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DVR and NVR



Installation manual

How to install the system How to connect to the network

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Contents of the manual

The RK series DVRs and NVRs are video recording systems for CCTV surveillance. The NVR models are for connecting

IP cameras

The DVR models have BNC inputs to connect AHD, CVI, TVI, CVBS analog cameras but can also manage IP cameras if you disable some analog inputs.

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

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Get the cameras ready

Before installing a DVR or NVR you must have the cameras to be connected. If you connect analog cameras you have to supply them with power and then connect the video signal with a coaxial cable or a twisted pair with balun. If you connect IP cameras to the network you need to configure their IP address.

For these operations you must follow the camera manual.

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Install the Hard Disk

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

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

Depending on the model, you can house from 1 to 8 Hard Disks inside the video recorder. You can easily understand the direction in which the disk should be mounted by looking at the holes on the bottom of the DVR / NVR.



Remove the cover by unscrewing the side screws e

rear



Connect the hard disk with the two cables of

power and data you find inside. If there are multiple ports, choose any pair.



Secure the hard drive with the 4 screws provided that you screw from underneath the VCR

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

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Connect a DVR

If you have purchased a DVR, your device can manage both analog cameras with its BNC inputs and IP cameras via the network port.

These are the rear connections. The equipment varies according to the model you have purchased.



VIDEO IN - You can connect any type of analog camera in AHD, CVI or TVI technology, up to 8MP resolution, to these BNC video inputs. You can also connect old analog CVBS cameras. The only cameras with BNC connection that you cannot connect are SDI digital cameras.

A OUT - You can connect a speaker to this RCA connector to broadcast the audio of the DVR. Remember that the HDMI monitor output also conducts audio so if you connect a TV via HDMI you can hear audio without connecting a speaker to this output.

HD OUT - This is the HDMI output for the monitor. Almost all TVs and PC monitors have this connection port. If you connect a TV, remember to select the external HDMI input you used for the NVR on your TV to see the images. This is usually done by pressing the SOURCE button on the remote control. These DVRs come from the factory with a low output resolution that you can increase up to 4K to match the monitor's maximum resolution.

Remember that the HDMI cable cannot be longer than a few meters. To connect a remote HDMI monitor from the NVR you need to use an HDMI transmission device.

VGA - You can connect a computer monitor not of the latest generation to this output. This output supports the maximum resolution of 1920x1080 FullHD. You can use this output with a VGA / BNC converter if you need a CVBS video output, which is no longer available on these high resolution models.

A1..A4 - You can connect audio signals from cameras or microphones to these RCA inputs. Remember that these audio inputs are only usable on BNC channels because IP cameras require the microphone to be connected to the camera.

NET - This is the RJ45 network port. To be able to view your cameras via the Internet, or to connect IP cameras, you need to connect the DVR to your network. You must use a normal straight type network cable and plug it into the NET port of the DVR on one end and into a free port on your router or switch on the other. The DVR is factory set to auto-configure to the network automatically (DHCP).

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USB - You can connect the mouse included with the DVR to the USB ports and USB sticks for backing up video files. All DVRs also have a front USB port.

AB RS485 - This is the RS485 serial port to which you can connect the control pair to control the motorized cameras. In fact, motorized analog cameras require this additional connection for control. The RS485 BUS is a twisted pair that connects in cascade all the motorized units of your system. Find more information on how to connect it in the camera manual. You will then need to configure the transmission protocol in the PTZ configuration of the DVR. Motorized IP cameras do not require this connection because they are controlled via the network cable.

DC 12V - Connect the included 12VDC power supply here. Be careful not to confuse the power supply of the DVR / NVR, which has at least 2A of power, with other smaller ones that you have purchased, perhaps for the cameras, because this would lead to malfunctions. If you power the DVR with our centralized cassette power supply, you must consider that the individual outputs are limited to 1A and it is therefore necessary to connect at least 3 in parallel to provide adequate power to the DVR.

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Connect an NVR

If you have purchased an NVR, your video recorder can only manage IP network cameras. These are the rear connections. The

equipment varies according to the model you have purchased.



A-OUT - You can connect an external speaker to this minijack connector to broadcast the audio of the DVR. Remember that the HDMI monitor output also conducts audio so if you connect a TV via HDMI you can hear audio without connecting this output.

VGA - You can connect a computer monitor not of the latest generation to this output. This output supports the maximum resolution of 1920x1080 FullHD. You can use this output with a VGA / BNC converter if you need a CVBS video output, which is no longer available on these high resolution models.

HD - This is the HDMI output for the monitor. Almost all TVs and PC monitors have this connection port. If you connect a TV, remember to select the external HDMI input you used for the NVR on your TV to see the images. This is usually done by pressing the SOURCE button on the remote control. These DVRs come from the factory with a low output resolution that you can increase up to 4K to match the monitor's maximum resolution.

Remember that the HDMI cable cannot be longer than a few meters. To connect a remote monitor from the NVR you need to use an HDMI transmission device.

USB - You can connect the mouse included with the DVR to the USB ports and USB sticks for backing up video files. Many DVRs / NVRs also have a front USB port. You can also connect USB disks to record to external HDDs

NET - This is the RJ45 network port. To be able to view your cameras via the Internet, or to connect external IP cameras, you need to connect the NVR to your network. You must use a normal straight type network cable and insert it on one side into the NET port of the NVR and on the other side into a free port of your router or switch. The NVR is factory set to auto configure to network automatically (DHCP).

LAN1..8 - Some NVR models have POE ports for cameras. You can connect here the IP cameras you want to be managed by the NVR. The NVR provides POE power to the cameras. If you connect our RK Series cameras to these ports, they are automatically configured (plug and play).

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DC 12V - Connect the included 12VDC power supply here



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Plug in your monitor

Although the DVR / NVR can work without a monitor, you must necessarily connect one, at least for configuration operations.

You can use a computer monitor or a TV. The main, higher resolution monitor port is the HDMI port found in all modern TVs and computer monitors.

There is also a VGA port if you need to connect a PC monitor from a few years ago.



DVRs / NVRs are factory programmed to provide low resolution (1280x1024) to be compatible with all monitors. Once you have connected the monitor and started the DVR / NVR, you should increase the resolution of the video output up to the maximum supported by your monitor (usually FullHD 1920x1080 or 4K).

If starting the DVR / NVR you only see the DSE logo and then nothing more, it is because the monitor does not support the video resolution of the device. You have to connect another monitor and then eventually change the video resolution in the configuration





Page: 10

			Configurazione	×
Senerale				
Network				
Manitor	`		O	
Monto		Mostra ora NVR	2	
🕂 Anomalia		Mostra nome canale	E	
🧕 Utente		Mostra all'avvio	9 Finestre	
Channel config		Default Applica Annulla		
Local Alarm				
Live				

Remember that the HDMI cable cannot be longer than a few meters. To connect a remote monitor from the NVR you need to use an HDMI transmission device.

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Make the first ignition

As soon as you plug in the power adapter, the DVR / NVR starts up and displays an image on the screen. If you don't see the picture you need to check the cable and monitor settings. The first time you turn on a wizard that helps you configure the main options of your system in minutes.

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

1 - START THE GUIDED PROCEDURE

When turned on, the guided procedure starts. After using it, you can choose to remove the tick to stop using this procedure in future start-ups.



2 - LOG IN TO THE SYSTEM

Enter the factory password to access the DVR / NVR:

USER: admin

PASSWORD: 12345

Then press LOGIN.

If you want, you can choose a different language than the factory Italian that we show in this manual.

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After pressing the ACCESS button, the system reminds you that it would be advisable to customize the password. It is an important operation to protect your privacy, but it is better to do it later, in the configuration menu, when you have become familiar with the system.



If you decide to change the login password to your NVR / DVR, first you must be

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sure not to forget it, because it is a safety device and to recover a forgotten password, you will have to contact us and face a rather

laborious procedure.

Contraction of the	Modifica password									
Nome Utente	admin									
Nuova password										
Conterma										
Segno di sblocco										
Attenzione: la passivori deve av	era 3 caratteri con almeno una lattera o un numero l									
Impostauradomanda di sicurezz	8									
Domanda disisurezza 1	Seloziona una domanda 🛛 🗸 🗸									
Rispostati										
Domanda di sicurezza/2	Scegliuna domanda 🛛 👻									
Risposite2										
Domanda di sicurezza 3	Seleziona una domanda 🛛 🗸 🗸									
(Rispostal)										
Awiso: sodirenticitiarispostad	isturezzaelapassword, contetterassistenza/DSE.									
Stiva	Consolina Esposico passivoral Annulina									

The password must contain at least 8 characters with a letter and a number inside.

We strongly recommend that you set the answers to the security questions before saving your new password, as they will allow you to easily recover your password by email if you forget it.

3 - SET THE GENERAL OPTIONS

In the first section of the guided procedure the general system options are set: LANGUAGE - Choose the menu language

RECORD MODE - Choose OVERWRITE to overwrite the oldest file once the HDD space runs out

DAYS PRESERVED - Set, if you want, a capacity limit of the video archive for privacy reasons.

VIDEO STANDARD - Leave the PAL standard in Italy

AUTOMATIC LOGOUT - Choose after how much time of inactivity the DVR / NVR must request a new user password to log in

NAME - If you want, enter a distinctive name for the DVR / NVR

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				2019.01.23 20.09:46
D <u>SE</u>		DSE		D <u>SE</u>
	Device settings Date sett			
CH1	Lingua			
	Modalità Registrazione			
	Giorni Conservati			
	Standard Video			
	Logout automatico (min)			
DAE	Nome Dispositivo			Dec
CH4		,		
	Dofault Ap;	pica Annula	Prossimo	
D		D		
CHT211	CHB			

In the second folder of this window you can set the time and date management

		2019.01.23 20:10.26
DSE	D <u>SE</u>	DISE
	Generale	
	Device settings Date settings	
CH1	👳 Imposta Data/Ora manualmente	
	Data/Ora 2019 - 01 - 23 20 : 10 : 20 Separatore ~	
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DEE	Fusio orano GMT+00:00 ~	DEC
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CH4	Orainizio Mar v 1* v Dom v 3ora v 3min v	
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	Lietaust Appirca Annulia 🔻 Prossimo	
DSE	DAR	
A Part of the Part		
СИ7	CHI	

You can set a manual date and time or you can choose to synchronize your DVR / NVR with an NTP server via the Internet by

setting the Italian time zone GMT + 1

In the last section you can set the automatic switching between summer and winter time.

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4 - SET UP YOUR NETWORK

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



5 - ADD THE CAMERAS

Analog cameras connect to the BNC ports and are immediately available. If you want to connect IP cameras to your DVR / NVR you must first configure them appropriately in the external network or connect them to the LAN ports of the NVR (NVR with poe ports). In this section of the procedure, you can add the IP cameras you have networked to the recorder. The details of this operation are explained later and also in the configuration manual.

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Dis	Ispositivo collegato Banda disponibile: 160/160 Mb												
	•		Modifica								Versione FW		
in the second se	App		Auto agg										
	Aggi	ng	Auto agg										

6 - SET REGISTRATION

Color the weekly table green where you want continuous recording and yellow where you want to record in motion detection, i.e. only in the presence of movements. We recommend that you keep the factory continuous recording for now and then eventually set up motion alarm detection and motion recording later following the advanced setup manual.

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FINISHED!

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

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Connect the NVR to your network

In order to connect to the surveillance system via PC or mobile phones or to manage IP cameras installed on the network, you must connect the DVR / NVR to your network. To do this use a network cable and connect **the NET NETWORK port** to a free port on your router or switch. Verify that the port LEDs turn on, solid green and flashing yellow, this means the hardware connection is correct.



If your NVR has POE LAN ports for cameras, do not use them to connect the external network as it will not work. The external network, towards your Internet router, must be connected to the NET port.





Check the network parameters of your DVR / NVR

Your DVR / NVR automatically configures itself to the network (DHCP), then directly receives the network address and configuration from your router. You don't have to worry about entering any parameters.

However, before connecting remotely with PCs and mobile phones, it is good to check the network situation. To do this, follow these instructions

1 - ACCESS THE NVR MENU

Right click and choose MENU



To access you will need to login Enter the factory

password:

USER: admin PASSWORD: 12345

2 - OPEN THE NETWORK WINDOW TO CHECK THE IP ADDRESS

Click CONFIGURATION and then CHOOSE NETWORK





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		Configurazione	×
Senerale	> IP/Porte DDNS Email P2P FTP UPNP		
Network	Indirizzo IP		
	Abiita DHCP	1	
Monitor	Subnet Mask		
4 Anomalia			
Utente			
Channel config	> IP Broadcast		
Local Alarm	MAC dispositivo		
	Porta privata		
	Aggiorna Default Applica		
Dive			

In this window check that the DHCP check is active and take note of the IP address that your NVR has assumed within the network (first line at the top). It will be useful if you want to access the NVR from within your network, without going through the Internet.

If your network is not connected to a router, or to another device acting as a DHCP server, you cannot use the DHCP option and you must set a manual address. This situation is better explained in the configuration manual.

3 - GO TO THE P2P WINDOW TO CHECK THE CONNECTION TO THE SERVER

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

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

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Connect analog cameras

If you have purchased a DVR of this range, you will find the BNC ports on the back to connect the cameras. DVRs support all analog video formats available today: AHD, CVI, TVI up to 8MP and traditional CVBS.

The DVR is factory programmed to recognize the video format automatically so there is no need to configure anything and just connect the rear BNC connector.



ATTENTION: HD-SDI digital cameras, although they use the same BNC connector as analog cameras, are not compatible.

When you connect a new camera, the DVR displays the format and resolution of the camera's video signal for a few seconds. Many analog cameras allow you to change the video format and its resolution by pressing the button on the camera.

If you want, you can force the DVR to accept only one video format by pressing the MODE button in the OSD menu. You can try forcing a specific video signal if the factory automatic selection doesn't work with your camera and the image doesn't appear or appears distorted or distorted.

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-	Menu							
	1-Fin							
-	4-Fin							
E.	Manual screenshot							
	Modalità							
-	Ciclico							
0	Conf. registrazione							
-	Agg. telecamera							
	Riproduzione							
-	PTZ							
-	Immagine XVR							
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								2019 01 23 20 24:10
	DNE			Modalità		×	DNE	2019 01 23 20 24 10
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UTC MENU CONTROL OF ANALOG CAMERAS

The latest AHD, CVI and TVI cameras have an internal configuration menu that is usually operated with the button on the camera.

These DVRs allow you to control the internal OSD menu of the camera with the mouse of the DVR thanks to the UTC protocol that passes along the video cable. The camera must support the UTC protocol to be able to use this function.

The UTC remote control also allows you to adjust the zoom of the lens cameras

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motorized.

First you have to check that the UTC protocol is enabled in the PTZ settings of the channel, by clicking: MENU CAMERA PTZ CONFIGURATION



				Conf. telecamera	×
agg. telecamera					
osd					
immagne		Indirizzo			
Ril. Movimento		Baud Rate	2400		
Video Perso		Data Bit			
DT7		Stop Bit			
	-	Cheox	NESSUNA		
Configurazione PTZ	>	Default Copia Applica			
Maschera privacy					
Canale					
🕐 Apg Telecamera	>				
Live	×.				

CHANNEL - Select the camera input you want to control

PROTOCOL - Choose UTC-A. If that doesn't work you can try the UTC-B version that

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it is suitable for some types of cameras from other manufacturers.

To control the camera OSD menu you need to bring the camera to full screen and click PTZ. To open the OSD menu you have to

press the central ENTER button in the middle of the arrows.

2019-01-26 19:	35:07	
	confic	
PTZ Canale Canale Velocità Velocità Imp. Cruise	ESPOSIZIONE RETROILLUM BIL BIANCO DIUR/NOTT NR SPECIAL ADEGUARE USCITA	OFF ATW USC 2 2 3 AL&FINE SAL&FINE

PTZ CONTROL OF ANALOG CAMERAS

The analogue motorized cameras are controlled by commands sent through the rear RS485 port.

First you need to set the communication parameters that allow the DVR to communicate with the camera. Click: MENU CAMERA

.... PTZ CONFIGURATION





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		Conf. telecamera	×
🦛 Agg. telecamera			
SD OSD			
immagne	Indirizzo		
Ril. Movimento			
Video Perso	Data Bit		
PTZ	Check		
Configurazione PTZ	Default Copia Applica	Annulla	
Maschera privacy			
Canale			
Apg Telecamera			
· · · · · · · · · · · · · · · · · · ·			
Live	×		

CHANNEL - Select the camera input you want to control

PROTOCOL - Choose PelcoD for all our PTZ cameras. You can also choose PelcoP for cameras from other manufacturers.

ADDRESS - Each camera located along the RS485 bus must have an ID address from 1 to 255. Normally the cameras have the factory address 1 but you can change it by acting on the camera.

BAUD RATE / DATA BIT / STOP BIT / CHECK PARITY - These are the communication parameters that the DVR will use to communicate with your camera. The most important is the Baud Rate that you can choose in the camera. The most common speeds are 2400,

4800, 9600 bps. Check the manual of your PTZ camera to know the parameters to be entered. In general, the address and speed in the camera are set with microswitches: check how they are positioned by comparing the manual.

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To control the movements of the motorized cameras you have to bring the camera to full screen and click PTZ.



You can rotate the camera with the arrows and control the lens with the Zoom, Focus, Iris buttons. The commands in this window are explained in detail in the configuration manual.

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Enable IP channels on your DVR

If you have purchased an NVR you can only manage IP cameras that you must have previously installed on the network, each with its own address.

Even DVRs with BNC ports can manage IP cameras if you disable some analog inputs in the channel configuration. You have to click MENU... CONFIGURATION... CHANNEL CONFIGURATION



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			Configurazione		X
🔆 Generale					
Network					
Manitor			8	•	
Monitor			E C	•	
Anomalia			5	-	
. Utente			2	•	
Channel config				•	
Charmerconny	1	CH6		•	
Local Alarm		CH7		•	
		CH8		•	
		CH9		•	
		CH11			
			Appika Annulia k		
UV Live					

The DVRs are shipped with all analogue channels enabled by default so that all rear BNCs can be used. If in this table you try to disable some analog HD channels, a certain number of IP channels will be automatically enabled and you can add network IP cameras.

Obviously, if you disable an analog channel, the relative BNC can no longer be used. It seems like an obvious clarification, but it needs to be remembered because if you connect a BNC camera to that input in the future and you don't see it working, you may think that the DVR is broken and needlessly require repair.

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Connect IP cameras on the network

If you have purchased an NVR you can manage IP cameras. You can also manage IP cameras with a DVR, if you have disabled

some analogue channels, as seen in the previous chapter.

Before adding an IP camera you must have it configured on the network, using the appropriate configuration software, as explained in the camera manual.

To add an IP camera to your DVR / NVR you have to right click and choose ADD. CAMERA, or from the programming menu click MENU... CAMERA... ADD. CAMERA



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									Agg. te	elecamera				×
Disp	positivo collegato Banda disponibile: 160/160 Mb													
	•		Modifica								Protocollo	Versione FW		
								Automaa		Managarta				
						A00	jungi	Auto agg	A00.	Manuale R	Annul	· ·		

In the add cameras window you have to click ADD. A search window will appear and after a few moments you will find in the list all the DSE cameras and also the ONVIF cameras of other brands that the DVR / NVR has detected on the LAN to which it is connected. Select the camera and click ADD to insert it into the VCR.



If your camera does not appear in the list, check that it has been configured on it

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network segment of the DVR / NVR (in the example above 192.168.2) and that supports the onvif protocol. Also check the network settings of the DVR / NVR as seen above.

Once the camera is added, check that the LINK indicator turns green as this certifies that the connection has been made. The connection usually takes about ten seconds but can sometimes take longer depending on the type of network connection.



If the LINK indicator remains red there is something wrong because the automatic camera setup was not successful. At the bottom of the row, to the right of the table, you will find an error message giving you an indication of the cause of the problem. You must then click on the EDIT button and change the connection parameters. Start by entering the correct access password of the camera, then check the onvif port your camera uses in the manual.

If the camera does not connect even after checking the password and port, enter the camera configuration with the browser and check that both the main stream and the substream have the same H264 or H265 compression and try to use a different format.

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Statistic and statistics of the	the second s	Conf. telecamera	×
Agg. telecamera >	Agg. telecamera PoE		Banda disponibile: 58/60 Mb
osd >	CH(1) Vodifice Elim.	Conf. Link IP Porta	Protocollo Versione FW Private 3516CV/200 IMX207 P1T
Magine Andreasta		Configurazione Canale	3516CV300_IMX307_B11
PTZ >	Abilita Canale	Сна	Ĵ
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	Nome Utente	admin	
	Password		
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	Dominio		
	Porta	80	
		Salva Annulla	
	Aggiungi Agg. Manur	ale Aggioma Rimuovi	Amulia
C Live		and the second sec	





Connect IP cameras to the POE ports of the NVR

If you have purchased an NVR with integrated POE ports you can connect the IP cameras directly to the LAN ports on the back of the NVR. It is a very simple operation because the NVR configures the camera automatically.

<u>ATTENTION</u> - Unlike other DVRs and NVRs in this range, NVRs with POE ports are supplied with a special power supply which provides **52VDC**. Be careful not to mistakenly mistake it for another of our standard 12VDC power supply because the POE outputs for the cameras would not work properly

RK SERIES CAMERAS

If you connect one of our RK series cameras to the NVR, recognition is totally plug & play. You can take the new IP camera out of the box and connect it directly to a LAN port of the NVR without doing any preliminary configuration. The NVR will automatically assign the address to the camera and correctly configure the network settings. Wait about a minute and you will see the camera image appear on the monitor, in the box corresponding to the POE port where you have inserted it.

ONVIF CAMERAS

If you connect a normal onvif camera to the POE ports of the NVR you must first configure it manually because the plug and play autoconfiguration works only with our RK Series cameras. Use the program to assign the IP address to the camera and set a fixed IP address of the type 192.168.11 .---, for example 192.168.11.20. It is the address class that the factory NVR uses to manage its internal network. Enter the other network parameters as in the example below, where we use our RH Series camera.

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castSearch	ActiveSea	r ch			
Start	Sto	P			Device ID: OC3FE4 C Device obtain an IP address automatically Output of Device user the following IP address
 n	[[n-1		Device IP: 192.168.11.20 Subnet Mark: 1255.255.255.0
OC3FE4	30001	192.168.11.20	RH-BCC3-4Z	v3. 4. 0804. 1003. 59. 0. 99. 0. 2	Default Getamou: 192 168 11 1
					DNS Preferred DNS Server: 192.168.11.2 Alternate DNS Server:
					User Name: admin

Then connect the camera to a POE port of the NVR, click add camera and press ADD. MANUAL. Enter the camera parameters as in the following example. Note that the channel mode must be changed from plug and play to manual.

							Agg. telec	amera			×
Dispositivo colle	gato									Banda disponibile:	
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TIP - If you want, you can assign an external network address to the new camera, instead of an internal network address of the NVR. For example if your external network, to which the NET port of the NVR is connected, uses the class 192.168.1.xxx you can assign the address

192.168.1.10. If you add the camera to a POE port of the NVR using this address it will work the same, even if you have not used an internal IP address of the NVR network (192.168.11 ---). It can be handy if you have already assigned your camera a fixed IP address for your external network, so you don't have to change it.

ONVIF CAMERAS IN DHCP

Although it is technically possible it is not advisable to connect to the POE ports of the NVR cameras in DHCP mode (automatic address assignment) because they will receive the IP address from the DHCP server of your external network and if this IP changes you will have to reconfigure the NVR.



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Connect wifi IP cameras to wifi NVRs

If you have purchased an NVR with integrated wifi you can connect wifi cameras directly to the wifi network of the NVR without using your external wifi network.

Connecting wifi cameras is very simple and Plug & Play if you buy one of our RK or RKK series wifi cameras. If, on the other hand, you want to connect a different type of onvif wifi camera, you will have to proceed with the manual configuration.

CONNECT RK SERIES WIFI CAMERAS

If you connect one of our RK series cameras to the NVR wifi, recognition is totally plug & play. You can take the new IP camera out of the box and connect it directly by following these instructions.

To connect an RK wifi camera to your NVR, follow the steps below:

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

If your NVR has a WAN network port and other LAN ports, connect the new camera to any free port.



2 - Open the NVR MENU and access the CAMERAS section

In this example it is a system with 3 connected and functioning cameras to which we want to add a fourth.

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la table				i de		1111		1-22			Conf. t	elecamera	al a start a little		-	- the second
Agg.	telecamera	>	Age	g. telecar	me										Banda disponibile:	56/60 Mb
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Masc	hera privacy	3														
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					Self											
C Live		>														

3 - Press the ADD button to start the camera search

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Agg telecamera	>	Age). teleca	пе													Banda disponibi	le: 56/60 Mb
osd	~			СН	Modifica	Elim.	c	onf.	Link	IP				Porta		Protocollo	Versione FW	
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Magine Immagine				2	1		_1	٢		172.20	0.18.12			80		Private	3518EV200_I	IX323_W_WIFIKITS_[E000
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4.5						•	2	1	172.2	0.18.12	80	Private	351	BEV200_IMX323_W_	WIFIKIT			
								1	172.2	0.18.13	80	Private	351	BEV200_IMX323_W_	WIFIKIT			
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C Live	>																	

Leave the OWNER basic setting in the FILTER box. The NVR searches for RK cameras and will find, in addition to any wifi cameras already installed, also the new one you connected with the cable. This new camera will probably have a completely different address than the ones already installed, but don't worry; the NVR will configure the camera automatically.

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

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

CONNECT WIFI ONVIF CAMERAS

If you want to connect an onvif wifi camera that is not part of our RK series to a wifi NVR, for example one of our wifi mini cameras, a wifi PTZ, or a wifi camera from another manufacturer, you can do so by following the instructions of your camera to connect the camera to a wifi network. Generally these instructions tell you how to connect the camera to your home wifi network, but you can do the same by connecting to the NVR's wifi network instead.

Before you can proceed, however, you must perform some preliminary configurations in the NVR to make the wifi network that it generates visible to the outside.

1 - Enter the menu of the NVR section CONFIGURATION - NETWORK - WIFI. Click the ADVANCED button. In this window, move the reference area of the wifi network from MKK to EU. Then press confirm and restart the NVR. Now the wifi network of the NVR will also be visible to external devices. you can

DSE SRL - ITALY - WWW.DSE.EU

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try to search for wifi networks with your smartphone to make sure of the presence of this new network.

			>
🌞 Generale	IP/Porte DDNS Email P2P	FTP UPNP Archivio cloud	VIFI PPPOE WAN
Network	BSSID W ESSID H	IFINVR SNVR2Zm8s	
Monitor		Avanzato	Mostra
Utente	Certify mode WPA2-PSK SSID broadcast Formato WiFi 902.11bgn Canale WiFi altro Area MiKK Modalità DHCP FCC Inizio IP EU Gateway MiKK Maschera 255 • 255	• 255 • 0	
	Assegnazione numero 190 Attenzione: Luso dei canali WiFi deve rispetta Default	re le normative locali Conferma Annulla	
Live	>		

2 - Connect the camera to the NVR wifi network following the camera instructions. Generally you will have to enter the camera configuration from the computer and act in the wifi configuration.

The WiFi page of the NVR provides you with the connection data. The ESSID is the name of the wifi network of the NVR and the login password is revealed by pressing SHOW. Look at the following example.

You can connect to the NVR any onvif wifi IP camera and also different wifi devices, such as WiFi signal repeaters to enhance the transmission range





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							Configurazio	ne	-		>
٠	Generale		IP/Porte	DDNS	Email	P2P	FTP	UPNP	Archivio		WAN
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Viewing of live cameras

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

most of live viewing.



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

EDIT SCREEN DIVISION - Right-click and in the menu that appears choose another screen division. It can be especially useful if you don't use all the channels of the NVR / DVR. In the settings you can also choose a preferred subdivision to be called at startup.



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

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mouse.

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

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





1 - In analogue channels the first icon on the left allows you to change the video format of the channel. Normally you will leave it on AUTO, but you can force AHD, CVI, TVI or CVBS format if you are having trouble viewing. In IP channels this icon allows you to rotate the image 90 ° with each click.

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

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

4 - DIGITAL ZOOM - If you activate this function you can drag the mouse in the image to zoom in on a detail. You can then resize and move the zoomed box with the mouse.

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Click the right mouse button to return to normal viewing.

5 - With this button you can adjust the video parameters of the image: brightness, contrast, saturation, tones.

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

control panel.

CHANNEL ICONS

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



Channel in recording

A

Motion detection alarm channel

CYCLIC

Cyclic camera scanning allows you to see all cameras in sequence in sequence. If you want to use this function press CYCLIC in

the context menu



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CH3		CH4				

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

TIME - It is the dwell time of each window during the scan (seconds)

WINDOWS - In DVR / NVR with more than 4 channels, in addition to scanning a single camera at a time, you can cycle windows with 4 or more cameras.

PTZ

With the PTZ button open the PTZ control panel to control the motorized cameras, both analog and IP. You can also use this panel to control the UTC menu of analog cameras.

In order to use this panel it is necessary to set the PTZ settings correctly as explained in the configuration manual.

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		Immagine XVR	
CH3		CH4	

PTZ control is performed automatically on a single full screen camera



CHANNEL - Select the camera to view and control ARROWS - Direction shifts

ENTER - The central button opens the camera configuration menu SPEED - Adjusts the movement speed

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ZOOM - FOCUS - IRIS - Motorized lens controls. Some of these commands may not be effective depending on the camera settings.

IMP. CRUISE - Allows you to set the tour or cruise of the camera (if available)



PRESET - You can recall a preset set in the camera CRUISE ON / OFF - You can activate a tour or cruise set in the camera

NVRs can only control the most common automatic movements of PTZ cameras. Other functions and configurations must be performed in the camera configuration.

MONITOR LEVELS CONTROL

For each camera you can modify the image parameters from the panel of the single channel, as shown above.

You can also adjust the monitor's overall brightness, contrast, saturation and tones with the PICTURE button

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	Contrasto	50		
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		10.		
CH3	CH4			

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Review the recordings

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

1 - OPEN THE PLAYBACK WINDOW

Right-click and choose PLAY in the context menu



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

Choose the day you are interested in at the top right. Days containing recordings are marked with a colored box. Click on one of these. Under the calendar, select the channels you want to play

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3 - REPRODUCE THE INSTANT YOU WANT TO REVIEW

In the time bar at the bottom you will find the 24 hours of the day with the continuous recording colored in green and the recordings made by motion detection in yellow. Click wherever you want in the timeline to play the images at that exact moment.



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With the buttons 24H 6H 2H 1H 30M you can vary the scale of the timeline.

With the control buttons at the bottom left you can accelerate playback, stop or pause playback.





Connect with the browser on the internal network

If you have a computer connected to the same network as your DVR / NVR, you can view your cameras simply with the Internet browser Internet Explorer. At the first access you will be asked to download and install the Plug-in necessary for the connection.

Be careful not to use different browsers such as Edge, Firefox, Chrome etc. because they wouldn't work properly. Internet Explorer is always present in all versions of Windows. If you don't know how to find Internet Explorer in your version of Windows, you can easily find directions on the Internet. Follow these instructions to connect to the DVR / NVR with the browser.

1 - ENABLE THE EXECUTION OF ACTIVEX

Internet Explorer contains security settings that can prevent the installation of the ActiveX component. Before connecting you must enable the execution of ActiveX not marked as safe. Open Internet Explorer and choose INTERNET TOOLS / OPTIONS



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2 - ENTER THE NETWORK ADDRESS OF YOUR NVR

In the previous chapter we saw how to know the IP address your DVR / NVR is using in the local network by opening the settings menu in the NETWORK section. Enter the IP address of the DVR in the Internet Explorer bar



3 - ENTER THE PASSWORD

Enter the password to access your NVR (factory admin: 12345)

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4 - INSTALL THE PLUGIN COMPONENTS

The first time you log in you will find the suggestion that asks you to download and install the necessary components (plugin

activeX). The best thing is to download the file to your computer with the SAVE button and then install it like any other program.



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Remember to close the browser before installing the activeX component and reopen it at the end of the installation.

5 - FINISHED

You are now connected and can view live camera images by clicking on the camera icon. You can also review the recordings by

clicking PLAY and change the system configuration that we will see in the advanced settings manual.



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Connect with an RTSP client

The RK Series DVR / NVR support the RTSP protocol which is factory set to use port 554. It is possible to connect to the DVR / NVR using any RTSP player such as VLC.

The address to be called must have the following syntax: RTSP: // USER: PASSWORD @ IP : PORT / CHANNEL / STREAM

USER: Username PASSWORD: Login password IP: IP address of the DVR / NVR DOOR: RTSP port set in the DVR / NVR: factory 554 CHANNEL: channel number from 0 (channel 1 = 0, channel 2 = 1 etc.) STREAM: 0 = main stream. 1 = substream

For example with this command: rtsp: // admin: 12345@192.168.2.191 : 554/00

The main stream of channel 1 of the device opens

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See below as operate for example with the free player VLC:

Lettore multimediale	VLC			
Media Riproduzione	Audio Video Strumenti Visua	lizza Aiuto		
	Antifile	CHL O		
	Apri nie	Ctrl+ Shift+ O		
	Apri cartella	Ctrl+E		
	Apri disco	Ctrl+D		
	Apri flusso di rete	Ctrl+N		
	Apri periferica di acquisizione	Ctrl+C		
	Apri posizione dagli appunti	Ctrl+V		
	Salva scaletta su file	Ctrl+Y		
	Converti / Salva	Ctrl+R		
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For the stream to play, the following option must be enabled

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nterfaccia /	Audio Video	Sottotitoli / OSD Ingresso / Codificatori	Tasti speciali		
postazioni d	i ingresso e codi	ficatori			
Codificatori					
Decodifica con accelerazione hardware		Automatico			
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Salta il filtro de deblo	cking H.264	Nessuno			
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Lettore ottico					
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Pre-carica i file Mi	(V nella stessa cartella				
File AVI danneggiati o incompleti		Richiedi azione all'utente			
Rete					
Criterio di cache predefinito		Personalizzato			
URL proxy HTTP					
Trasporto flussi Live555		HTTP (predefinito)	RTP s	su RTSP (TCP)	
atra la investoria d					
istra le impostazioni					



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Connect with your mobile, even via the internet

You can connect to the video recorder easily with your mobile or tablet. You can do it on the internal wifi network or even via the Internet, thanks to our P2P cloud server. Consult the manual for remote access with our IoVedo.RK app





Connect with iVMS PC software, even via the internet

You can connect to the VCR easily with your Windows PC. You can do this on the internal wifi network or even via the Internet. Download our iVMS software and charge your device to control it from a computer. Use the internal IP address if you want to connect to the local network, or use the serial if you want to connect via the internet with our P2P cloud.