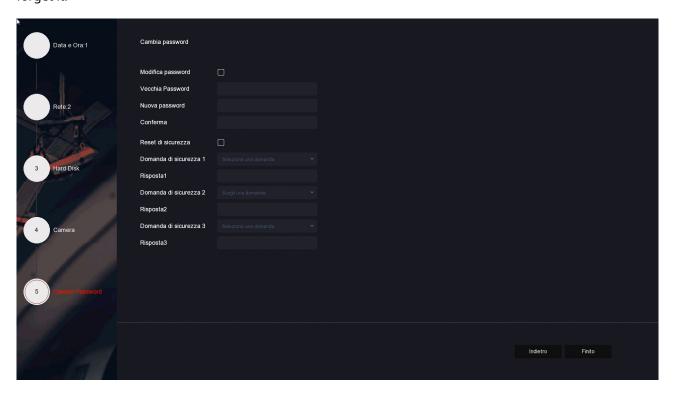


#### 6 - SET THE PASSWORD

In this final step you can optionally change the password for accessing your NVR/DVR. If you want to do this, the first thing you need to do is make sure you don't forget it, because it This is a security device and to recover a forgotten password, you will need to contact us and go through a rather laborious procedure.

Password must contain at least 8 characters with a letter and a number in between.

You also need to set the 3 answers to the security questions, before saving the new one. password, because they will allow you to easily recover your password via email, should you ever forget it.



#### FINISHED!

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

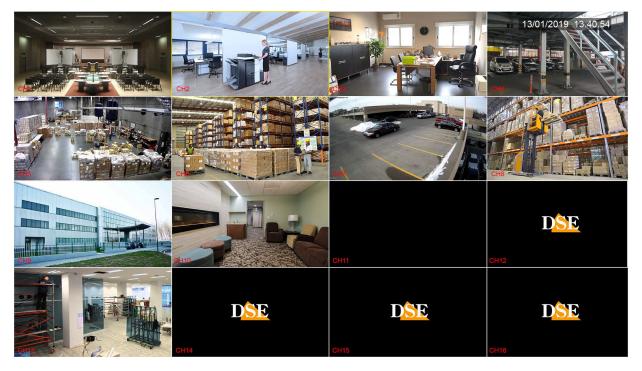
**RKK SERIES - POE CAMERA/NVR KIT** 

Page:17



# **Viewing live cameras**

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



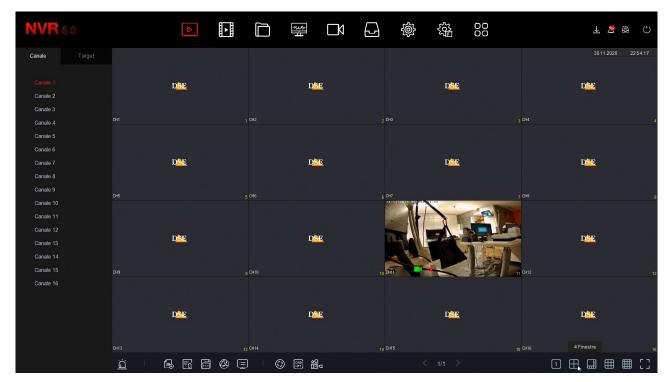
The factory display provides multi-view of all cameras on the screen. You can easily change this basic view.

CHANGE SPLIT SCREEN – 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.

## **RKK SERIES - POE CAMERA/NVR KIT**









In the general settings of the NVR you can choose a preferred subdivision to recall at startup.

In live view you can also do the following.

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

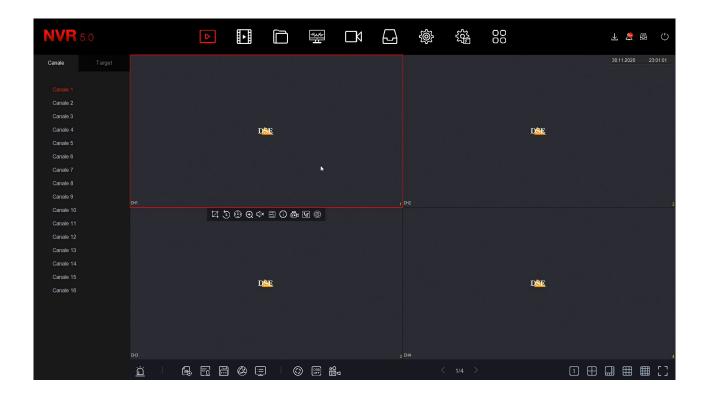
DRAG CAMERAS - If you want, you can drag a camera with the mouse to change its position on the monitor.

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

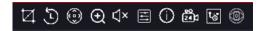
## **RKK SERIES - POE CAMERA/NVR KIT**







#### 12345678910



- 1 CAPTURE Save a photo of the image in real time
- 2 INSTANT PLAYBACK If you press this icon you will automatically play the last 5 minutes of recording. It is a very convenient function to immediately review what has just been success.
- 3 PTZ With this button you open the panel for controlling PTZ 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 part of the image and you can control the zoom by dragging the box zoom with the mouse. Click the right mouse button to return to the view normal.
- 5 AUDIO Press this icon to activate the channel audio playback and adjust the volume. To hear the audio you must have a speaker connected 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, tone, and other parameters depending on the camera.

## **RKK SERIES - POE CAMERA/NVR KIT**







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



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



Channel recording



Motion detection alarm channel

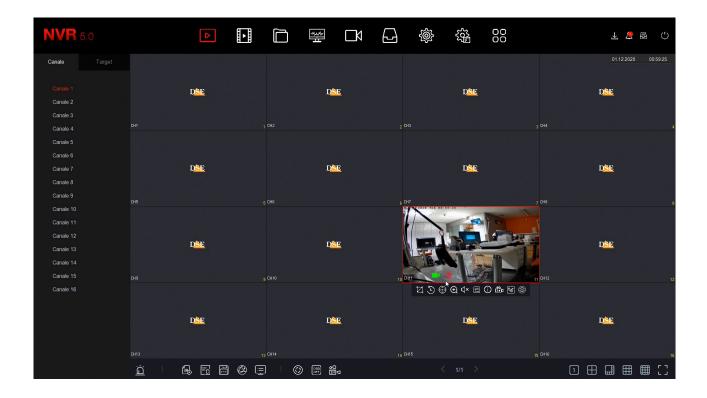


Channel in alarm human detection

## **RKK SERIES - POE CAMERA/NVR KIT**

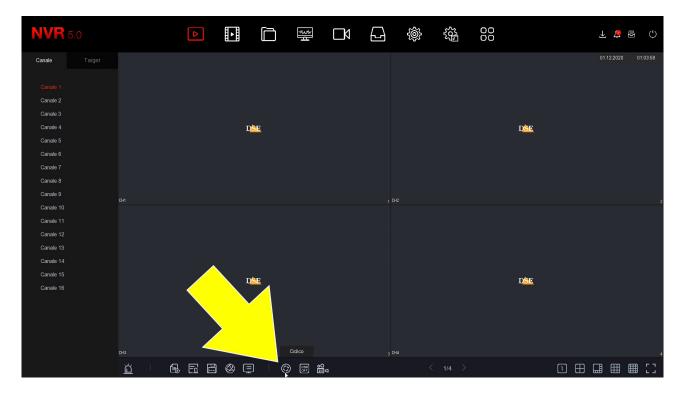






#### **CYCLIC**

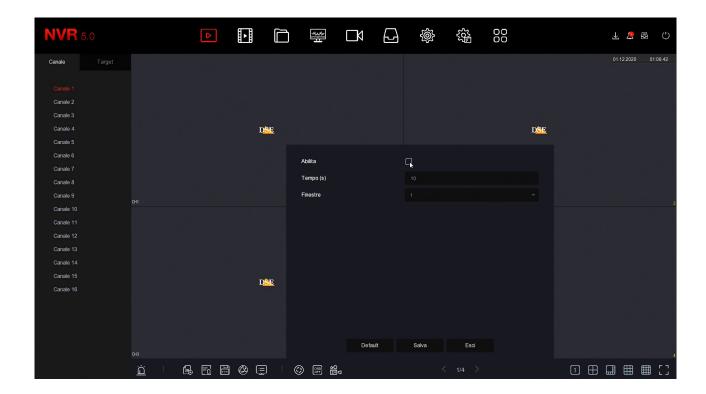
The camera cycle scan allows you to view all the cameras in sequence at once. rotation instead of the classic multi-view of all channels. If you want to use this function press the CYCLIC button in the live menu



## **RKK SERIES - POE CAMERA/NVR KIT**







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

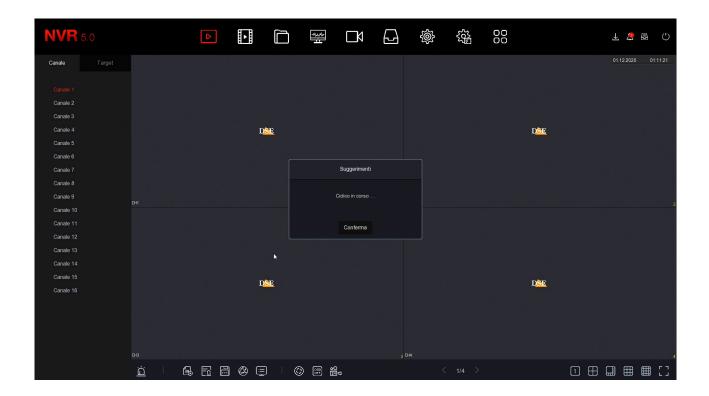
TIME - This is the length of time each window remains during the scan (seconds)
WINDOWS – In DVRs/NVRs with more than 4 channels, in addition to scanning a single camera for time, you can cycle windows with 4 or more cameras.

WARNING: During the cycle scan you cannot control the other live functions and for To regain full control of its functions you will first have to disable the cyclic. The DVR/NVR lets you warns with this message,

## **RKK SERIES - POE CAMERA/NVR KIT**







#### **OTHER LIVE CONTROLS**

At the bottom, below the live view windows, there are some buttons to get 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 channels and recording
- 3 ALARM INPUTS Shows the status of the alarm inputs
- 4 DISK Shows the status of the Hard Disk
- 5 NETWORK Shows network status with DVR/NVR network settings
- 6 INFO Show system information
- 7 CYCLIC Configure the cyclic scanning of the cameras on the screen
- 8 OSD Enable/Disable channel overlays
- 9 RECORDING Activates immediate continuous recording on all channels

#### **GENERAL BUTTONS**

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

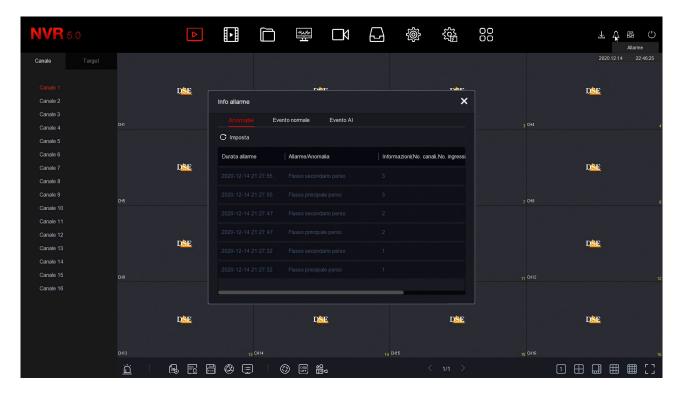
## **RKK SERIES - POE CAMERA/NVR KIT**





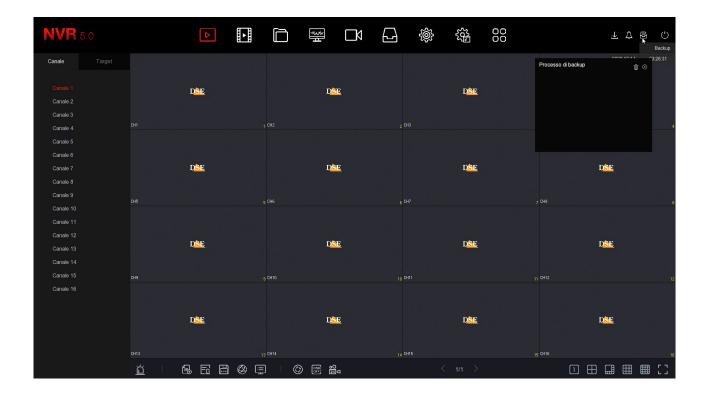


opens a popup panel with the log of the latest Alarms divided by Anomalies - Motion - AI





opens a popup panel that shows the progress of the ongoing backup



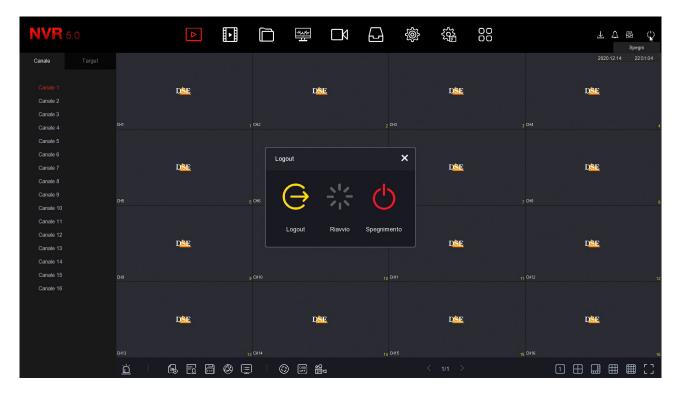
## RKK SERIES – POE CAMERA/NVR KIT







opens a popup panel where you can: Logout, Restart and Shutdown



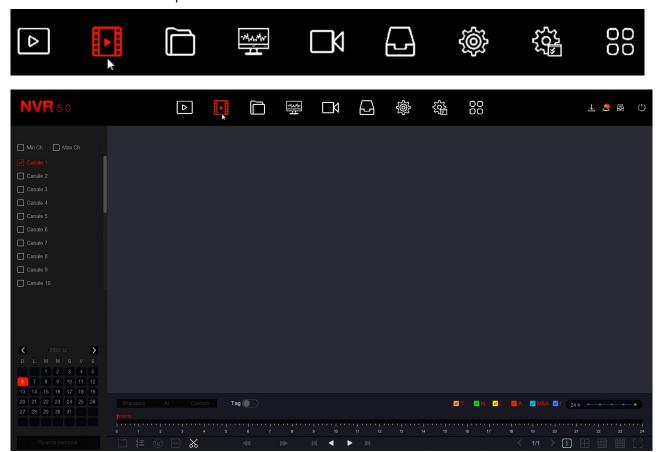


# **Review the recordings**

To review archived recordings from your NVR, do the following.

#### 1 - OPEN THE PLAYBACK WINDOW

Click the PLAY icon at the top of the menu



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

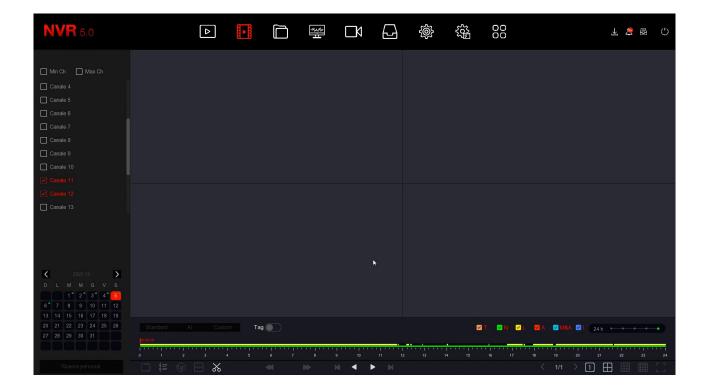
Select the day you want to review in the calendar on the left. The days that contain recordings are marked with a colored dot. Click on one of these. Above the calendar, select the channels you want to play. The channels will automatically appear recordings in the timeline below representing the 24 hours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

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

## **RKK SERIES - POE CAMERA/NVR KIT**







#### 3 - PLAY THE MOMENT YOU WANT TO WATCH AGAIN

In the time bar at the bottom you will find the 24 hours of the day. The recordings are shown with different colors depending on the type of recording. The most common are the green bar for the continuous recording and the yellow bar for recordings made with detection of the movement. If you want you can filter the types of recording by selecting the colored icons:

T (All recordings)

N - green (Continuous recording)

L - yellow (Motion recording)

A - red (Alarm input recording)

M&A – blue (Motion recording and alarm input)

I - blue (Recording from human detection).

Click anywhere on the timeline to play the images at that exact moment.

Please note that each NVR has a limit on the maximum number of playable cameras at the same time. If you select a higher number of cameras a message will appear of INSUFFICIENT RESOURCES.

#### 4 - CONTROL PLAYBACK

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

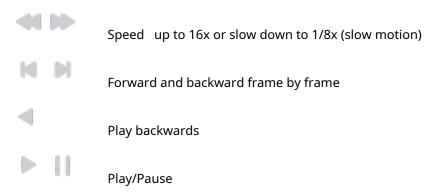


## **RKK SERIES - POE CAMERA/NVR KIT**



Page:28

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



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



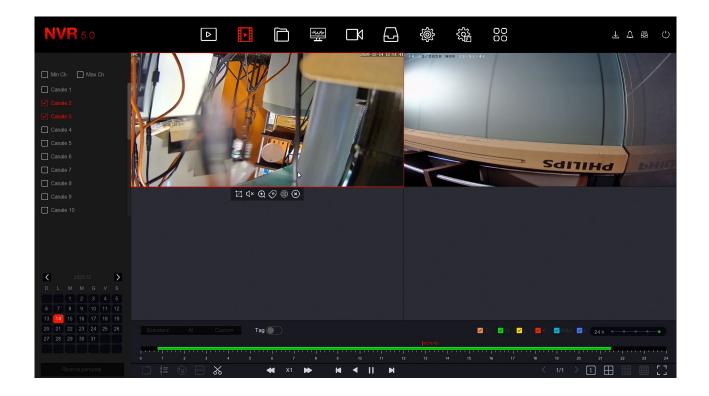
Press the button twice in succession to open and close the video clip while it is in progress. playback. Then you can save it with the SAVE CLIP button. The button with the scissors between brackets allows you to define a video clip by manually entering the start and end time.

Clicking a video box during playback opens a channel menu

## **RKK SERIES - POE CAMERA/NVR KIT**









capture photo



turn on audio



activate digital zoom



insert TAG

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



**RKK SERIES - POE CAMERA/NVR KIT** 

Page:30



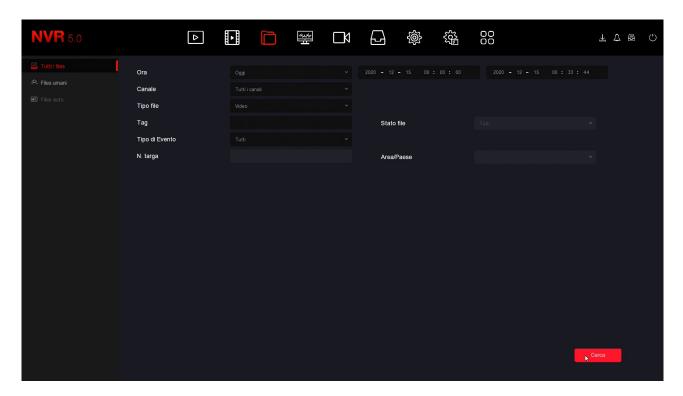
# File Search and Backup

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 storage. Run the following operations.

#### 1 - OPEN THE FILES WINDOW

Click the FILES icon at the top of the menu





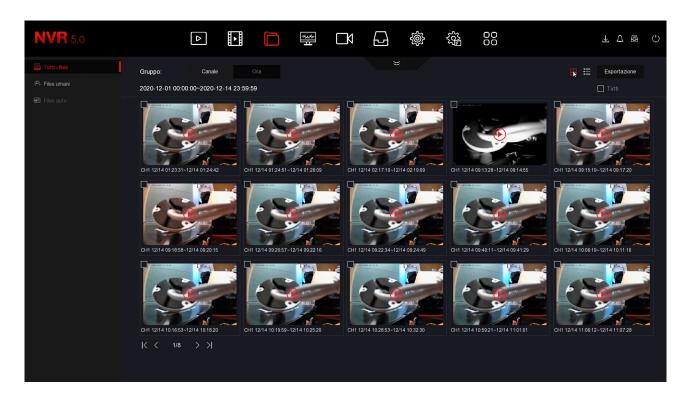
#### 2 - SEARCH FOR FILES

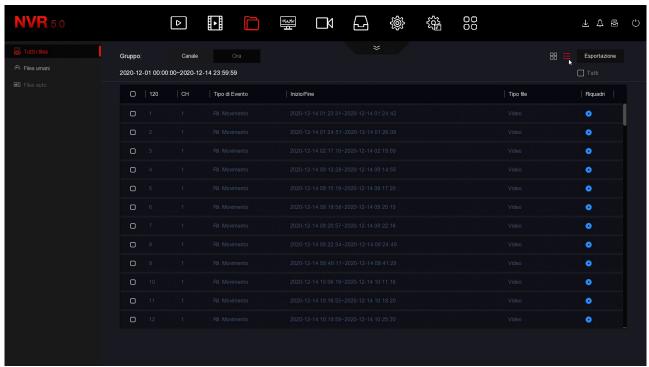
You can search by date/time, channel and event type. You have two pages of search, one for normal events such as motion detection and one specific for detections human. You can then easily review the files and export them to a USB stick with the button EXPORT

## **RKK SERIES - POE CAMERA/NVR KIT**









**RKK SERIES - POE CAMERA/NVR KIT** 

Page:32



# Connect the NVR to your network

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

**ATTENTION**. You must connect to your network or router if you want to run the remote connections illustrated in the following chapters.

**RKK SERIES - POE CAMERA/NVR KIT** 

Page:33



# Check your NVR network parameters

Your NVR configures itself to the network automatically (DHCP), so it receives the IP address directly. and network configuration from your router. You don't have to worry about entering any parameters. However, before connecting remotely with PCs and cell phones, it is a good idea 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

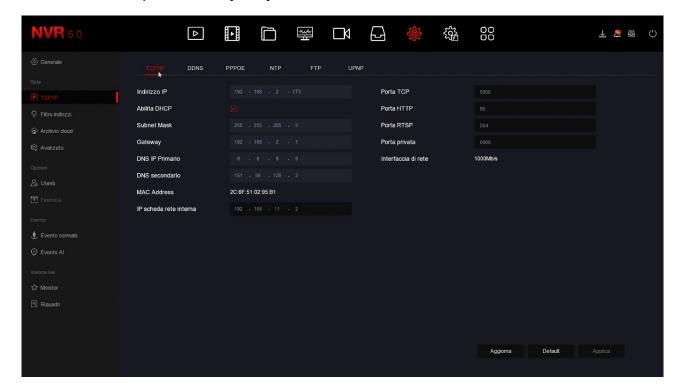
Enter the factory password:

**USER: admin** 

**PASSWORD: 12345** 

#### 2 - OPEN THE NETWORK WINDOW TO CHECK THE IP ADDRESS

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



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

## **RKK SERIES - POE CAMERA/NVR KIT**

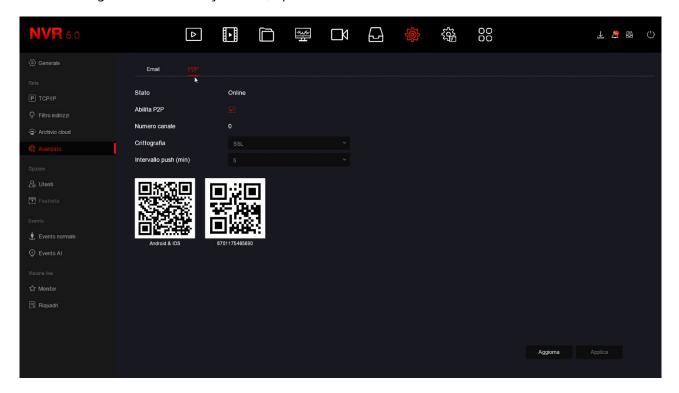




of the IP address that your NVR has assumed within the network which is the first entry at the top (in the example 192.168.2.173. This will be useful if you want to access the NVR from within your network, without going through the Internet.

#### 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 the status is ONLINE. This

It means that the NVR is communicating well via the Internet with our P2P cloud server which you will allow you to access via the Internet without configurations or static IP. If the status is not ONLINE please double check the above steps because it means your NVR cannot access the Internet network.

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

**RKK SERIES - POE CAMERA/NVR KIT** 



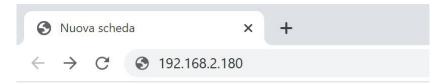


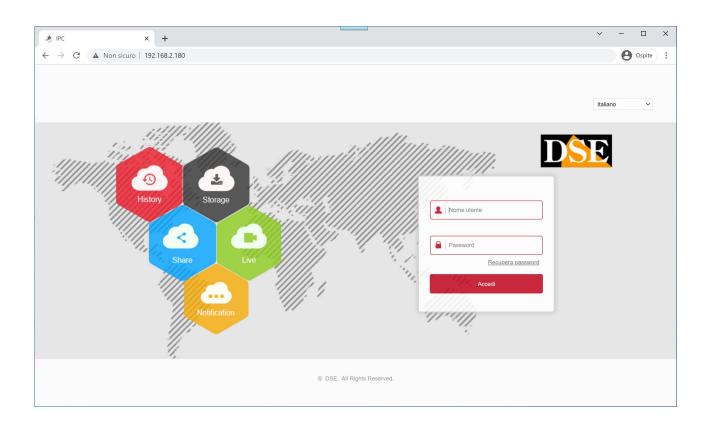
# **Browser access**

TodayOur RK DVR/NVR support all common browsers, like Google Chrome,

Firefox or Edge. Browser access only works on 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





**RKK SERIES - POE CAMERA/NVR KIT** 





# Connect with your mobile or PC via the internet

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

**RKK SERIES - POE CAMERA/NVR KIT** 

Page:37



# Add cameras to your kit

RKK POE kits have a maximum capacity of 4 or 8 POE cameras, depending on the model.

If you 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 in a second moment by purchasing only the additional cameras.

You can purchase additional cameras for the kits, or any of our RK series IP cameras.

All of these cameras self-configure when connected.

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