urmet

Mod.
1099

DS1099-014

H.265 1080P IP Cameras

IP Bullet Camera Ref. 1099/200

Starlight IP Bullet Camera Ref. 1099/201

IP Bullet Camera Ref. 1099/202

Starlight IP Bullet Camera Ref. 1099/203

IP Dome Camera 1099/300

Starlight IP Dome Camera 1099/301

IP Dome Camera 1099/302

Starlight IP Dome Camera 1099/303

Vandal IP Dome 1099/304

USER MANUAL

CONTENTS

1 INTRODUCTION

Thank you for purchasing our integrated and developed network camera products for network video monitoring. Our range includes the following products: Storage Network Bullet, Wireless Storage Network Bullet, IR Network Dome, IR Network Weather-Proof and High-Speed Network Ball cameras. Individual high-performance SOC chips are used in the media processor for audio/video capture, compression and transmission/transfer. An h.265 standard encryption algorithm ensures clear and smooth video representation, as well as a high transfer capacity. The integrated Web server offers users access to real-time surveillance and remote control of the front-end camera through the Internet Explorer browser.

The network cameras are easy to install and operate. They are ideal for large and medium-sized companies, governmental projects, large malls, supermarket chains, intelligent buildings, hotels, hospitals, schools and other public places, as well as for applications that requiring remote network video transmission and monitoring.

Instructions:

- For the purpose of this manual, IP camera refers to a network camera.
- The default factory IP address for the IP camera is 192.168.1.168.
- The default factory administrator username for the IP camera is admin (in lowercase) and the password is admin (in lowercase).
- The default Web port number is 80 and the default client port number is 9988.

Statement:

Some information contained in this manual may differ from the actual product. For any problems that cannot be solved with the help of this manual, please contact our technical support or an authorised dealer. This manual may be subject to change without prior notice.

2 PRODUCT DESCRIPTION

URMET S.p.A. Ref. 1099/200, Ref. 1099/201, Ref. 1099/202, Ref. 1099/203, Ref. 1099/300 and Ref. 1099/301, Ref. 1099/302, Ref. 1099/303 and Ref. 1099/304 are 2 MegaPixel IP cameras that can be controlled by TCP/IP network connections.

2.1 TECHNICAL CHARACTERISTICS

- High-performance Hisilicon media processor with advanced functions.
- CMOS progressive sensor.
- Optimised H.265 video compression algorithms; multi-stream transmission ensures high definition images on both narrowband and wideband.
- Support simultaneous connection of up to 10 video streams (if the IP camera is connected to the NVR, the NVR will occupy 3 streams, leaving 7 free video streams. If IP camera is connected to the Browser only, 10 streams will be available).
- SD Card support up to 128GB (for camera models with varifocal and motorized lenses).
- The integrated Web Server allows multi-browser use (Internet Explorer, Firefox Mozilla up to version 5.1 and Safari 6.0 for MAC O.S.) for real-time on-site monitoring, setup and management.
- Managed through Urmet UVS client software.
- Mobile software for the following platforms: iOS (Iphone and iPad), Android (smartphones and tablets).
- Remote system firmware updates.
- Support LAN and Internet.
- Support ONVIF and RSSP protocols.
- Support multiple network protocols, such as TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6 and Bonjour.
- Support motion detection alarm function (the user can set the area and sensitivity) and sensor/alarm out function (for camera models with motorised lenses and box cameras).
- Support privacy zone function.
- POE (optical) power supply function.
- Support snapshot. Image upload via FTP or E-mail.
- Log Support: System logs, network logs, parameter logs, alarm logs, user logs, recording logs, storage logs and all logs.
- Intelligent video analysis function (Perimeter intrusion detection, line crossing detection, stationary object detection, etc.).
- Reset Button supported (where included).
- Support automatic download recovery function. Automatic connection in the event of network interruption.

Note: The specifications of the different products may vary slightly.

2.2 OPENING THE BOX

Check that the packaging and the contents are not visibly damaged. Contact the retailer immediately if parts are either missing or damaged. Do not attempt to use the device in this case. Send the product back in its original packaging if damaged.

ACCESSORIES PROVIDED

- 1 IP camera unit
- 1 installation bag
- 1 Quick Guide and 1 Appendix containing instructions for proper installation
- 1 Mini-CD containing Urmet Software

※IMPORTANT NOTE:
Accessories may be changed without prior notice.

2.3 WARNINGS

Power supply

- Before connecting the equipment to the electrical outlet, ensure that the nameplate specifications match those of the mains power supply.
- It is advisable to install a suitable disconnection and protection switch upstream from the equipment.
- In the event of failure or malfunction, disconnect the power supply at the main switch.
- Use only the power supply unit provided with the product.

Safety precautions

- Keep the device away from rain and humidity to prevent the risk of fire and electrocution. Do not introduce any material (solid or liquid) inside it. If this should accidentally occur, disconnect the device from the mains and have it inspected by qualified personnel.
- Never open the device. In all cases, contact qualified personnel or an authorised service centre for repairs.
- Keep the device away from children, to prevent accidental damage.
- Do not touch the device with wet hands to prevent electrical shock or mechanical damage.
- Do not use the device if it falls or if the external casing is damaged. Continued use of the device in such conditions could cause an electric shock. Contact the retailer or authorised installer.

Installation precautions

- Do not install the camera in places exposed to rain or humidity. In these situations, use the special cases.
- Avoid pointing the camera directly towards sunlight or other intense sources of light, even when switched off; the subject to be filmed should not be against the light.
- Avoid pointing the camera towards reflecting objects.
- The presence of certain types of light (e.g. coloured fluorescent light) can distort the colours.
- Do not position this device on an unstable surface, such as a tottering or slanted table. The device could fall, causing injury or mechanical failures.
- Stop using the device if water or some other material penetrates inside it, to prevent risk of fire or electrocution. In such cases, contact the retailer or authorised installer.
- Do not cover the device with a cloth while it is running to prevent deformation of the external casing and overheating of internal parts, causing risk of fire, electrocution and mechanical failure.
- Keep magnets and magnetised objects away from the device to prevent faults.
- Do not use the device in the presence of smoke, vapour, humidity, dust or intense vibrations.
- Do not operate the device immediately after moving it from a cold place to a warm place and vice versa. Wait on average for three hours: this will allow it to adapt to the new environment (temperature, humidity, etc.).

Precautions for use

- Check that the device is not damaged after removing it from the packaging.
- Ensure that the working environment is not too humid and that the temperature is within the indicated range.
- Avoid pointing the camera towards sunlight to prevent damage to the sensor.

Cleaning the device

- Rub gently with a dry cloth to remove dust and dirt.
- Dip the cloth in neutral detergent if dirt cannot be removed with a dry cloth alone.
- Do not use spray products to clean the device. Do not clean the device using volatile liquids (such a petrol, alcohol, solvents, etc.) or chemically treated cloths to prevent deformation, deterioration or scratches to the paint finish.
- Disconnect the device from the electrical outlet before any cleaning or maintenance operations.

Recording images

- This device is not designed as a burglar system but mainly to transmit and record video images. Urmet S.p.A. cannot be held liable for loss or damage due to theft from the user's premises.
- Make a test recording before using the device to ensure that is working correctly. Please note that Urmet S.p.A. is not liable for any loss of stored data or damage caused by incorrect installation, improper use or malfunctioning of the device.
- This device contains precision electronic components. Protect the device from bumps and jolts to ensure proper recording of images.

Privacy and Copyright

- The IP camera is designed for CCTV systems. The recording of images is subject to the laws in force in the country of use. Recording of images protected by copyright is forbidden.
- Product users are responsible for checking and complying with all local rules and regulations regarding monitoring and the recording of video signals. The manufacturer SHALL NOT BE LIABLE for any use of this product that is not in compliance with the laws currently in force. For more information see http://www.garanteprivacy.it.

Firmware upgrade

- You are advised to refer periodically to URMET S.p.A. Customer Service Technical Assistance to check the availability of firmware updates.

Network configuration

- The camera default setting is DHCP mode. If the installation network does not support dynamic addressing (DHCP), the device will automatically switch to the factory-set IP address 192.168.1.168. The Urmet “Device Search Tool” software can be used to change the IP address and other network settings to prevent conflict with other devices on the network.
- Once the camera is properly connected and configured on the IP network, its video and settings can be viewed from a PC or smartphone.

Network connections

- When connecting a remote PC (using client software or a browser), it should be borne in mind that any video channel used on the PC will have a “unicast” connection (TCP, RTP, UDP).
- The device can support up to 10 “unicast” connections, thus the video stream can be viewed from a maximum of 10 remote devices (PC or smartphone) at the same time, depending on the available bandwidth.

3 OVERVIEW

3.1 RANGE OF APPLICATION

These network cameras with their powerful image processing capacity can be used in various public places, such as malls, supermarkets, schools, factories and workshops, as well as in environments requiring HD images, such as banks and traffic control systems, as illustrated in the figure below:

3.2 PRODUCT DESCRIPTION

An IP camera is an online digital surveillance camera, equipped with a web server and capable of independent operation, providing the user with access to real-time monitoring from any location through a web browser or client software.

These IP cameras feature the most advanced HiSilicon solution: an integrated media processing platform for audio/video capture, compression and network transmission on a single board. It is compliant with High Profile H.264/ H265 coding standards. Remote users can have access to real-time monitoring by entering the IP address or domain name of the IP camera in the web browser. This network camera solution is suitable for residential or business environments, as well as a wide range of situations that require remote network video monitoring and transmission. The IP cameras are easy to install and operate.

The cameras can be controlled by several users with different levels of authorisation.

The IP cameras allow mobile detection and sending of e-mails and snapshots in cases of emergency; if an SD card is included, the image or video snapshots can be stored in the card for subsequent retrieval.

3.3 OPERATING ENVIRONMENT

Operating system: Windows 7/Windows 8/Windows 2008 (32/64-bit), Windows 2003/Windows XP/Windows 2000 (32-bit)

CPU: Intel Core Duo II processor or higher

Memory: 1G or more

Video memory: 256M or more

Display: 1024 × 768 or higher resolution

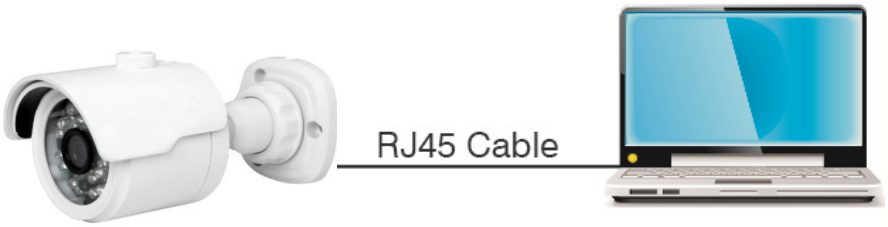
Internet Explorer 6.0 or later

4 DEVICE CONNECTION

The IP camera can be connected in two ways:

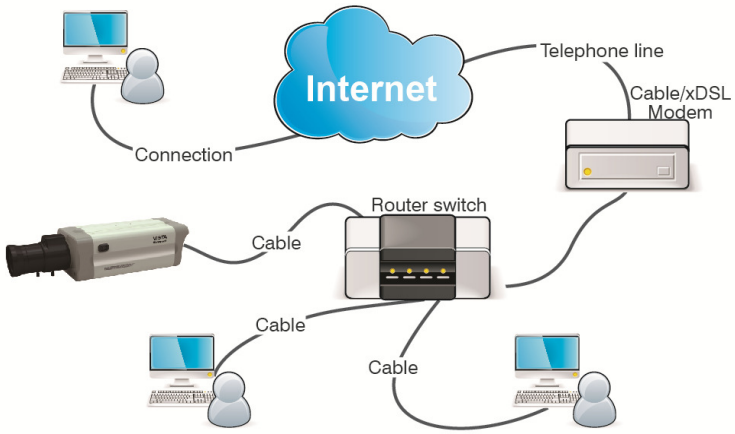
- Connection to a PC

  Connect the IP camera to the PC using a direct network cable, with the power input connected to a 12VDC adaptor, and enter the IP addresses of the PC and the camera in a network segment. The IP camera will communicate with the PC within one minute after being switched on if the network is working properly.

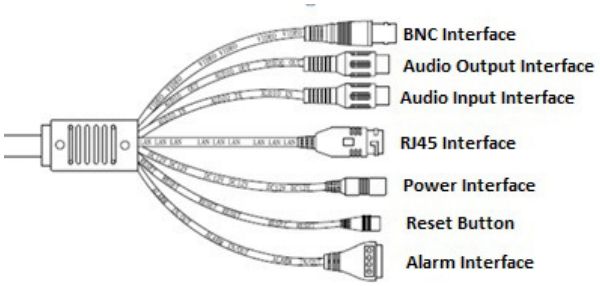


- Connection to a router/switch

  This solution is more commonly used to connect the IP camera to the Internet; in this case, the camera and the PC are connected to the LAN ports of a router/switch and the gateway of the camera is set to the IP address of the router.



4.1 IP CAMERA CONNECTOR LAYOUT (WHERE PRESENT)

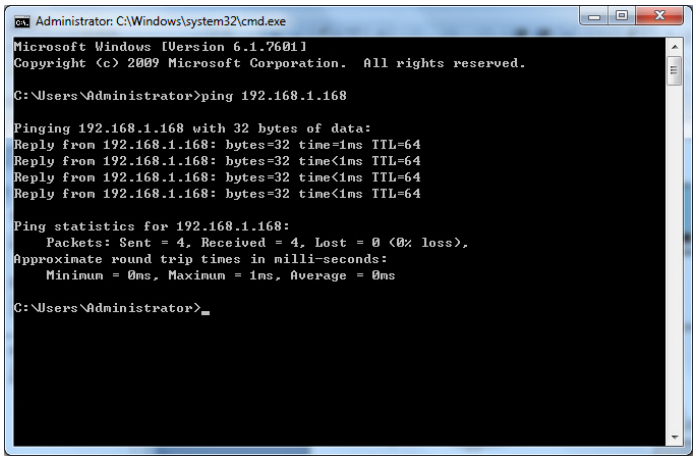


1. BNC Interface: Local video signal output.
2. Audio Output Interface: RCA female head (white), can connect with external devices, such as speakers.
3. Audio Input Interface: RCA female head (red), can connect with input devices, such as a microphone.
4. RJ45 Interface (Network Interface): Connector for a RJ45 network cable.
5. Power Interface: DC 12V.
6. Reset Button: The device will restore the default settings if this button is pressed and held for 3 seconds.
7. Alarm Interface: Including alarm input and output interface. ③,④ are alarms input, ① is alarm output, ② is used as GND.

5 OPERATING INSTRUCTIONS

5.1 CHECK CONNECTION

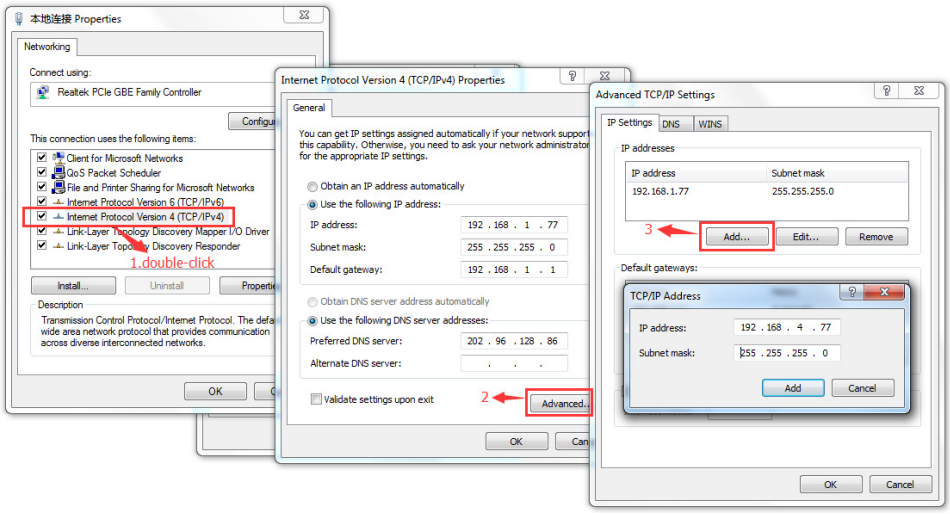
- The factory default IP address for the IP camera is 192.168.1.168 and the subnet mask is 255.255.255.0. Give your computer an IP address in the same network segment as the IP camera, for example, 192.168.1.69, and the same subnet mask as that of the IP camera.
- Check whether the IP camera is connected and switches on properly by selecting Start > Run, entering “cmd” and pressing ENTER; then enter “ping 192.168.1.168” in the command line window.



- Check whether the IP camera is accessible. If the PING command is executed successfully, it means that the IP camera is operating normally and the network is connected properly. If the PING command fails, check the IP address and gateway settings of the PC, as well as the network connection.

5.2 SEARCHING FOR THE DEVICE

- Feedback: The Device Config Tool function may be used to search for the device across network segments. Before running the Device Config Tool, select the local connection icon at the bottom right corner of the desktop;
- Add the IP addresses of several network segments in the TCP/IP local area connection settings (as shown below). You can run this tool to search for any device with an IP address in the same network segment.



Note:

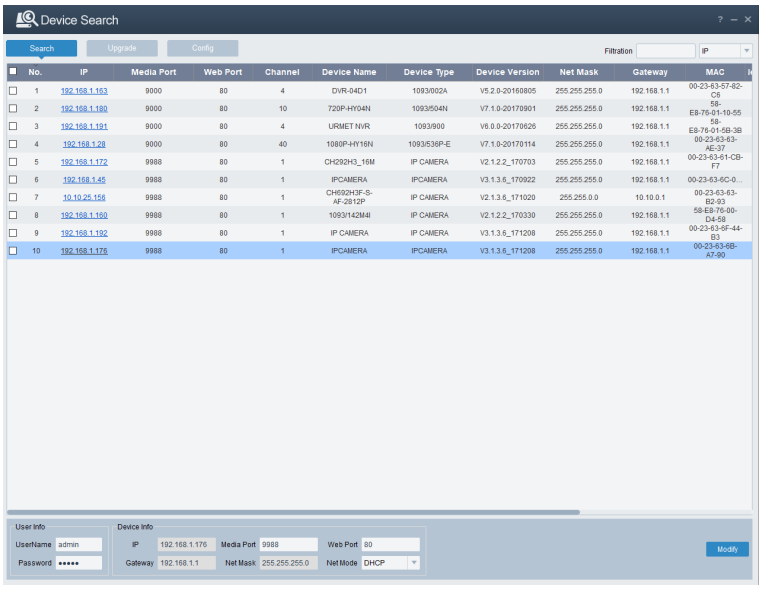
Device Config Tool uses the Multicast protocol to search for the device across the segments; however, since firewalls prevent multicast data packet traffic, they must be disabled so that the information on the device can be acquired.

Online device search procedure

1. Run Device Config Tool by double-clicking on the 

icon.

   It will search for and display any online device and its IP address, port number, web port number, number of channels, configured name, device type and version, subnet mask, gateway, MAC address, connection pattern and status.



5.3 INSTALLATION OF CONTROLS AND LOGIN TO THE SYSTEM

Before using the IE (Internet Explorer) browser to access the IP camera for the first time, the plug-in components must first be installed, as follows:

Access the IP address of the IP camera to automatically download the controls from it.

Select an option in the plug-in installation pop-up dialogue box to run the installation process.

IPC Plug-In for the 2MP Series

6 LOGIN

6.1 PREVIEW

Open IE and enter the IP address of the camera (http://192.168.1.168) to bring up the login window shown below:

Login Interface for H.265 IP Cameras

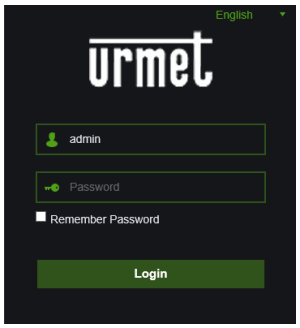
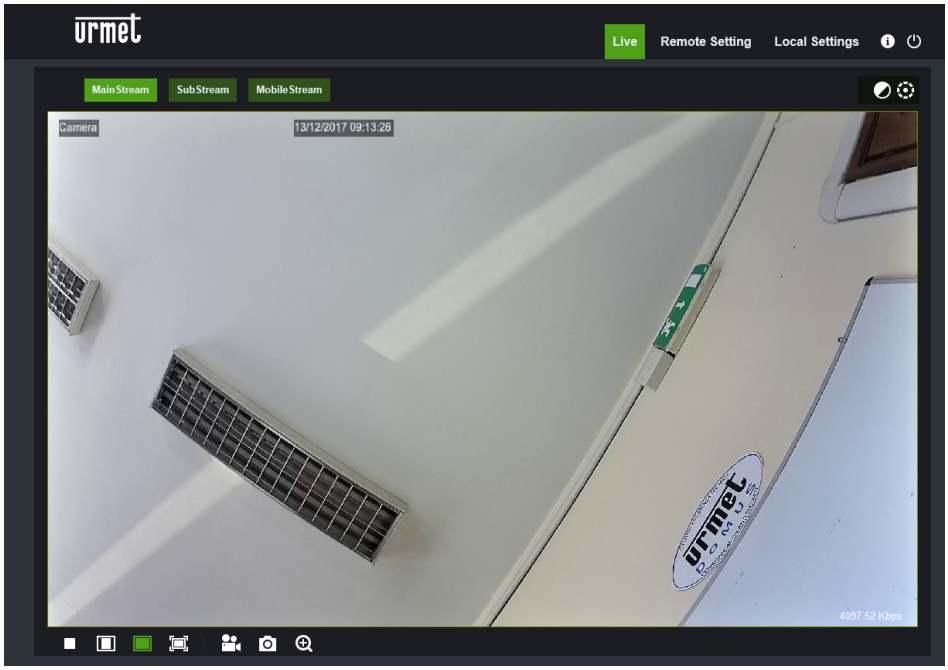


Figure 1

In the login window you can choose a language for the IE client. Enter your username (admin by default) and password (admin by default) and then press OK.

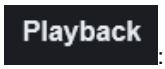
7 LIVE



Some of the buttons in the preview frame are described below.

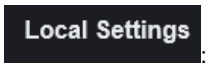
 : Button for setting the colour, brightness, contrast, saturation and sharpness of the frame.

 : (PTZ control)



: This reads the recording file from the SD card and plays it back through the browser (if SD card support is provided).

: Access to the device settings menu to customise the settings of various parameters.



: For snapshot, video file type and storage path settings.


: Help information (current user, Web browser and plug-in versions) and logout button for returning to the login page.


: Stop/Start Live video.


: Preview frame ratio adjustment, toggling between Original Ratio, Automatic Ratio and Full Screen.


: Preview control buttons - Open Video, Snap, Zoom-In/Out, Sound On/Off, Microphone (from left to right).

: Dynamic switching of the bit stream for the preview frame.

7.1 PTZ CONTROL


: (PTZ control) select the icon to open the following window:

On Autofocus cameras with AF optics, the PTZ interface will be as follows:

Eight different angles can be selected on the circular control,

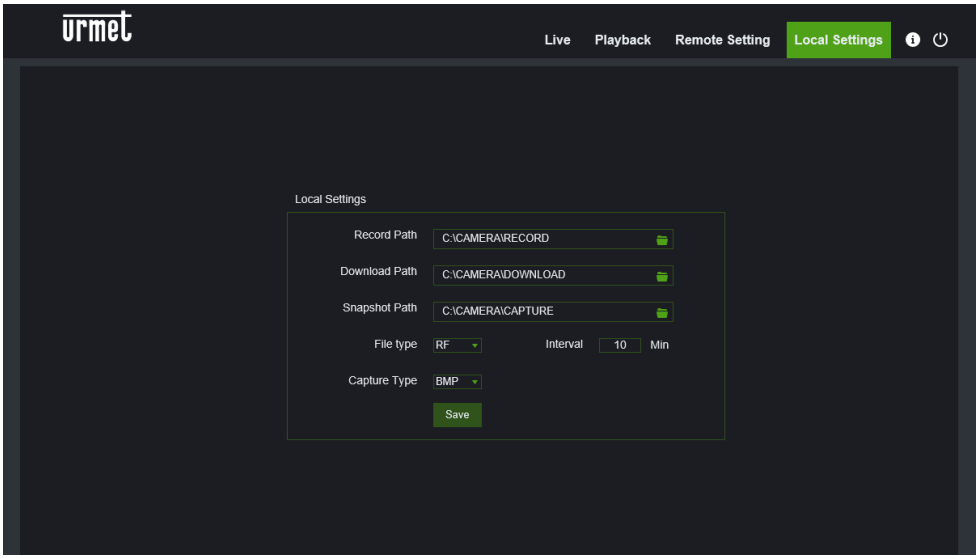
- **PTZ Speed**: 0 – 10 indicates different PTZ speeds,
- **ZOOM** zooms in and out
- **FOCUS** increases or decreases FOCUS
- **Restore**: resets default settings

On Auto Focus cameras with DF optics, the PTZ interface will be as follows:

Option	Value	Explanation
Zoom	Step/-/+	Manually adjusts zoom (+ zoom in / - zoom out) Step: defines zooming speed
Focus	Step/-/+	Manually adjusts focus (+ increase / - decrease) Step: defines focusing speed
AF MODE	SEMI ÷ AUTO ÷ MANUAL ÷ OFF	This function is used to customise the camera focusing mode. Possible options are: SEMI: focusing is performed only after the zooming operations are finished. AUTO: focusing is adjusted automatically. MANUAL: focusing is adjusted manually. OFF: focusing and zoom are deactivated. Activate this option after having adjusted focus and zoom as required.
ONE SHOT AF	/	Function not available.
TDN AF	ON ÷ OFF	This function, when activate, allows automatic focus adjustment at each day->night or night->day switch.
LENS INIT	/	This re-initialises the optics and obtained optical calibration. To be performed when the camera is installed for the first time and in case of movements with consequent change of the framed picture. IMPORTANT: do not use with AF MODE equal to OFF.
POWER MODE	SAVE POSI ÷ OFF ÷ WIDE	This is used to adjust the zoom whenever the camera is switched back on. SAVE POSI: this holds the zoom position set before the camera was switched off. OFF: do not save the settings stored before switch-off. WIDE: the camera is switched on in Wide mode.
AutoFocus	/	Adjusts focus automatically
Restore	/	Resets PTZ interface default settings (including focus)
Refresh	/	Updates the PTZ interface with changes to parameters (including focus)

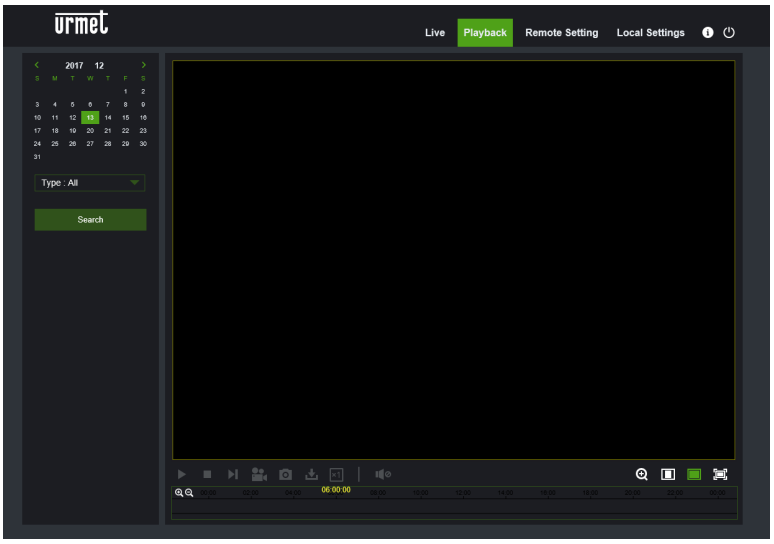
8 LOCAL SETTINGS

Select Local Settings to access the following dialogue window: here you can set the video storage location, paths for downloading remote files and storing snapshot images, the file type (RF by default, with H265, AVI, MP4 or BMP encoding), video recording duration and screen capture file type (BMP or JPG).



9 PLAYBACK

Select Playback in Record File, select the corresponding date, then Search to go to the page shown below.



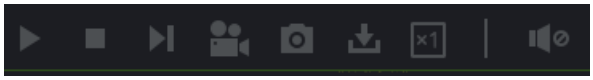
Explanation of the button functions:

Type of recording file: ALL, Normal, IO, Intelligent.

Normal: 24H recording

(IO) alarms: Motion and Alarms.

Intelligent: see the chapter on intelligent video analysis.



: from left to right, Play/Pause, Stop, Advance one frame, (select once to play one frame), Record, Capture, Download, Zoom, Audio control.

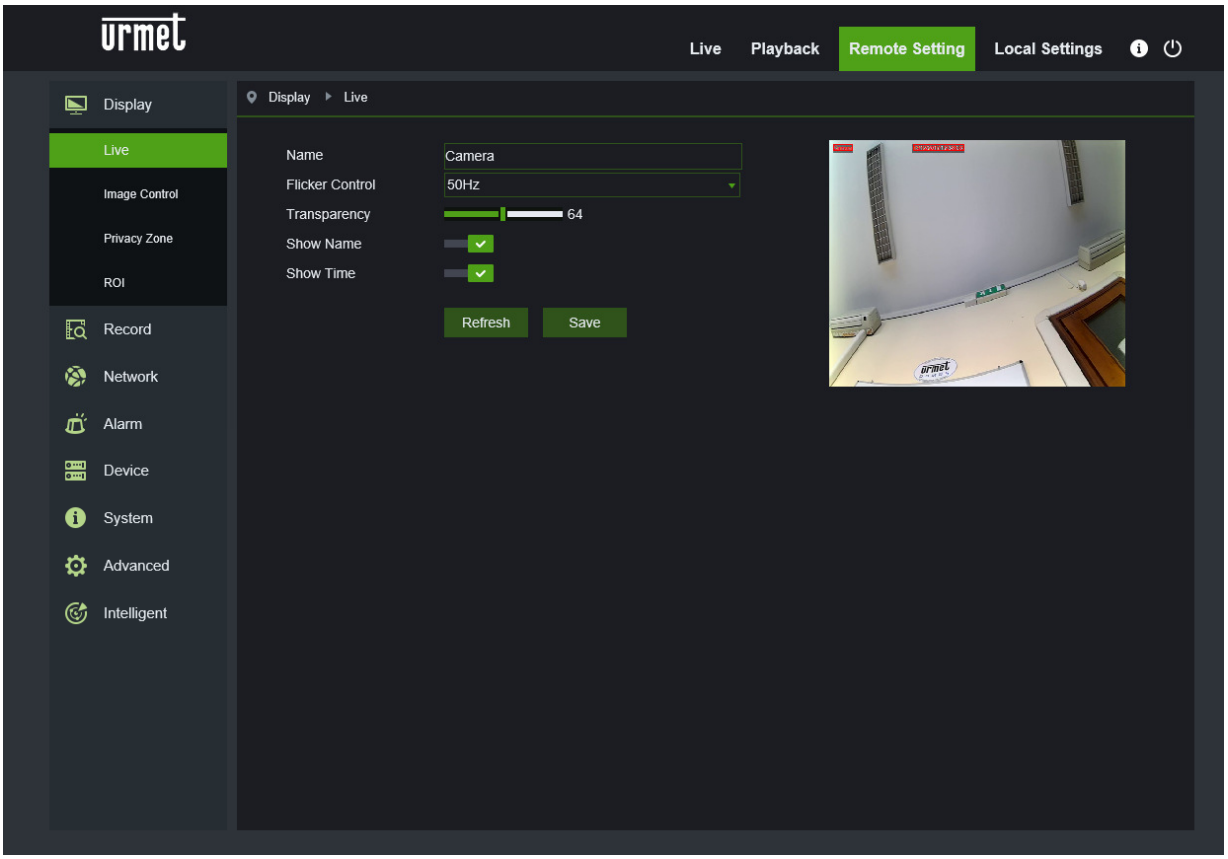
: from left to right, Zoom, Original proportions, Increase scale, Full screen.

10 REMOTE SETTING

10.1 DISPLAY CONFIGURATION

10.1.1 LIVE

Select Remote Settings to open the page shown below (default preview settings page):



Name: name of the IP camera.

Flicker control: choose 50Hz or 60Hz.

Transparency: choose the display transparency of the channel name and time on the preview frame (the lower the value, the greater the transparency).

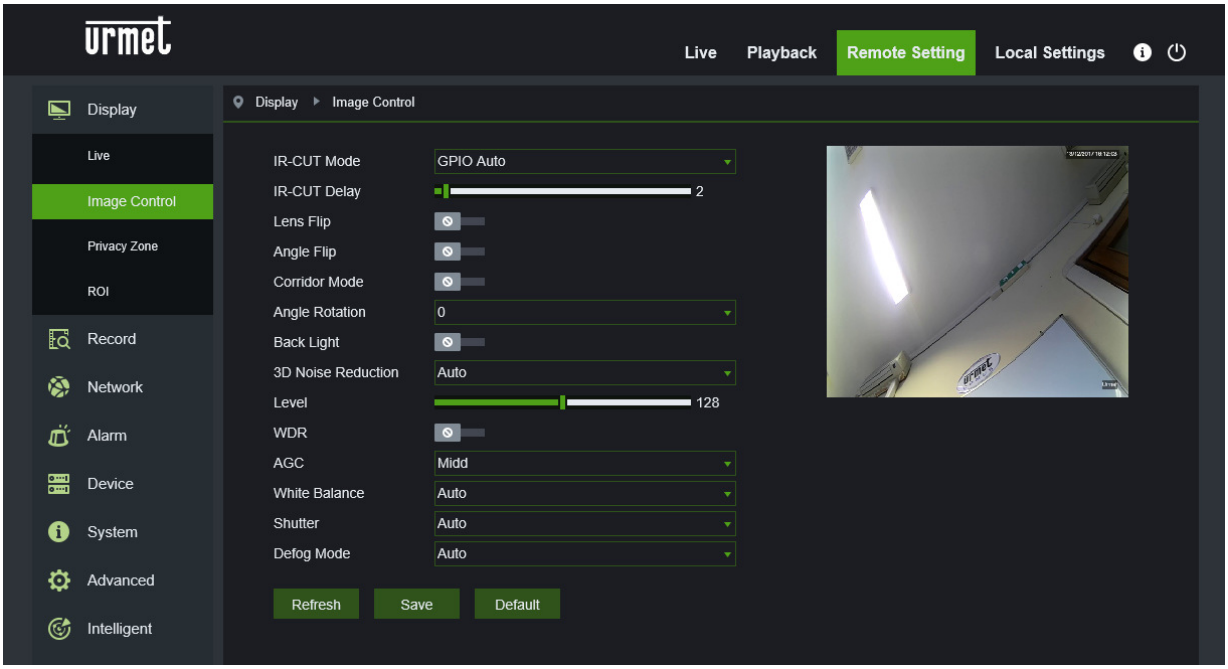
Show Name: the camera name is displayed.

Show Time: the date and time are displayed.

OSD: the red text on the frame; the channel name and time display can be repositioned by dragging them in the preview frame.

10.1.2 IMAGE CONTROL

Select Image Control in Display to open the following page:



IR-CUT Mode: GPIO Automatic, Colour and Black and White.

IR-CUT Delay: IR-cut switching delay.

Lens Flip: On/Off.

Angle Flip: On/Off.

Corridor Mode: On/Off.

Angle Rotation: 0° or 180°.

Black Light: On/Off.

3D Noise Reduction: Off, Automatic, Manual.

Level: from 0 to 255.

WDR: On/Off.

AGC: OFF, Low, Medium, High.

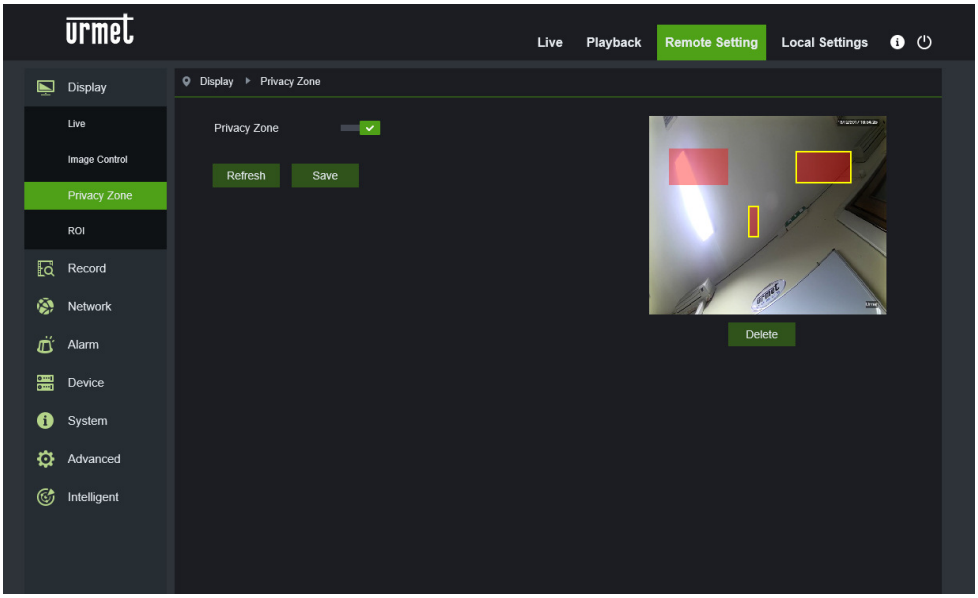
White Balance: Automatic, Manual, Internal.

Shutter: Automatic, Manual.

Defog Mode: Off, Automatic, Manual.

10.1.1 PRIVACY ZONE

Select Privacy Zone in Display Configuration to open the following page:

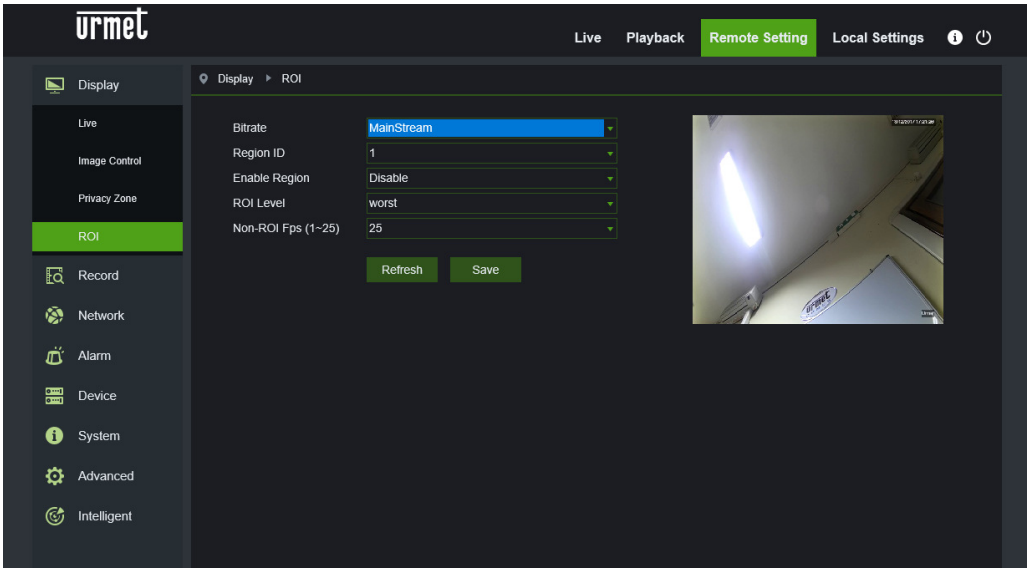


Enable Privacy Zone, and then use the right mouse button to trace rectangles around areas not to be displayed during recording, in screenshots and in Live viewing.

Save when done to keep the settings.

10.1.2 ROI

Select Display to open the following page:



ROI setting procedure:

1. Choose a region of application.
2. Press and hold the left mouse button and drag out a ROI (only one ROI can be set for each zone),
3. Select Save to apply the ROI.

Region ID: Up to 8 ROI zones can be set in one bit stream.

Enable Region: Enable or disable the ROI.

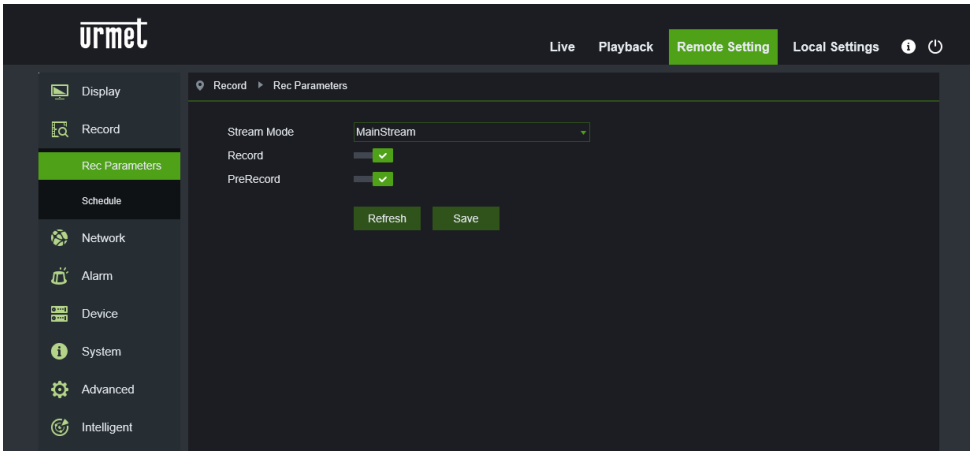
ROI level: Select a bit stream for the ROI from worst (), worse (), bad (), normal (), better () and best ().

Non-ROI frame rate Fps: Set the frame rate outside of the ROI; the smaller the value, the higher the image quality in the ROI. The frame rate range depends on the video standard and the resolution. It varies from 1 to 25 Fps. (Note: Different non-ROI frame rates may be given to different ROIs, but the lowest value among them will be used as the frame rate applied to the non-ROI area on the preview frame.

10.2 RECORD PARAMETERS

10.2.1 REC PARAMETERS

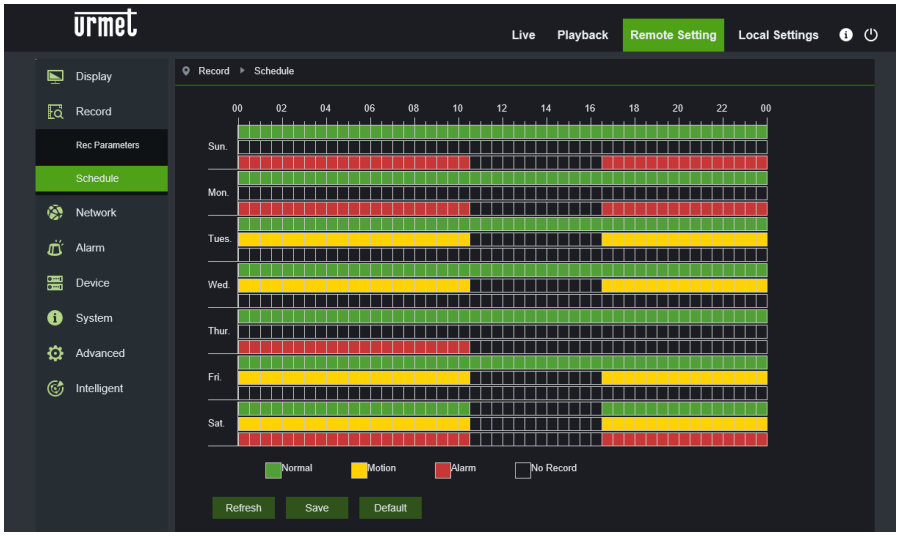
Select Rec Parameters in the Record menu to go to page shown below.



This function allows you to control recording, pre-recording and type of recording (main stream and substream).

10.2.2 SCHEDULE

Select Schedule in the Record menu to access the following page:

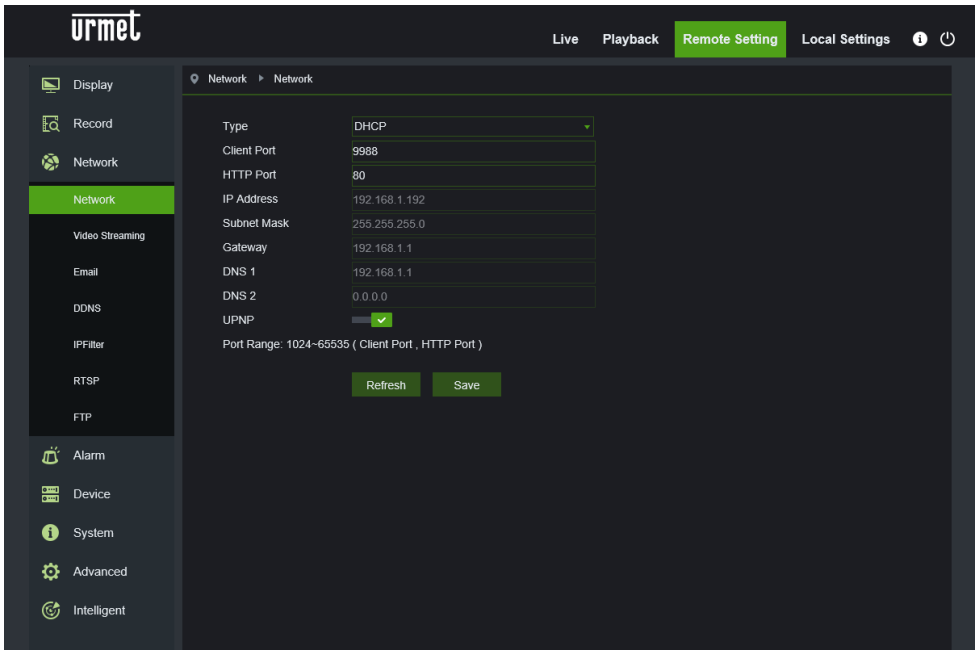


Example: a grid on the table represents 30 minutes; green indicates normal recording, yellow a movement detection alarm and red a recording alarm. You can set these parameters, according to your needs, to choose different types or times of recording.

10.3 NETWORK

10.3.1 NETWORK

Select Network to open the following page:



Type: Network connection mode: DHCP (Automatically Acquired), Static (Manually configured) and PPPOE; DHCP (Automatically Acquired) is the default setting.

Client Port: The port for the clients that connect to the IP camera.

HTTP Port: Web port for the IP camera.

IP address: The IP address of the IP camera.

Subnet mast: The subnet mast of the IP camera.

Gateway: The default gateway of the device.

DNS 1: Sets the primary DNS server.

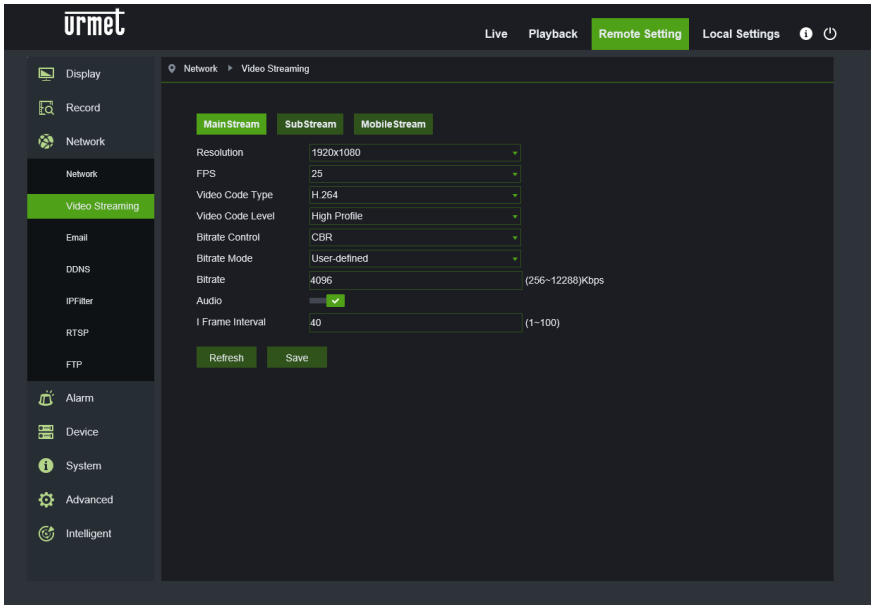
DNS 2: Sets the secondary DNS server.

UPNP: Enables or disables the UPNP function for the device (enabled by default).

Note: To enable the UPNP function, the client port must be set to a value between 1024 and 65535; the client port is used to connect with a mobile phone or other device.

10.3.2 VIDEO STREAMING

Select Video Streaming Setting in the Network Parameter menu to open the following page:



The following bit streams are available by default: Main stream, Substream and Mobile stream.

The resolution, frame rate, video code, encryption level, bitrate control, bitrate modality, bitrate frequency, audio and frame interval can be set for the main stream, the substream and the stream for mobile devices respectively.

Resolution: Sets the resolutions for the respective bit streams: The maximum resolution for the main bit stream is 1920x1080. The maximum resolution for the substream is 704x480. The resolutions for mobile devices are 640x480 and 320×480.

FPS: When the refresh rate is 50Hz, the maximum available frame rate is 25 fps. When the refresh rate is 60Hz, the maximum available frame rate is 30 fps.

Video Code Type: Sets the video encoding (H265/H264) for each bit stream.

Video Code Level:

Bitrate control: Sets the constant or variable bitrate for the stream.

Mode: User-defined or Predefined.

Note: The range of the main bit stream is 256-8192.

The range of the substream is 128-4096.

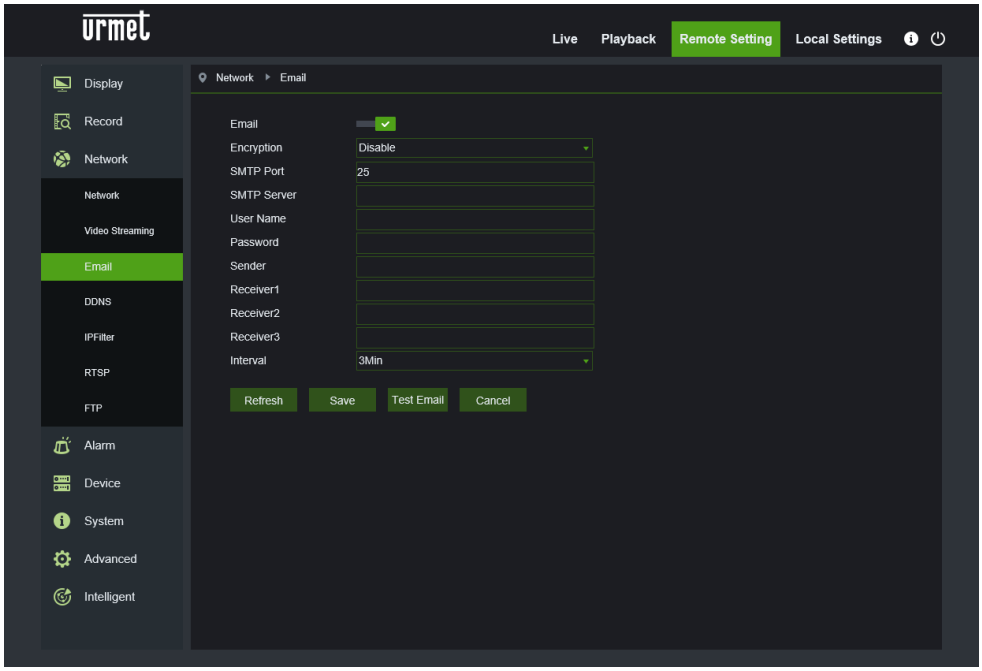
The range of the mobile bit steam is 8-1536.

Audio: Enables audio for each bit stream.

I frame interval: Sets the interval of a single frame.

10.3.3 E-MAIL CONFIGURATION

Select E-Mail in the Network menu to open the following page for setting up the e-mail service – used with the alarm function to send images to the mail server:



E-Mail: Enabling/disabling of the service.

Encryption: The options are Deactivate/SSL/TLS/AUTO.

SMTP Port: The default port number is 25.

SMTP server: Enter the address of the mail server.

User Name: Username of the e-mail sender**.**

Password: Password of the sending mailbox.

Sender: Address of the sending mailbox.

Receiver1: Address of the first receiving mailbox.

Receiver2 Address of the second receiving mailbox.

Receiver3: Address of the third receiving mailbox.

Interval: Time interval for sending e-mail (1 minute, 3 minutes, 5 minutes, 10 minutes).

Test E-mail: Select this to test whether the mailbox is configured properly by sending a test e-mail to the recipient's mailbox.

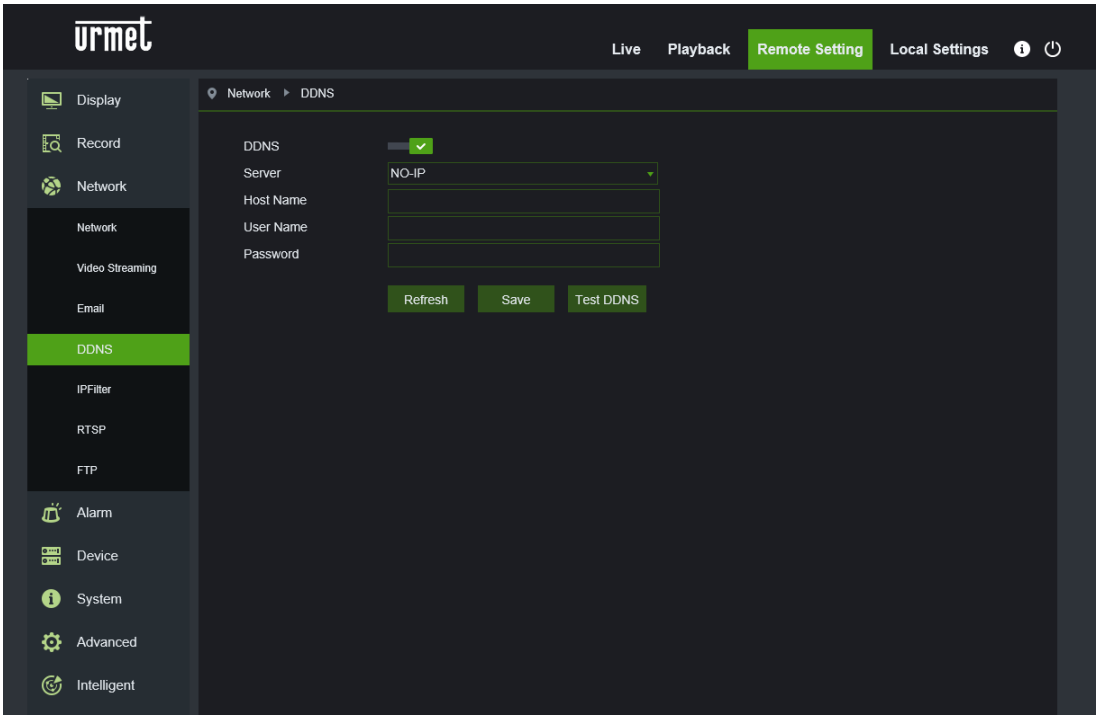
The **Refresh, Save and Delete** buttons are functions to update the page, save it or delete the data entered.

10.3.4 DDNS CONFIGURATION

Select DDNS in the Network menu to open the following page:

DDNS: Dynamic DNS configuration – used with the server to access an Extranet network.

DDNS (Dynamic DNS) is a service used to record a domain name and floating IP address with the DDNS server so that the domain name can be routed towards the IP address even if it is modified in a dynamic IP system.



DDNS: Enable or disable the function.

Server: The Server options are 3322/DynDNS/NO-IP. Choose the Server address.

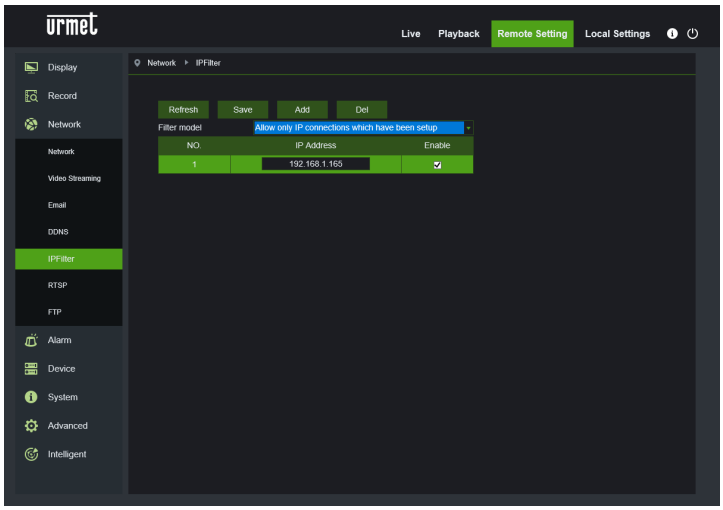
Hostname: Enter the name of the active server.

User Name: Name of the user.

Password: User's password

10.3.5 IP FILTER

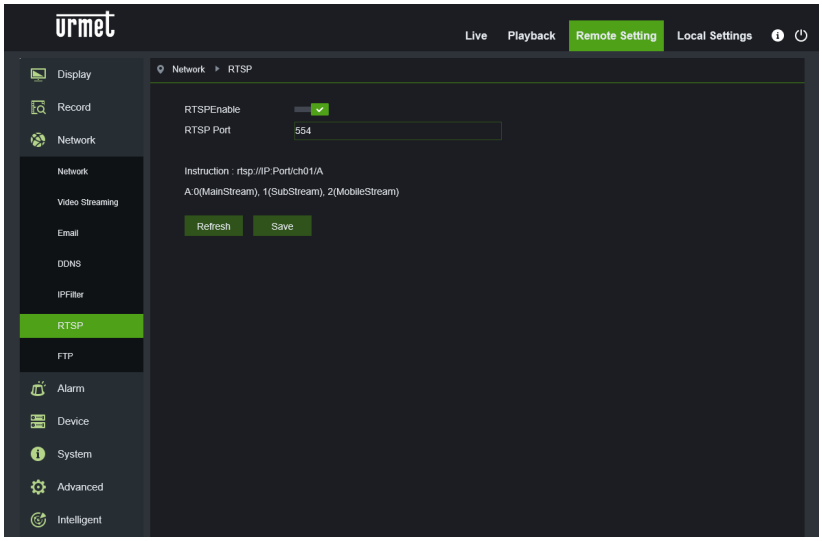
Select IP Filter in the Network menu to open the following page:



- **Filtering mode:** Three modes are available (Allow all IP connections, Allow only IP connections which have been set up, Do not Allow the IP connections which have been set up).
- **Add:** This adds an allowed or prohibited IP address.
- **Delete:** This deletes any IP address added previously.
- **Refresh:** this updates the values.
- **Save:** this saves the set values.

10.3.6 RTSP

Select RTSP in the Network menu to open the following page:



- **RTSPEnable:** Enables or excludes RTSP. RTSP is enabled by default. If disabled, it cannot be found with ONVIF.
- **RTSP Port:** The default port number is 554 and it can be changed by setting another value between 1024 and 65535. Changing this parameter will restart the system.

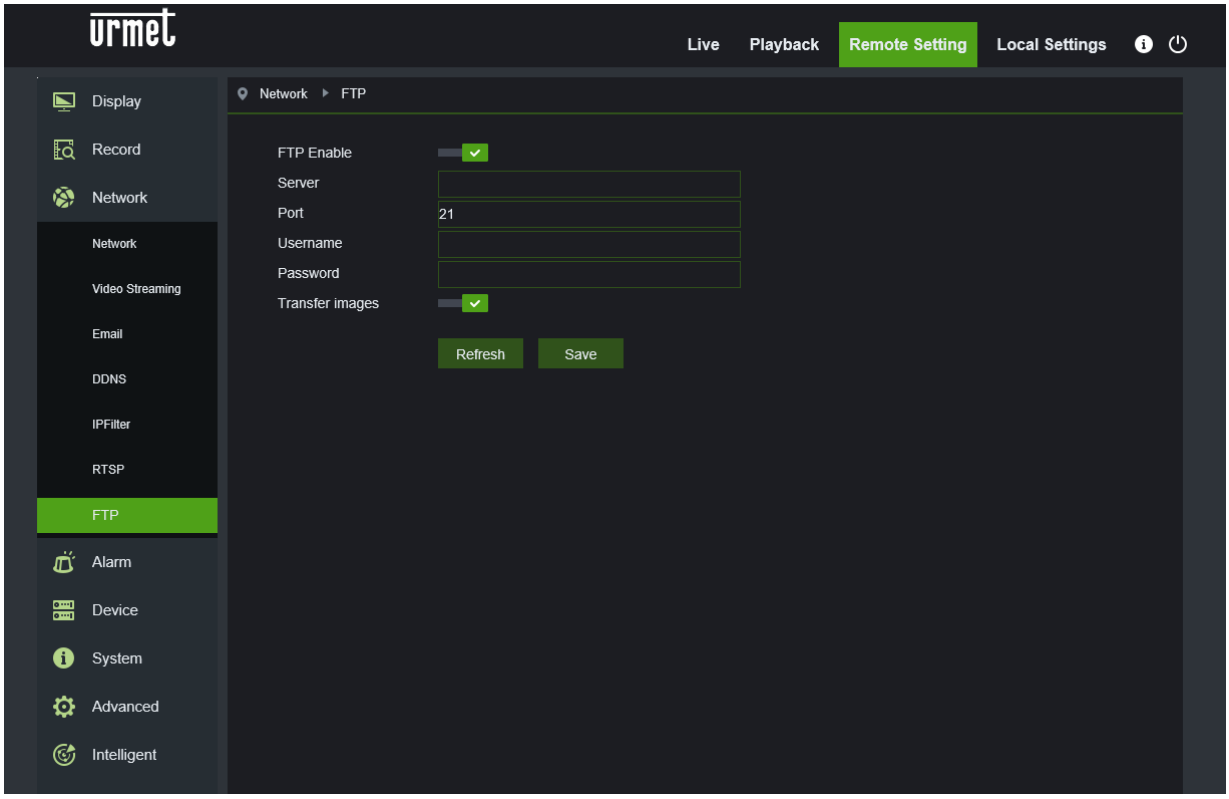
Operating instructions:

rtsp://IP:Port/ch01/A A:0(Main Stream), 1(Sub Stream), 2(Stream Mobile):

10.3.7 FTP

FTP: the FTP service setting is used with the alarm function to send images or video to the FTP server.

Select FTP in the Network menu to open the following page:



FTP Enable: Enables or excludes the FTP function.

Server: Enters the address of the FTP server.

Port: FTP service port number; the default number is 21.

Username: The username for access to the FTP service.

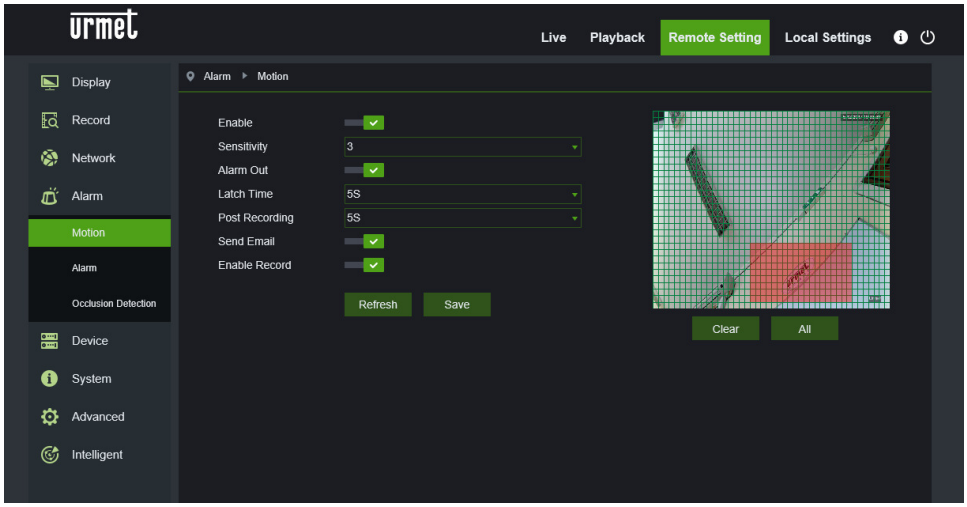
Password: The password for access to the FTP service.

Transfer images: Select to allow the sending of images.

10.4 ALARM

10.4.1 MOTION

Select Motion in the Alarm menu to open the following page:



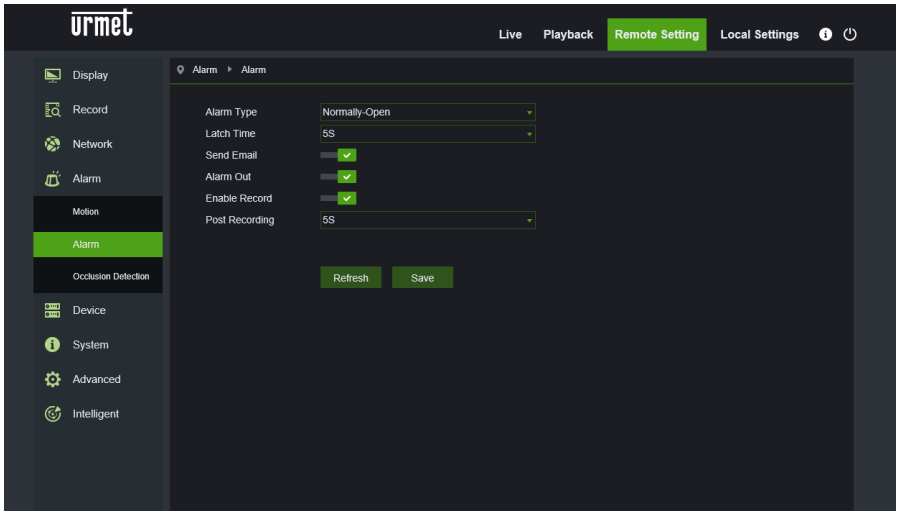
Motion Detection setting procedure:

1. Select Enable.
2. Click and hold the left mouse button and drag out an area for motion detection.
3. Set the motion detection sensitivity (from 1 to 8; the higher the value, the greater the sensitivity).
4. Enable Alarm Output, Latch Time (recording time) and Post recoding time.
5. Enable Send Mail, a function used with SMTP to enable the sending of e-mail.
6. Select Save to apply the settings.

(Note: When any object moves within the target area, a green letter “M” is displayed in the preview frame).

10.4.2 I/O ALARM:

Select Alarm in the Alarm menu to open the following page:



Alarm Type: Available values: OFF, Normally-Open, Normally-Closed.

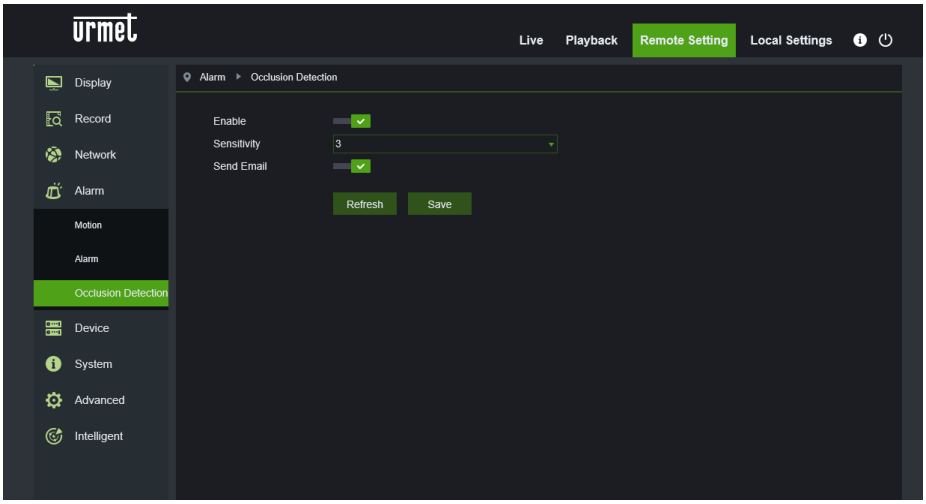
Latch Time: Set the alarm output time (5S,10S, 20S, 30S).

Send E-mail, Alarm Output, Enable Recording.

Post Recording: When Enable Record is checked, the recording delay can then be set (5S, 10S, 20S, 30S).

10.4.3 LENS BLOCKING

Select Lens Blocking in the Alarm menu to open the following page:



Select Enable to activate the Sensitivity and Send E-Mail options.

Sensitivity: Set the sensitivity level (level 1~6; the higher the value, the greater the sensitivity level).

Send E-mail: When enabled, it can be used with SMTP to enable the sending of e-mail.

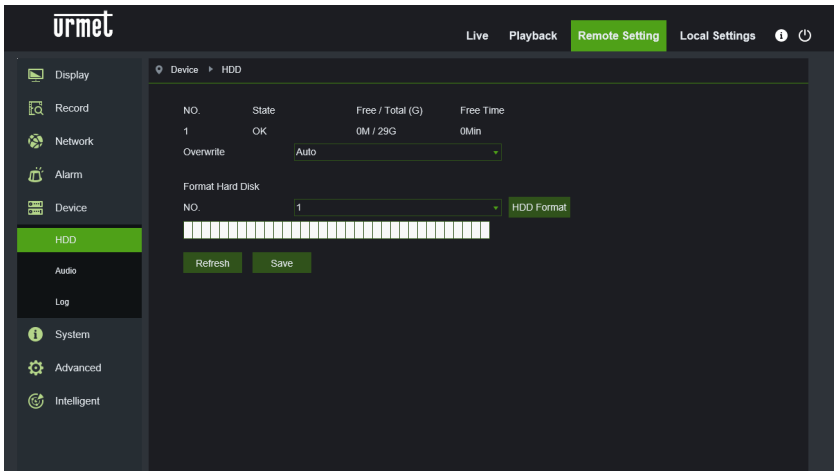
Mail Linkage: This is disabled by default. When enabled, it can be used with SMTP to enable the e-mail address.

10.5 DEVICE

This includes SD Card, Logs and Audio. The respective interfaces and functions are described below.

10.5.1 HDD (WHERE INCLUDED)

Select HDD in the Device menu to access the following page:



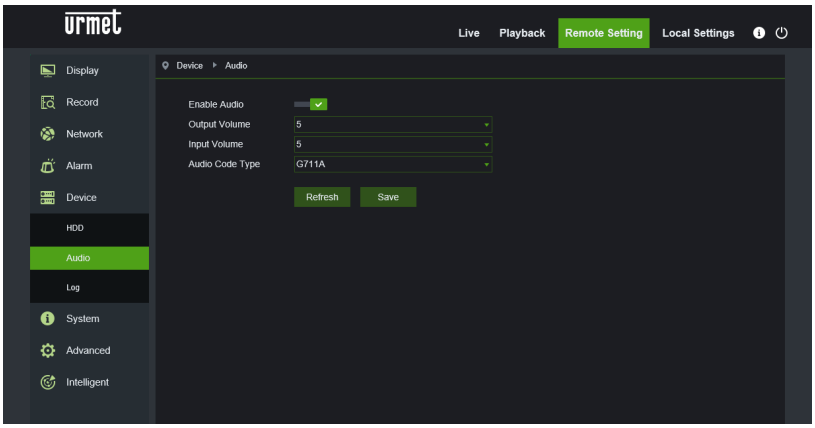
Insert the SD card in the device: the system will automatically detect the total capacity and provide information on the remaining recording time.

Overwrite: when the SD card capacity is full, new recordings overwrite the previous ones (this function is enabled by default).

Format: Formats the SD card.

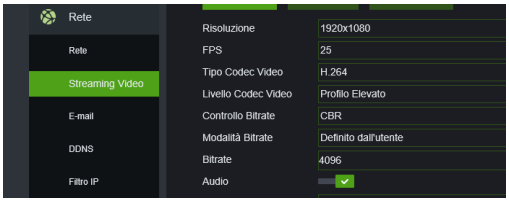
10.5.2 AUDIO

Select Audio in the Device menu to open the following page:



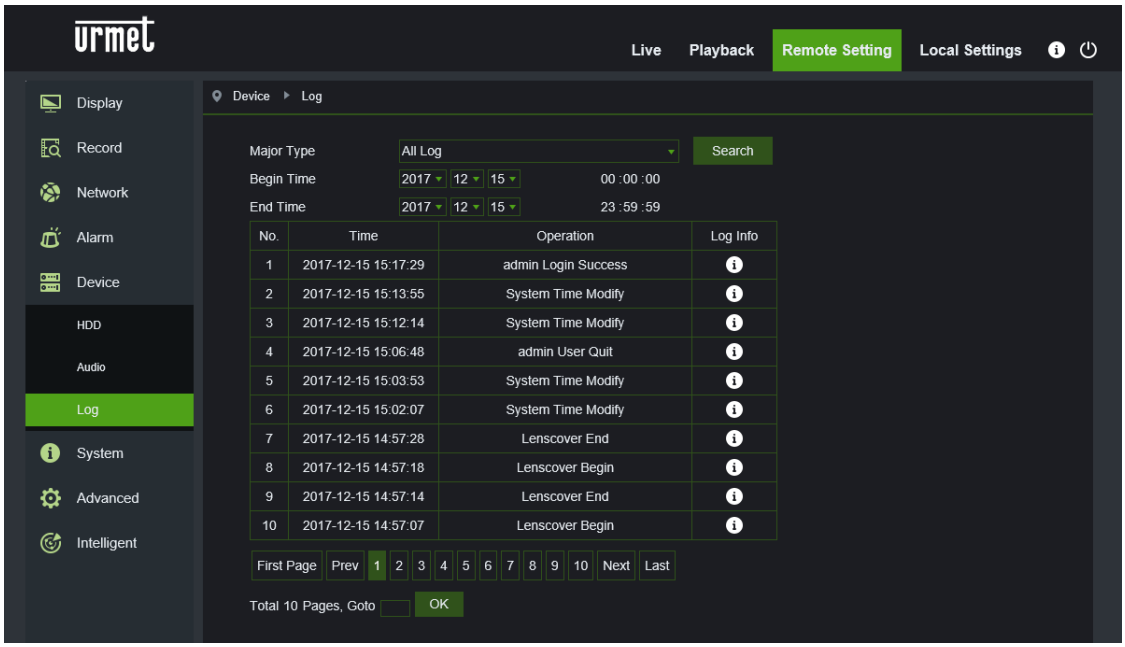
Audio setup procedure:

Select the Enable Audio option to access the audio parameters, then set the audio input/output volume (0~10) and select Save to save the set parameters. (Note: the audio option in Streaming Video must be enabled in order to use the audio function).



10.5.3 LOGS

Select Logs in the Device menu to open the following page:



Major Type: Eight types of logs are available: System Logs, Config Logs, Alarm Logs, User Logs, Recording Logs, Storage Logs, Network Logs and All Logs, with the respective Minor Types defined for the various types of Logs.

Choose the start and end date/time.

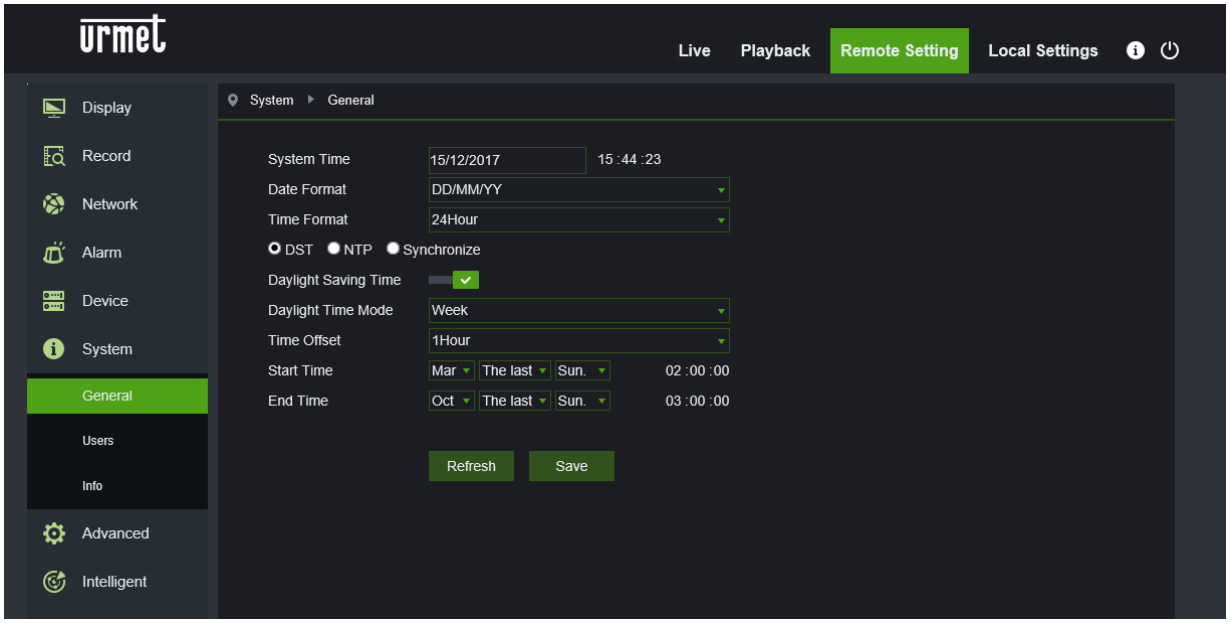
Select “Search” to search for and view the various Logs.

10.6 SYSTEM

System parameters include: General, User and Information. The various interfaces and functions are described below.

10.6.1 GENERAL

Select General in the System menu to open the following page:



The device time, system time and date/time format contained in the basic information can be manually set and saved.

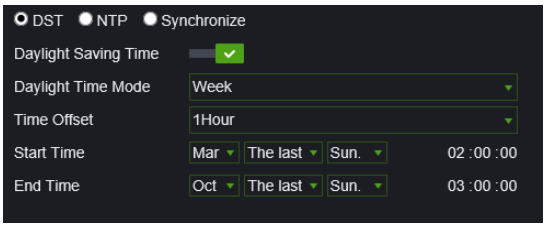
This device has three automatic time setting functions.

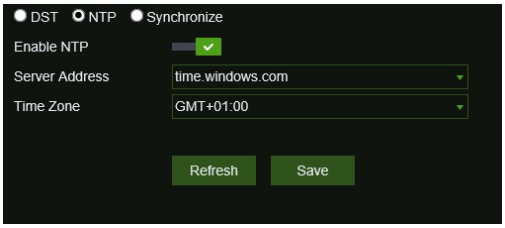
DST: Select the Daylight-Saving Time (DST) function to enable the DST correction function.

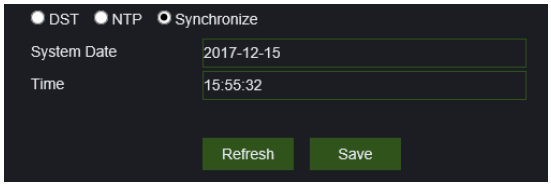
The device will correct the time based on the set time difference.

NTP: Select the Enable NTP option, enter the address of the synchronisation server, choose a time zone and save the settings. The system will correct the time based on the synchronisation server.

Synchronise: The device will use the PC as a synchronisation server to correct the time.

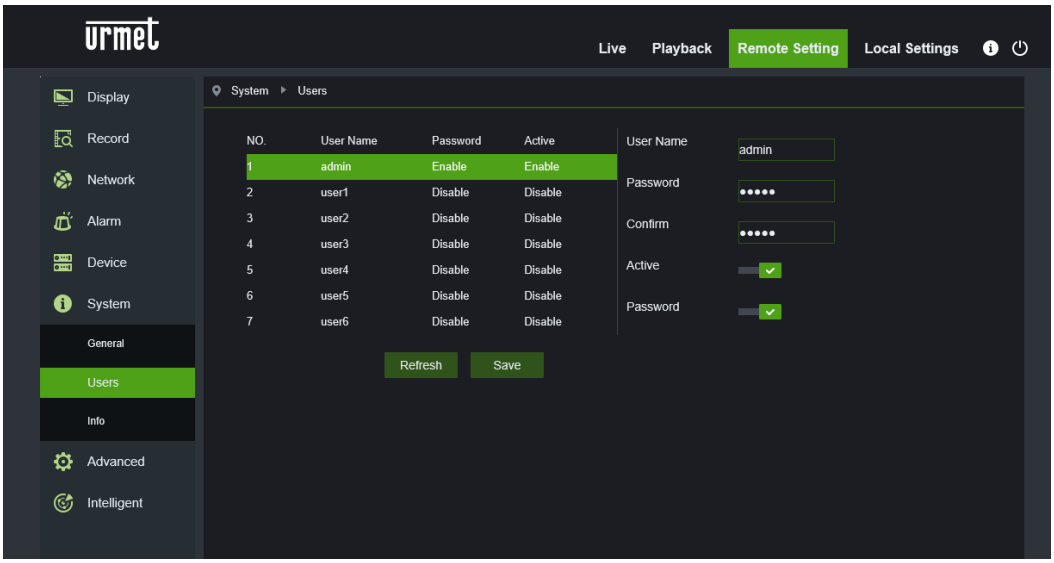






10.6.2 USER CONFIGURATION

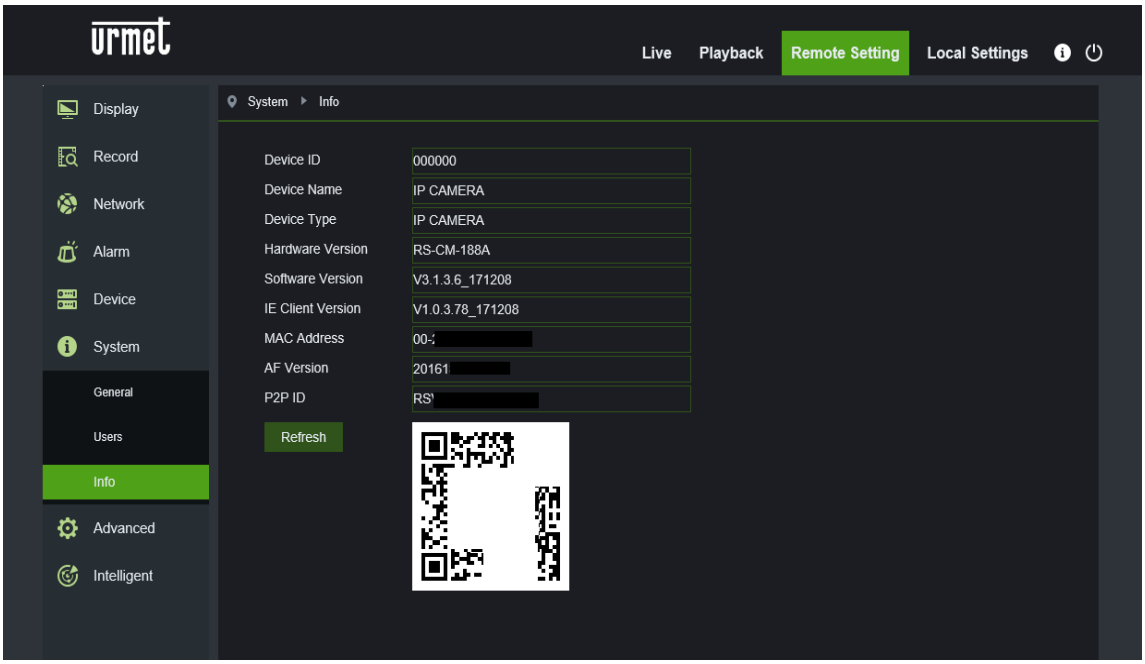
Select User in the System menu to open the following page:



In this section you can set user access rights and the login password.

10.6.3 INFO

Select Info in the System menu to open the following page:



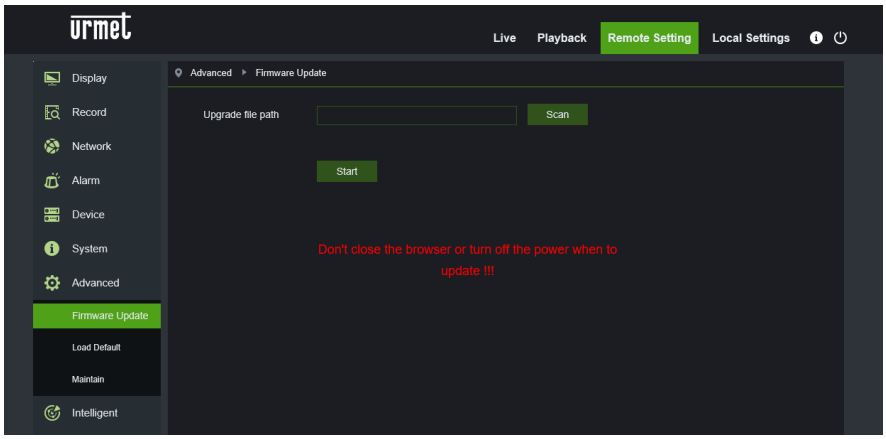
Some system information is displayed in this section, including the device type, MAC address and software version. The QR Code is a P2P ID that can be used by an app.

10.7 ADVANCED

This includes Firmware Update, Load Default and Maintain. The various interfaces and functions are described below.

10.7.1 SYSTEM UPDATE

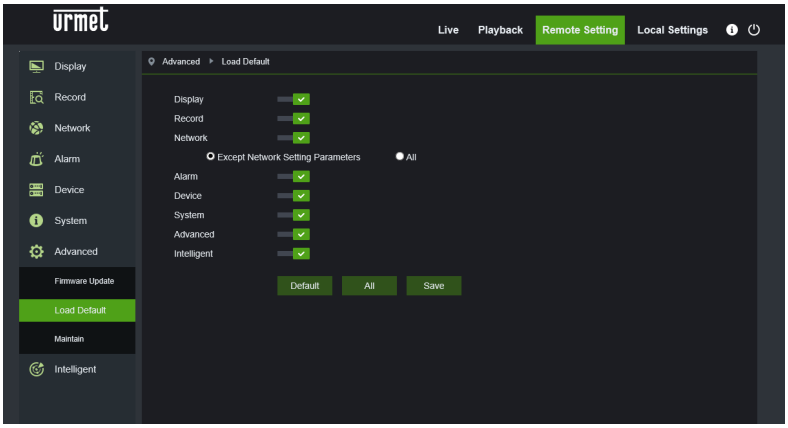
Select Firmware Update in the Advanced menu to open the following page:



The update will not be available if the files are not compatible with the target device.

10.7.1 LOAD DEFAULT

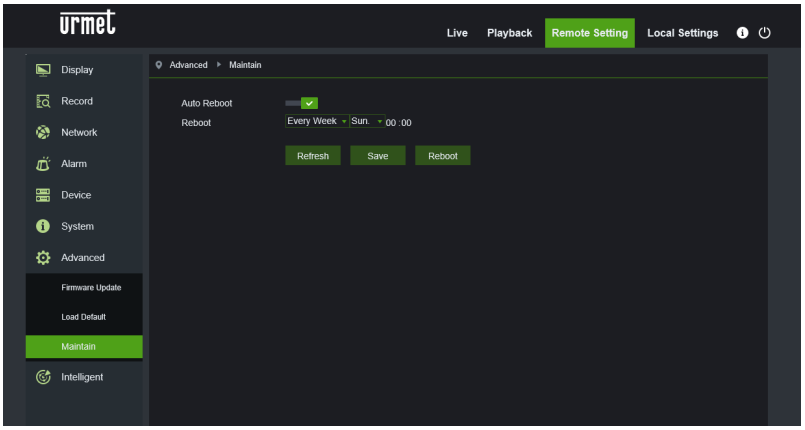
Select Load Default in the Advanced menu to open the following page:



Enable the various options and select Save to restore the default factory parameters.

10.7.2 SYSTEM MAINTENANCE

Select Maintain in the Advanced menu to open the following page:



10.8 INTELLIGENT

This section briefly describes the intelligent video analysis functions capable of generating specific events that can also be recorded on a remote NVR.

For further details on the use and settings of the intelligent video analysis functions, you can visit the URMET website http://www.urmet.com for series or product codes, the availability of relevant additional material and any firmware updates describing improvements to the intelligent video analysis algorithms.

IMPORTANT NOTE:

1) The video content analysis algorithms described in this section are based on an automatic analysis of the scene filmed by the camera device, which is capable of automatically processing the images. For this reason, the algorithms may, in some conditions, generate false alarms or fail to detect certain events.
   In this sense, therefore, they cannot be considered zero-error-rate analysis systems.
2) The efficiency of the video analysis algorithms strictly depends on the level of quality of the image filmed by the camera.
3) After activation of any video analysis algorithm, you must wait for a period of 30-60 seconds for initialisation of the function. During this period, the video analysis algorithm is not operational.
4) To enable recordings, set the programming in the Schedule menu and ensure that there is available free space in the memory drive.
5) The letter **S** (in green) at the bottom centre of the image indicates an intelligent analysis event in progress without video recording. If recording is enabled and the Schedule has been programmed, the letter **S** (in red) will appear at the bottom centre of the image for all intelligent analysis events.
6) The following two groups of algorithms: PID / LCD / SOD and PD / FD / CC are mutually exclusive and cannot be activated at the same time.
7) When the three algorithms PID / LCD / SOD are activated at the same time, the most recently configured scene has validity.
8) The video analysis will not work if the camera is set to corridor mode.
9) The intelligent video analysis algorithms may or may not be available, and their number may vary, depending on the model of the device that is connected (e.g.: IP/Fish Eye camera) or being used (e.g.: HVR/NVR).
10) Dates and times can be programmed for intelligent video analysis.

10.8.1 SCHEDULE

Select Schedule in the Intelligent menu to access the following event programming page:

10.8.2 DETECTION

The following intelligent video analysis algorithms are available for this range of 1080P H.265 IP cameras: Perimeter Intrusion Detection (PID), Line Crossing Detection (LCD) and Stationary Object Detection.

10.8.2.1 Perimeter Intrusion Detection (PID)

Automatic detection of entry or exit of an object in a specific area of the image, delimited by a manually defined box.

10.8.2.2 Line Crossing Detection (LCD)

This feature allows automatic detection of the crossing (in both directions) of a preset line by a moving object/person.
The function is used to generate alarms when the algorithm traces the movement of an object that crosses a line previously defined by the user.

10.8.2.3 Stationary Object Detection (SOD)

This feature allows automatic detection of a change regarding the presence of an object within a preset area.
The function is used to generate alarms in response to the “presence” or “removal” of an object in a previously defined area.

11 MOBILE SOFTWARE

Mobile Software is used for the iOS (iPhone, iPad) and Android platforms (Android Smartphone, Tablet).

The following is a description of the Mobile Client Software.

11.1 Smartphone Device

11.1.1 URMET IUVS PLUS MOBILE SOFTWARE

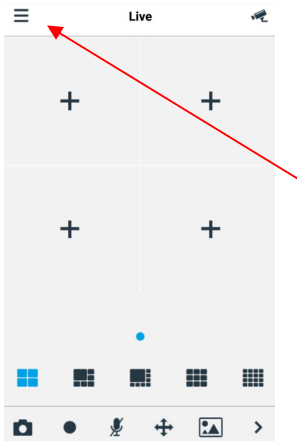
Urmet iUVS plus is a TVCC application for iOS and Android on smartphones, pads and tablets that is compatible with all URMET devices, both IPCam (Codec H265) and DVR/NVR/HVR (all codecs).

Main features:

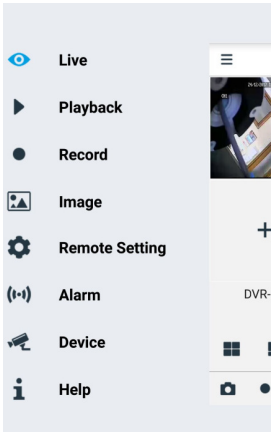
- Multichannel audio/video live streaming
- Multichannel remote playback
- Double stream playback
- Fisheye Camera support in Live and Playback modes
- Alarm notifications
- Custom single video stream configuration
- Video signal format management 4:3 – 16:9
- Local playback
- Video signal in portrait or landscape mode
- Device list export function
- Image sharing on social media/remote drives and personal clouds
- PTZ
- Image and Video capture
- Multi-device support

Getting Started

- Download the iUVS app from the Apple Store or Google Play Store and install it.
- Connect your iPhone, iPad, Android phone or Android tablet to the Internet via the 3G network or WIFI.
- Run the application to access the “Live” menu

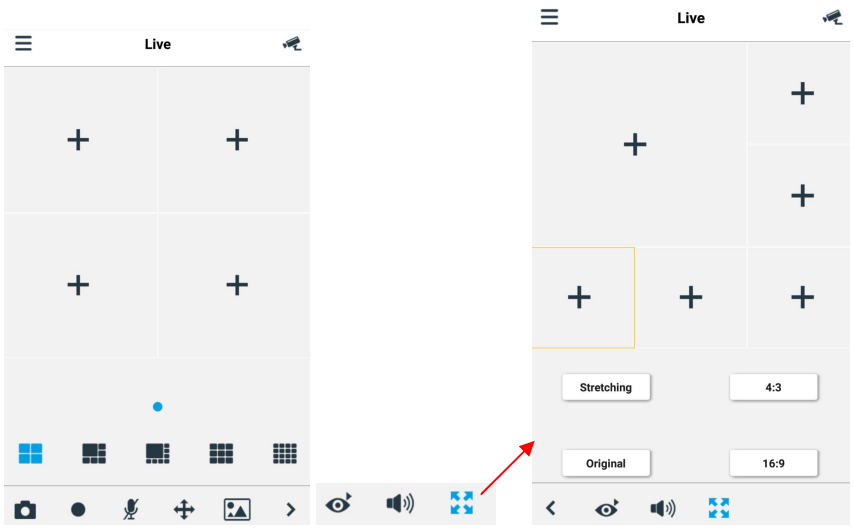


To access the menu, select the icon at the top left



11.1.1.1 Live

Select “Live” in the main menu for the Live interface, which include the following features: video stream, instant recording and PTZ, etc.

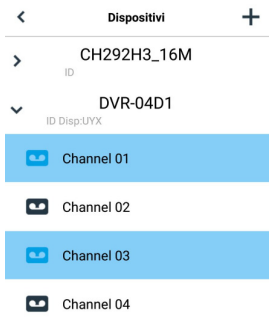


1. Open a device

Select  to open the device list shown below, then select one of devices in the list: all its channels will open automatically.

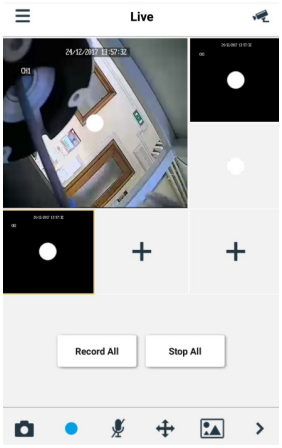
Opening a channel

Selecting a device brings up the list of channels; select a channel, which will be displayed in the main window.



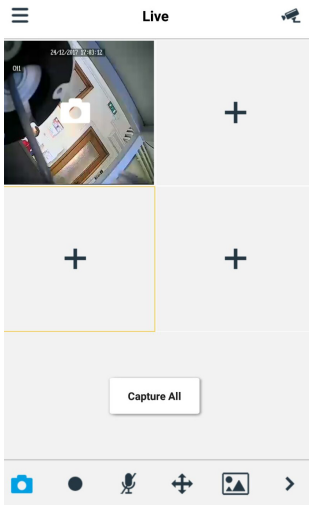
Recording a live video stream

You can record the stream while viewing a video in live mode. Select  followed by the channel label to start recording. It will continue recording on the live page once it has started; only the channels that are displayed can be recorded. Recording stops if you close the channel or exit from the live page.



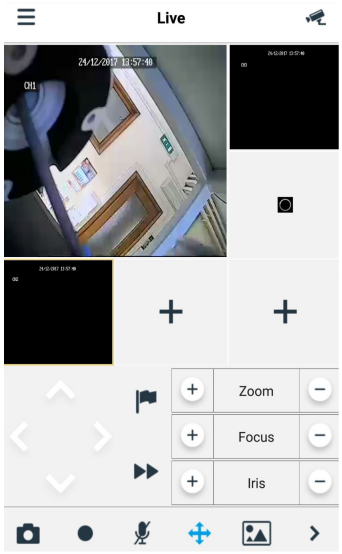
Live video

In live mode, selecting  allows you to select channels individually or all together.



PTZ Control

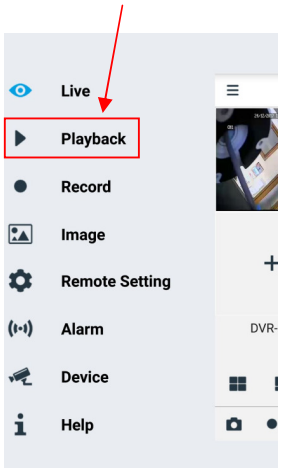
PTZ is short for Pan-Tilt-Zoom and refers to camera movement options. Select  to open PTZ mode; this will bring up the PTZ control buttons of the live page.



Select the arrows to move it sideways or up and down. The other buttons allow you to zoom, force, operate the aperture, preset, etc.

11.1.1.2 Playback

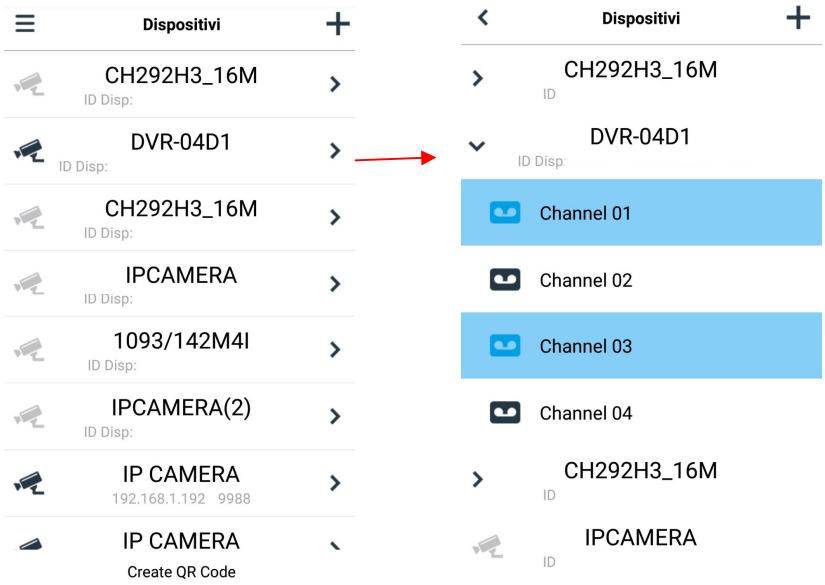
Select “Playback” in the main menu; the play list will be displayed.



A channel from the device can be played remotely.

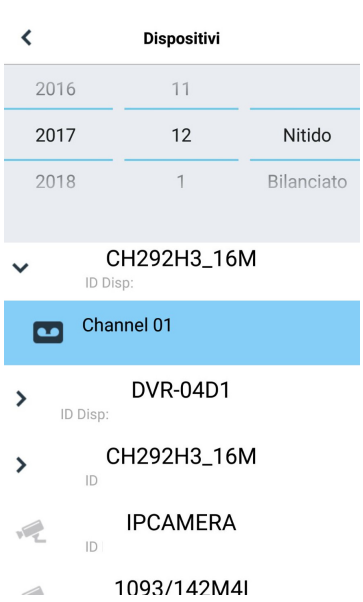
1. Selecting a channel

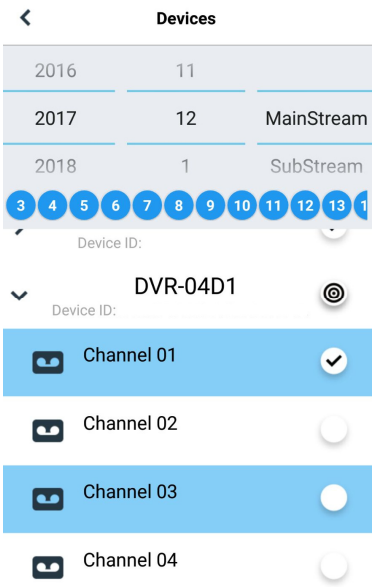
Select the “Remote Playback” button to open the device list, as shown below; select a channel on a device in the list.



2. Selecting the date

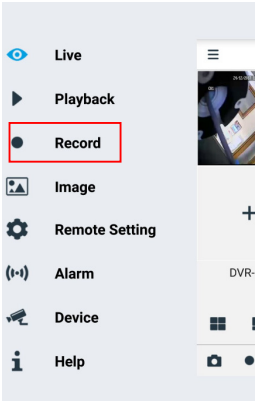
When you have selected a channel, all dates with recordings will be marked with a dot. Select a date to play the recordings from that day.





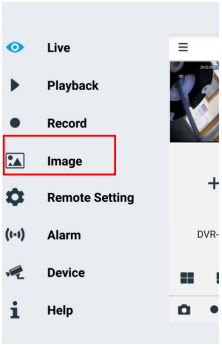
11.1.1.3 Record

You can record the stream while viewing a video in live mode, as described previously.



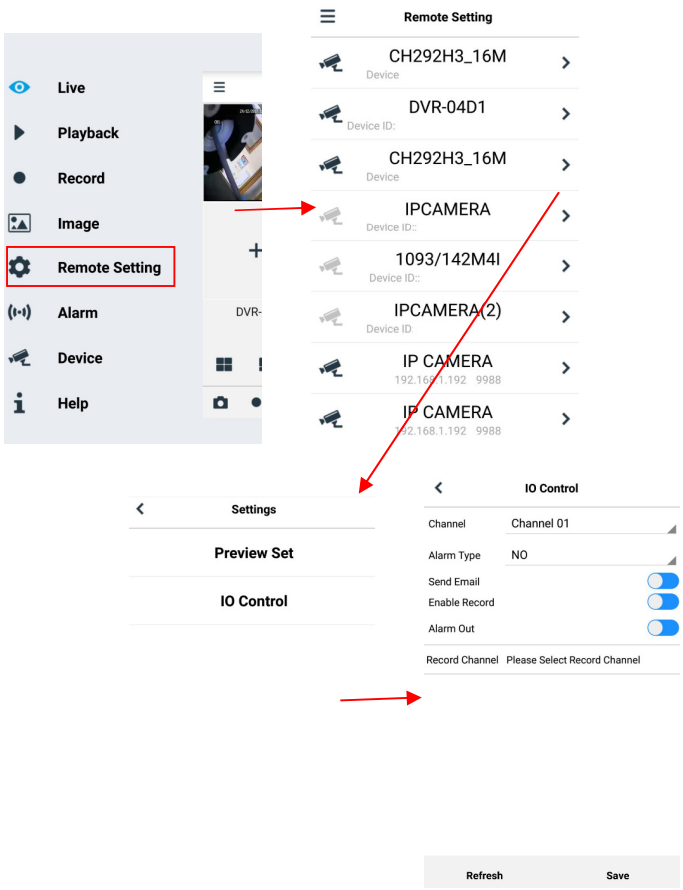
11.1.1.4 Images

Images opens a gallery of screenshot pictures.



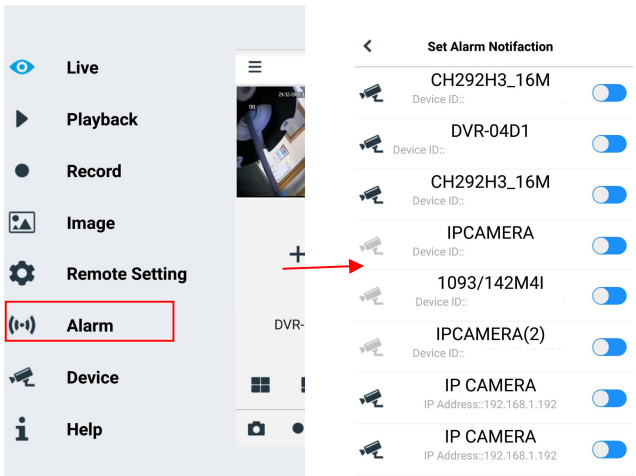
11.1.1.5 Remote Settings

Controls on the remote device can be enabled, such as sending e-mail and enabling recording on the device.

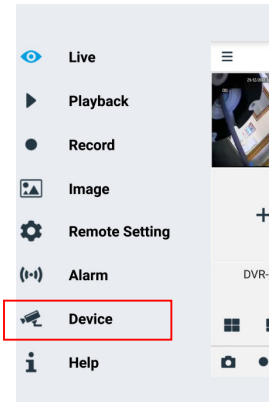


11.1.1.6 Alarm

E-mail notification of the devices can be enabled.



11.1.1.7 Device

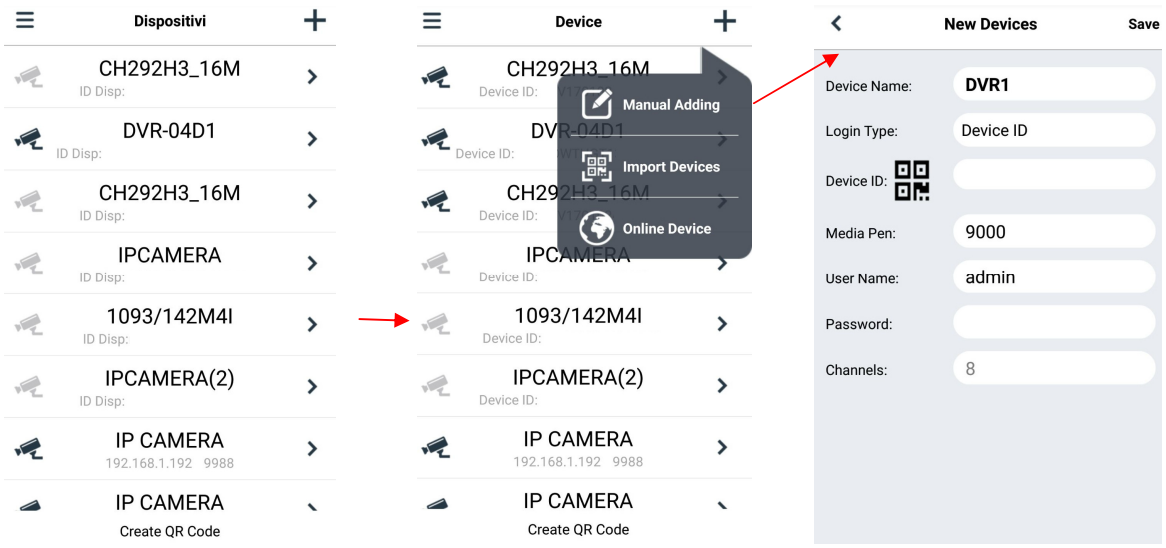


Add or delete a device

“Device” allows you to add or delete a device and edit its properties.

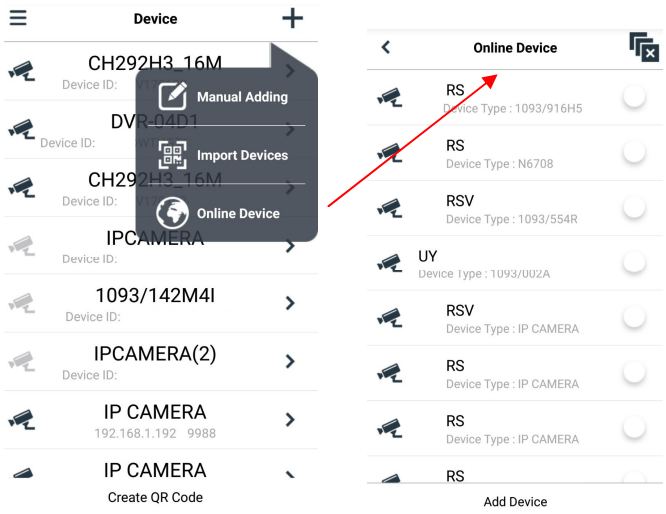
Select Menu and “Device” 

or the  icon at the top right of the start screen to open the interface shown below and manually add a device



To add a new device, select “**+**”, then Manual Adding, Import Device (via QR Code), Online Device (Device present on network): enter the name of the device, the address (IP, domain name or device ID for the DDNS Urmet account), the port, the user name and password, etc. The channel properties can be obtained from the device.

To add a device using automatic network search:



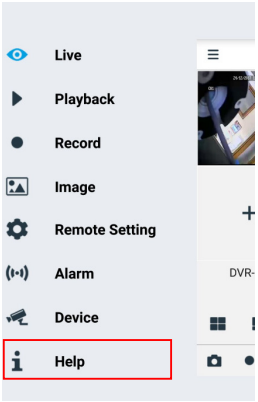
Choose the device and select “Add Device”

NOTE: the Data Port (i.e. 9000) must be set up in order for the Mobile Software to work properly. If you do not configure the mobile device port, the iUVS Mobile Software will not work.

To delete a device from list, select the name of the device you want to delete, then press the delete button next to the device name.

11.1.1.8 Help

This is a guide with information on the various items in the menus.



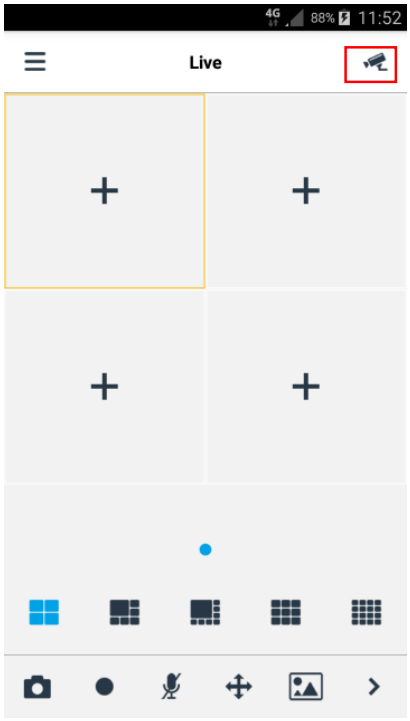
11.2 P2P FUNCTION

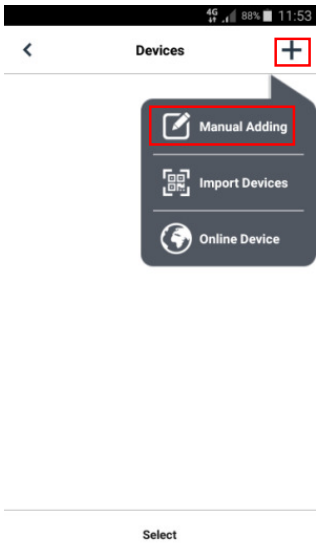
Once the IP camera has been configured to the network, to remotely display images on an iPhone or Android smartphone, download the URMET iUVS apps from the online stores.

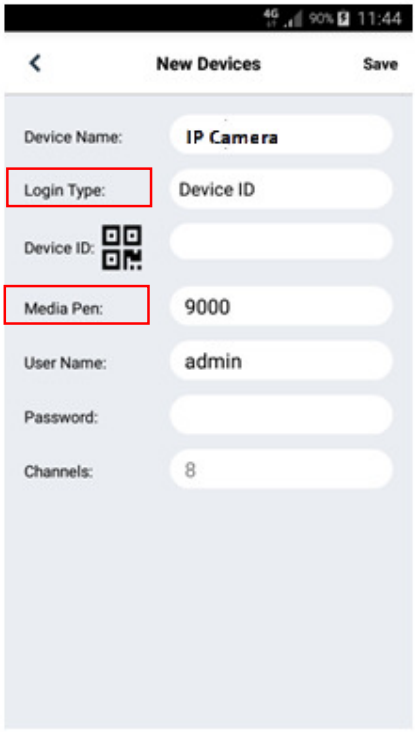
For viewing on an Apple iPad or Android tablet, download the **iUVSpad** app from the Apple Store or the **iUVStab** app from the Google Play Store.

After the application has been downloaded from the store and installed, the IP Camera can be added and viewed on a smartphone via a P2P connection as follows:

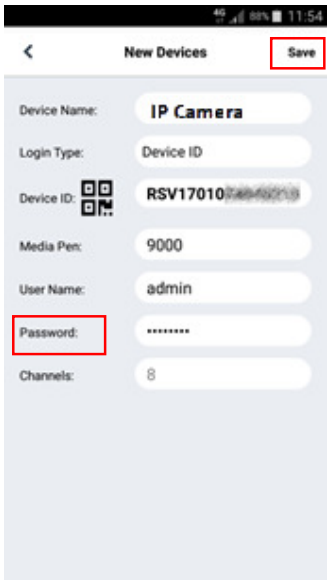
1. Run the "**iUVS**" app; select "***Devices***" and then "***Add***"



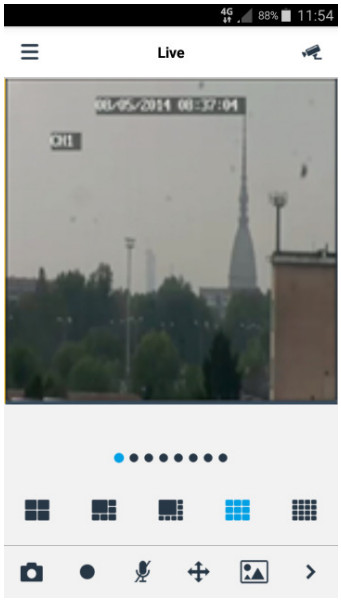




Fill in the "Device name" field. Select the symbol to insert the IP Camera ID, reading it from the QR code. Install the QR code reader app on the smartphone if you do not have it, then scan the QR code on the IP Camera.



Fill in the “Password” field by entering the NVR password (default: **00000000**), then press “Save” and wait for about 10 seconds for the NVR LIVE video to automatically load.



IMPORTANT NOTE:

- In addition to P2P mode, the IP camera can also be remotely viewed on a smartphone via the Urmet DDNS service. To do this, the router must be set for port opening and forwarding.
- To view the IP camera in the local network (LAN), it can be added to the app using its IP address. To know the local IP address of the IP camera, see the menu page [→ Network Menu] of the IP camera.

12 TECHNICAL SPECIFICATIONS FOR THE 2MPX FIXED LENS BULLET AND DOME IP CAMERAS

Items		Description			
		Bullet IP Camera	**Dome IP Camera**	**Starlight Bullet IP Camera**	**Starlight Dome IP Camera**
		1099/200	**1099/300**	**1099/201**	**1099/301**
Camera	Image Sensor	1/2.9” Progressive CMOS		1/2.8” Progressive CMOS	
	Sensor Type	IMX323		IMX290	
	Video Format	Optional format P/N			
	Minimum Luminance	Colour 0.1lux @ F1.2(AGC ON); B/W 0 lux @ IR ON			Colour 0.01lux @ F1.2(AGC ON); B/W 0 lux @ IR ON
	Lens Mount/Lens Type	3.6 mm Fixed Lens			
	Viewing angle	H.FOV: 73°			H.FOV: 83°
	Shutter Speed	1/5 ~ 1/20000s			
	Shutter Slowdown	Supported			
	G/N change mode	IR cut filter with auto switch			
	Wide Dynamic Range	Digital WDR			120 dB
	Digital noise reduction	3D DNR			
	IR illuminator range	1 item (array) / Approx. 30m	18 items (SMD) / Approx. 30m	1 item (array) / Approx. 30m	18 items (SMD) / Approx. 30m
Standard Compression	Standard Video Compression	H. 265 (Main profile)/ H.264/ MJPEG			
	Video Compression Rate	8Kbps~ 8Mbps			
Picture	Max. Resolution	2MP (1920x1080)			
	Frame Rate	**Mainstream (1-30fps)** 1920x1080, 1280x960, 1280x720 **Substream (1-30fps)** 704x480,640x480,320x240 **Mobilestream (1-30fps)** 640x480, 320x240			
	Image settings	Rotation, Saturation, Brightness, Contrast, Sharpness, settings can be adjusted via Client Software or Web Browser			
Users	No.: Max. Stream/PC access	10			
Software Functions	E-mail Alarm	YES			
	FTP	Picture or video upload to FTP Server			
	RTSP	YES			
	P2P	YES			
	NTP, DST, Sync. with PC time	YES			
	ROI	YES			

Items		Description			
		Bullet IP Camera	**Dome IP Camera**	**Starlight Bullet IP Camera**	**Starlight Dome IP Camera**
		1099/200	**1099/300**	**1099/201**	**1099/301**
	Web/Client/ Mobile	**Multi-Browser Support**: Internet Explorer 11.0 for Windows 7 and higher/ Firefox Mozilla up to v.51/ Safari 6.0 **Urmet UVS Client Support:** Windows 7 O.S. or higher / MAC O.S. 10.8.0 or higher **Mobile Support Software:** (iOS, Android)			
SMART capability	Smart analysis	YES (perimeter intrusion detection, line crossing detection, object detection)			
Network	Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP/RTSP, PPPoE, SMTP, NTP, UPnP, SNMP, HTTPS, FTP			
	Memory	NVR			
Interface	Communication interface	1 RJ45 10M / 100M Ethernet interface			
	System compatibility	ONVIF (Ver 2.6)			
	Security	3 video streams, mirror, password protection, privacy mask, IP filter			
	Alarm trigger	NO			
	Audio	NO			
	Video Output (CVBS)	NO			
	Protection rating	IP66			
	Protective connector	Waterproof RJ45 connector			
	Reset button	NO			
	SD Card	NO			
	PoE	YES			
General Specifications	Operating conditions	-20～+50°C			
	Power supply	12 VDC ± 10%, PoE (802.3af)			
	Power consumption	2W(D) / 3.8W(N)	1.7W(D)/ 4.7W(N)	2W(D) / 3.8W(N)	1.7W(D) / 4.7W(N)
	Dimensions (WxHxD or ØxH mm)	150x76,5x76	Ø90x85	150,5x76,5x76	Ø90x85
	Weight (g)	455	375	455	375

13 TECHNICAL SPECIFICATIONS FOR THE 2MPX VARIFOCAL BULLET AND DOME IP CAMERAS

Items		Description	
		Bullet IP Camera	Dome IP Camera
		1099/202	1099/302
Camera	Image Sensor	1/2.9” Progressive CMOS	
	Sensor Type	IMX323	
	Video Format	Optional format P/N	
	Minimum Luminance	Colour 0.1lux @ F1.2(AGC ON), B/W 0 lux @ IR ON	
	Lens Mount/Lens Type	Varifocal 2.8 ~ 12 mm	
	Viewing angle	H.FOV: 104 ~ 31°	
	Shutter Speed	1/5 ~ 1/20000s	
	Shutter Slowdown	Supported	
	G/N change mode	IR cut filter with auto switch	
	Wide Dynamic Range	Digital WDR	
	Digital noise reduction	3D DNR	
	IR illuminator range	40 items (SMD) / Approx. 40m	
Standard Compression	Standard Video Compression	H. 265 (Main profile)/ H.264/ MJPEG	
	Video Compression Rate	8Kbps~ 8Mbps	
Picture	Max. Resolution	2MP (1920x1080)	
	Frame Rate	**Mainstream (1-30fps)** 1920x1080, 1280x960, 1280x720 **Substream (1-30fps)** 704x480, 640x480, 320x240 **Mobilestream (1-30fps)** 640x480, 320x240	
	Image settings	Rotation, Saturation, Brightness, Contrast, Sharpness, settings can be adjusted via Client Software or Web Browser	
Users	No.: Max. Stream/PC access	10	
Software Functions	E-mail Alarm	YES	
	FTP	Picture or video upload to FTP Server	
	RTSP	YES	
	P2P	YES	
	NTP, DST, Sync. with PC time	YES	
	ROI	YES	
	Web/Client/ Mobile	**Multi-Browser Support**: Internet Explorer 11.0 for Windows 7 and higher/ Firefox Mozilla up to v.51/ Safari 6.0 **Urmet UVS Client Support:** Windows 7 O.S. or higher / MAC O.S. 10.8.0 or higher **Mobile Support Software:** (iOS, Android)	

Items		Description	
		Bullet IP Camera	Dome IP Camera
		1099/202	1099/302
SMART capability	Smart analysis	YES (perimeter intrusion detection, line crossing detection, object detection)	
Network	Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP/RTSP, PPPoE, SMTP, NTP, UPnP, SNMP, HTTPS, FTP	
	Memory	SD Card, NVR	NVR
Interface	Communication interface	1 RJ45 10M / 100M Ethernet interface	
	System compatibility	ONVIF (Ver 2.6)	
	Security	3 video streams, mirror, password protection, privacy mask, IP filter	
	Alarm trigger	1 alarm input, 1 alarm input	NO
	Audio	1 audio input, 1 audio output	NO
	Video Output (CVBS)	YES	NO
	Protection rating	IP66	
	Protective connector	Waterproof RJ45 connector	
	Reset button	YES	NO
	SD Card	Supports up to 256GB (not included in supply)	NO
	PoE	YES	
General Specifications	Operating conditions	-20～+50°C	
	Power supply	12 VDC ± 10%, PoE (802.3af)	
	Power consumption	1.5W(D) / 4.4W(N)	1.8W(D) / 4.9W(N)
	Dimensions (WxHxD or ØxH mm)	239,5x89x86,5	Ø113x151
	Weight (g)	870	895

14 TECHNICAL SPECIFICATIONS FOR 2MPX DIRECT FOCUS MOTORISED LENS BULLET AND DOME IP CAMERAS

Items		Description		
		Starlight Bullet IP Camera	**Starlight Dome IP Camera**	**Vandal Dome IP**
		1099/203	**1099/303**	**1099/304**
Camera	Image Sensor	1/2.8” Progressive CMOS		1/2.9” Progressive CMOS
	Sensor Type	IMX290		IMX323
	Video Format	Optional format P/N		
	Minimum Luminance	Colour 0.01lux @ F1.2(AGC ON); B/W 0 lux @ IR ON		Colour 0.1lux @ F1.2(AGC ON); B/W 0 lux @ IR ON
	Lens Mount/Lens Type	2.8 ~ 12 mm (Motorised DF)		
	Viewing angle	H.FOV: 109 ~ 32°		H.FOV: 104 ~ 31°
	Shutter Speed	1/5 ~ 1/20000s		
	Shutter Slowdown	Supported		
	G/N change mode	IR cut filter with auto switch		
	Wide Dynamic Range	120 dB		Digital WDR
	Digital noise reduction	3D DNR		
	IR illuminator range	40 items (SMD) / Approx. 40m		20 items (SMD) / Approx. 40m
Standard Compression	Standard Video Compression	H. 265 (Main profile)/ H.264/ MJPEG		
	Video Compression Rate	256K-8M		
Picture	Max. Resolution	2MP (1920* 1080)		
	Frame Rate	**Mainstream (1-30fps)** 1920x1080, 1280x960, 1280x720 **Substream (1-30fps)** 704x480, 640x480, 320x240 **Mobilestream (1-30fps)** 640x480, 320x240		
	Image settings	Rotation, Saturation, Brightness, Contrast, Sharpness, settings can be adjusted via Client Software or Web Browser		
Users	No.: Max. Stream/PC access	10		
Software Functions	E-mail Alarm	YES		
	FTP	Picture or video upload to FTP Server		
	RTSP	YES		
	P2P	YES		
	NTP, DST, Sync. with PC time	YES		
	ROI	YES		

Items		Description		
		Starlight Bullet IP Camera	**Starlight Dome IP Camera**	**Vandal Dome IP**
		1099/203	**1099/303**	**1099/304**
	Web/Client/ Mobile	**Multi-Browser Support**: Internet Explorer 11.0 for Windows 7 and higher/ Firefox Mozilla up to v.51/ Safari 6.0 **Urmet UVS Client Support:** Windows 7 O.S. or higher / MAC O.S. 10.8.0 or higher **Mobile Support Software:** (iOS, Android)		
SMART capability	Smart analysis	YES (perimeter intrusion detection, line crossing detection, object detection)		
Network	Protocols	TCP/IP, UDP, RTP/RTCP, RTSP, HTTP, SMTP, DNS, DDNS, DHCP, FTP, NTP, PPPOE, UPNP		
	Memory	SD Card, NVR		
Interface	Communication interface	1 RJ45 10M / 100M Ethernet interface		
	System compatibility	ONVIF (Vers. 2.6)		
	Security	3 video streams, mirror, password protection, privacy mask, IP filter		
	Alarm trigger	1 alarm input, 1 alarm output		
	Audio	1 audio input, 1 audio output		
	Video Output (CVBS)	YES		
	Protection rating	IP66		
	Protective connector	Waterproof RJ45 connector		
	Reset button	YES		
	SD Card	Supports up to 256GB (not included in supply)		
	PoE	YES		
General Specifications	Operating conditions	-20～+50°C		
	Power supply	12 VDC ± 10%, PoE (802.3af)		
	Power consumption	1.5W(D) / 4.4W(N)	1.8W(D) / 4.9W(N)	2.5W(D) / 6.3W(N)
	Dimensions (WxHxD or ØxH mm)	239,5x89x86,5	Ø113x151	Ø147x117
	Weight (g)	870	895	1010

15 MAXIMUM RECORDING TIME WITH SD CARD

15.1 REF. 1099/202 – REF. 1099/203 – REF. 1099/303 – REF. 1099/304

The following resolution options can be selected for Main Stream recording:

- "**1080P**", "**960P**" or "**720P**" for IP cameras with **H.265 coding**
- "**1080P**", "**960P**" or "**720P**" for IP cameras with **H.264 coding**

※IMPORTANT NOTES

- Bandwidth and SD card duration can vary greatly, depending on the scene being recorded.
- The following tables show the approximate time needed to fill the SD Card when the IP channel records video only (i.e. no audio) at the resolution and frame rate selected.

1 channel recording with 1080P resolution (1920x 1080) and H.265 Coding											
Variables to be set		Results		Results		Results		Results		Results	
Bitrate (Kbps)	Frame rate (fps)	SD 16GB (hours)	SD 16GB (days)	SD 32GB (hours)	SD 32GB (days)	SD 64GB (hours	SD 64GB (days)	SD 128GB (hours)	SD 128GB (days)	SD 256GB (hours)	SD 256GB (days)
2560	24-25	7.19	0.30	20.76	0.86	47.88	2.00	102.14	4.26	210.64	8.78
2048	20-23	8.99	0.37	25.94	1.08	59.85	2.49	127.67	5.32	263.30	10.97
1664	16-19	11.06	0.46	31.93	1.33	73.66	3.07	157.13	6.55	324.07	13.50
1280	12-15	14.38	0.60	41.51	1.73	95.76	3.99	204.27	8.51	421.28	17.55
1024	9-11	17.98	0.75	51.89	2.16	119.70	4.99	255.34	10.64	526.61	21.94
768	6-8	23.97	1.00	69.18	2.88	159.61	6.65	340.45	14.19	702.14	29.26
512	4-5	35.96	1.50	103.78	4.32	239.41	9.98	510.68	21.28	1053.21	43.88
384	1-3	47.95	2.00	138.37	5.77	319.21	13.30	680.90	28.37	1404.28	58.51

1 channel recording with 1080P resolution (1920x 1080) and H.264 Coding											
Variables to be set		Results		Results		Results		Results		Results	
Bitrate (Kbps)	Frame rate (fps)	SD 16GB (hours	SD 16GB (days)	SD 32GB (hours)	SD 32GB (days)	SD 64GB (hours	SD 64GB (days)	SD 128GB (hours)	SD 128GB (days)	SD 256GB (hours)	SD 256GB (days)
4096	24-25	4.49	0.19	12.97	0.54	29.93	1.25	63.83	2.66	131.65	5.49
3072	20-23	5.99	0.25	17.30	0.72	39.90	1.66	85.11	3.55	175.54	7.31
2560	16-19	7.19	0.30	20.76	0.86	47.88	2.00	102.14	4.26	210.64	8.78
2048	12-15	8.99	0.37	25.94	1.08	59.85	2.49	127.67	5.32	263.30	10.97
1536	9-11	11.99	0.50	34.59	1.44	79.80	3.33	170.23	7.09	351.07	14.63
1280	6-8	14.38	0.60	41.51	1.73	95.76	3.99	204.27	8.51	421.28	17.55
1024	4-5	17.98	0.75	51.89	2.16	119.70	4.99	255.34	10.64	526.61	21.94
768	1-3	23.97	1.00	69.18	2.88	159.61	6.65	340.45	14.19	702.14	29.26

1 channel recording with 960P resolution (1280x960) and H.265 Coding											
Variables to be set		Results		Results		Results		Results		Results	
Bitrate (Kbps)	Frame rate (fps)	SD 16GB (hours	SD 16GB (days)	SD 32GB (hours)	SD 32GB (days)	SD 64GB (hours	SD 64GB (days)	SD 128GB (hours)	SD 128GB (days)	SD 256GB (hours)	SD 256GB (days)
2048	24-25	8.99	0.37	25.94	1.08	59.85	2.49	127.67	5.32	263.30	10.97
1792	20-23	10.27	0.43	29.65	1.24	68.40	2.85	145.91	6.08	300.92	12.54
1536	16-19	11.99	0.50	34.59	1.44	79.80	3.33	170.23	7.09	351.07	14.63
1280	12-15	14.38	0.60	41.51	1.73	95.76	3.99	204.27	8.51	421.28	17.55
1024	9-11	17.98	0.75	51.89	2.16	119.70	4.99	255.34	10.64	526.61	21.94
768	6-8	23.97	1.00	69.18	2.88	159.61	6.65	340.45	14.19	702.14	29.26
512	4-5	35.96	1.50	103.78	4.32	239.41	9.98	510.68	21.28	1053.21	43.88
256	1-3	71.92	3.00	207.55	8.65	478.82	19.95	1021.35	42.56	2106.42	87.77

1 channel recording with 960P resolution (1280x960) and H.264 Coding											
Variables to be set		Results		Results		Results		Results		Results	
Bitrate (Kbps)	Frame rate (fps)	SD 16GB (hours)	SD 16GB (days)	SD 32GB (hours)	SD 32GB (days)	SD 64GB (hours)	SD 64GB (days)	SD 128GB (hours)	SD 128GB (days)	SD 256GB (hours)	SD 256GB (days)
2048	24-25	8.99	0.37	25.94	1.08	59.85	2.49	127.67	5.32	263.30	10.97
1792	20-23	10.27	0.43	29.65	1.24	68.40	2.85	145.91	6.08	300.92	12.54
1536	16-19	11.99	0.50	34.59	1.44	79.80	3.33	170.23	7.09	351.07	14.63
1280	12-15	14.38	0.60	41.51	1.73	95.76	3.99	204.27	8.51	421.28	17.55
1024	9-11	17.98	0.75	51.89	2.16	119.70	4.99	255.34	10.64	526.61	21.94
768	6-8	23.97	1.00	69.18	2.88	159.61	6.65	340.45	14.19	702.14	29.26
512	4-5	35.96	1.50	103.78	4.32	239.41	9.98	510.68	21.28	1053.21	43.88
256	1-3	71.92	3.00	207.55	8.65	478.82	19.95	1021.35	42.56	2106.42	87.77

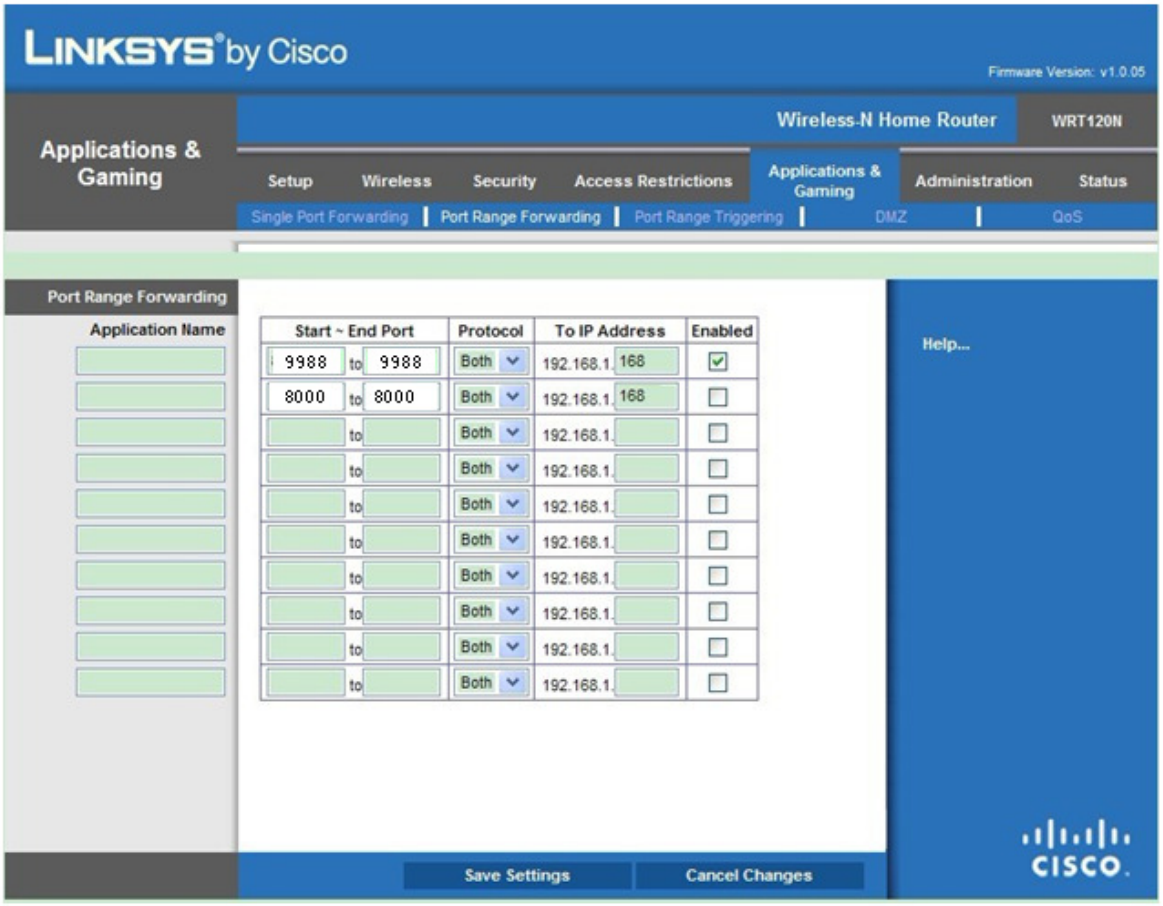
16 APPENDIX

16.1 ROUTER PORT FORWARDING

To remotely view the IP Camera through the Internet, you must first set the web port and client port of IP Camera.

Taking a Cisco router as an example:

The IP address of the IP camera is 192.168.1.168, the web port is 8000 and the client port is 9988.



16.2 FREQUENTLY ASKED QUESTIONS

- **Internet Explorer cannot load and install plug-ins.**
  1. Possible cause: IE security level is set too high.
     Solution: Set IE security level to the minimum level.

- **After updating, I cannot access the IP Camera through Internet Explorer.**
  1. Solution: Clear the IE cache as follows: open IE Tools, select Internet Options, select the 2nd option under "Delete Files" (Temporary Internet Files), click "Delete all offline content" and click OK. Access the camera once again.

- **Why am I unable to access the IP Camera through IE?**
  1. Possible cause 1: network fault.
     Solution: connect the PC to the Internet and check whether network access is normal. Check that there are no problems with cable connection or network problems so that the two devices can ping each other.
  2. Possible cause 2: the IP address is occupied by other devices.
     Solution: Disconnect the IP camera from the network, connect the IP camera directly to the PC and set the device IP address.
  3. Possible cause 3: the IP address belongs to a different mask.
     Solution: check the settings of the IP address, the subnet mask address, and the gateway.
  4. Possible cause 4: the physical address of the network conflicts with that of the IP camera.
     Solution: change the physical address of the IP camera.
  5. Possible cause 5: the web port has changed.
     Solution: contact the network operator to obtain the port information.

- **The PC client cannot connect to the front-end video**
  1. Solution: check that the IP camera video can be normally viewed in IE, that the device can be accessed by the PC client software and that the device parameters on the client PC are set correctly.

- **The mobile client cannot connect to the front-end video**
  1. Possible cause 1: mobile stream is not enabled.
     Solution: enable mobile stream.
  2. Possible cause 2: the mobile port number was not entered correctly.
     Solution: the mobile client software port number is 9988 and that of the third-party client is 8800.
  3. Possible cause 3: the video streams connections exceed the maximum limit.
     Solution: reduce the video stream connections on the device.

DS1099-014

URMET S.p.A.
10154 TURIN (ITALY)
VIA BOLOGNA 188/C
Tel. +39 011.24.00.000 (AUTO)
Fax +39 011.24.00.300 - 323

urmet

CE

Technical area
customer service
+39 011.23.39.810
http://www.urmet.com
e-mail: info@urmet.com
MADE IN CHINA