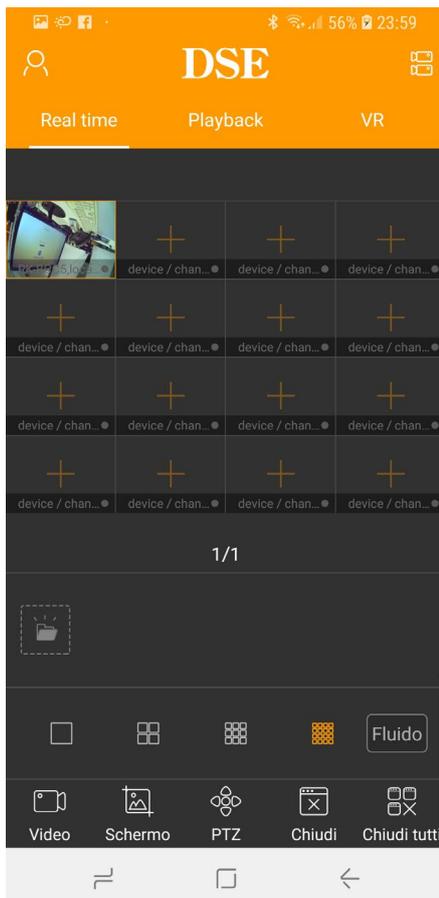


RK series IP cameras and DVR/ NVR



Remote access manual with P2P

Cloud Server and IoVedo.RK APP

How to create an account

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



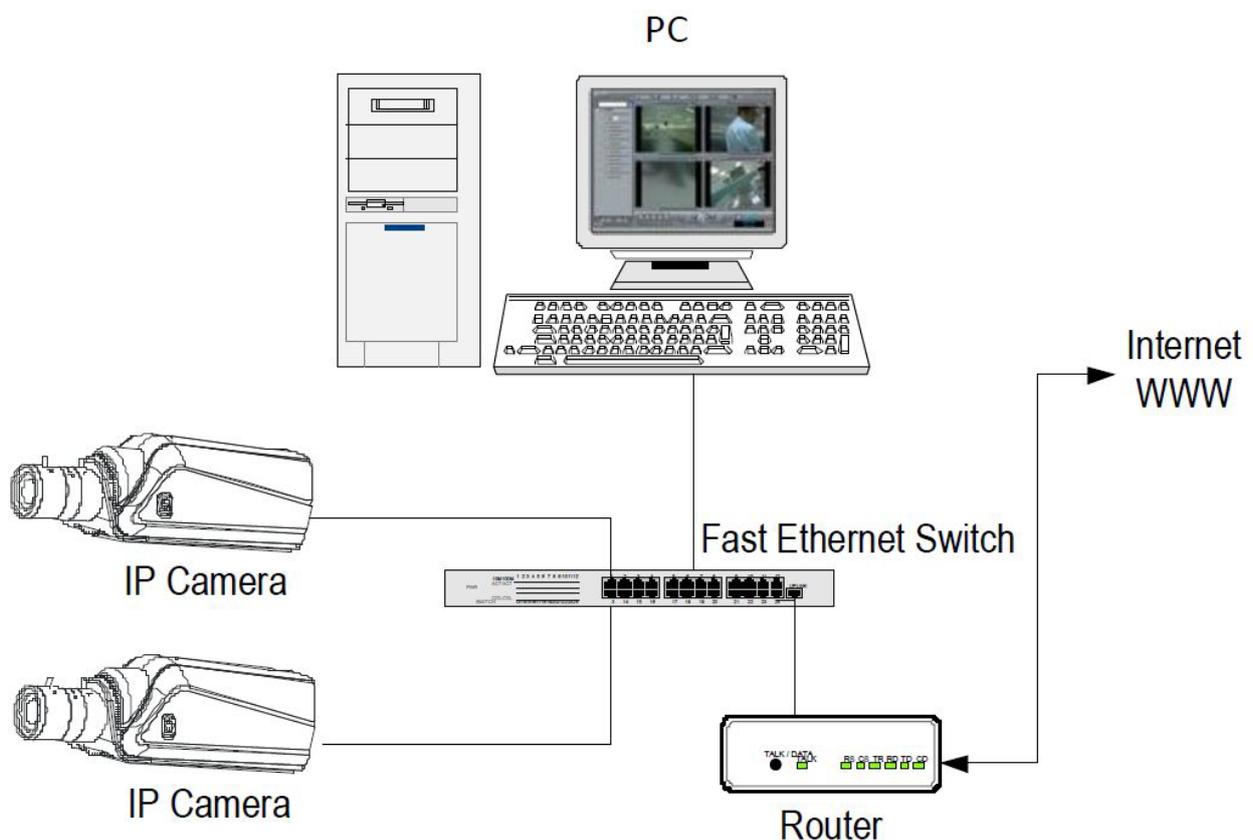
Contents of the manual

The RK series IP cameras, NVRs/DVRs and DSE kits allow easy access via the web using free P2P cloud server and DSE IoVedo.RK APP. Thanks to the cloud server it is not You need a static IP or router port configuration to connect via the web. In this manual explains how to use the IoVedo.RK APP

Notes on direct web access, without cloud server

Before analyzing the functioning of the P2P cloud server, it is advisable to give some hints on how to do it can be connected to a device through the Internet without using any server, but directly calling your IP address on the Internet.

A system of IP cameras and possibly NVRs is generally located 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 (generally 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 they will be more reachable directly, as the only IP address visible from the web will be that that your router will have on its WAN side i.e. 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 from the provider a fixed address that remains unchanged at each connection. If there isn't, the chance is

need to use DDNS services.

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

However, it is not enough to type the IP address of the router on the wan side in the browser to be able to access it connect to your device. In fact, the router acts as a filter and drops every external call which is not first answered for a call from within the network. To be able to connect with successful it is therefore necessary to insert port forwarding instructions inside 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 forwarding is done only for the communication ports that are used by the device and that you will find in the network configuration.

You can consult your router's manual for instructions on how to do the mapping.

As you will have understood, web access directly to your IP address involves several complexity because it requires a static IP address or a DDNS and also configuration appropriate of the router.

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



Web access with P2P cloud server

Direct web access, described in the previous chapter, can present various complexities for the end user. First you need to get a static IP address from your internet provider, what 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 not accessible.

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

The cloud also allows you to connect to internet-connected devices with a 4G router, what impossible in direct 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

Not all RK devices support the IoVedo.RK app

Some older generation RK series cameras and NVRs/DVRs used the FREEIP app for the which there is a special manual.

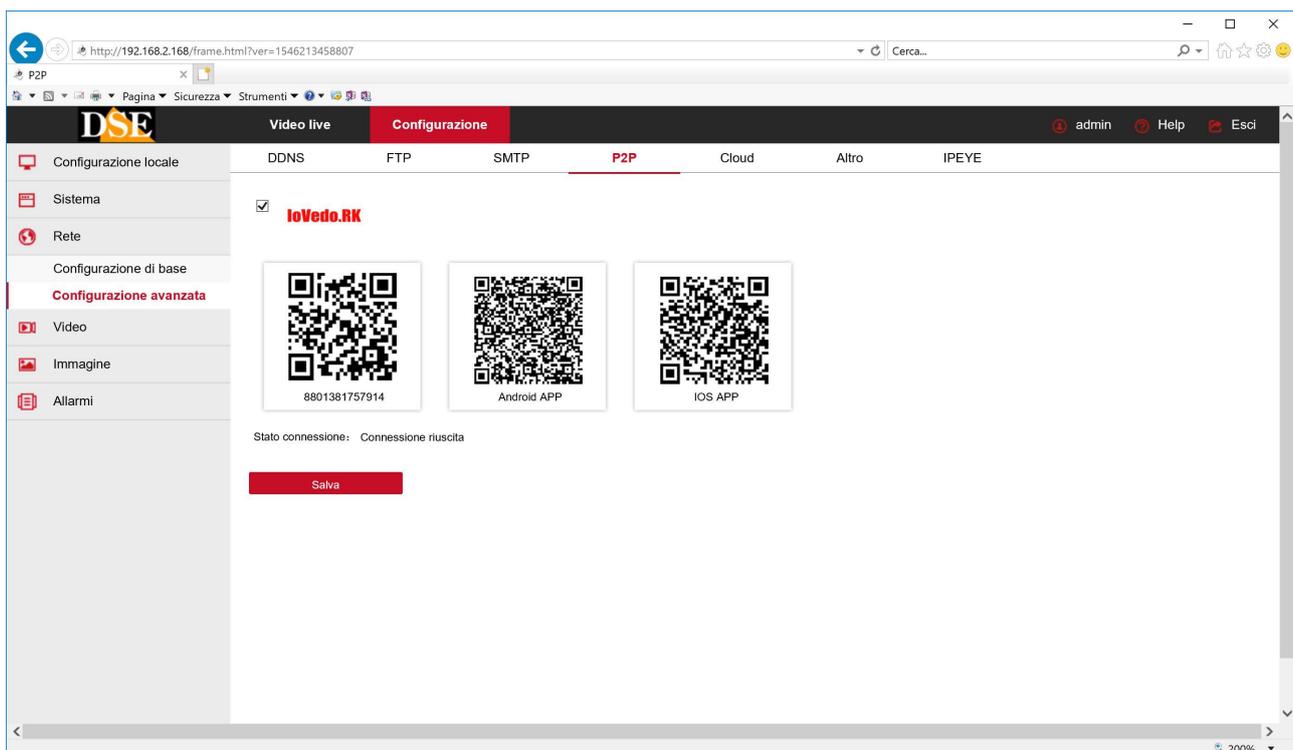
To find out if the RK series product you have purchased supports IoVedo.RK, the simplest thing is check if the IoVedo orange label is present on the product



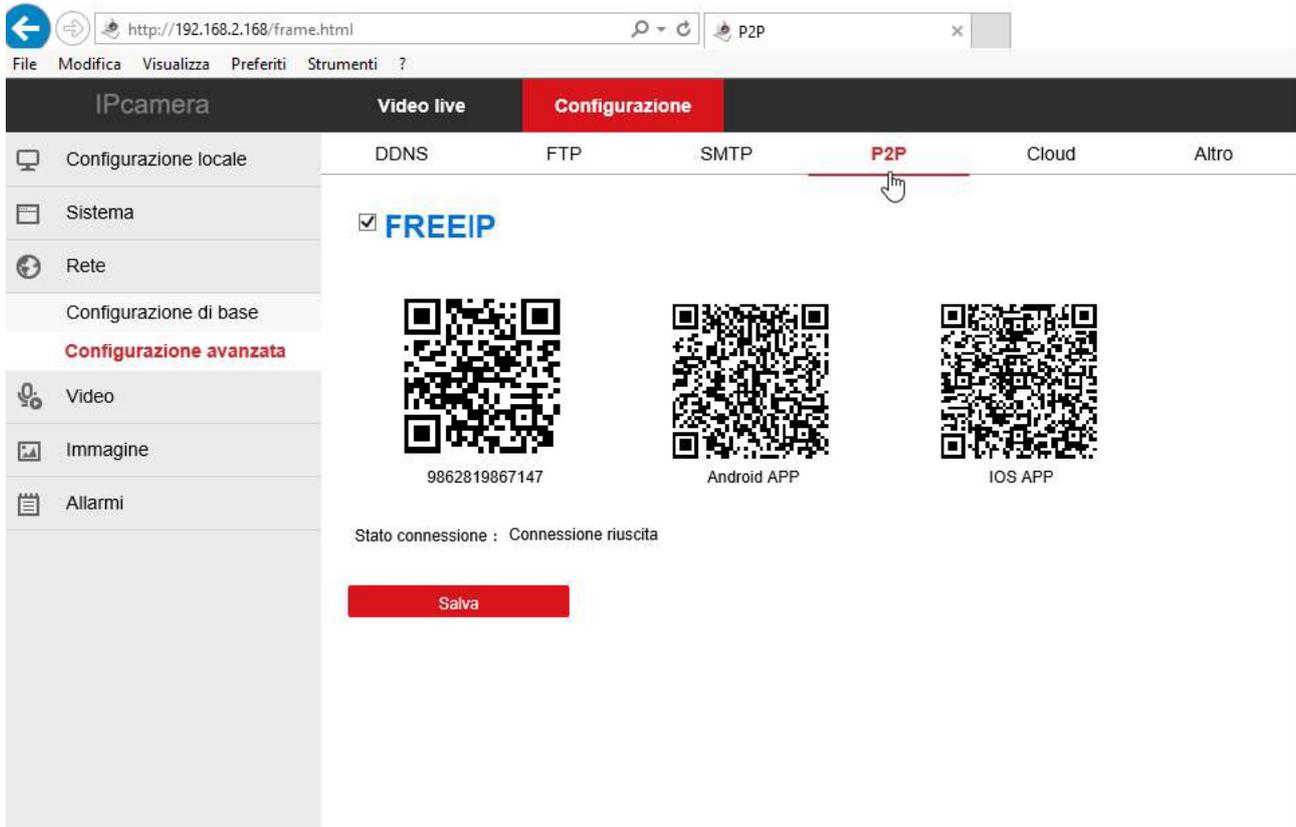
If you doubt that the IoVedo label has been removed, perhaps for aesthetic reasons, there is a another way to know if your device supports IoVedo.RK and is by connecting with the browsers. If you don't know how to connect with the Internet Explorer browser, refer to the manual equipment installation and configuration.

Find information about the app in the advanced network configuration, under the P2P tab.

This equipment, for example, supports IoVedo.RK



while this other one uses FreeIP



Find the device serial

Each user of a camera or an RK series NVR/DVR purchases the possibility of using a free online CLOUD service to make the connection via Very simple internet.

Thanks to this service you can connect via the web from a mobile phone without a 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 SERIAL NUMBER OF THE DEVICE AND THE CAPTCHA CODE

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

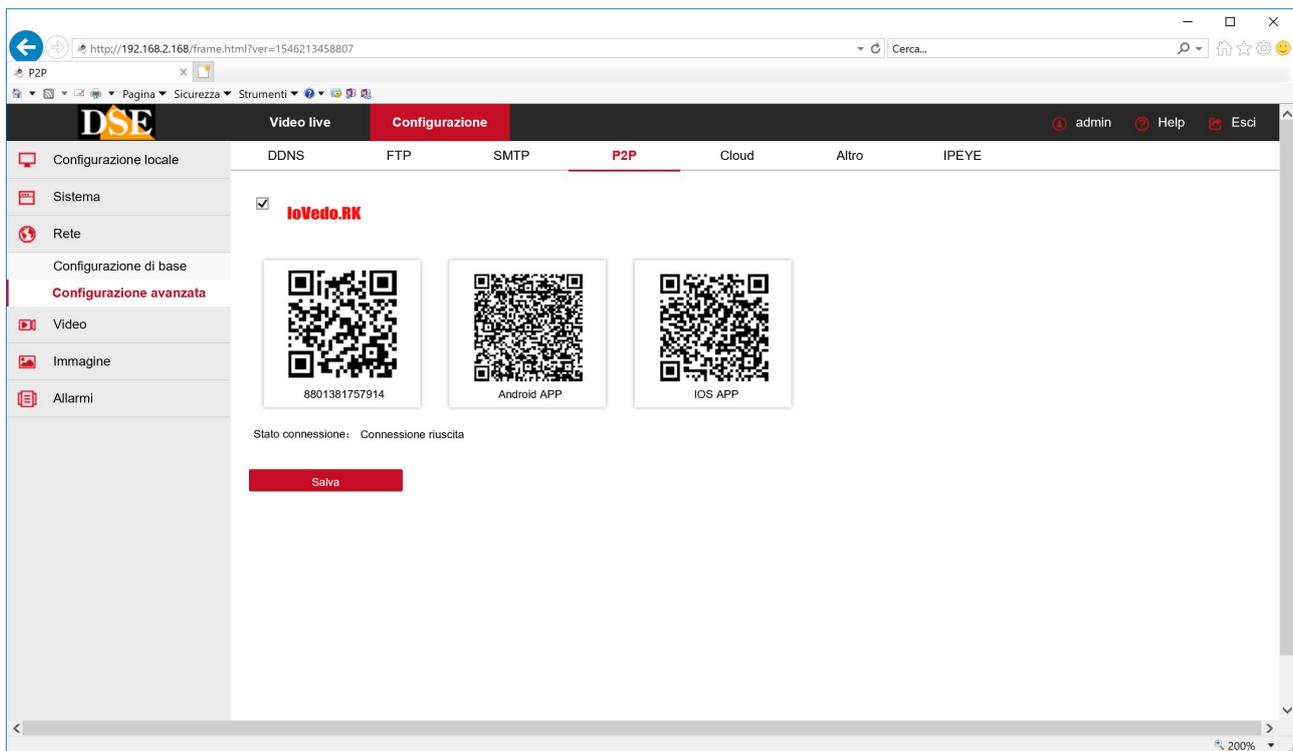
Together with the S/N you will also find the security Captcha code that you will need to register the equipment on the server.



Check the connection to the P2P cloud.

Before using the app, you need to verify that the device is connected to the P2P cloud server.

Find the indication in the P2P window. Must Read: Connection Successful or ONLINE



If you have no connection you must check the connection to the network of the device as it is not able to communicate properly over the Internet.

Mobile remote access with cloud recording

By registering an account in the cloud you can use many advanced features and easily manage many devices.

To connect to the device with your mobile phone you must use the IoVedo.RK app.

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



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

REGISTER TO THE CLOUD WITH YOUR MOBILE PHONE

To use IoVedo.RK you need to register. If you don't register you won't be able to save your devices. You can register directly from the APP, with your mobile as shown below.

By registering with the app, you create your own personal space on the cloud server where you can upload all the devices you have purchased.

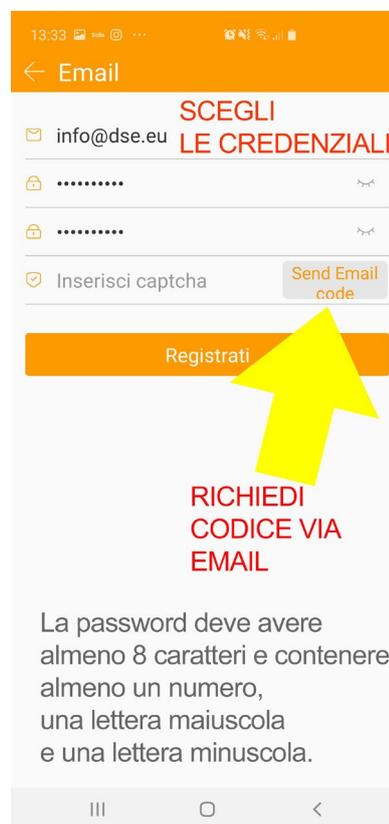
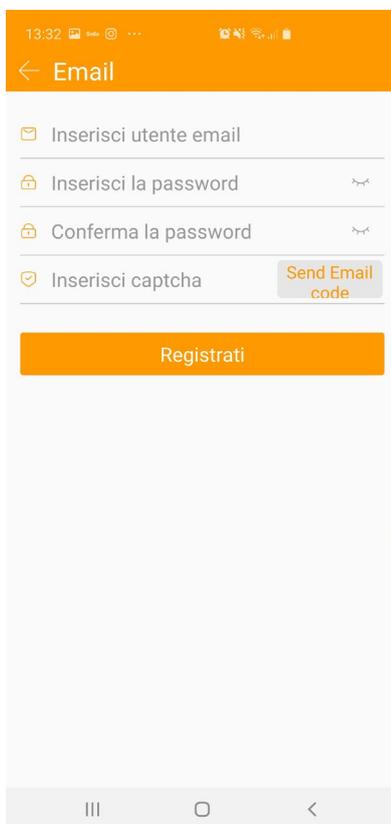
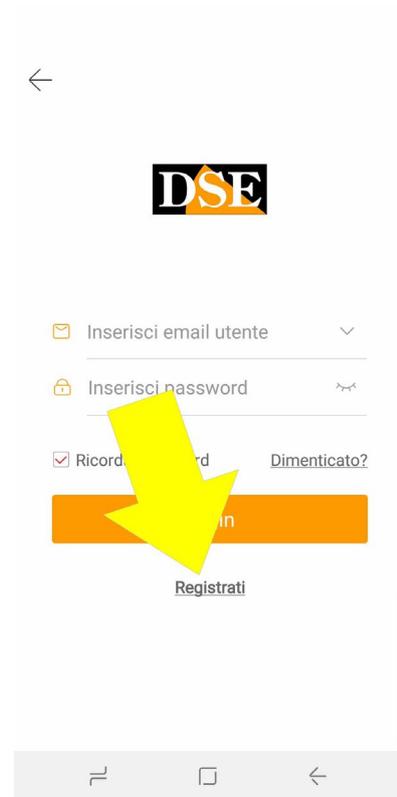
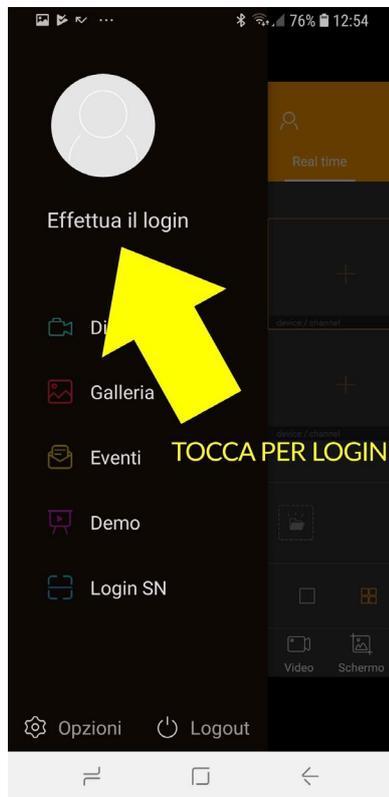
To register you must be able to read your email because a code will be sent to you he confirms. Perform the following steps to register:

- 1 Enter your valid email
- 2 Choose a password and type it 2 times. The password must have at least 8 characters and contain at least one uppercase letter, one lowercase letter and one number.
- 3 Press the button to send the confirmation code via email
- 4 Check your email and enter the 4-digit captcha code that was sent to you. You are 60 seconds to do this.
- 5 Press Register to complete. Now you can log in with your credentials

Check out what you'll see on your mobile below.

ATTENTION - If you have several mobile devices, you do not need to create more than one account. Use the same cloud access credentials on all devices. Even if you want to grant access to the device to other people, such as your family members, you do not need to register a new account for

each one. Just download the app on each mobile phone and log in with your same credentials.





WHICH DEVICES CAN YOU UPLOAD TO THE CLOUD?

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

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

ATTENTION – Before loading a device, check that it is connected to the cloud server by checking in the P2P status of the device as shown above.

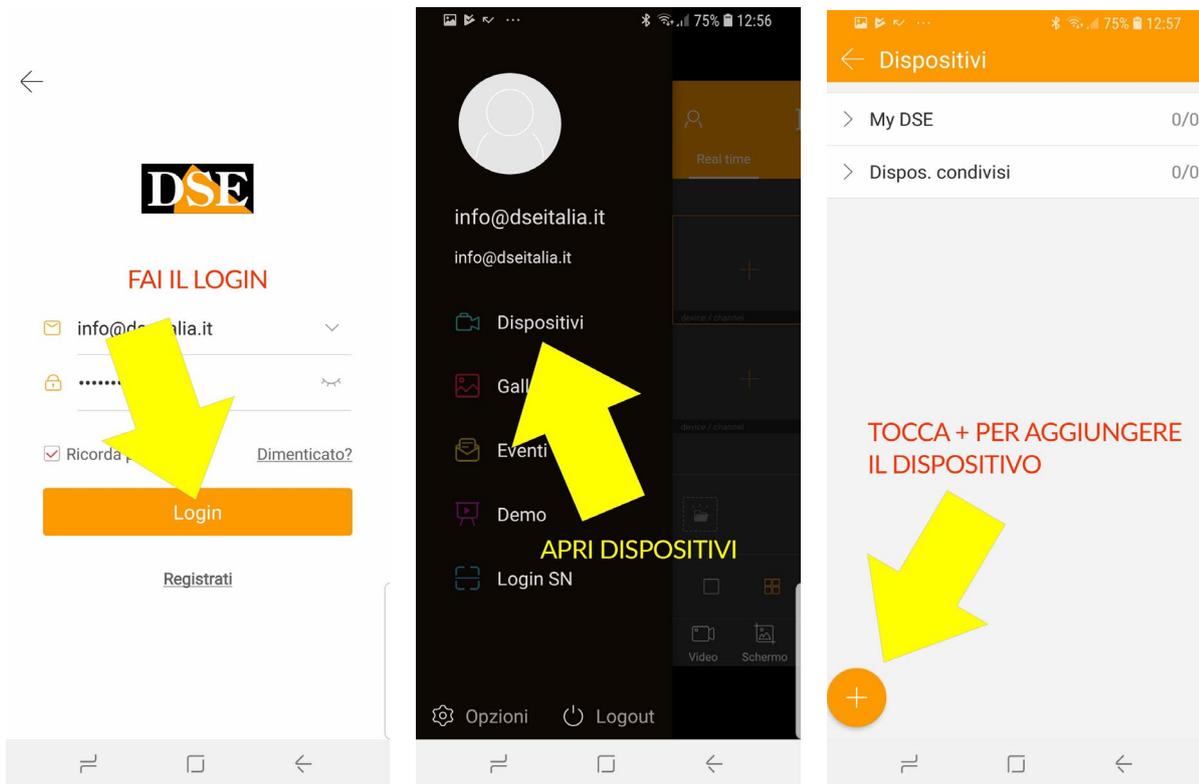
ATTENTION-**A device can only be uploaded to one account**, for reasons of safety. If other people need to access your device, they just need to use your password access on their mobile phone. If for some reason you need to share a device between multiple accounts several, a sharing procedure is available.

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.

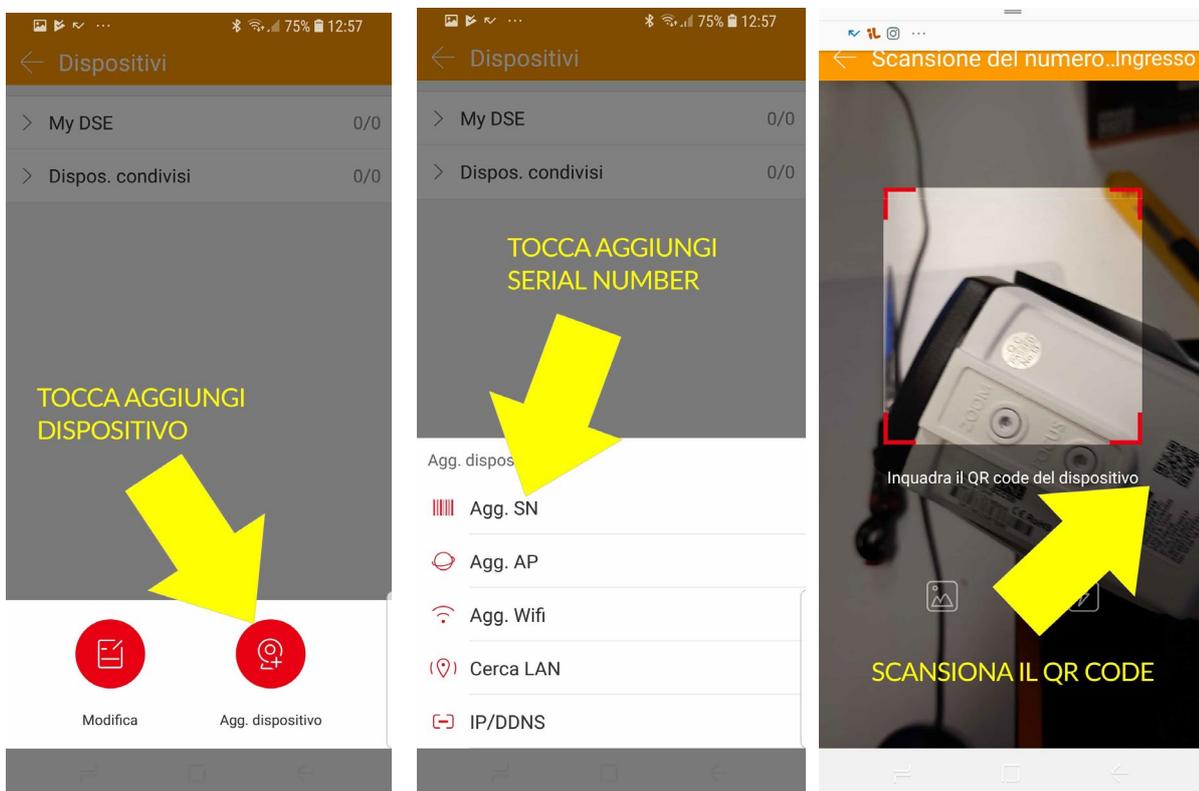
CHARGE YOUR DEVICES BY SCANNING THE QR CODE

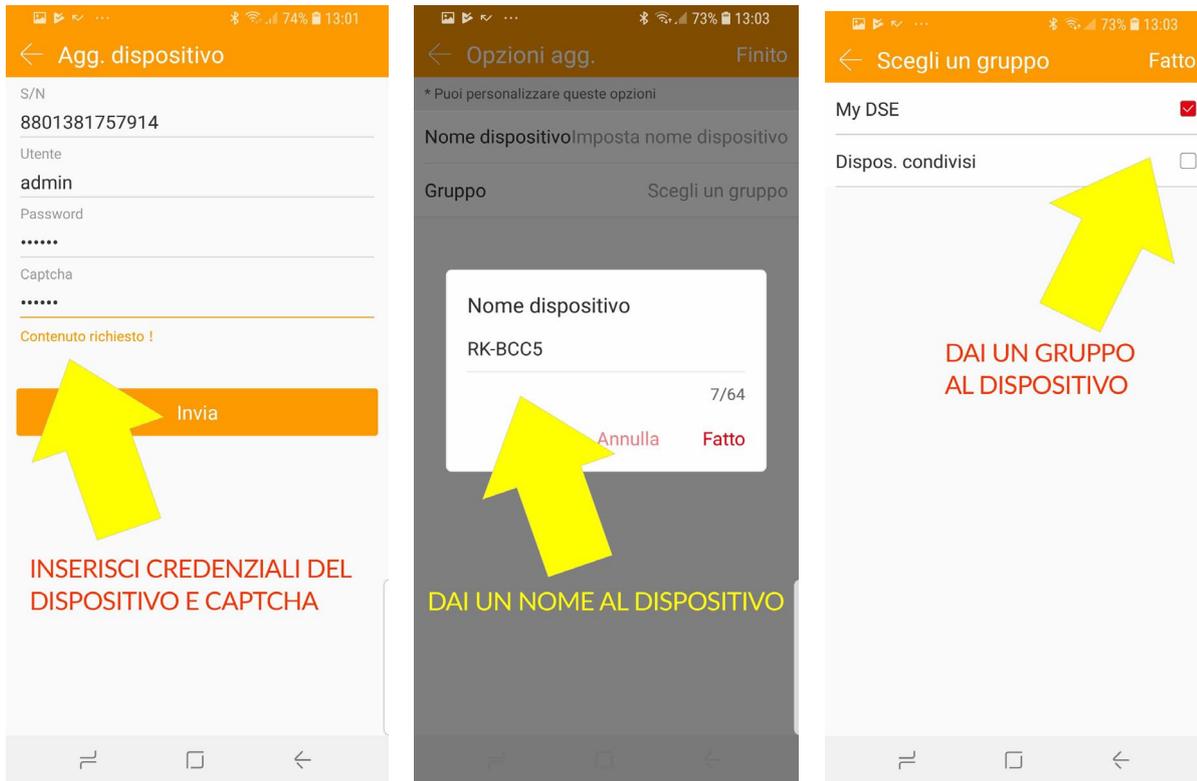
Now that you have registered, you can access your new personal area with your credentials. There first thing you need to do is charge your devices.

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



There are several ways to charge a new device. The most immediate is the scan of the serial number. Proceed as follows.





When you tap the ADD button. SN you can scan the QR code of the equipment you find in the label on the product or even in the computer configuration in the P2P folder. In alternatively you can touch ENTER, at the top right, and enter the serial number manually. Immediately after you will have to enter the access credentials to the camera or DVR NVR. Check the camera or NVR manual if you don't know them. Finally you must enter the CAPTCHA CODE which you can also find ON THE PRODUCT LABEL.

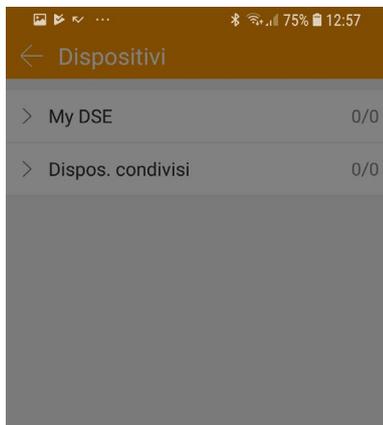


After pressing SEND you have the option to enter a distinctive name for the device that you want help identify it. Finally, you can assign the device to a group. If you have to manage a few devices you can use the default My DSE group. If you have many devices you can instead divide them into different groups, to facilitate their management.

Remember that when you press SEND, the app searches for the equipment on the network and therefore it must be online in order to complete the registration.

CHARGE YOUR DEVICES OTHER WAYS

There are also other ways, besides the Serial Number (SN), to load a piece of equipment into yours IoVedo account.



Agg. dispositivo

||||| Agg. SN

⊞ Agg. AP

📶 Agg. Wifi

(📶) Cerca LAN

🔗 IP/DDNS

ADD AP and WIFI they are foreseen to be able to add special devices with wifi only.

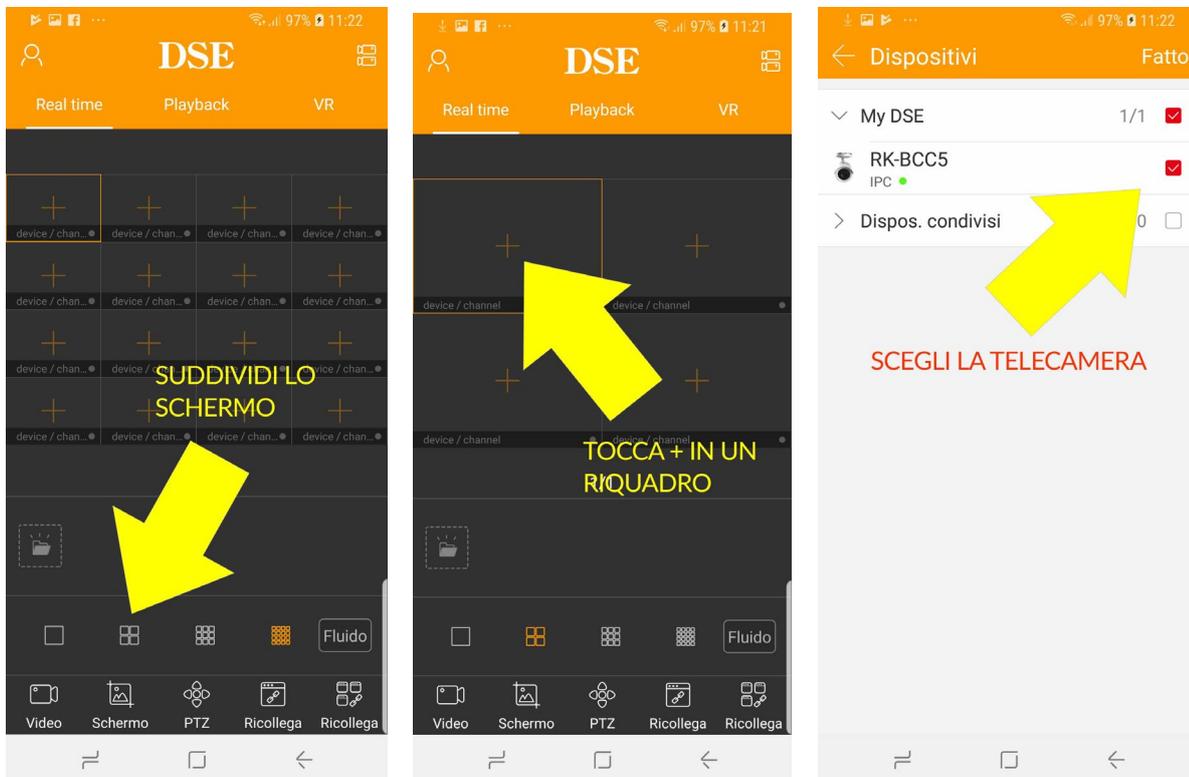
SEARCH LAN allows you to search for compatible cameras connected to your network. To start the search you will have to shake your mobile phone. This search in LAN is only for local access in How much **it doesn't let you save the device to the cloud** and access via the Internet.

IP/DDNS it can be useful if you want to connect directly to the device's IP, without using the cloud server. You can enter the IP address of the camera or a DDNS domain, but remember that for to use this type of web connection you need to map the router ports.

Live and playback from mobile

Once you have uploaded your device, camera or NVR to the cloud you can connect with yours mobile device through the Internet. The IoVedo.RK APP can show up to 16 cameras simultaneously on screen.

The amount of cameras you can see fluidly on the screen strictly depends from the bandwidth you have available, both on your mobile connection and on the Internet access of the device.





During live viewing, you can use the command bar buttons for the following functions. You have to swipe to show them all



VIDEO – Record live video of the selected camera. A red dot appears on the camera to indicate recording in progress. The icon for reviewing the recorded video appears already in the space below the live images. To review the recorded video later tap your account icon and choose GALLERY

SCREEN - Take a live photo of the selected camera you have on screen at that moment. The icon for reviewing the photo you've taken already appears in the space below the live images. For review the photos later tap your account icon and choose GALLERY

PTZ – Allows you to control motorized cameras. The highlighted camera is automatically brought to full screen.

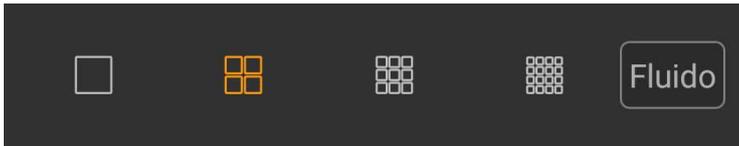
CLOSE- Closes the connection with the selected camera

CLOSE ALL – Closes all connections in progress

AUDIO – Enable audio playback, if the camera is equipped with it.

FAVORITES – With this button you can then mark the cameras you use most frequently. These favorite cameras are shown in the device list in a separate group called My Favorites which is convenient to call up.

You also have the screen splitter bar at your disposal.

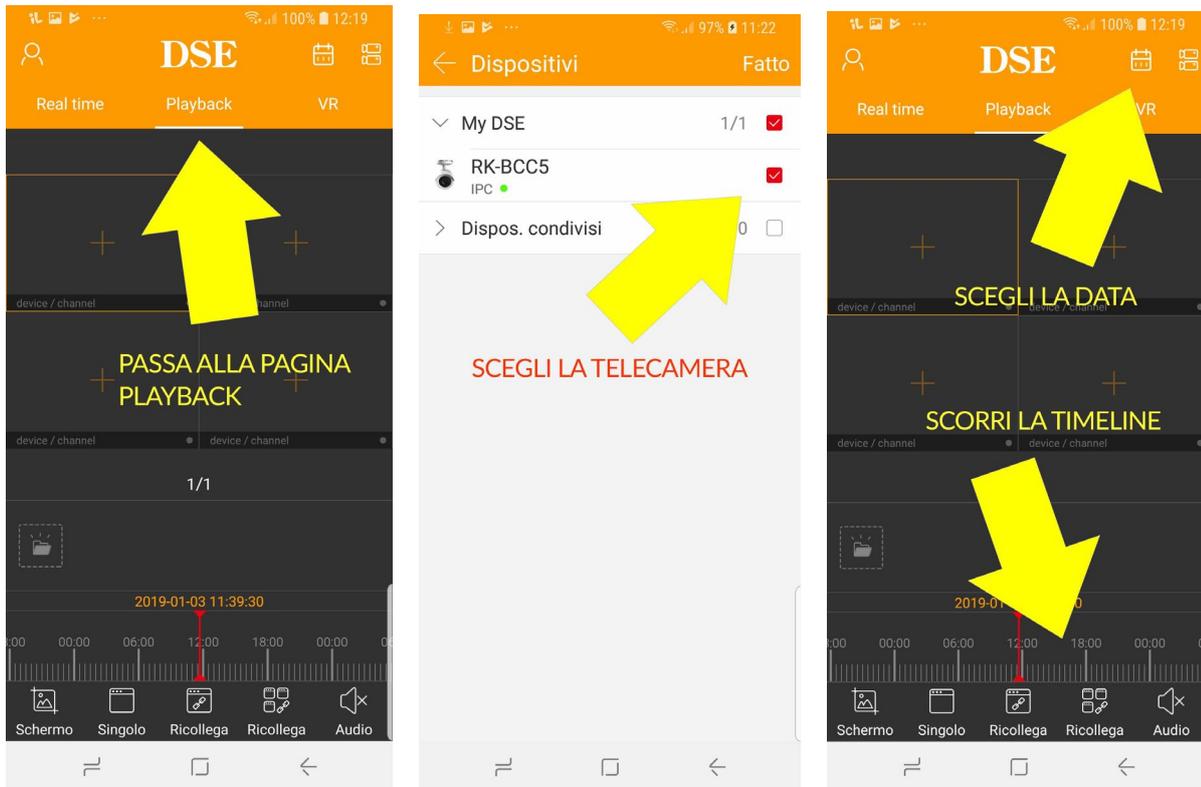


You can split the screen up to 16 panes and bring a camera full screen with a double tap.

Don't try to open too many channels at once if your connection doesn't have adequate bandwidth available. The right button is very important in bandwidth management and allows you to choose 3 options: FLUID, HD and SD. 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, it is shown instead low resolution secondary stream, more suitable for web viewing. With the FLUID option the app will choose the stream automatically based on the situation to ensure a stream image fluid.

PLAYBACK WITH MOBILE PHONE

If your device has a memory to record, such as the NVR of a wifi kit or an IP camera with built-in SD card, you can playback the recordings remotely using the PLAYBACK tab.

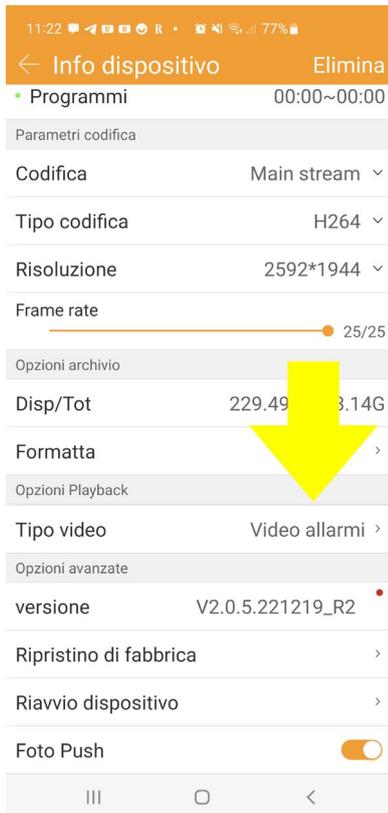


ATTENTION 1

If only the period from 00 to 1 in the night appears in the playback timeline and why not you have set daylight saving time (DST) correctly in your device.

ATTENTION 2

In the device settings (next paragraph) you can set what type of recordings search in the playback section (continuous recordings or alarm recordings). If you stay recording only in motion detection you have to set up alarm recordings to be able to see the recordings in the timeline

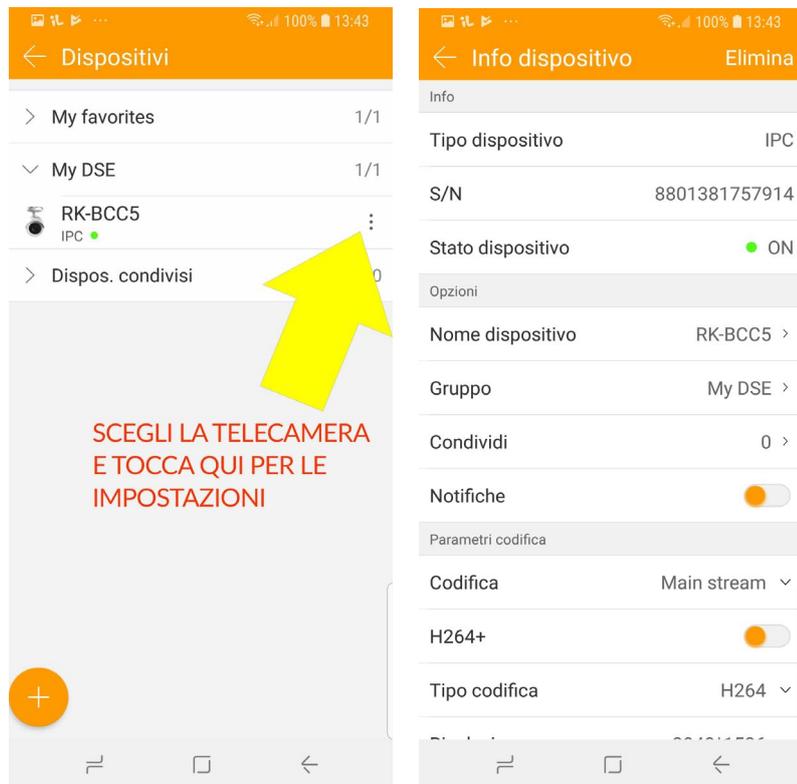


The VR tab is not active at the moment, but planned for future developments.

DEVICE SETTINGS WITH MOBILE PHONE

For each device you upload to IoVedo.RK you can change some settings.

These are the settings that regulate the interaction between the device and the app.



INFO – The first three items cannot be changed and depend on the device you have connected

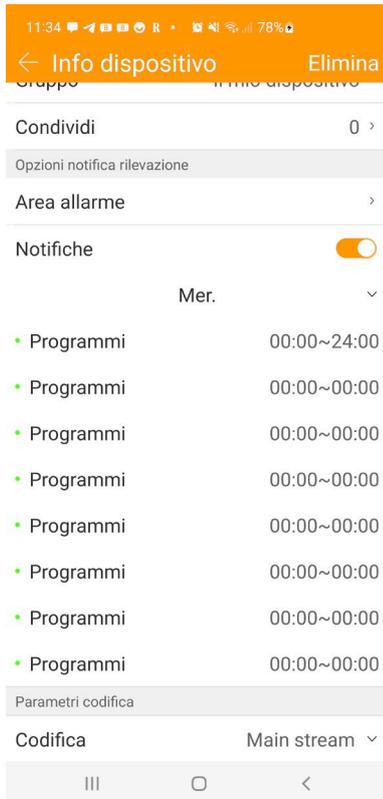
DEVICE NAME – The name you can give the camera to distinguish it.

GROUP – You can associate the camera to a group. The factory group is My DSE but you can create others.

SHARE – Normally a device can only be added in one account on the cloud server.

This limitation ensures your privacy. If you have various devices there is no problem because by logging in you can always find your cameras. If you want to share a device (camera / NVR / DVR) with your friends or family, download IoVedo on their mobile phone and create him a new account, then tap this SHARE feature on your mobile phone. A qr will appear tails. In the new phone use the function: add SN and scan the qr code from your screen telephone. The list of accounts with which you have shared the camera appears in this window and you can revoke sharing at any time.

NOTIFICATIONS (or PUSH PHOTOS) - Several devices of our RK series have the ability to send of notifications on mobile devices in case of an alarm event such as motion detection. Self you want to receive these push notifications, please enable this function. To receive alarm notifications motion detection and notifications must be enabled on the device. You can review the list of notifications received by touching your account photo and choosing EVENTS If you enable the receipt of notifications, you can eventually allow it only in specific time slots of the day, depending on the day of the week.



ENCODING PARAMETERS – IoVedo allows you to vary the encoding parameters of the device, but this operation should be done via browser to be able to access all the parameters of configuration. We also don't recommend editing video streaming from apps because you might affect the connection with other clients such as the NVR.

PLAYBACK CHANNEL OPTIONS – This setting affects the playback section of the app. You can choose to search for all files of VIDEO TYPE or only the videos in alarm or only the videos normal (continuous recording). You can also choose whether to receive the Sub stream (recommended) or the main stream, high resolution, to be used only on the local network.

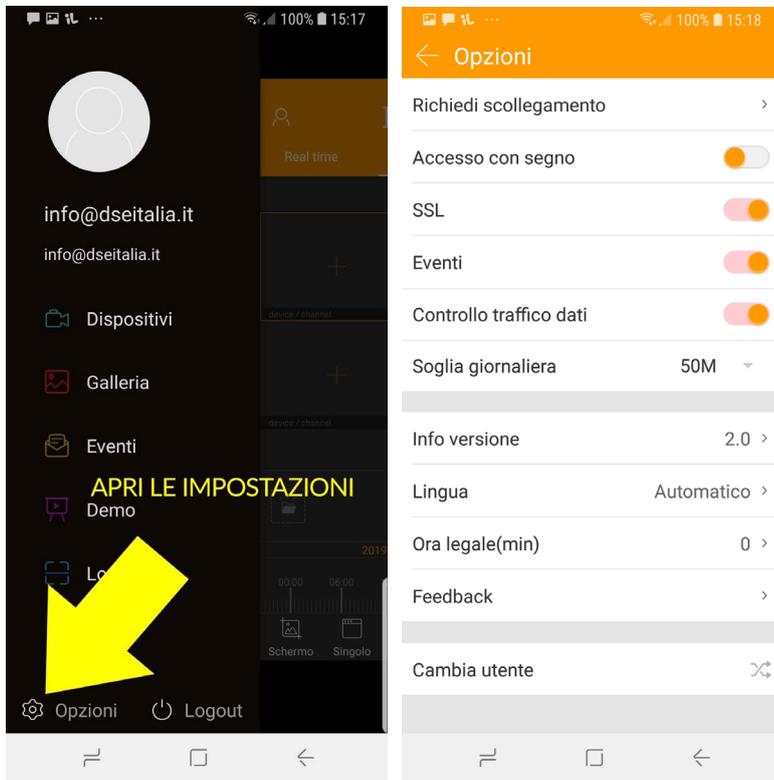
STORAGE OPTIONS – You can format the device memory and see the memory space.

FACTORY RESET – Restore the device to factory settings.

RESTART DEVICE – Restart the device

PHOTO PUSH – Several devices of our RK series have the possibility to send notifications on mobile devices in case of an alarm event such as motion detection. If you want to receive these push notifications, please enable this feature. To receive alarm notifications, you must be on the device motion detection and notifications are enabled. You can review the list notifications received by tapping your account photo and choosing EVENTS.

App settings



REQUEST TO DISCONNECT - This option is needed if you have tried to add the camera to your account and you were not allowed because the camera is already managed by another account. If you think you know who may own the other account, great would contact him to ask him to delete the cameras from his account. For example it could be your installer who tested the correct functioning of access from smartphone before installing the system. If, on the other hand, you have no idea who added the camera to your account then you need to tap **REQUEST TO LOG OUT**. It will start one wizard where you will have to scan the qr code and take a photo together with the device. You will receive email confirmation of successful disconnection within 3 working days. You will then successfully upload the device to your account.

SIGN IN - Enable this option if you want to secure access to the app drawing a mark on the screen.

SSL - Enable encrypted communication with the server

EVENTS - Enable the reception of alarm notifications

DATA TRAFFIC CONTROL - To avoid using too much traffic on metered connections you can set a daily threshold beyond which you will receive a warning and the connection will interrupt

IOVEDO.RK APP MANUAL

RK SERIES - IP CAMERAS and DVR/NVR



Page:24

VERSION INFO – App version

LANGUAGE – Factory set to automatic, the app uses the phone's language.

SUMMER TIME – Set the duration of daylight saving time, which in Italy is 60 minutes.

FEEDBACK – You can send suggestions on how to improve the application.

SWITCH USER – You can register several cloud accounts and quickly switch between them to the other.

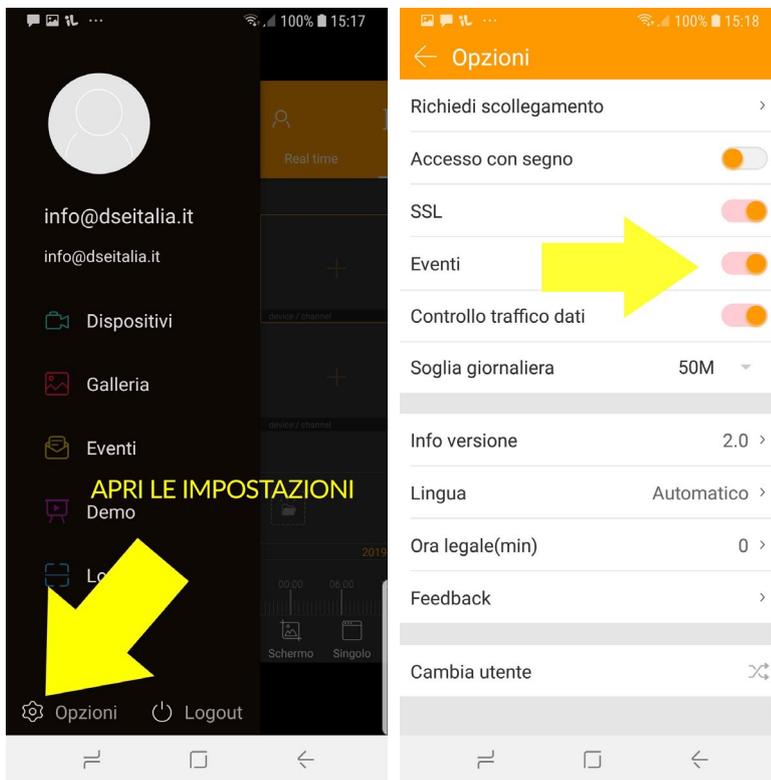
Push notifications

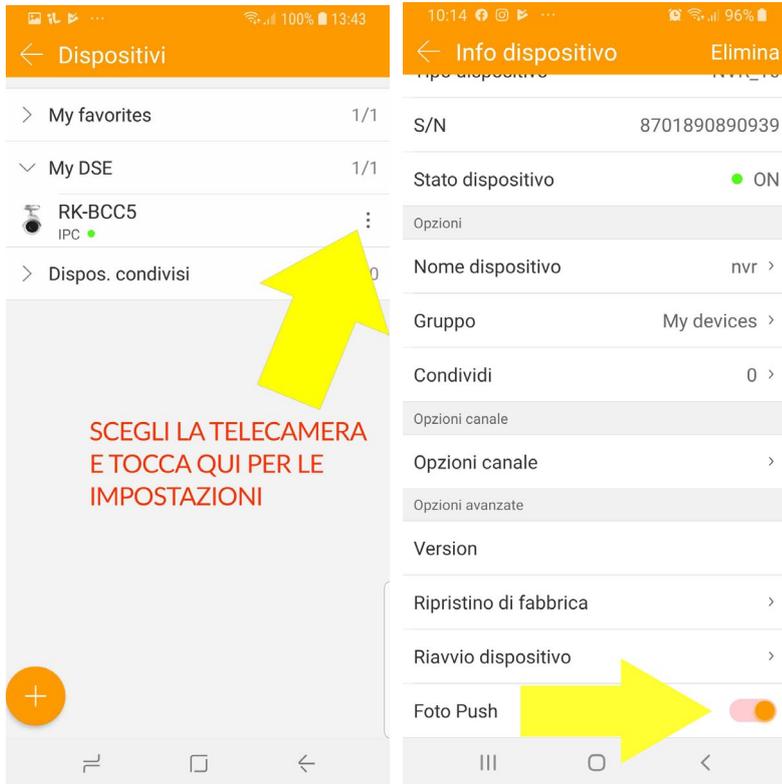
SETTINGS OF THE IOVEDO.RK APP FOR RECEIVING NOTIFICATIONS

Several devices in our RK series have the ability to send device notifications furniture in case of an alarm event such as motion detection.

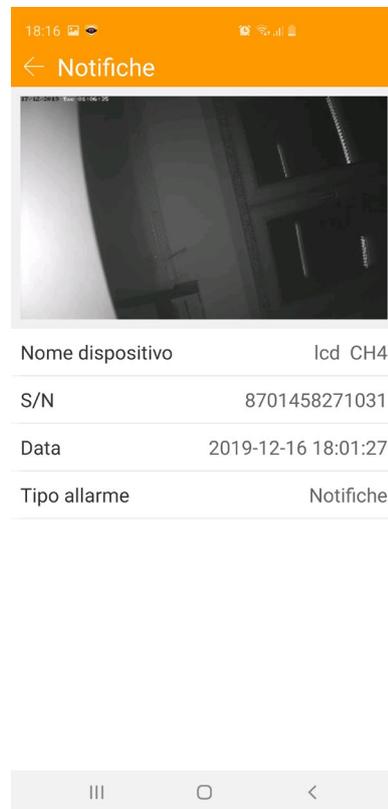
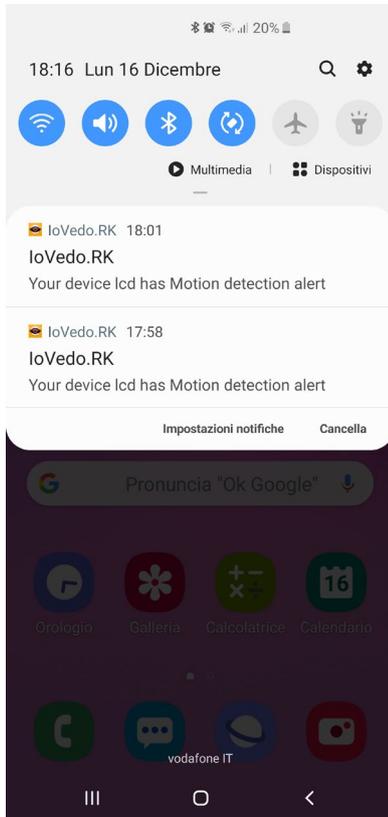
To use notifications, you must first enable and adjust motion detection in the camera/NVR. Consult the configuration manual on how to do it and verify that al When an intrusion occurs, the detection icon appears on the image. It's important to do check this because obviously, if the alarm doesn't go off, you won't receive any notification.

To receive notifications you must also **enable the following controls in the app.**





This is what a notification looks like on your mobile phone if you have also enabled the sending of the attached photo



Remember that the app must always be running in order to receive notifications background and not closed completely. For this you must include the IoVedo.RK app among those allowed to run in the background of your mobile. Search online like your phone manages this function and authorizes the app not to be automatically suspended since phone when you close it. Here for example you see the settings of Samsung Galaxy



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

DAILY LIMIT OF NOTIFICATIONS

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

Be careful to adjust the motion so that it doesn't trip too much because otherwise after the first 100 notifications you will not receive anything. For example, it is quite common that large outdoor shooting cameras often shoot at night due to insects or other if you adjust too sensitively. If the camera sends 100 notifications during the night then you will receive nothing during the day. In this case it is better to decrease the sensitivity or enable detection only during the day.