

RK series IP cameras and DVR/ NVR



Remote access manual with APP IoVedo.RK

How to create an account

How to connect to the Internet from a mobile phone/tablet



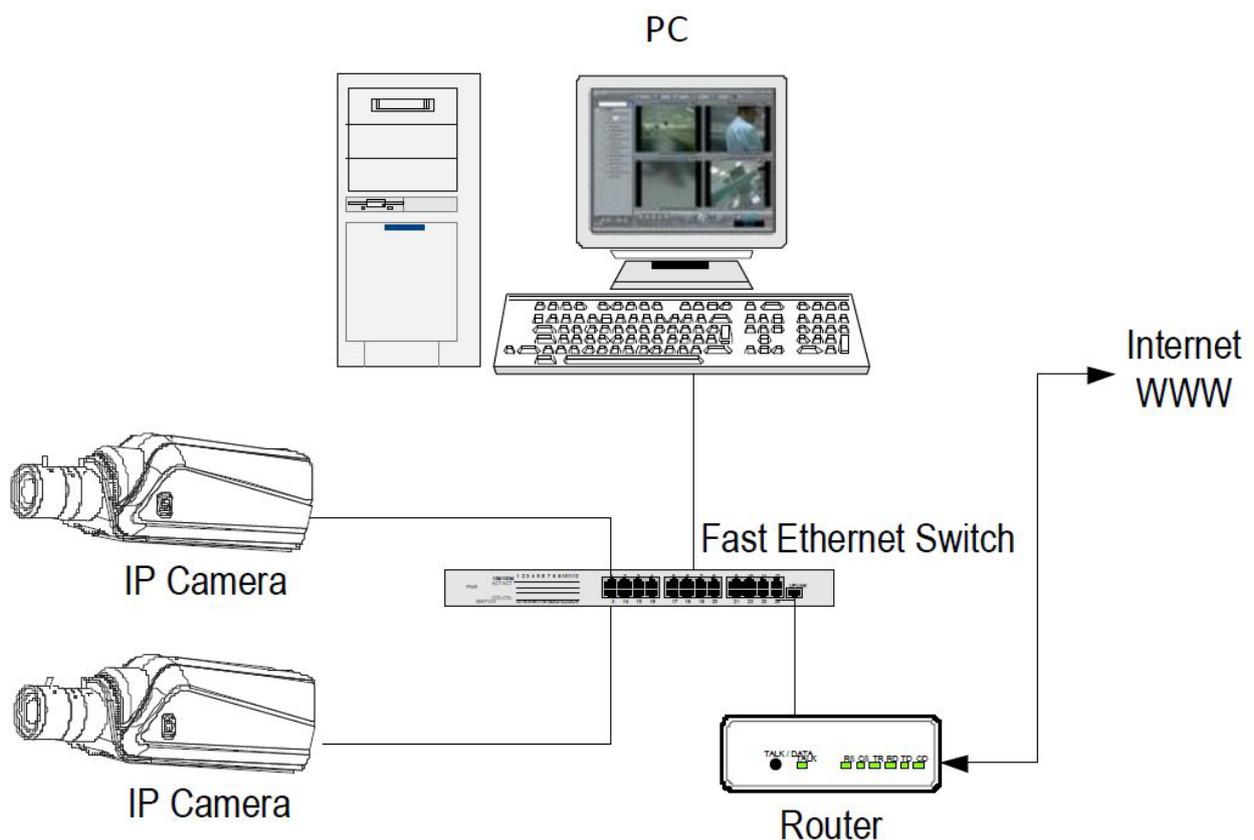
Contents of the manual

RK series IP cameras, NVR/DVRs and DSE kits allow easy web access using the free P2P cloud server and the DSE IoVedo.RK APP. Thanks to the cloud server it is not no static IP is required, nor router port configuration to connect via web. In this manual explains how to use the IoVedo.RK APP

Access directly from the web, without cloud servers

Before analyzing the functioning of the P2P cloud server, it is worth giving some information on how you can connect to a device through the Internet without using any server, but by directly calling your IP address on the Internet. This is a method used today rarely because it is much more complex than the connection you can make using of our P2P cloud server.

An IP camera system and possibly NVR is usually placed within a LAN network connected to the Internet via a router as in the following diagram



If you use a PC inside the network, the addresses of the cameras (usually of the type 192.168.XXX.XXX) are directly reachable. If you want to establish the connection instead through the Internet, using a PC located elsewhere, the internal addresses of your network are not will be more directly reachable, as the only IP address visible from the web will be that that your router will have on its WAN side, that is, towards the outside world of the Internet. This address is assigned by the provider (ISP).



If you want to connect from the Internet directly to your IP address, it is advisable to obtain it from the provider a fixed address that remains unchanged at each connection. If this is not possible, you need to use DDNS services.

To find out the Internet IP address that is assigned to your router you can use an online service as www.my-ip.it

However, it is not sufficient to type the IP address of the WAN side router into the browser to be able to connect to your device. The router actually acts as a filter and drops any external calls which has not previously been answered by a call from within the network. In order to connect with success it is therefore necessary to insert port direction instructions into the router which depending on the router manufacturers are called NAT, PORT FORWARDING, PORT MAPPING etc.

In practice you need to access the router configuration and enter the instructions so that This directs incoming calls from outside to the device's internal IP address.

The addressing is performed only for the communication ports that are used by the device and that you will find in the network configuration. See the equipment manual for more information.

You can consult your router's manual for instructions on how to map the doors.

As you may have understood, accessing the web by pointing directly to your IP address involves different complexities because it requires a static IP address, or a DDNS, and also the configuration appropriate router.

You can avoid these problems by using the **P2P cloud server included with our APP ISee.RK** as described below.

Web access with P2P cloud server

Direct web access, described in the previous chapter, can present several complexities for the end user. First you need to get a static IP address from your Internet provider, which not always possible and sometimes expensive. Secondly, it is necessary to intervene in the configuration of the router which can be complicated and sometimes even inaccessible.

Luckily the RK series device you purchased has a free P2P cloud server online that allows you to easily access your device through the web, without the need to have a static IP and without configuring the router.

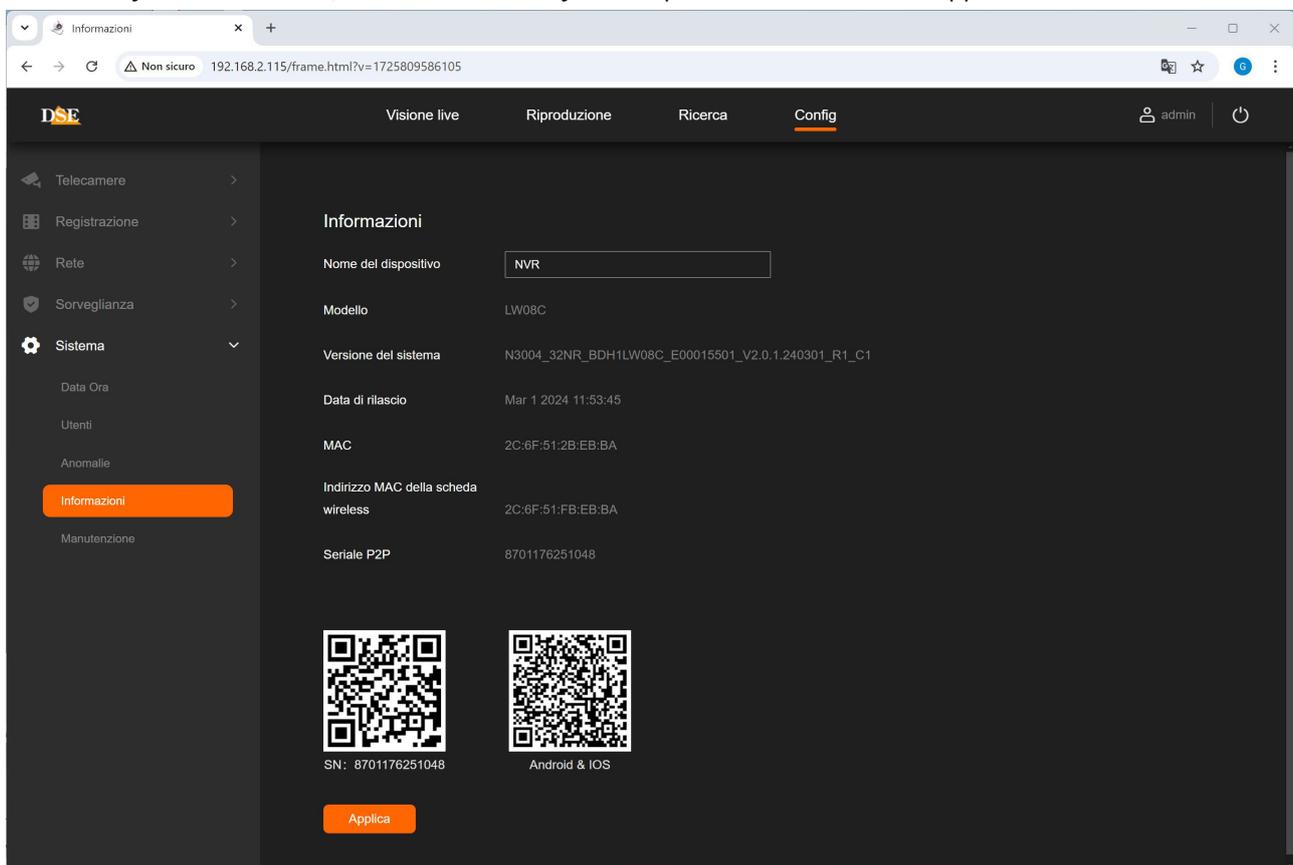
The cloud also allows you to connect to devices connected to the Internet with a 4G router, which impossible in live mode.

In the following chapters we will explain how to use the cloud server and connect via the Internet with the mobile phone.

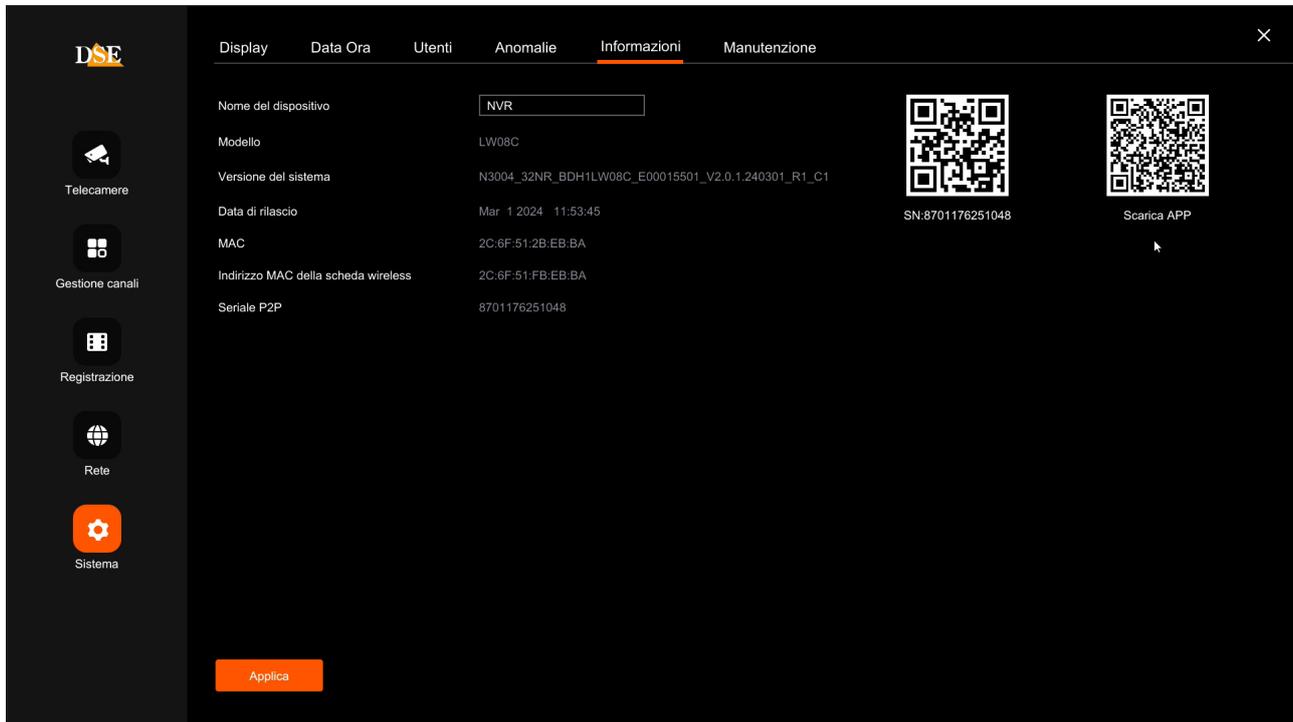
Find out if your camera or NVR supports IoVedo.RK

Today all our devices whose acronym begins with RK, both cameras and DVR/NVR, are controlled with our IoVedo.RK app. Only some cameras and NVR/DVR RK series, of old generation, used the FREEIP app for which there is a specific manual.

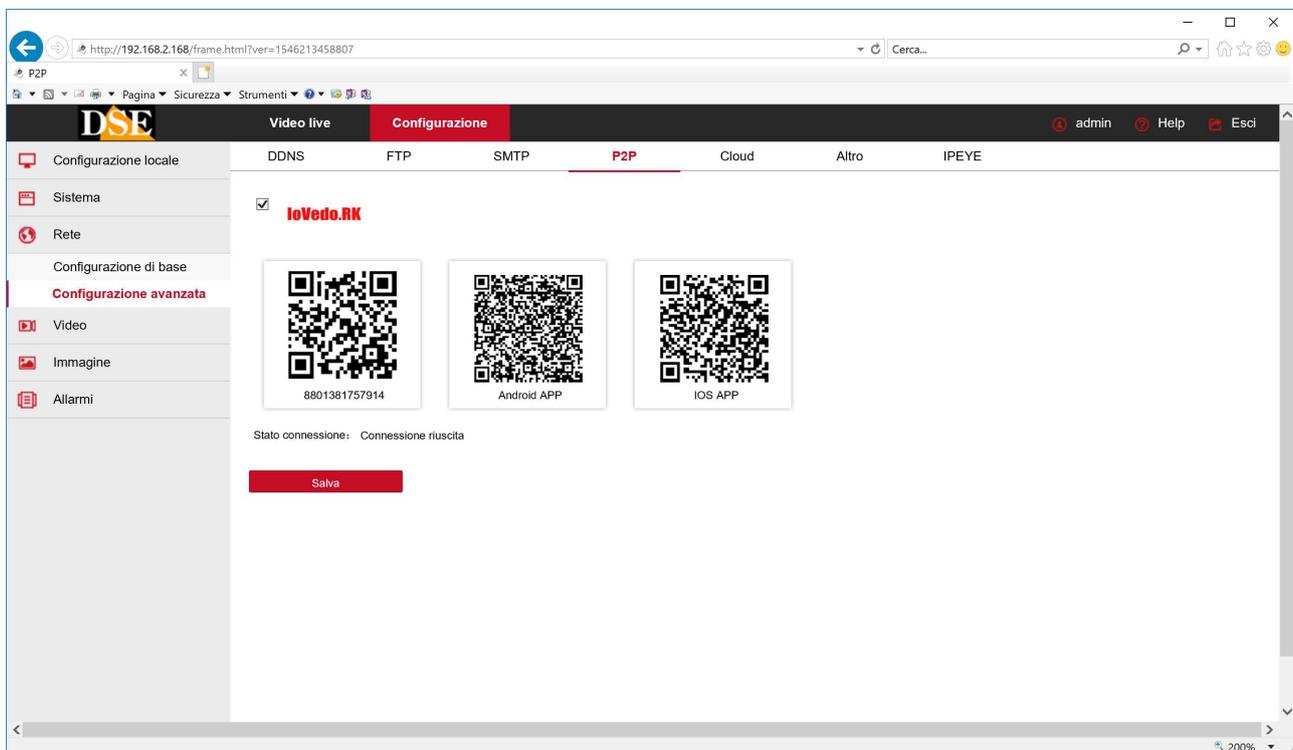
If you have an older device you can check if it supports IoVedo.RK before proceeding further. manual. To verify this you can connect from a computer with a browser and check the information P2P where you will find the QR code to scan with your cell phone to download the application.



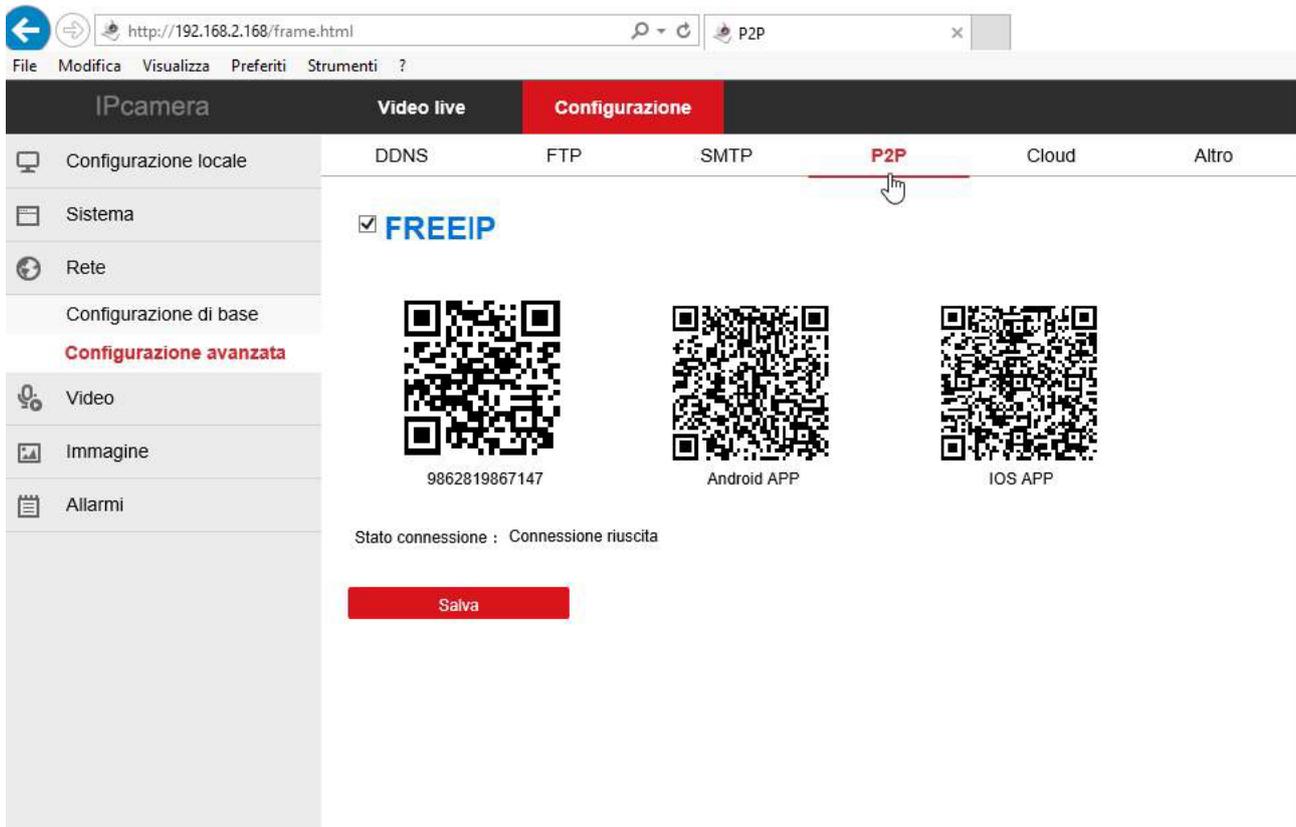
If your device is a DVR/NVR you can also check the IoVedo.RK app on the monitor



Some product versions also report the name of the app, in addition to the qrcode, like this one equipment for example.



This instead is an old device from 2015 that used FreeIP. If your equipment uses FreeIP do not continue in this manual and download the app manual FreeIP.



Find the device serial number

Each user of a RK series camera or NVR/DVR purchases the product together with the possibility of using a free online CLOUD service to make the connection via Internet made easy.

Thanks to this service you can connect via web from your mobile phone without static IP, without DDNS services and without configuring the router.

To use the cloud server you first need to know the serial number of your device.

WHERE IS THE DEVICE SERIAL NUMBER AND CAPTCHA CODE FOUND?

The RK series device (camera or NVR) you purchased is already registered in the cloud server and is identified by a unique serial number (S/N). The serial number is located on the label located on the camera or under the NVR and consists of 13 digits.

Together with the S/N you will also find the security Captcha code that you will need to register the equipment on the server.





Remember your device password

In order to use a camera or DVR/NVR locally, you need to know the username and the password to access it, which you will type in the browser, when you access from a computer, or on the monitor in the case of NVR and DVR. These credentials will also be used to upload your device in the IoVedo.RK app, in order to prevent unauthorized access.

The factory credentials of our RK products are:

CAMERAS

User**admin**PW**admin**

NVR/DVR/KIT

User**admin**PW**12345**

Please note that these are the factory settings of the new product and after changing them you will have to use the credentials you have customized.

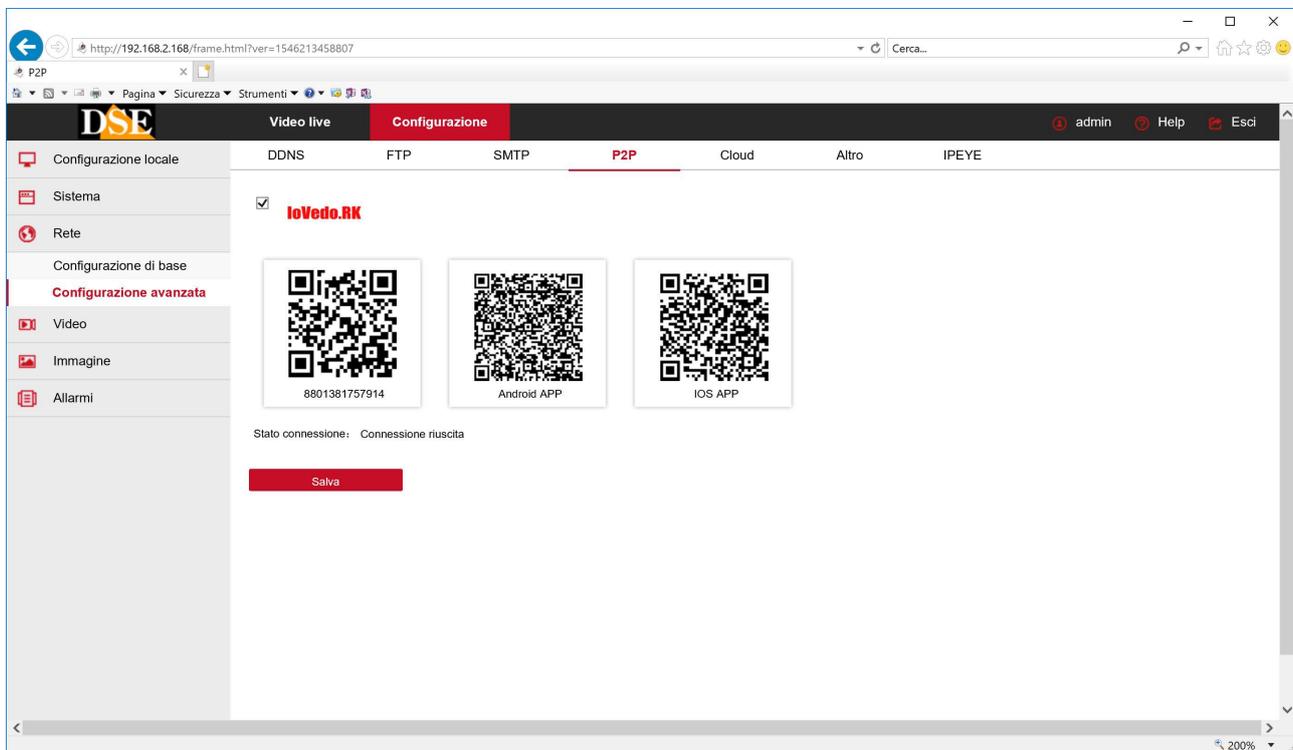
You should set your personal password on your device before loading it into the app.

Check your P2P cloud connection.

Many devices report good connection to P2P server within the configuration.

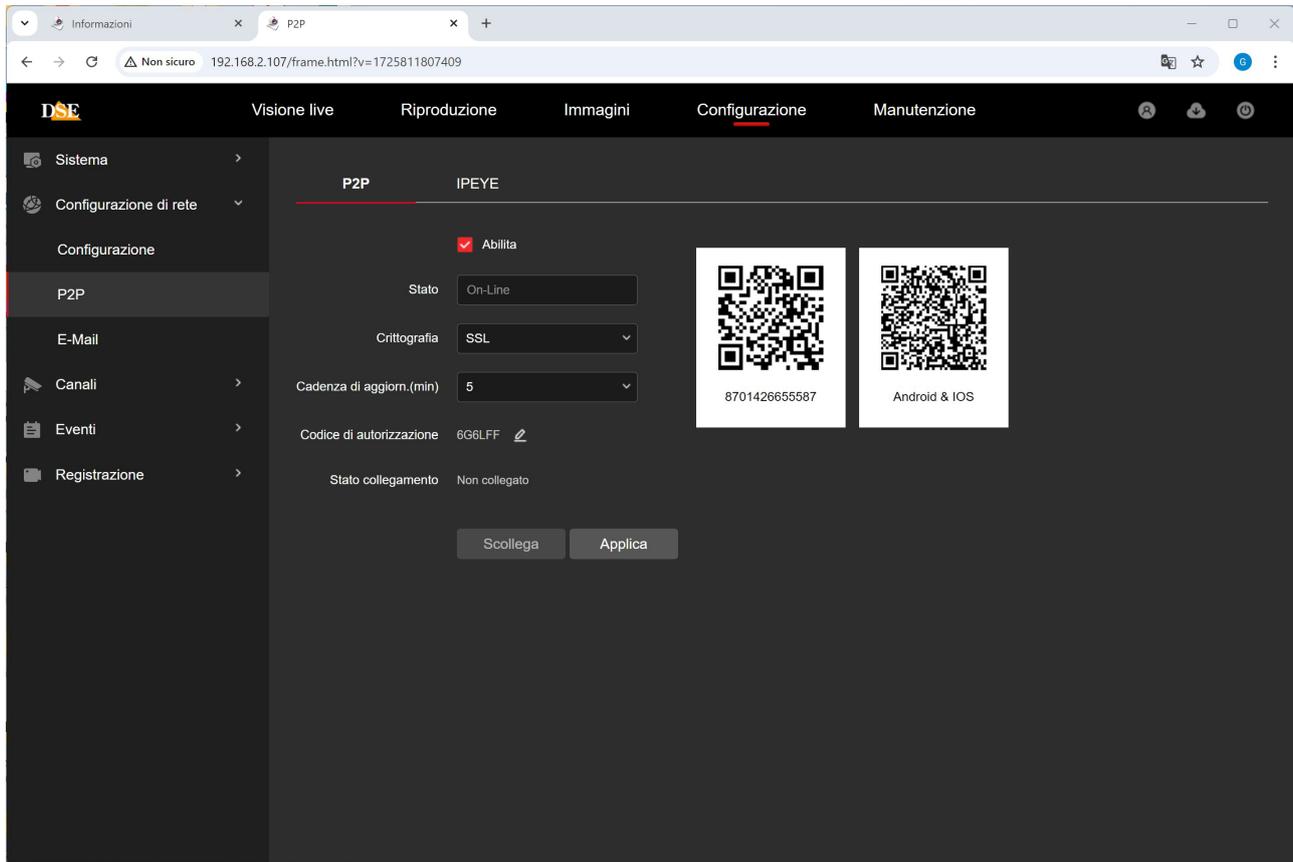
Before using the app, you can check whether your device is well connected to the P2P cloud server.

You can find the indication in the P2P window, among the network settings. In the device below read Connection Successful, means that your device has successfully connected to our server through Internet and can be used with the app.



The most recent devices, with graphical interface 6.0, indicate both the connection status to the server P2P, both the association of the device to an app user.

The following, for example, is one of our NVR 6.0 where you can see that the P2P connection to the server is established (Status: online) but the device has not yet been linked to any app user (Connection Status: Not connected)



If your device reports that you have no connection, do not proceed with trying to use the app, it will never work. You need to check the device's network connection and its network settings as it is unable to communicate properly via the Internet.

Create an account in IoVedo.RK and upload the device.

Although you can also use the IoVedo.RK app on your local internal network, by adding the devices with their LAN network IP address, it is convenient to create an account and upload the devices with their serial number, so you can reach them via the Internet when you are away.

By registering a cloud account you can use many advanced features and easily manage many devices.

First download the app: **ISee.RK**



In the iOS or Android version, depending on your mobile phone.

It is a completely free app, without advertising, and supports all our devices whose acronym starts with RK

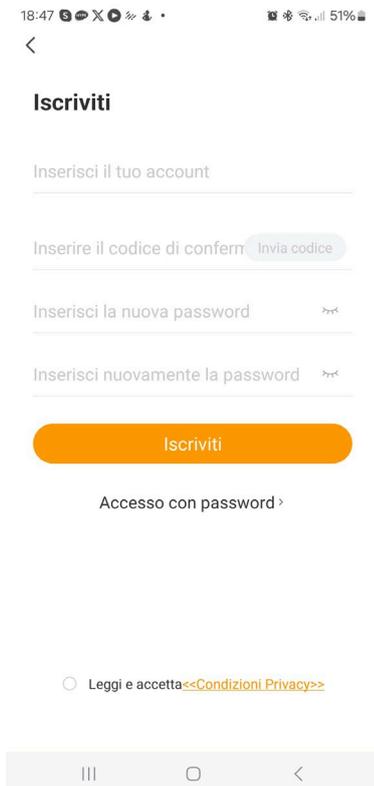
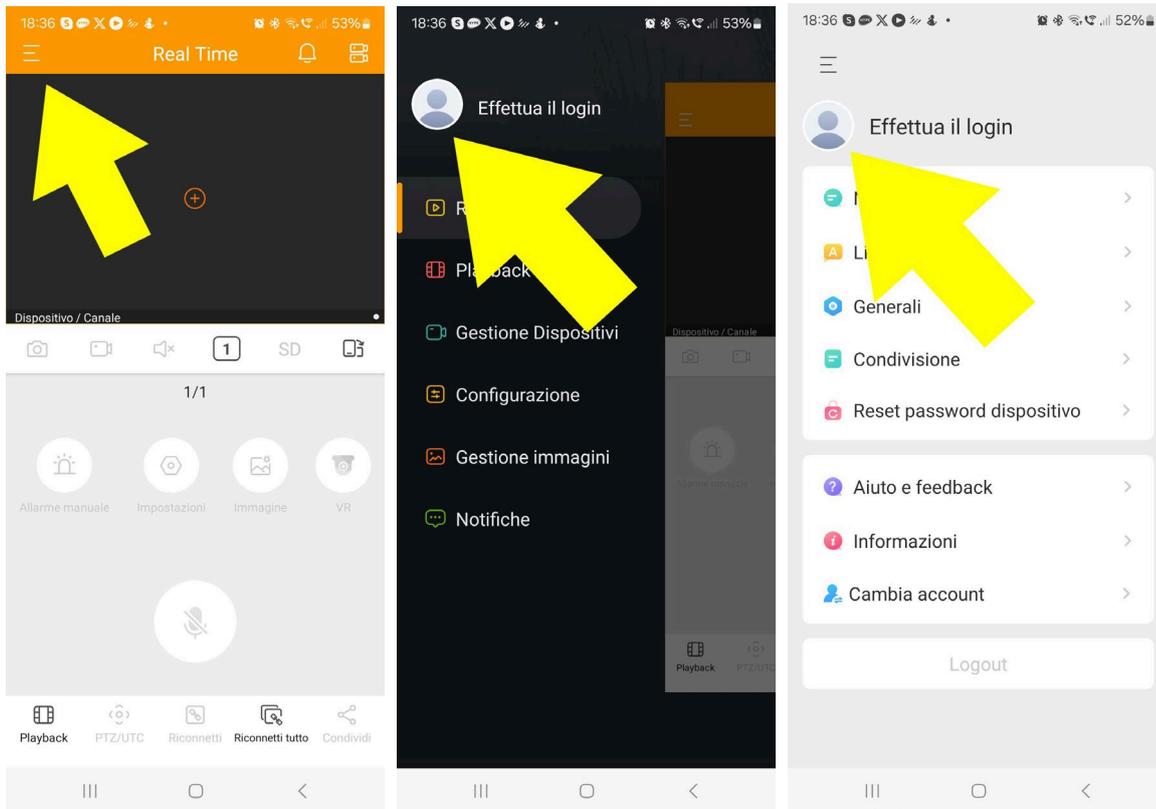
REGISTER TO THE CLOUD WITH YOUR MOBILE

To use IoVedo.RK you must register. If you do not register you will not be able to save your devices. You can register directly from the APP, with your mobile phone as shown below.

By registering with the app, you create your own personal space on the cloud server where you can upload all your devices you own and will purchase in the future.

To register you must be able to read your email because you will be sent a code he confirms.

To register, press the following icons





Now follow the steps below to register:

- 1 Enter your valid email address in the first line (Account)
- 2 Press the SEND CODE button to send the confirmation code to your email
- 3 Check your email and enter the code sent to you in the REQUEST CODE box. CONFIRM. You have 60 seconds to do this.
- 4 Choose a password and type it twice. The password must have at least 8 characters and contain at least one uppercase letter, one lowercase letter and one number
- 5 Press SIGN UP to complete. You can now log in with your credentials

NEVER CREATE MORE THAN ONE ACCOUNT

ATTENTION – If you have multiple RK products, you do not need to create more than one account. You can add more devices to your account.

If you have multiple mobile devices, such as a phone and a tablet, you don't need to create more than one account, but just install the app on each device and log in with the same credentials from each device.

Even if you want to grant access to your device to other people, such as your family members, you do not need to register a new account for each. Just download the app on each mobile phone and log in with the same credentials as yours.

Finally, even if you change your phone you don't have to register a new account, but just install the app and log in with your usual credentials.

In practice, whatever happens, you never have to create a new account, but always use the one you registered when you first logged in. If you forgot your password, you can recover it.

WHAT DEVICES CAN YOU UPLOAD TO THE CLOUD?

All our RK series IP DVR and NVR cameras have a code to be able to be uploaded to your cloud account, but it is best to only upload devices that have the most utility.

If you have multiple IP cameras and don't have an NVR, you can upload each individual one to the cloud camera. If you have created a system with cameras and video recorder, it is better for you **record only the video recorder in the cloud**, with which you will control all the cameras together in a practical way. If you have purchased a RKK Series wifi or POE kit you can only register the NVR as cameras connected to the NVR's internal network cannot access the Internet independently.

ATTENTION-**A device can only be loaded to one account**, for reasons of security. If other people need access to your device, they can simply use your password access on their mobile phone. If for some reason you need to share a device between multiple accounts

different, a sharing procedure is available.

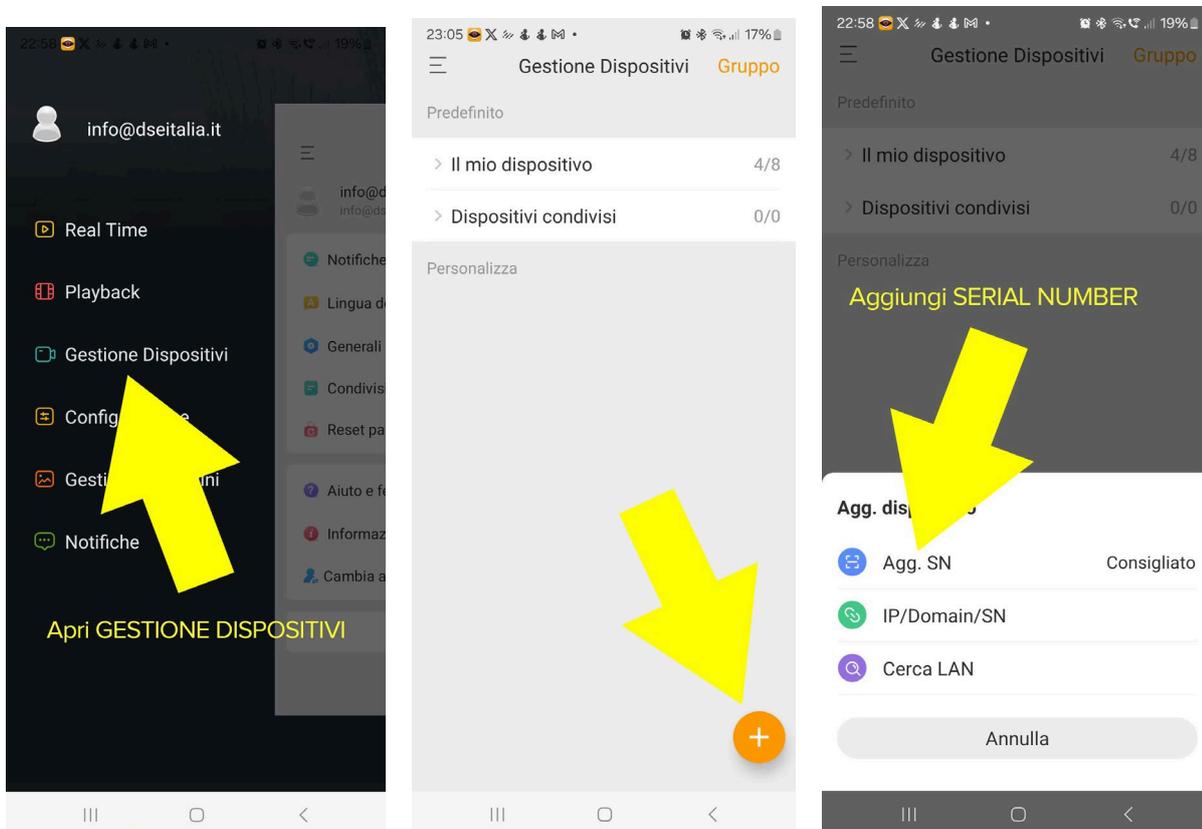
If you have uploaded a device to your account and want to upload it to a different account you must delete it from the first account in Device Manager.

CHARGE YOUR DEVICES BY SCANNING THE QR CODE

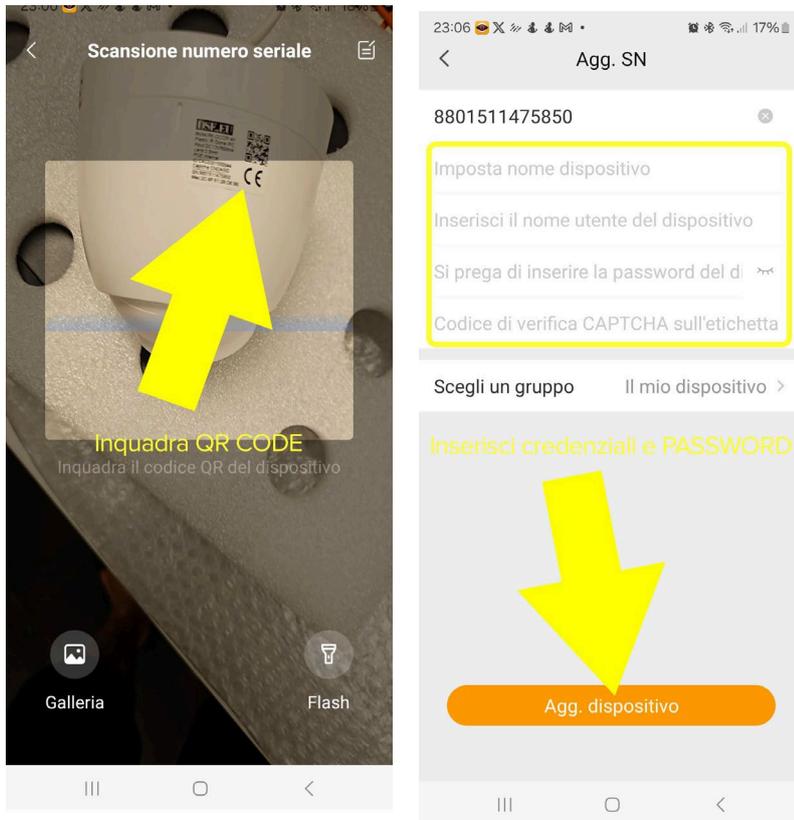
Now that you have registered you can access your new personal area with your credentials.

First thing you need to do is charge your devices, cameras or NVR/DVR.

Follow the steps below to upload your device to the cloud with your mobile phone



There are several ways to load a new device. The most recommended is serial scanning. Proceed as follows, tapping the Add SN button.



When you touch the ADD SN button you can scan the QR code of the equipment you find on the product label, on the packaging and also in the device configuration, inside the P2P section.

The QR code contains your device's serial number, a 13-digit number. Alternatively, instead of scan the QR code, you can tap the icon, top right, and enter the serial number manually. If you have photographed the qr code, you can also search it in the gallery.

On the next page you will need to enter your device data, which is as follows

SERIAL - normally the first field, containing the 13-digit serial number of the device, will be already filled in by scanning the QR code.

NAME - Enter a name of your choice to assign to the device, for example HOME NVR

USERNAME - This is the username to access the device (default admin)

PASSWORD - This is the password to access the device (default admin for cameras and 12345 for DVR/NVR).

CAPTCHA - This is the 6-character verification code found on the product label, near the QR code code.



GROUP – If you have to manage a few devices you can use the factory group. If you have many You can instead divide devices into different groups, to make them easier to manage.

Finally press ADD DEVICE to upload the device to your account. Remember that when press SEND, the app searches for the device in the network, through the Internet, and therefore it must be online to complete the registration. Otherwise you will encounter an error.

CHARGE YOUR DEVICES IN OTHER WAYS

There are also other ways, besides the Serial Number (SN), to load a device into your IoVedo account.



IP/DOMAIN/DDNS–This mode can be useful if you want to connect to the device within the local network, by directly typing its LAN IP address. You can also enter the IP of your router, Internet side, or a DDNS domain to connect directly via the Internet, without using the cloud server. Remember that to use this type of web connection you need also map router ports.

LAN SEARCHallows you to search for compatible cameras connected to your network. This LAN search is only for local access as**It doesn't allow you to save the device in the cloud**and access via the Internet. You can use this online search option to a quick check of the equipment locally, without tying it to any account.

Live viewing

Once you have loaded your device, camera or NVR, into the app, you can connect from mobile phone through the Internet. The IoVedo.RK APP can display up to 16 cameras simultaneously on the screen.

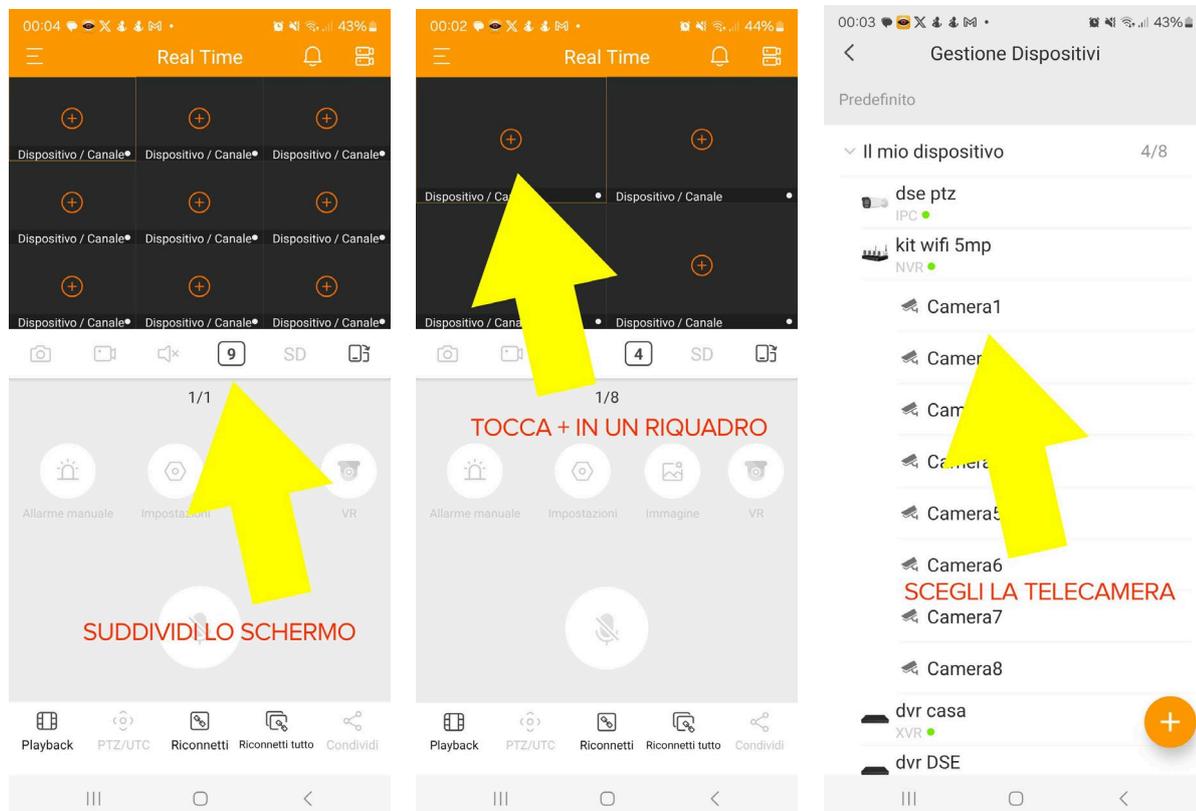
The amount of cameras you can see on the screen smoothly depends strictly on from the bandwidth you have available, both on your mobile connection and in upload on access to Device Internet.

The first thing to do is to start the live view of the cameras. There is a selection method single and a multiple selection method.

START LIVE VIEWING - SINGLE SELECTION

The single method is good when you want to view a few specific cameras.

Split the screen into 1,4,9, or 16 quadrants, tap the + sign in the center of a box, and then select the camera you want to appear in that box. You can repeat the operation for the other windows.





START LIVE VIEWING - MULTIPLE SELECTION

Multi-select is great for starting to view all cameras with just one selection.

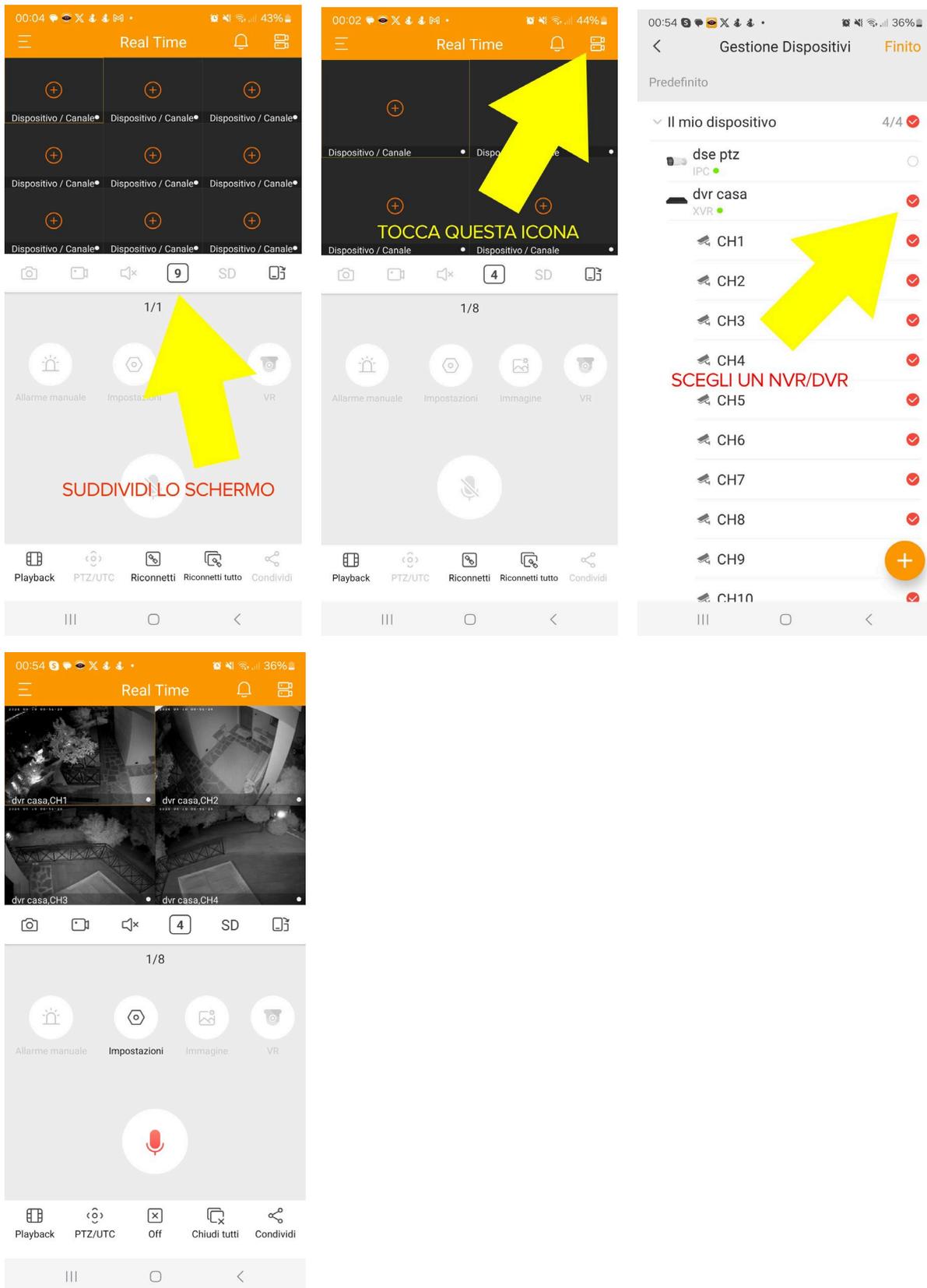
Split the screen into 1,4,9, or 16 quadrants, tap the icon with the two cameras at the top right and choose an entire NVR or DVR. You will automatically select all the cameras managed by the device. Then tap FINISHED and you will start live viewing of all cameras at the same time selected. If you select more cameras than your screen split contains, you can scroll through the various pages by dragging the screen with your finger as if you were flipping through the pages.

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START LIVE VIEWING - AUTOMATIC RECOVERY

Every time you launch the app, the last live viewing selection is automatically recalled. you had set. For this you will not have to select the cameras every time. If you want to reset the live view you can stop all the ongoing views with the CLOSE button EVERYONE.

CONTROLS IN LIVE VIEW

During live viewing you can change the screen split at any time. You can also bring a single camera to full screen with a double tap. You can browse the view pages by dragging the screen to the left with the classic flick gesture. With the zoom gesture you can digitally zoom in on the view and drag magnification in all directions.

In live view you can use the buttons on the command bar, below the viewing windows, to following functions.



1 - PHOTO - Take a live photo of the selected camera you have on your screen at that moment. The icon to review the photo you took already appears in the space below the live images. For review photos later open the left menu and choose IMAGE MANAGEMENT / IMAGES

2 - VIDEO - Records live video from the selected camera. A red dot appears on the camera to indicate recording in progress. The icon to review the recorded video appears already in the space below the live images. To review the recorded video at a later time, open the left menu and choose IMAGE / VIDEO MANAGEMENT

3 - AUDIO - Enables audio playback, if the camera has it.

4 - SPLIT SCREEN - You can split the screen from 1 up to 16 panes and bring the full screen a camera with a double tap. Don't try to open too many channels at once if your connection does not have adequate bandwidth available.

5 - SD HD - You can switch between viewing the SD substream (lighter stream) and mainstream HD (higher resolution stream). If you choose HD the app will show you the main stream of the device, high resolution which requires more bandwidth. If you choose SD instead, the secondary, low-resolution streaming, better suited for web viewing.

6 - ROTATE SCREEN - You can rotate the screen horizontally to maximize the size of the images.

At the bottom of the screen there are other controls



- 1 - Playback - Opens the playback page to review the footage recorded in the device
- 2 - PTZ/UTC - Opens the panel to control the movements of the motorized cameras or the menu UTC to control the analog cameras' minus. This button is only active on these types of cameras.



- 3 - OFF - Terminates/restores connection with the selected camera
 - 4 - CLOSE ALL - Breaks the connection of all windows
 - 5 - SHARE - Use this command to share the device with another account
- ISee.RK

Live remote controls

In live view, in the center of the screen, there are buttons that allow remote controls of the device.

Some of these buttons may not be accessible, depending on the type of device connected and how it is connected to the network.



- 1 - MANUAL ALARM – This button allows you to manually activate the devices on-board camera deterrents such as a flash, if the camera is equipped with one.
- 2 – SETTINGS – Opens the remote camera settings, which are described in the chapter on settings.
- 3 – IMAGE – Allows you to quickly change Brightness, Saturation, Contrast and



Sharpness in live viewing.

4 - AUDIO - Press the microphone to speak live through the camera speaker, if this one is equipped with it.

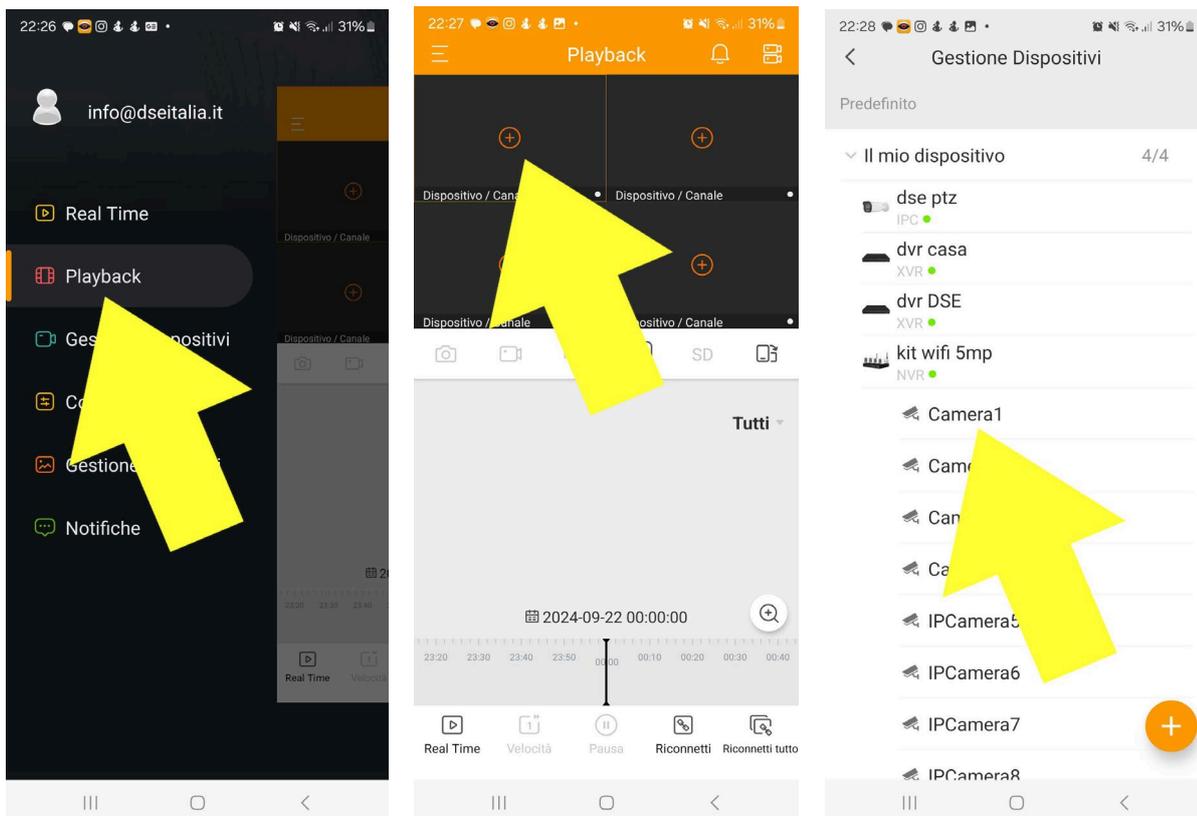
Note - The VR button is not currently used

Playback

If your device has storage to record to, such as an NVR or a IP camera with built-in SD card, you can playback the recordings remotely using the PLAYBACK tab. The number of cameras you can play at the same time It depends on the connected device.
As with live viewing, you can launch playback with single or multiple selections.

START PLAYBACK - SINGLE SELECTION

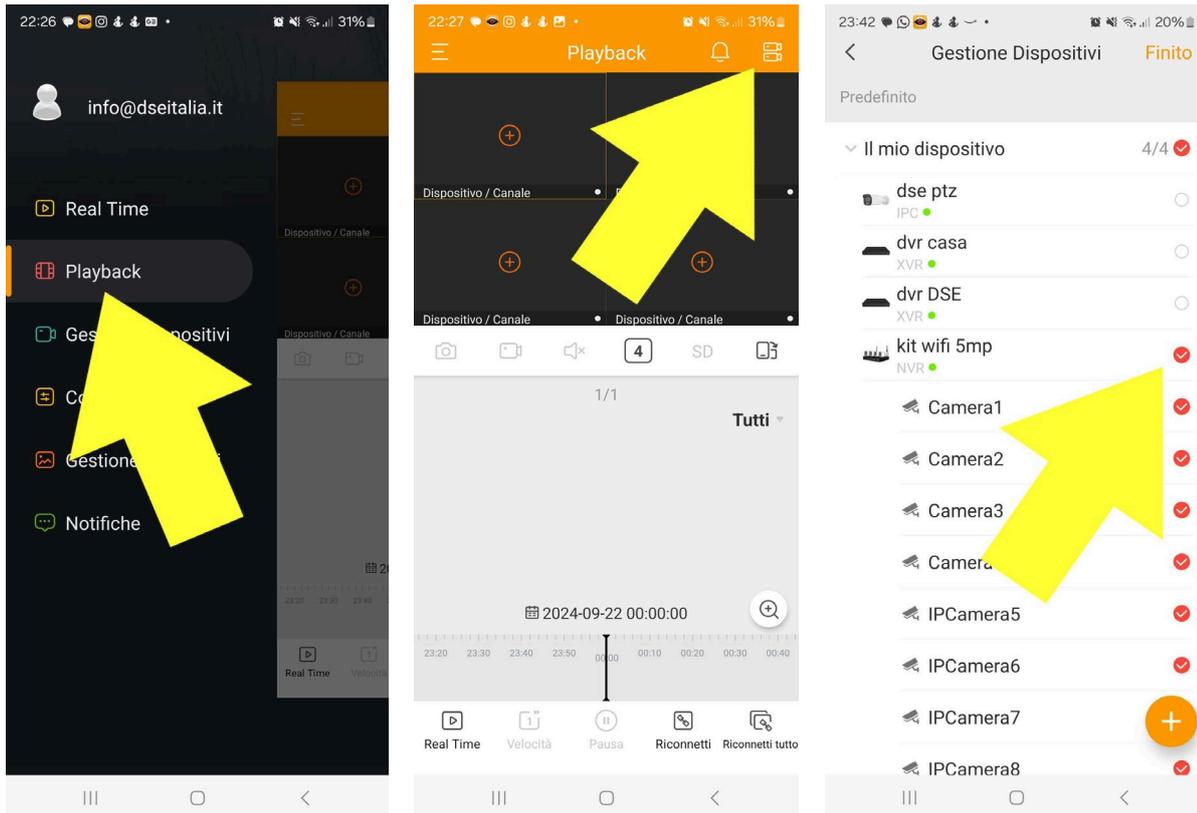
The single method is well suited when you want to view playback of a specific camera. Split the screen into 1 or 4 quadrants, tap the + sign in the center of a box, and then select the camera you want to appear in that box. You can repeat the operation for the other windows.



START PLAYBACK - MULTIPLE SELECTION

Multi-select is great for starting playback of all cameras with one click. selection.

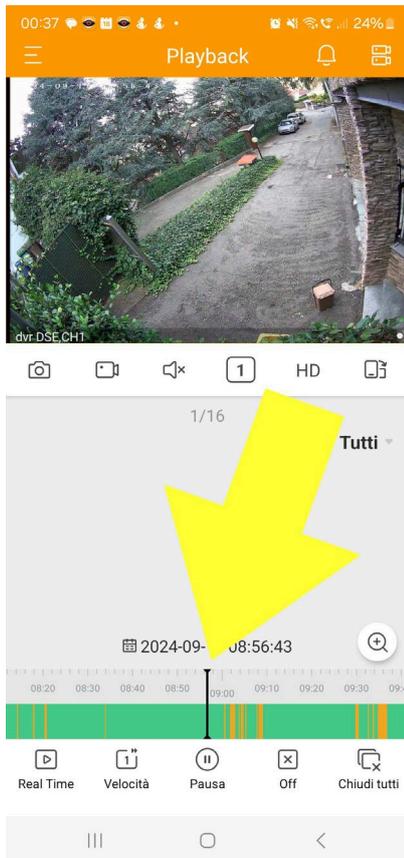
Split the screen into 1 or 4 quadrants, tap the icon with the two cameras at the top right and choose an entire NVR or DVR. It will automatically select all the cameras managed by the device. Then tap FINISHED and you will start playback of all cameras simultaneously selected. If you select more cameras than your screen split contains, you can scroll through the various pages by dragging the screen with your finger as if you were flipping through the pages.



TIMELINE CONTROL

Playback is controlled by selecting a camera frame and moving the timeline in bottom of the screen showing the recording present in the device's memory based on to the time slot.

Above the timeline is the calendar date that you can change as you wish to review the previous days.



ATTENTION

If in the playback timeline you only see the period from 00 to 1 am, why not?

You have correctly set Daylight Saving Time (DST) on the remote device.

The timeline shows the different types of recordings stored in the remote device's memory with different colors. By default, all recording types are displayed. However, it is

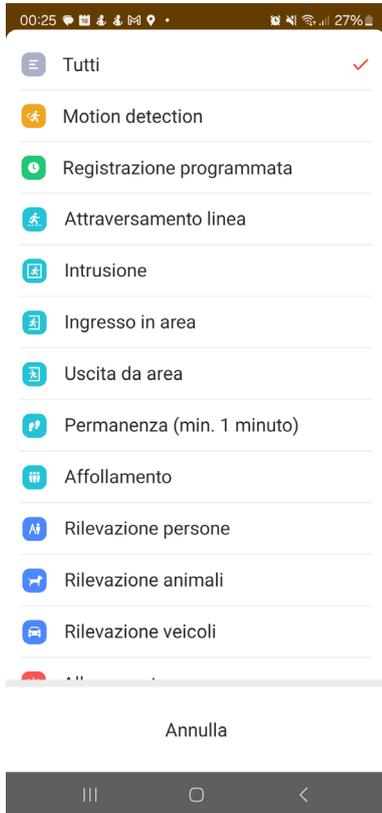
It is possible to change the factory setting ALL and choose to show only one type of specific registration.

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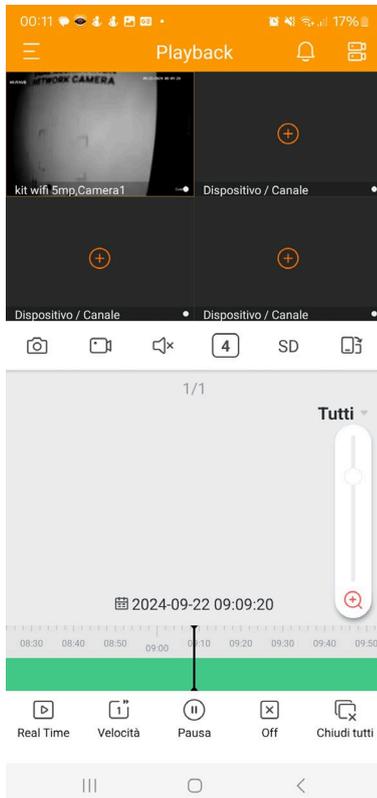
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To move precisely in the timeline you can change its scale with the zoom button



These controls are available in playback



REAL TIME – Return to live viewing

SPEED – Allows fast playback from 2x up to 16x and slow motion from 1/2X to 1/8X

PAUSE/PLAY

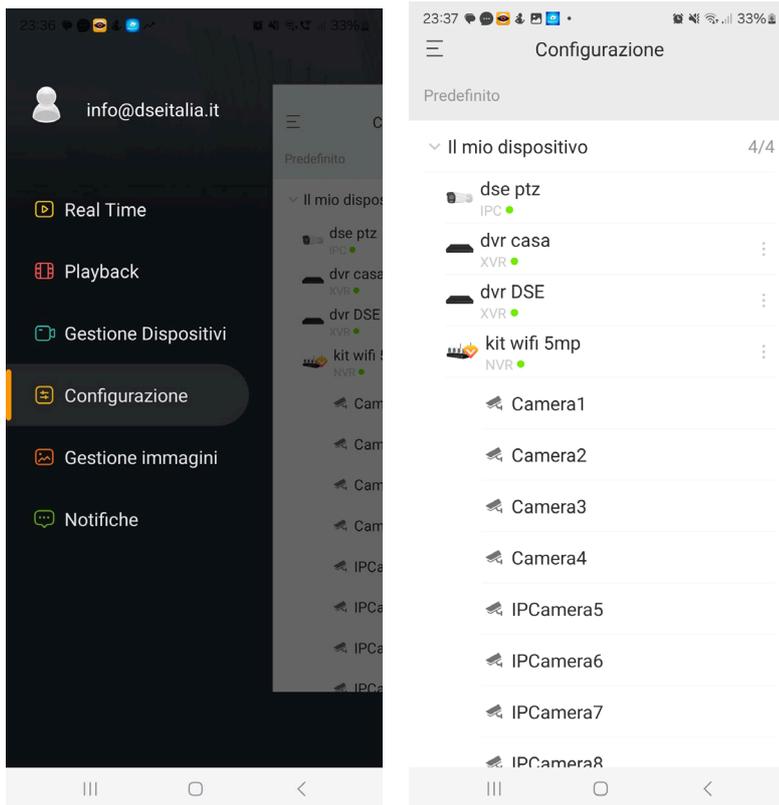
OFF – Terminates/restores connection to the selected camera

CLOSE ALL – Breaks the connection of all windows

Note that fast playback (Playback 2X..16X) consumes a lot of resources and can be used only with high-speed network connections and high-performance client devices.

Configuring Devices

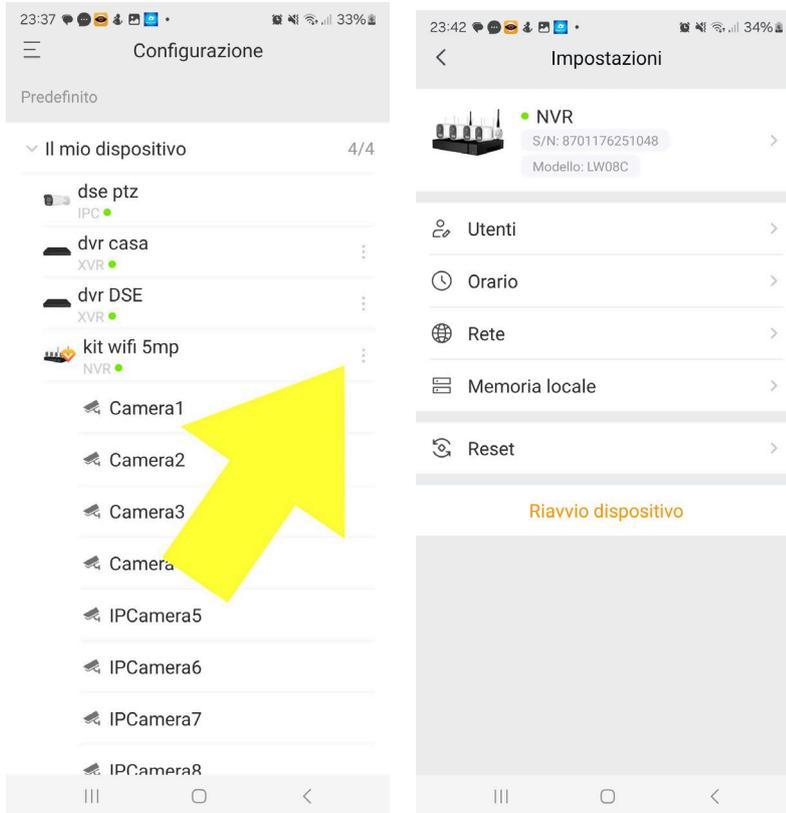
With the IoVedo.RK app you can remotely configure numerous device settings remote. You can access it from the CONFIGURATION menu item



You can control two types of settings: general settings of video recorders (NVR/DVR) and the settings of the individual cameras connected to the video recorders.

GENERAL NVR/DVR SETTINGS

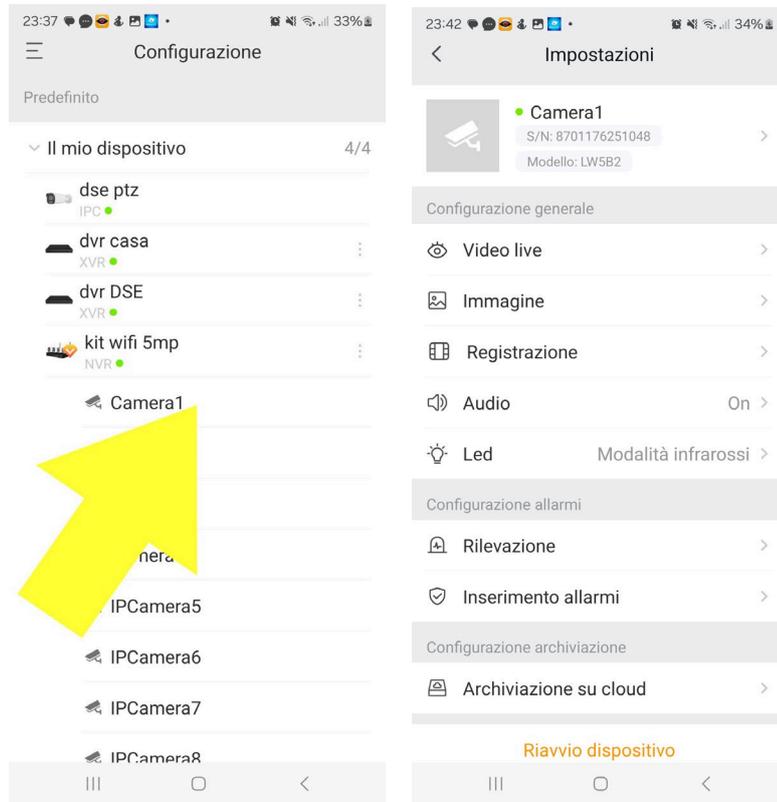
Tap the 3 dots next to the video recorder icon



Here you can configure the main general settings of the connected DVR/NVR. The parameters at layouts vary depending on the type of device connected.

CAMERA SETTINGS

Tap the 3 dots next to a camera, or next to a camera contained in a NVR/DVR



You can configure the main settings of the connected cameras. The parameters available are variable based on the type of device connected. You can also access these settings by pressing the live view settings icon.

Below are the main types of settings which can vary widely depending on the type of the connected camera and also the type of connection (direct or via NVR).

CAMERA1 - You can change the name of the camera

LIVE VIDEO - Configure image overlays, rotation and flipping

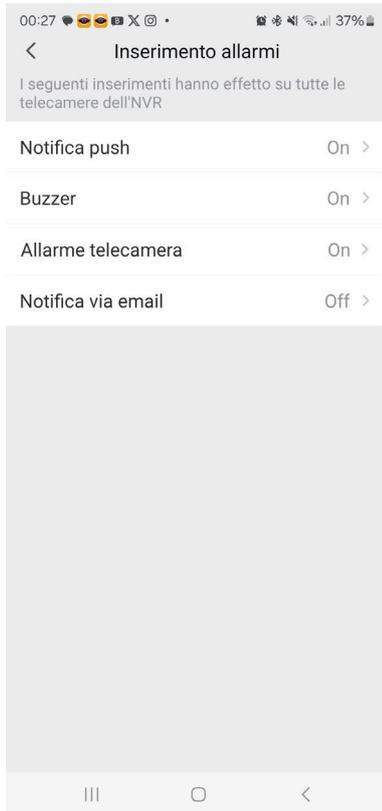
IMAGE - Configure Brightness, Saturation, Contrast and Sharpness

RECORDING - Configure scheduled continuous recording time slots and recording in case of intelligent detection. You can set 8 time slots to record for every day of the week.

AUDIO - Enables camera audio management and sets the speaker volume, if available in the camera.

LED - Configures the behavior of the night lighting LEDs

ALARMS INSERTION - This option allows you to enable and disable with a single button command all detections of an NVR/DVR and is only available on some NVRs. It is a command useful if you have planned local deterrent devices that you should disable when you return to house.



PUSH NOTIFICATIONS – Enable notifications to the app

BUZZER – Enable buzzer sound in NVR/DVR

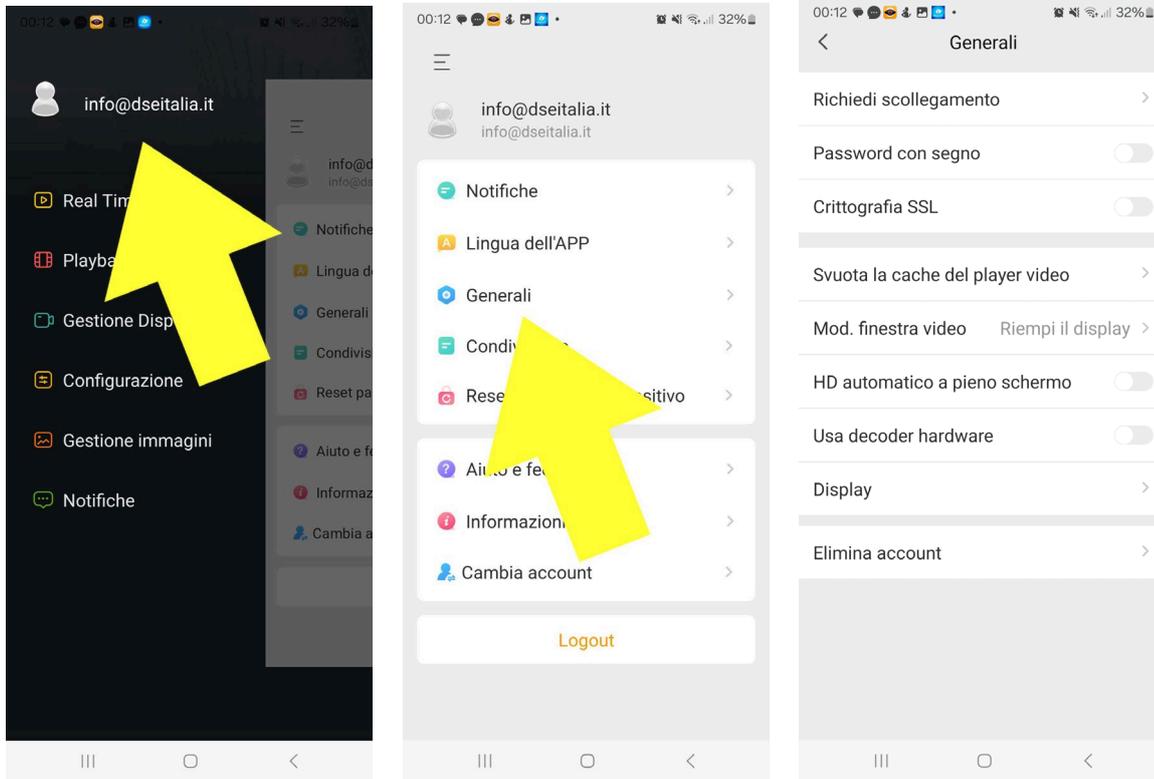
CAMERA ALARM – Enable all camera detections

EMAIL NOTIFICATION – Enable sending of alarm emails

CLOUD STORAGE – You can enable the paid service that allows you to save your cloud recordings. There are different subscription plans available for continuous recording and only in case of event.

App Settings

There are some general options that govern how the app works.



REQUEST DISCONNECT – This option is useful if you have tried to add a device to your account and you were not allowed to because it was already linked to another account. If you think you know what the other account could be, the best thing would be to delete the device from the other account, in order to free it. For example, it could be your installer who has tested the proper functioning of the smartphone access before installing the system. If but you have no idea who added the camera to their account before you, then you need to tap **REQUEST DISCONNECTION**. A wizard will start where you will have to scan the qr code of the device and take a photo together with the device. You will receive confirmation via email of the disconnection within 3 working days. You will then be able to successfully upload the device in your account.

PASSWORD WITH SIGN – Enable this option if you want to protect access to the app by drawing a mark on the screen.

SSL – Enables encrypted communication with the server

CLEAR VIDEO PLAYER CACHE – Clears data in cache memory, such as memory of the latest live views. This operation can solve app problems due to errors in previous uses.

VIDEO WINDOW MODE – You can set the view of the cameras so that



the image fills the entire available frame or maintains the original proportions
AUTOMATIC HD FULL SCREEN – Switch to the main high resolution (HD) stream
when bringing a single camera to full screen.

USA DECODER HARDWARE – Not used at the moment

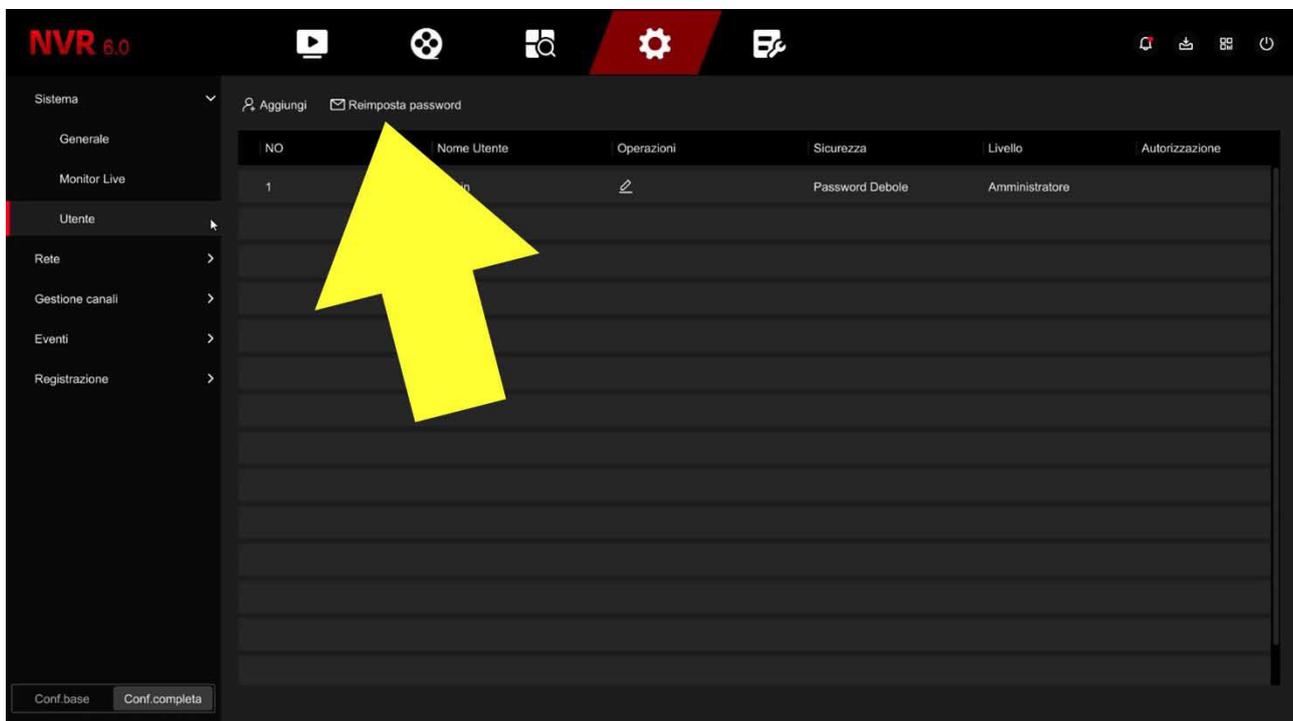
DISPLAY – Show the app in light or dark mode according to the system setting
operating.

DELETE ACCOUNT – Allows you to permanently delete the account from the server in compliance with the
of the privacy directives

App password recovery

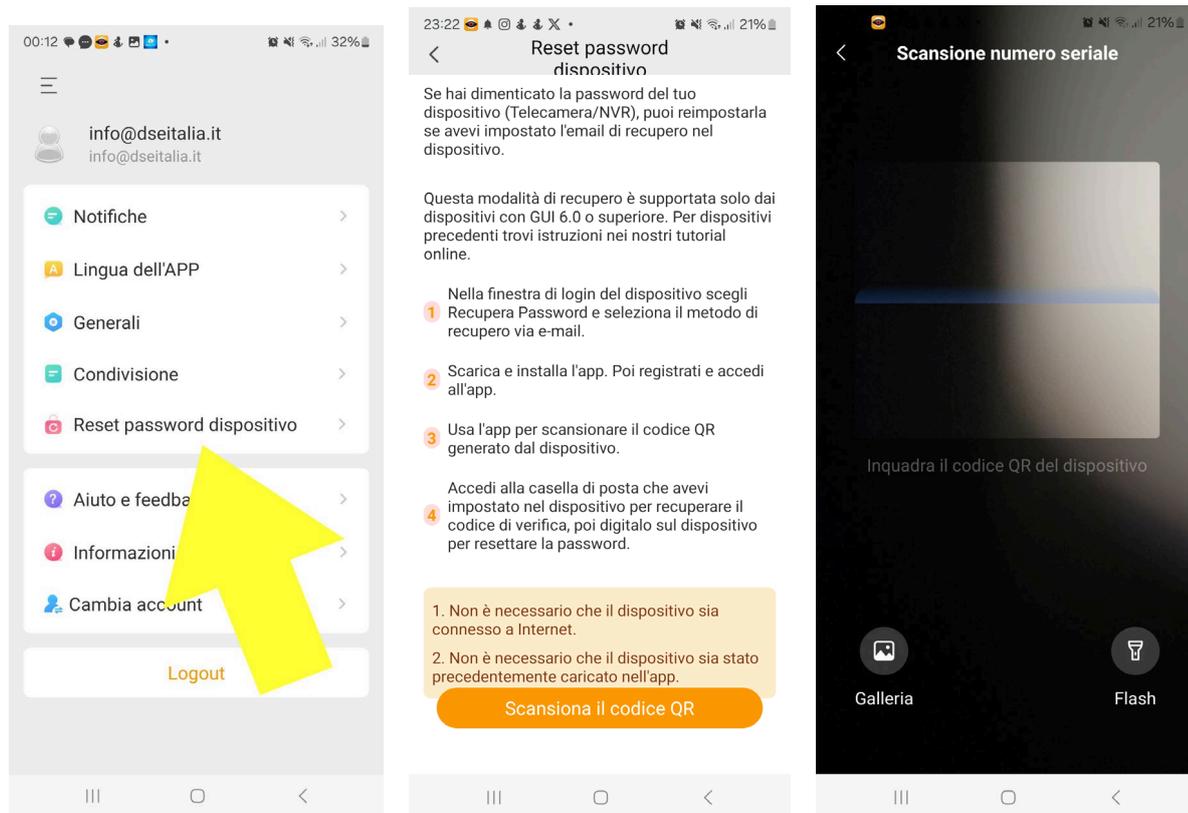
With the IoVedo.RK app you can recover the password of your NVR even if it is not connected in network and even if you had never uploaded it to the app. This email recovery method is supported by NVR from version 6.0 onwards. It is not supported by versions 5.0 and earlier.

To be able to recover your forgotten NVR password you must have set up the email address recovery, in the NVR configuration. See the button below.



To recover the password you need to open the RESET DEVICE PASSWORD item in the Settings menu.

Device Settings



Proceed as follows:

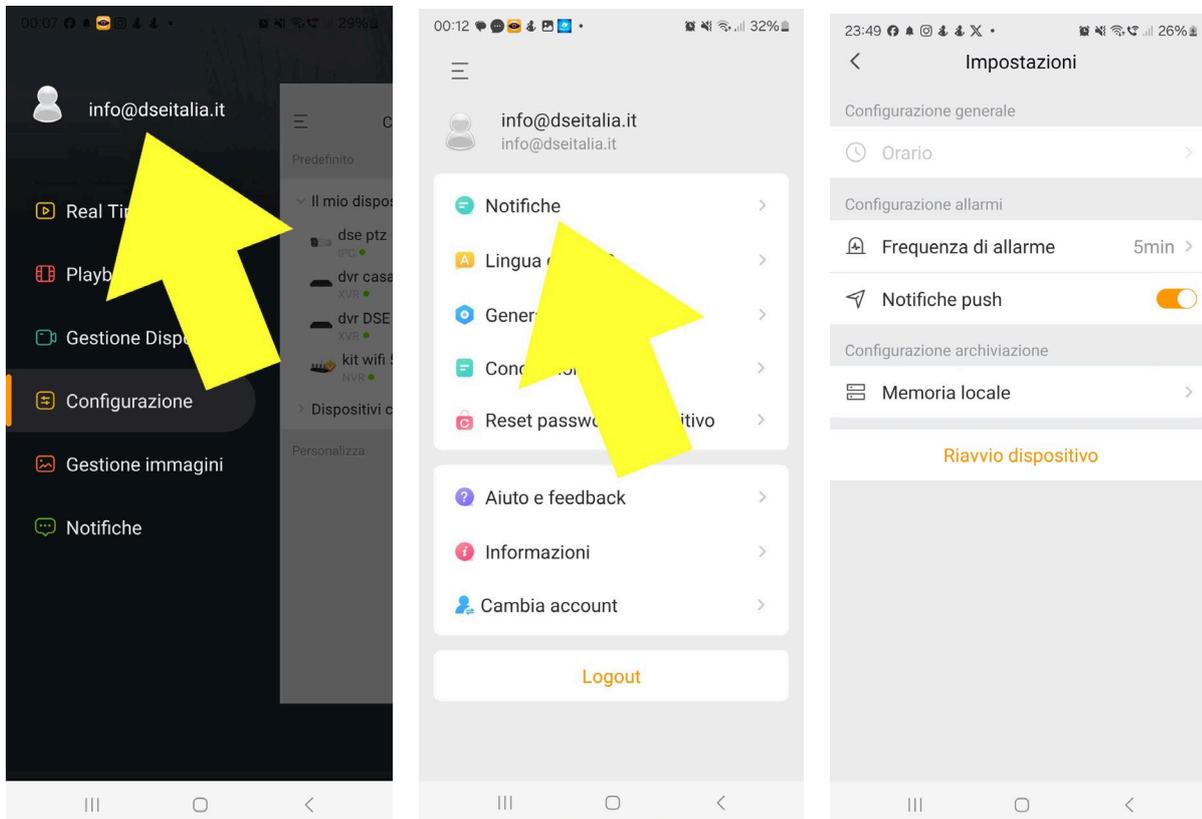
- 1 - In the menu of the NVR whose password you forgot, press Recover Password
- 2 - Choose Recovery Method: Verify with Email, a QR code will appear on the screen
- 3 - With the app scan the QR code on the screen. A code will be sent to your email recovery set in the NVR
- 4 - Retrieve the unlock code in your email box and enter it into the NVR
- 5 - Now you can set a new password

Please note that password recovery via email with the app is only one of the methods of password recovery. password of our NVRs. You can choose others, such as Dynamic Password, in the window NVR Password Recovery.

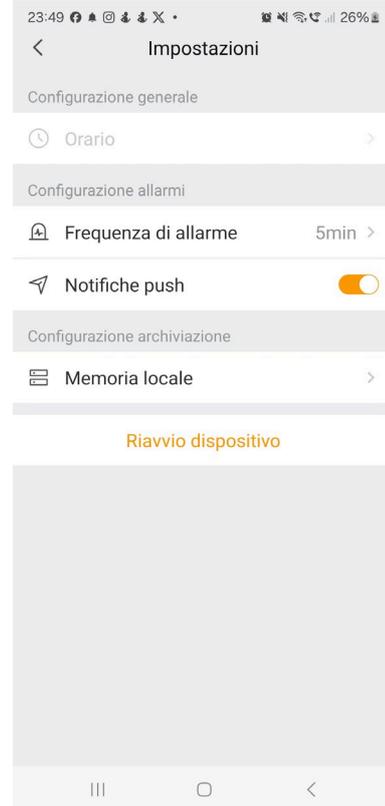
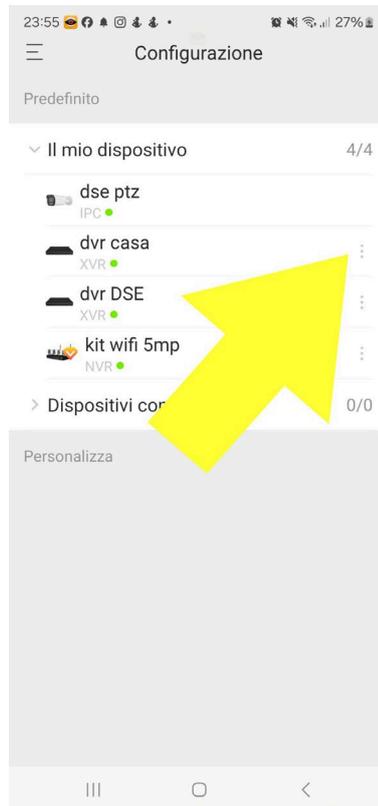
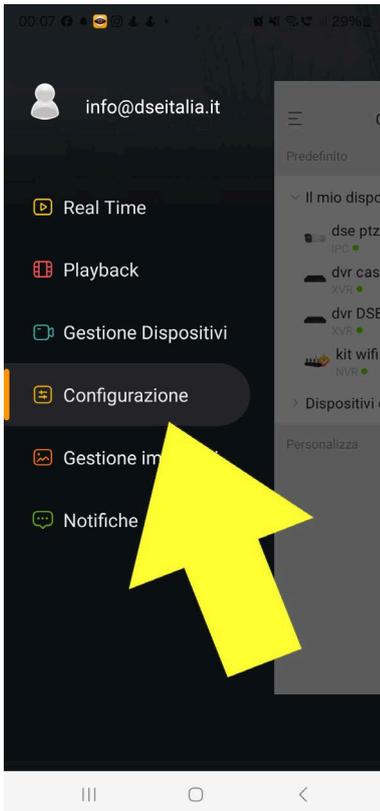
Push notifications

Our RK series cameras, NVRs and DRVs have the ability to send notifications on mobile devices in the event of an alarm event such as motion detection or human detection. To send notifications you don't have to enable anything on your device, except obviously scheduling it. detection that interests you and verify that it shoots on time. Consult the manual of the device for further indications. It is important to do this check because obviously, if not the alarm goes off, you will not receive any notification.

To receive notifications you must also **enable notifications in app settings.**

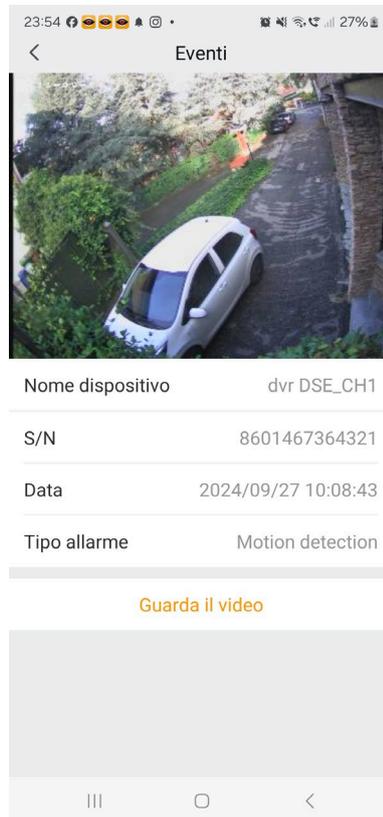
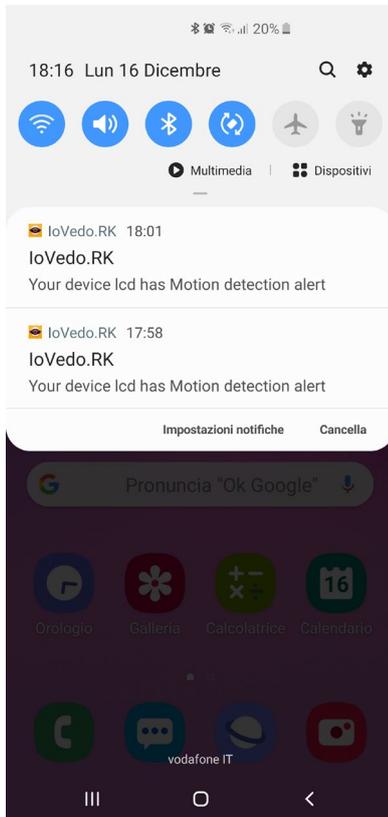


Additionally, many devices also have an enable for notifications in the device settings.
device



This is what a notification looks like on your mobile phone.

The photo of the event is attached and you can also have a preview of the video.



Remember that in order to receive notifications the app must always be running in background and not closed completely. For this you must insert the IoVedo.RK app among those allowed to run in the background of your phone. This setting is different to depending on the type of phone. Search online to see how your phone handles this feature and Allow the app so that it is not automatically suspended from your phone when you close it. Here for example you see the settings of Samsung Galaxy



Sending push notifications requires you to be connected via the cloud, through the web, and not in simple local connection with the device.

DAILY NOTIFICATION LIMIT

There is a maximum number of 100 notifications you can send per day for each camera. In DVR, NVR and KIT the limit is 100 notifications for each channel per day.

Be careful to adjust the motion or smart detection so that it doesn't intervene too much.

often because otherwise, after the first 100 notifications, you will not receive anything else until the day next. For example, it is quite common for cameras to record in large environments Outdoors they often trip at night due to insects or other things if set too sensitive.

If the camera sends 100 notifications during the night then you will not receive anything during the day. in this case it is advisable to intervene in the detection settings to avoid interventions untimely.

LIST OF NOTIFICATIONS

You can review the notifications received by the app in the notifications section.

