

RN-606W-600C RN RN-621B-636E

IP Camera 2 megapixel H.264 compression



RN-6901

Video server H.264 compression D1








Introduction

The RN series consists of cameras and video servers over IP with H.264 compression. The units are connected to a LAN via RJ45 port as any PC or other device and the images are displayed on the PC on the network using a standard Internet browser or special registration programs. The megapixel resolution allows image detail not possible with analog systems. The video servers are used to integrate analog sources into an IP system.

The RN series of network equipment using H.264 compression, the latest evolution in digital video compression that allows fidelity and bandwidth economy.

Technical data

| |  |  |  |  |  |
|--------------------------------------|---|---|---|---|---|
| | RN-606W | RN-621B | RN-600C | RN-636E | RN-6901 |
| Camera Type | IP camera | IP camera | IP camera | IP camera | IP video servers |
| Sensor | 1/3 "progressive scan CMOS 2mpx | 1/3 "progressive scan CMOS 2mpx | 1/3 "progressive scan CMOS 2mpx | 1/3 "progressive scan CMOS 2mpx | - |
| Color or black / white | colors | colors | colors | colors | colors |
| Resolution | UXGA: 1600x1200 HD720: 1280 x 720 SVGA: 800 x 600 VGA: 640 x 480 QVGA: 320 x 240 | UXGA: 1600x1200 HD720: 1280 x 720 SVGA: 800 x 600 VGA: 640 x 480 QVGA: 320 x 240 | UXGA: 1600x1200 HD720: 1280 x 720 SVGA: 800 x 600 VGA: 640 x 480 QVGA: 320 x 240 | UXGA: 1600x1200 SVGA 800 x 600 VGA: 640 x 480 | D1: 720x576 PAL (720x480 NTSC) |
| Frame rate | 30 f / sec up to 1280x720 15 f / sec to 1600x1200 | 30 f / sec up to 1280x720 15 f / sec to 1600x1200 | 30 f / sec up to 1280x720 15 f / sec to 1600x1200 | 30 f / sec up to 800x600 15 f / sec to 1600x1200 | 25 f / sec (PAL) 30 f / sec (NTSC) |
| video Compression | H264 / MJPEG | H264 / MJPEG | H264 / MJPEG | H264 / MJPEG | H264 / MJPEG |
| Audio compression u-Law PCM 8Khz | u-Law PCM 8Khz u-Law PCM 8Khz | u-Law PCM 8Khz u-Law PCM 8Khz | u-Law PCM 8Khz u-Law PCM 8Khz | | |
| Lan | RJ45 | RJ45 | RJ45 | RJ45 | RJ45 |
| Wifi connection | 802.11b / g | - | - | - | - |
| Power over Ethernet | - | IEEE802.3af | IEEE802.3af | IEEE802.3af | - |
| audio Input | Microphone | minijack input | Microphone | + Microphone input minijack input minijack | |
| Audio output for two-way dialogue | minijack | minijack | minijack | minijack | minijack |
| Alarm inputs | - | 1 | 2 | 4 | 1 |
| Alarm outputs | - | 1 | 1 | 1 | 1 |
| Day / Night | Yes | Yes | Yes | Yes | - |
| Lighting | | | | | - |
| Infrared compatible 840nm ... 1100nm | 840nm ... 1100nm 840nm ... 1100nm | 840nm ... 1100nm 840nm ... 1100nm | 840nm ... 1100nm 840nm ... 1100nm | | |

USER MANUAL

Megapixel H.264 IP CAMERAS



Page: 3

| | | | | | |
|-----------------------------------|--|--|--|--|--|
| integrated LED | 5 m. | 15 m. | - | - | - |
| IR filter automatic removal (ICR) | - | Yes | Yes | Yes | - |
| AWB | 5 options | 5 options | 5 options | 5 options | - |
| Analog Video Output | - | Composite BNC Composite | BNC | - | Composite BNC |
| memory slots | microSD | - | SD | microSD | 2 USB 2.0 ports |
| Supply | 5..12V DC | 12V DC or PoE | 12V DC or PoE | 12V DC or PoE | DC 12V |
| Absorption | Max. 5W | Max. 5W | Max. 5W | Max. 5W | Max. 5W |
| 230VAC power supply | Yes | No | No | No | Yes |
| Support bracket | Yes | Yes | Yes | No | No |
| Attaching the | S | CS | CS | S | - |
| Objective Standard | 4.9 mm. pin-hole | 6 mm. | 6 mm. | 1.25 mm. | - |
| Target interchangeable | - | Yes | Yes | - | - |
| Operating temperature | 0 ° ... + 50 ° C | - 30 ° ... + 50 ° C | 0 ° ... + 50 ° C | 0 ° ... + 50 ° C | 0 ° ... + 50 ° C |
| Degree of protection | IP40 | IP66 | IP40 | IP40 | IP40 |
| External dimensions (mm.) | 60x76x26 | 85x70x78 | 77x80x160 | 180 (diameter) x55 | 135x40x85 |
| Weight | 90 gr. | 370 gr. | 700 gr. | 380 gr. | 570 gr. |
| PPPoE protocol | Yes | Yes | Yes | Yes | Yes |
| DHCP Protocol | Yes | Yes | Yes | Yes | Yes |
| SMTP Protocol | Yes | Yes | Yes | Yes | Yes |
| FTP protocol | Yes | Yes | Yes | Yes | Yes |
| UPnP Protocol | Yes | Yes | Yes | Yes | Yes |
| RTSP protocol | Yes | Yes | Yes | Yes | Yes |
| Protocol 3GPP / ISMA | Yes | Yes | Yes | Yes | Yes |
| HTTPS protocol | Yes | Yes | Yes | Yes | Yes |
| Other protocols supported | TCP / IP, ARP, ICMP, NTP, RTP, HTTP, TCP, UDP, Bonjour | TCP / IP, ARP, ICMP, NTP, RTP, HTTP, TCP, UDP, Bonjour | TCP / IP, ARP, ICMP, NTP, RTP, HTTP, TCP, UDP, Bonjour | TCP / IP, ARP, ICMP, NTP, RTP, HTTP, TCP, UDP, Bonjour | TCP / IP, ARP, ICMP, NTP, RTP, HTTP, TCP, UDP, Bonjour |
| DDNS Support | Yes | Yes | Yes | Yes | Yes |
| Disable ping response | Yes | Yes | Yes | Yes | Yes |

USER MANUAL

Megapixel H.264 IP CAMERAS



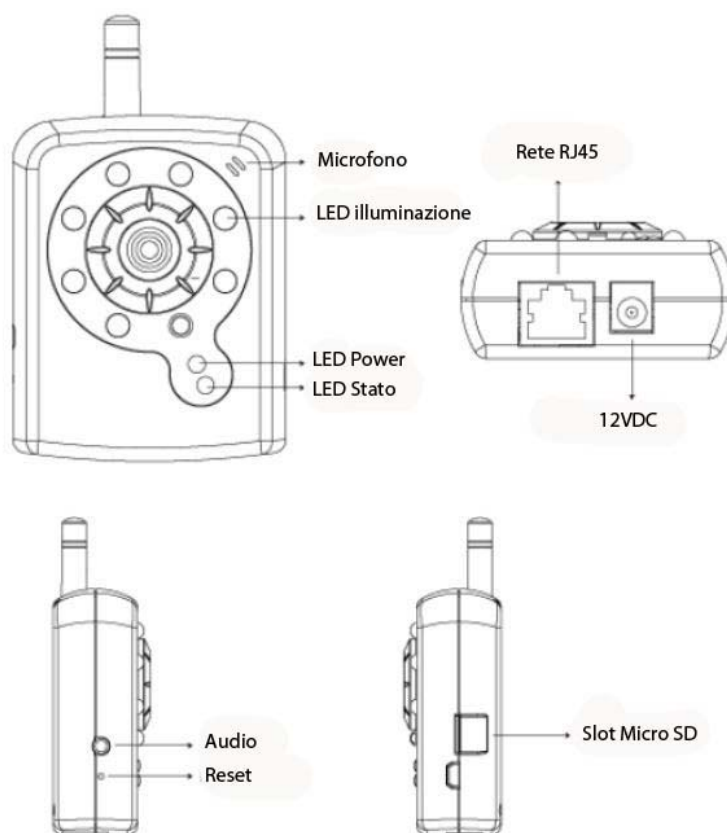
Page: 4

| | | | | | |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| supported browsers | PC (IE) Mac (Safari) | PC (IE) Mac (Safari) | PC (IE) Mac (Safari) | PC (IE) Mac (Safari) | PC (IE) Mac (Safari) |
| Access Password Protection | 20 3 users access levels | 20 3 users access levels | 20 3 users access levels | 20 3 users access levels | 20 3 users access levels |
| Motion detection | Yes | Yes | Yes | Yes | Yes |
| alarm Sending video | E-mail / FTP | E-mail / FTP | E-mail / FTP | E-mail / FTP | E-mail / FTP |
| FTP Upload timed | Yes | Yes | Yes | Yes | Yes |
| Videoconferencing Terminal function | Yes (10 'stations max.) | Yes (max 10' stations.) | Yes (max 10 'stations.) | Yes (max 10' stations.) | Yes (max 10 'stations.) |
| Recording on memory programmable timer | Yes | - | Yes | Yes | Yes |
| Explorer interface customizable | Yes (colors and logo) | Yes (colors and logo) | Yes (colors and logo) | Yes (colors and logo) | Yes (colors and logo) |

Installation

Product Overview

RN-606W



MIC IN - The camera is equipped with built-in microphone

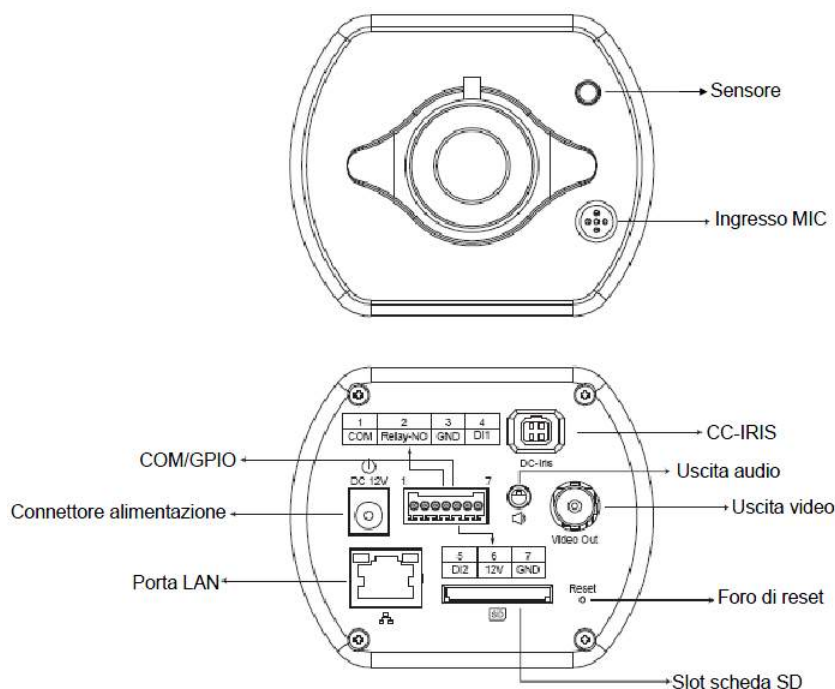
AUDIO OUTPUT - This 3.5 mm jack allows you to connect the local speakers. This feature allows you to create a two-way audio conversation between the person in front of the camera and the operator in front of the client PC.

Micro SD CARD SLOT - Slot to insert a Micro SD card to save aboard the same camera images.

12VDC - plug which connect the power supply 220VAC / 12VDC supplied.

NETWORK RJ45 - RJ45 connector to connect the network

RN-600C



IRIS - The 4-pole black connector allows you to connect an auto-iris lens control cable type DC Drive

VIDEO - The camera provides a video output of the analog type with BNC connector that can be connected to a monitor or a VCR

AUDIO OUTPUT - This 3.5 mm jack allows you to connect the local speakers. This feature allows you to create a two-way audio conversation between the person in front of the camera and the operator in front of the client PC.

SD CARD SLOT - slot to insert an SD card (also SDHC) to save aboard the same camera images.

SUPPLY - plug which connect the power supply 220VAC / 12VDC supplied.

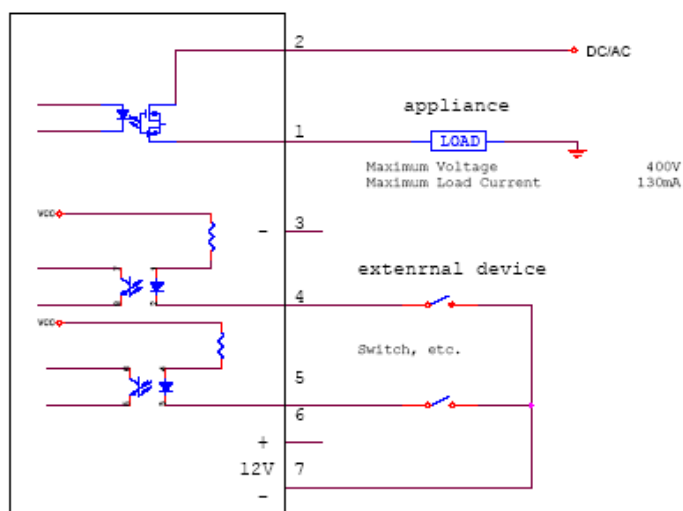
LAN PORT - RJ45 connector to connect the network

COM / GPIO - This terminal is used to connect the inputs and outputs to control local alarm and signaling contacts. The terminal functions are as follows: PIN

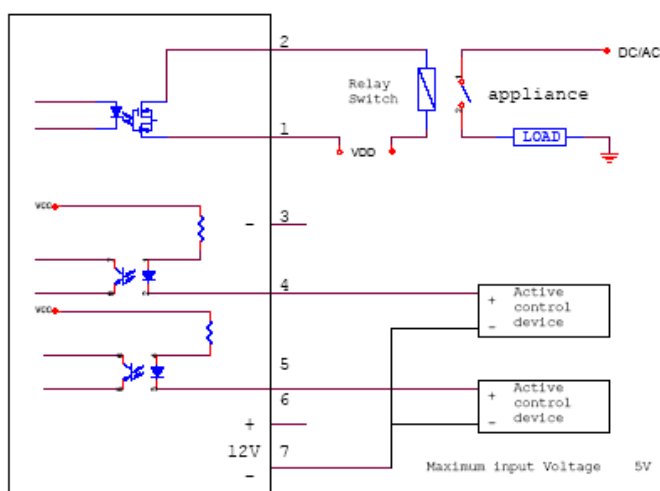
| | RIFER. | DESCRIPTION |
|---|----------|---|
| 1 | COM | Alarm output normally open (NO). It is a relay contact able to control an external device. The max. drivable current is 130mA |
| 2 | Relay NO | |

| | | |
|---|-------|---|
| 3 | GND | 2 alarm inputs for connecting sensors or external contacts. The ON / OFF type contacts are connected between the input terminal and the GND |
| 4 | 5 DI1 | |
| | DI2 6 | |
| | 12V | If you use the 12VDC power jack with the external power supply 2 these terminals serve to be able to provide 12VDC power to any external equipment (eg IR illuminator). If the plug is not used |
| 7 | GND | |

12VDC is possible to use these two terminals as a 12VDC power supply input.

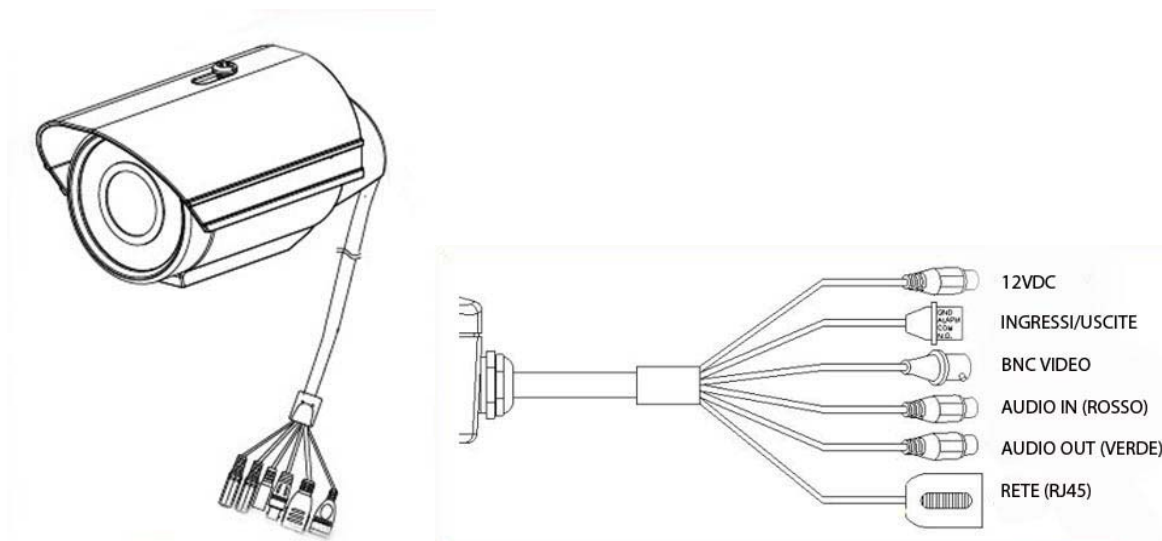


Application 1



Application 2

RN-621B



12VDC - plug which connect the power supply 220VAC / 12VDC supplied.

BNC VIDEO - The camera provides a video output of the analog type with BNC connector that can be connected to a monitor or a VCR

AUDIO - This 3.5 mm jack Pink allows you to connect a microphone for sound environmental recovery

AUDIO OUTPUT - This 3.5 mm jack lets you connect green local speakers. This feature allows you to create a two-way audio conversation between the person in front of the camera and the operator in front of the client PC.

NETWORK - RJ45 connector to connect the network

INPUT / OUTPUT - This terminal is used to connect the inputs and outputs to control local alarm and signaling contacts. The terminal functions are as follows: PIN

| | RIFER. | DESCRIPTION |
|---|--------------|--|
| 1 | COM | Alarm output normally open (NO). It is a relay contact able to control an external device. The max. drivable current is 130mA |
| 2 | Relay NO 3 | |
| | GND | alarm input for connecting sensors or external contacts. The ON / OFF type contact |
| 4 | Digital IN 5 | connects between the input terminal and the GND |
| | GND | These two terminals running the hardware reset of the camera and restore the factory settings. Should proceed as follows: 1 - Disconnect the power 2 - connect together with a cable terminals 5 and 6 3 - connect the power supply the POWER LED will flash. |
| 6 | DEFAULT | |

USER MANUAL

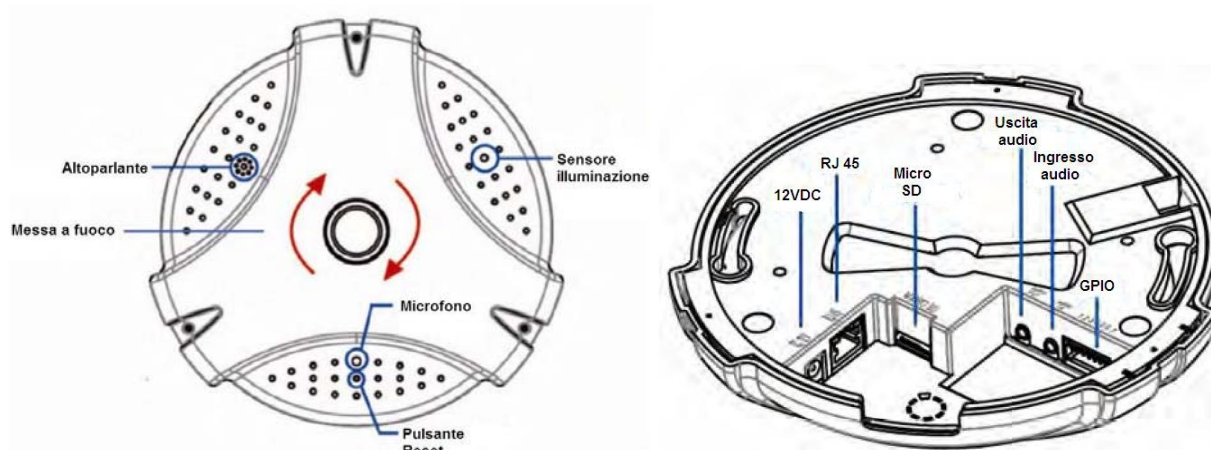
Megapixel H.264 IP CAMERAS



Page: 9

| | | |
|--|--|--|
| | | 4 - when the LED starts to flash quickly break the connection between the two terminals. Wait until the camera is reset. |
|--|--|--|

RN-636E



On the front of the camera are present microphone and speaker for audio as well as a light sensor for day / night function and the RESET button. By turning the lens you can adjust the FOCUS. On the back there are the following connections.

12VDC - Jack to which connect a power supply 220VAC / 12VDC min. 2 A (not supplied). The power supply is not necessary if you use the PoE power through the network cable (requires PoE switch or PoE injectors)

RJ45 - RJ45 connector to connect the network. Use CAT5 cable

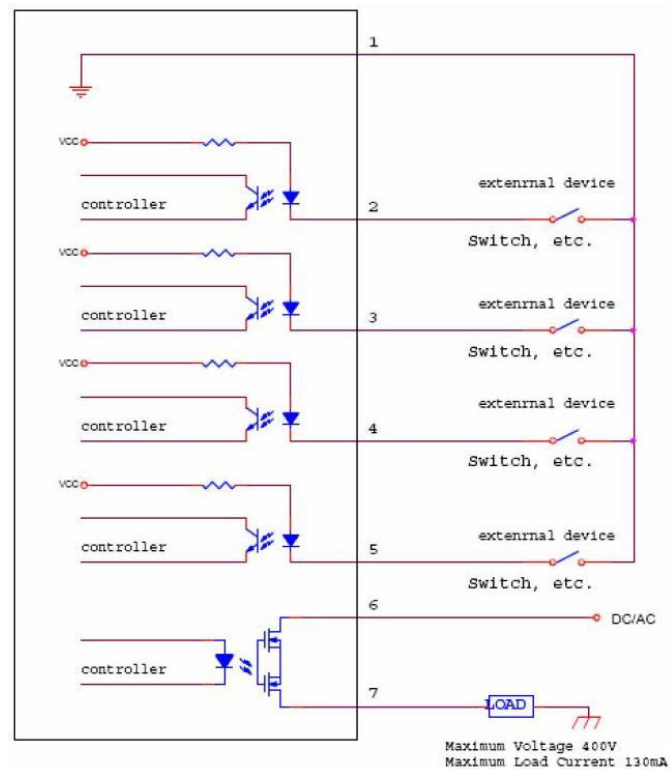
MICRO SD - Slot to insert a MicroSD card to save aboard the same camera images

AUDIO - This 3.5 mm jack lets you connect a microphone for sound environmental recovery. The camera is also equipped with a built-in microphone. The use of incorporato microphone or the external microphone is set in programming.

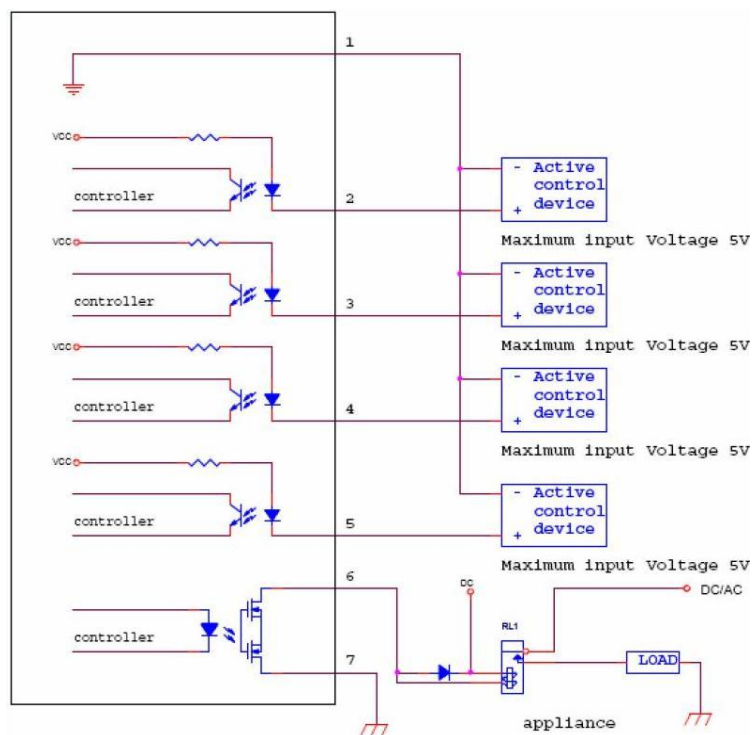
AUDIO OUTPUT - This 3.5 mm jack allows you to connect the local speakers. This feature allows you to create a two-way audio conversation between the person in front of the camera and the operator in front of the client PC.

GPIO - This terminal is used to connect the inputs and outputs to control local alarm and signaling contacts. The terminal functions are as follows PIN

| | RIFER. | DESCRIPTION |
|---|--------|---|
| 1 | GND | 4 the alarm digital inputs for connecting sensors or external contacts. The ON / OFF type contacts are connected between the input terminal and the GND. |
| 2 | DI4 | |
| 3 | 4 DI3 | |
| | DI2 5 | |
| | DI1 6 | Alarm output normally open (NO). It is a relay contact able to control an external device. The max. drivable current is 130mA. To drive of greater absorption equipment resorting to an external relay. |
| | GIFT | |
| 7 | COM | |



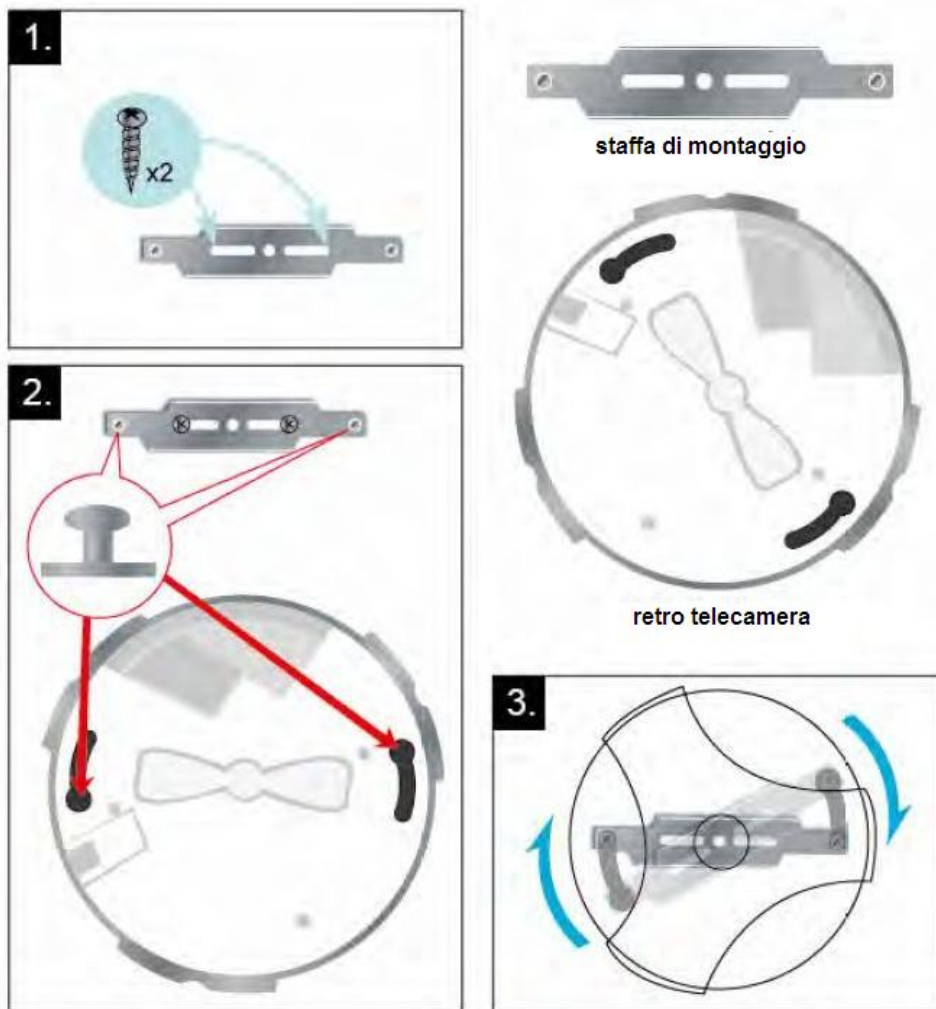
Application 1



Application 2

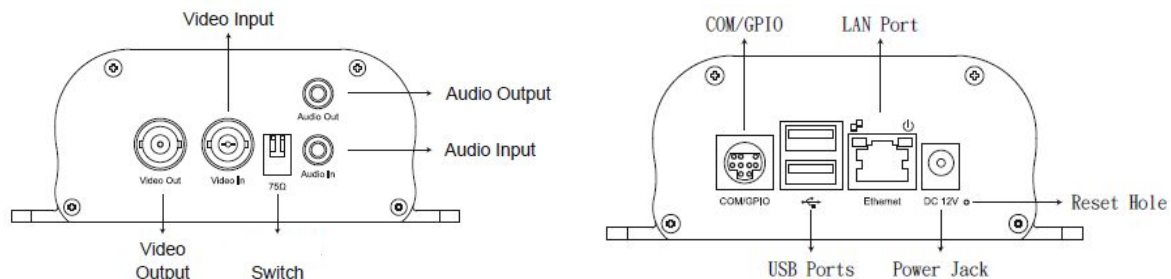
Mounting RN-636E

Carefully follow the three basic steps for mounting the camera.



1. Attach the mounting bracket with the two screws present in the package to the ceiling or wall. The bracket is fastened to the left output cable. The camera connections are in fact accommodated in a recess that allows housing a small cable abundance.
2. Once connected the camera to do enter the two protrusions in the mounting bracket in the slots on the back of the camera
3. Turn the camera clockwise until snug

RN-6901



VIDEO INPUT - BNC female connector to connect the video source (eg. Camera)

VIDEO OUTPUT - E 'available video output analog BNC connector that can connect to a monitor or a VCR

AUDIO - This 3.5 mm jack lets you connect a microphone to the sound recovery

AUDIO OUTPUT - This 3.5 mm jack allows you to connect the local speakers. This feature allows you to create a two-way audio conversation between the person in front of the camera and the operator in front of the client PC.

USB PORTS - Slot to insert USB or USB Hard Disk drives for normal recording

POWER - plug which connect the power supply 220VAC / 12VDC supplied.

PORT LAN - RJ45 connector to connect the network

75 Ohm SWITCH - The left switch is used to connect or not the 75 ohm termination impedance depending on the device connected to the analog video. The majority of DVR monitors have integrated impedance so there is no need to intervene in this selection. The switch to the right does not currently have combined function.

CONNECTOR COM / GPIO

In terms of the RN-6901 is a jack Mini-DIN 9-pin to connect the adapter cable. The following connections are available:

Serial line RS485A and B - for the control of a motorized speed dome camera with Pelco D / P Liliin and protocols Dynacolor

RS232 serial line (RXD TXD) - as above on RS232 BUS

relay input - Alarm input to which it is possible to connect a NO contact and with it being able to generate an alarm condition.

relay output - Can be operated remotely via browser or motion detection / external input.

video Output additional available

The following is the rule of the PIN access scheme for those who want to create a custom connector:

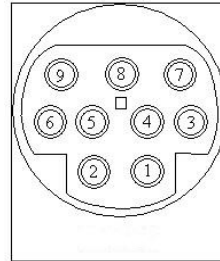
USER MANUAL

Megapixel H.264 IP CAMERAS

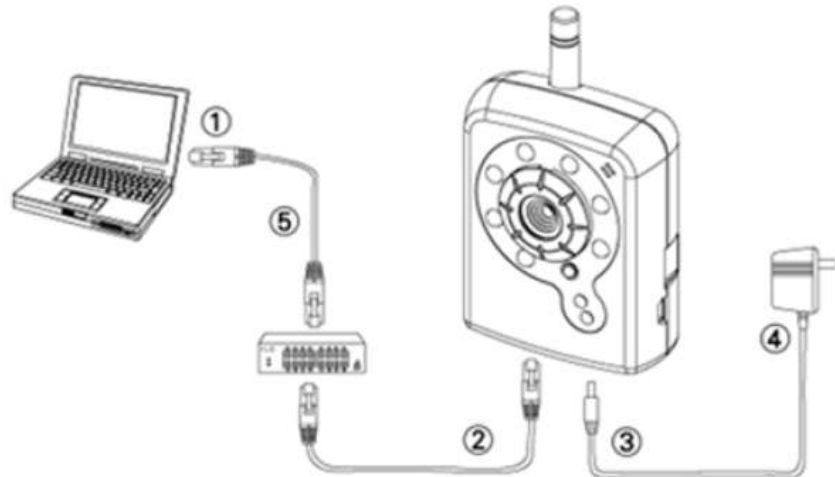


Page: 14

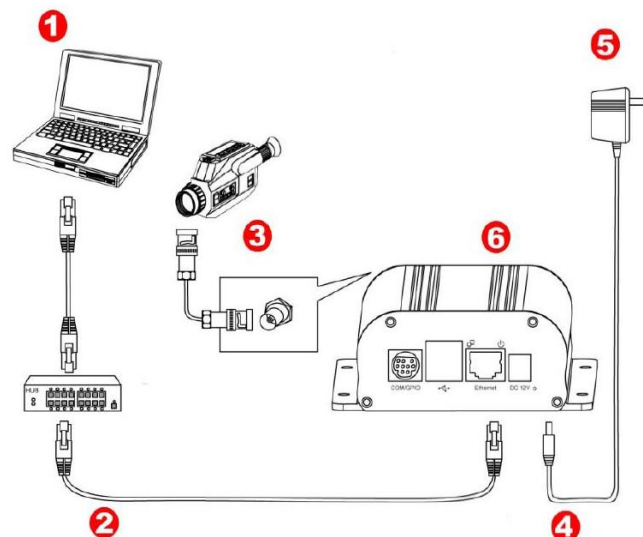
| PIN | FUNCTION |
|-----|------------------|
| 1 | alarm Input |
| 2 | RXD |
| 3 | TXD |
| 4 | RS485A |
| 5 | GND |
| 6 | Relay output NO |
| 7 | Relay output COM |
| 8 | RS485B |
| 9 | video Output |



Example of connection



1. Preparare un PC con collegamento Ethernet collegandolo alla rete
2. Collegare la porta LAN (RJ45) della fotocamera a uno switch/hub di rete
3. Collegare il connettore di alimentazione
4. Accertarsi che le specifiche del trasformatore corrispondano al sistema di alimentazione (110 V o 220 V) e connettere l'adattatore alla presa
5. Verificare lo stato del LED (Alimentazione/rete)



1. PC connected to the LAN
2. The video server connects to the network switch with a straight CAT5 cable. To connect to a single PC without a switch using a crossover cable



3. The camera's video output connects to the VIDEO IN BNC male
4. Connect the power supply plug 12VDC
5. The power supply 220VAC / 12VDC is supplied with the appliance
6. LED on the right is the corrected power 12V LED = left in a proper network connection

Installing Software

The CD supplied with the camera software is included **IP INSTALLER** which must be installed on a PC connected to the network in which you will connect the camera. The function of this software is to detect the presence of the camera network regardless of the class of addresses used on your network and allow you to configure the network address of the camera so as to be consistent with your network. We recall that because the camera is visible from the other PCs on the network it is necessary that the first 3 address parts are the same as other network PC and is equal also the subnet mask.

Network Configuration

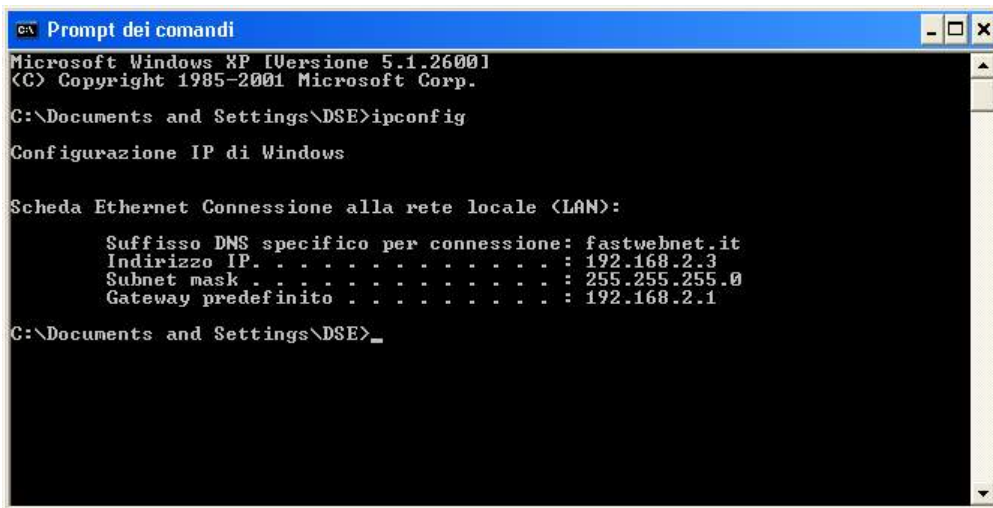
The IP Installer is a program that makes it easy and very efficient configuring IP address and the device's network settings.

Preliminary checks for network configuration

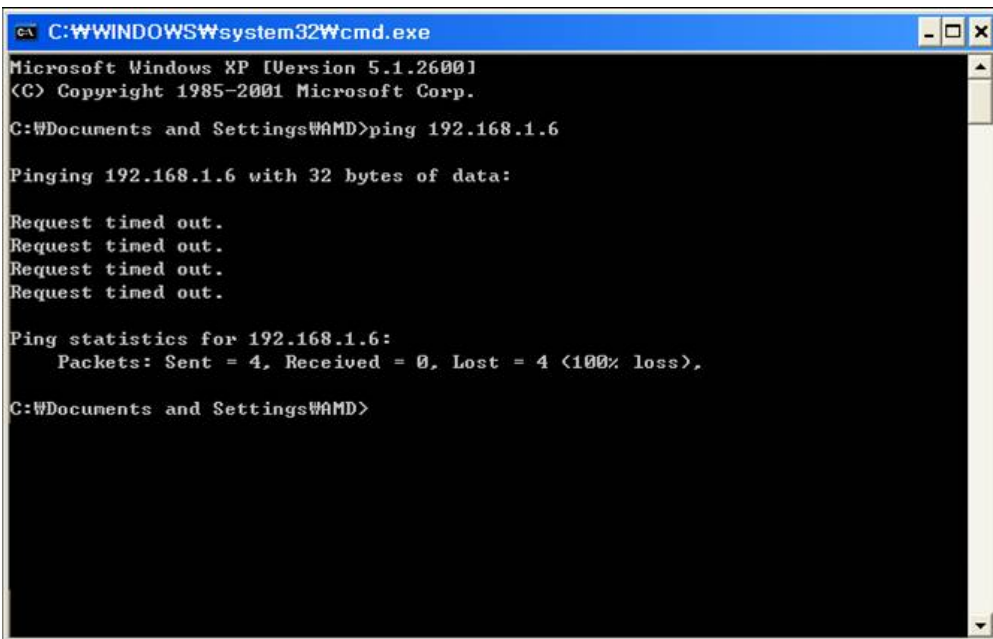
Before you must obtain from your network some information about the management of the IP addresses used on your network. E
'need to know an IP address can be assigned to the camera that is not equal to any other device already present in the network. At this point it is possible to feed the camera and connect the network cable. The wired connection is essential also in the installation of Wi-Fi cameras to enable the wireless connection. If you are unsure about your network's operation you can use certain commands in DOS PROMPT

On a network PC launched a DOS window available between the Windows accessory programs.

Type IPCONFIG at the command prompt and press ENTER. They will see the TCP / IP parameters. The second line is the IP address assigned to your computer.



In the above example the address of the PC on which you are working is 192.168.2.3 and the subnet mask used is the classic 255.255.255.0. The camera can therefore assign an address chosen by the 192.168.2.XXX type, where XXX stands for a number between 0 and 255. It is important **choose an address that is not already used by other devices of network**. To verify that the chosen address is free, try to make a PING from the same DOS window by typing PING followed by a space and by the IP you wish to assign to the camera. If there is no device responds to that address, you will receive 4 REQUEST TIME OUT as in the following example:

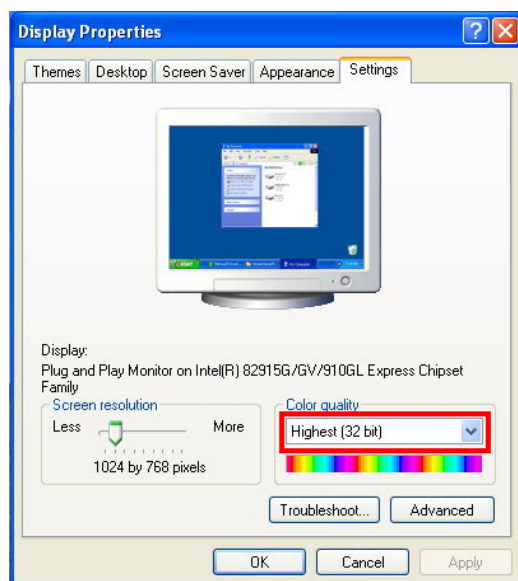


All cameras support the automatic IP address assignment from a DHCP server. However, this mode is not recommended as it is possible that in case of power failure or restart of the equipment is possible for the camera to change the IP address making it necessary

reconfiguration of the registration software.

Preliminary checks on the video card

To view the images you need to set the color quality of the PC video card of 32bit

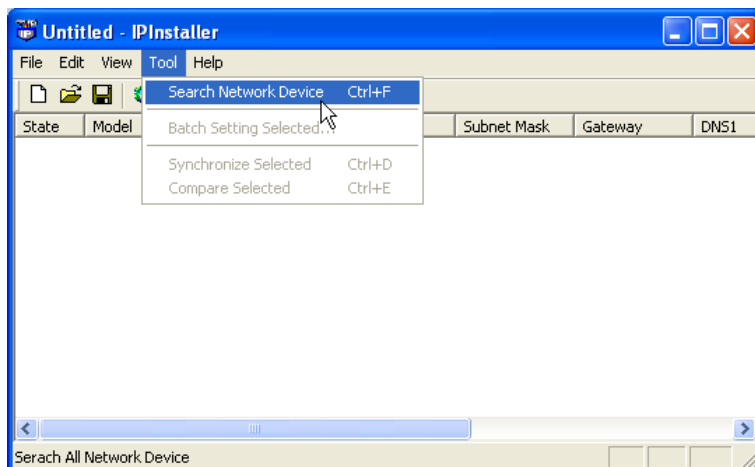


Using IP Installer to assign the IP address

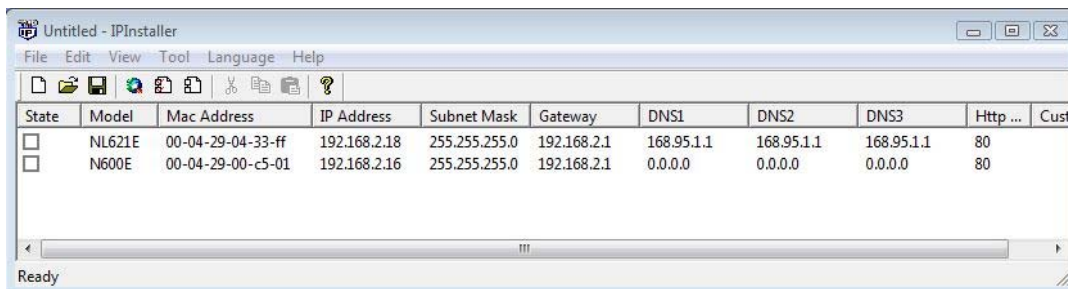
1. Once you have successfully installed the IP Installer on a PC properly connected to the network, double-click the icon in the START MENU. Click Start Menu> Programs> IP Installer> IP Installer> Launch IP Installer. This will open the program window.
The appearance of the program window may vary depending on the release without changing the function.



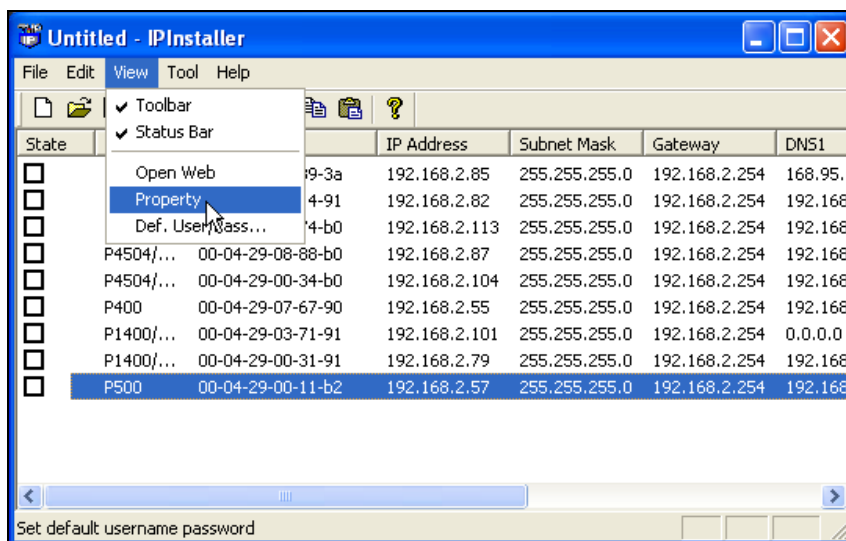
2. Click on the Tools menu bar (Tools)> Device Search Network (search network device) or click the icon with the search or press the lens DEVICE SEARCH button. The program begins to scan the RN series IP cameras on the network. Wait to complete the search.



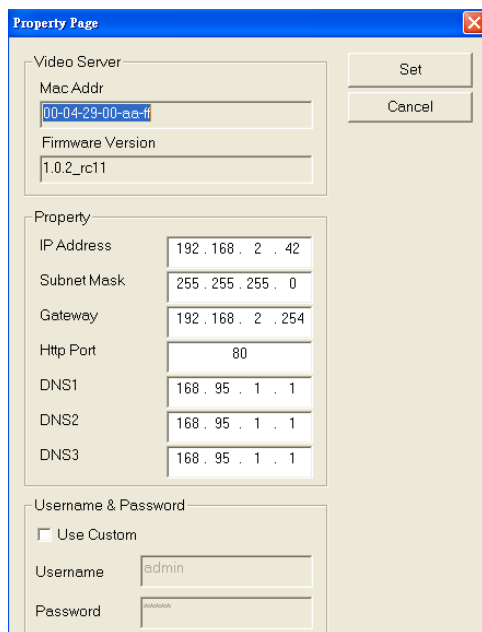
3. When the search will see the list of detected cameras. If the camera is not detected check the functionality of network links.



4. If you need to recognize which camera refers to physically a voice controlled list of the MAC address, a unique identifier, different for each camera, which is reported by the IP INSTALLER and is also indicated on the camera itself. Double-click on the camera line to be configured to open the Properties page, or click on the View menu bar (View)> Property (Properties).



5. In the Properties window, you can enter all network data necessary to integrate the camera into your network. Check especially to set an address with class and subnet mask similar to those used by your network. In the following figure, for example, the address class is 192.168.2 and the last number 42 is the camera identifier. The subnet mask is 255.255.255.0. Once you have entered the properties, click the SET button to transfer the configuration to the camera.



The IP Installer program also has some additional functions:

SAVE / SAVE AS - Allow to save the list of devices detected by IP Installer in a file that you can then open off-line but not connected to the network.

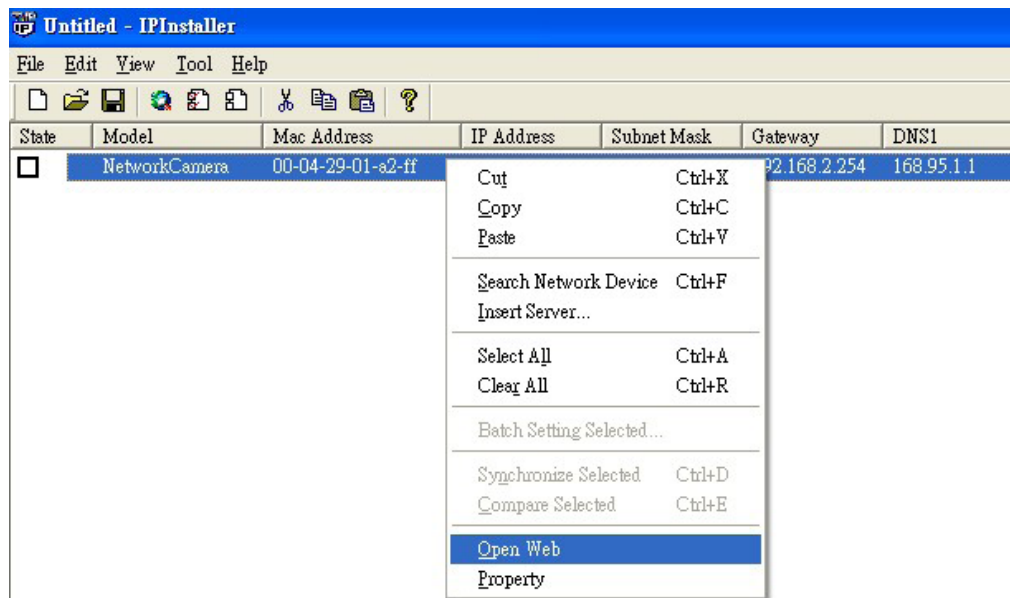
INSERT SERVER - Allows you to enter the camera's IP parameters from scratch, without having it detected with the search function.

DEF. USER PASSWORD - The modification of the IP parameters that is carried out by IP Installer provides you access the camera configuration, an operation that requires the use of USER NAME and PASSWORD. The factory in the RN series cameras are set to the following values: **USER: admin PASSWORD: admin**. For IP INSTALLER logic also uses the same factory admin / admin values. In this window you can change the data of default access to suit your needs. In the properties of each camera (see the previous figure) it is still possible to individually modify the access parameters for each camera by clicking USE CUSTOM and typing them freely.

Opening web user interface

1. Once properly set the network parameters, you can make the first access to the

camera using the Web browser. To access the selected drive web user, run View (View)> Open Web (Open Web) on the menu bar.



- It will automatically start your default web browser (Internet Explorer recommended) and you get access to the camera.

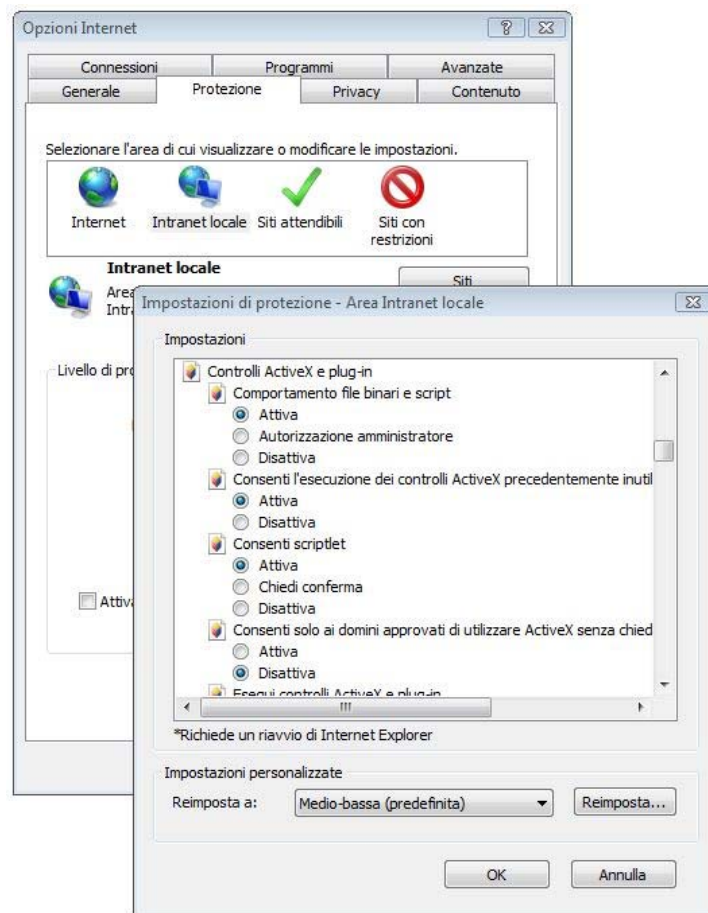
Alternatively it is possible to manually open **Internet Explorer** and type in the address box, the IP address that you gave to the camera (see previous section), for example.

<http://192.168.2.201> .

Install ActiveX component

When you connect to a RN camera using Internet Explorer for the first time, the system will be installed in the browser ActiveX components necessary to the vision of the cameras. You will get a confirmation window asking the approval to install the ActiveX control required for the video transfer. Reply OK to install.

If it is not no message, or the installation does not go to fruition obviously the security settings of Internet Explorer are preventing the installation. Open TOOLS / Internet Options and select the PROTECTION table. Select the area of interest: if you are accessing the Internet from outside the network or intranet camera if you are connecting to a local network. Set the security level to LOW. Click CUSTOM LEVEL check they're enabled all the rumors regarding the ActiveX management is marked as safe that are not marked. All security parameters related to ActiveX are enabled or at least allowed after confirmation.



Be careful if you have set the parameters with ASK CONFIRMATION because Internet Explorer will require explicit consent to the installation of the ActiveX control with a message that appears below the address bar.

After completing the installation of ActiveX in Internet Explorer browser will open the initial access to the camera page.

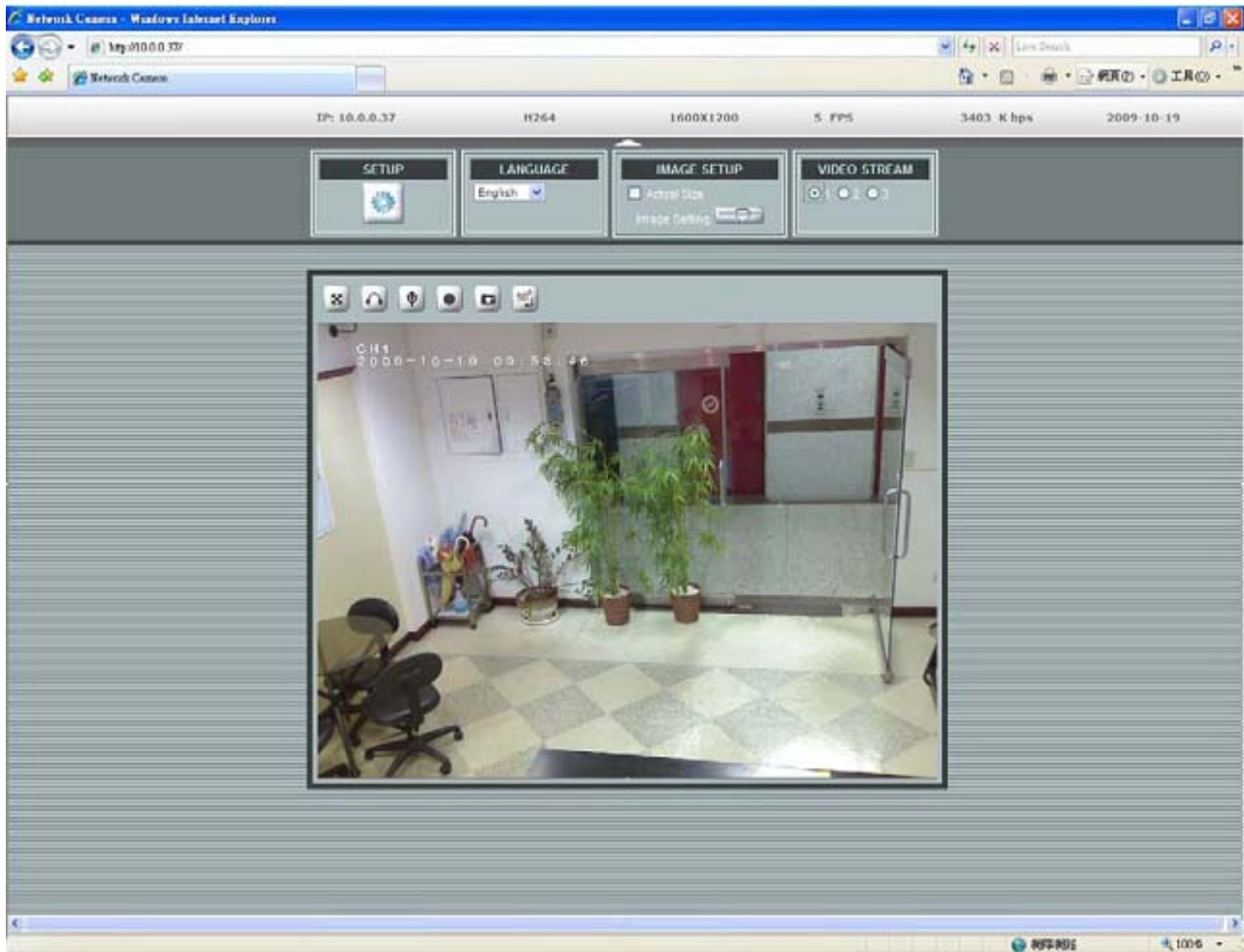
If it does not return to check the security settings remember to restart your browser after each change.

USER MANUAL

Megapixel H.264 IP CAMERAS



Page: 23



LIVE VIEW - LIVE Login with your browser

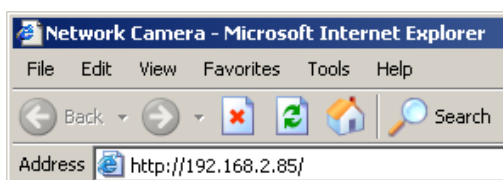
The RN series cameras are developed for full compatibility with the most popular browser

INTERNET EXPLORER. E 'can also use other browsers like **Mozilla Firefox** or **Apple Safari** but this is not recommended

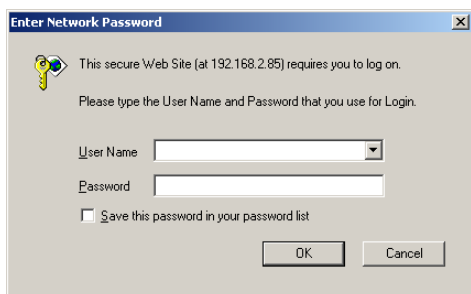
because some functions may not be accessible. For the use of other browsers you must also install the **VLC codec** while Internet

Explorer installation deli 'appropriate activeX is automatic as shown above .. To access the camera using Internet Explorer just

type the address in the browser bar:



Depending on the security settings of the camera could be offered a window of log-in for entering username and password for access.



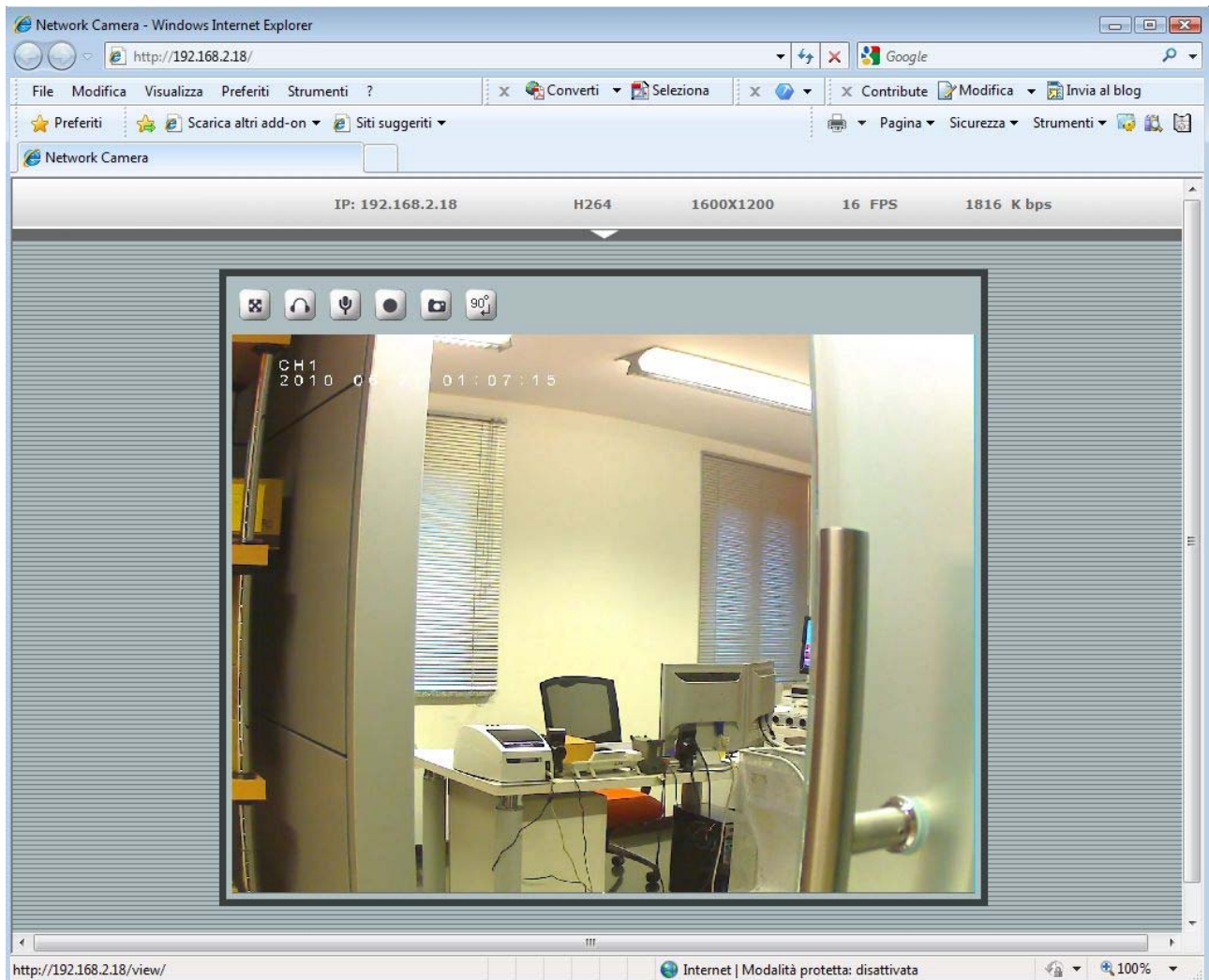
The data of the RN Series cameras factory passwords are:

USERNAME: admin

PASSWORD: admin

The access to the camera control mask:

The window that allows the display of real-time image looks like this:




At the top of the main window shows the connection parameters:



From left to right:

IP Address - video compression format - Resolution - Frame Rate - Bit Rate Above the image some buttons that allow quick access to commonly available

functions






| Icon | Description |
|---|-------------------------|
|  | Increase to full screen |

USER MANUAL

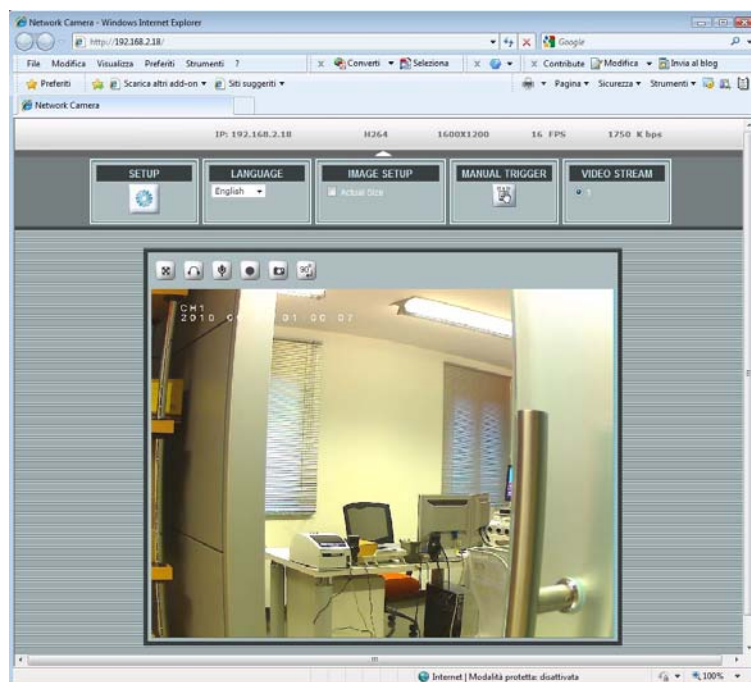
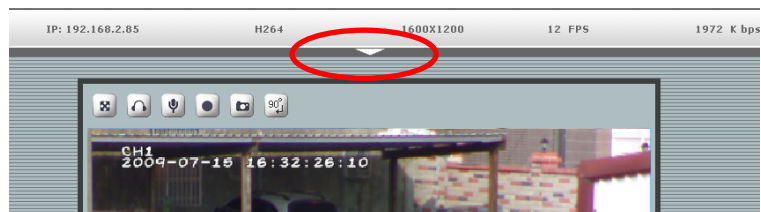
Megapixel H.264 IP CAMERAS










Page: 26

| | |
|---|--|
|  | Active listening to the sound coming from the camera |
|  | Send audio from the local microphone to the camera speakers output |
|  | Record video while you watch it in AVI format |
|  | Take a photo in JPG format |
|  | Rotate the image 90 degrees clockwise with each click (NO RN-636E) |

To access additional commands is required to open the curtain by clicking on the arrow on the top center of the display window.



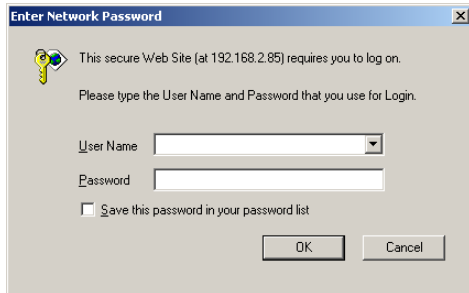
There are up to 7 frames depending on the camera models:

| Button | Description |
|---|--|
|  | Click to open the menu of camera settings |
|  | Click to select the web interface language (currently available English only) |
|  | The RN-636E panoramic camera allows you to choose different display types |
|  | Click to change the size of the display window and bring it to the actual size corresponding to the resolution set in the camera. |
|  | Click to manually operate the camera alarm condition (see Manual alarm in the programming section of the alarm management) The RN series cameras allow you to set three types of video streams with different settings that are |
|  | configured in the SETUP of the camera. Using these buttons you can quickly choose which stream to use without having to access the camera program . (NO RN-636E) |
|  | <p>The only dome camera RN-636Econ panoramic vision has the ability to activate a PTZ control electronic simulation that allows you to rotate the vision as if you were moving the camera. The PTZ button to activate this function is present only if you choose the option in the settings to CEILING</p> <p style="text-align: right;">Ceiling mount (section</p> <p>Room / advance / mount camera - see section CAMERA - Camera Configuration)</p> |



Programming access

The following chapters refer to the programming of the camera which is accessed by pressing the SETUP key and typing User and Password



The data of the RN Series cameras factory passwords are:

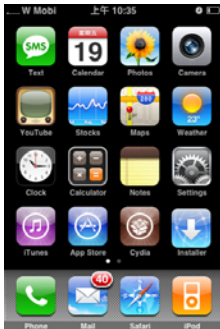
USERNAME: admin

PASSWORD: admin



LIVE VIEW - LIVE Login with PDA

E 'can also connect to cameras with a phone I-Phone, Android and many other common PDA. Select the BROWSER function



Insert the camera's IP address



Insert the credentials of the factory access if requested by the access settings (see above)

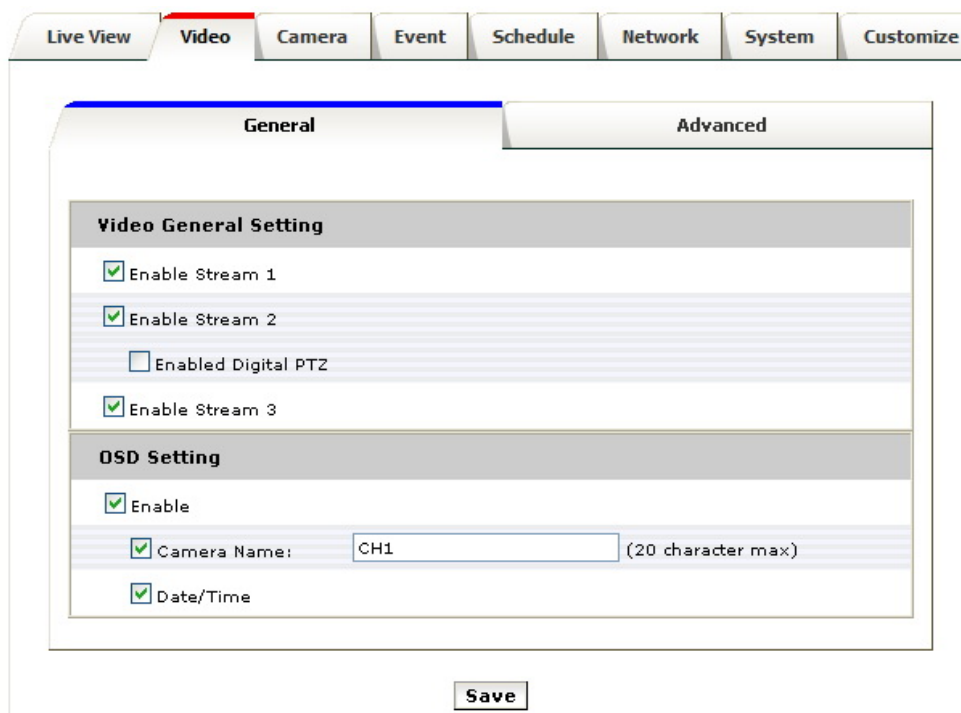


The link page allows real-time visualization and 'acting can zoom with two fingers on the screen.

VIDEO - Video Setup

The first programming section refers to the camera video streaming settings and is divided into 3 sections: GENERAL, ADVANCED AND EXTERNAL VIDEO SOURCES

General

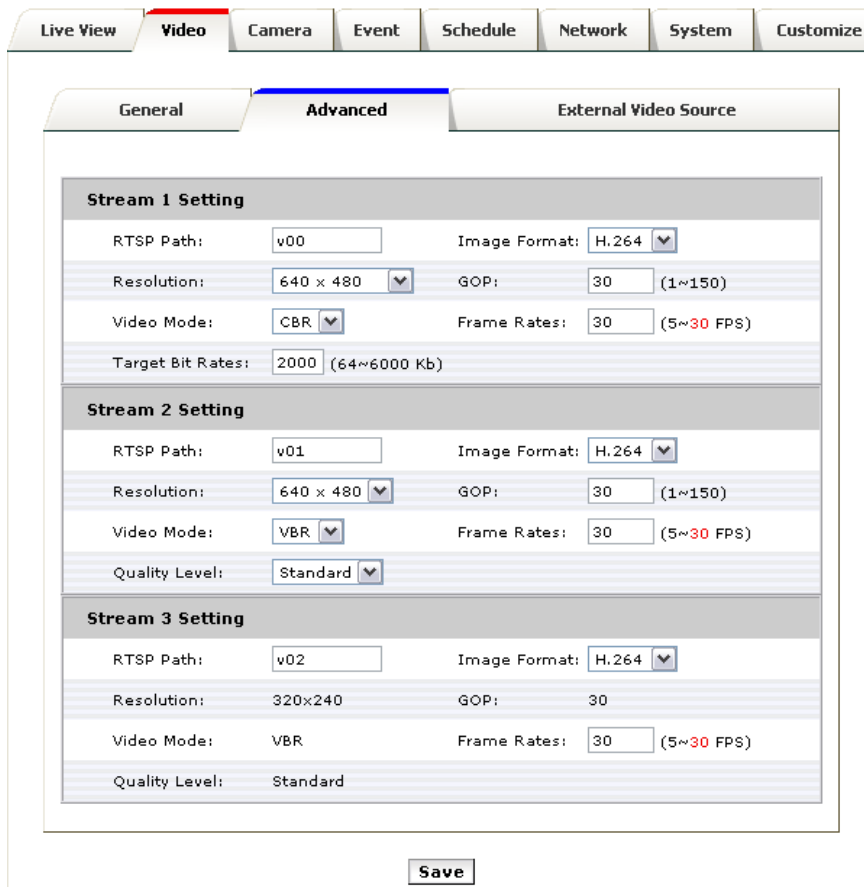


The screenshot shows the 'Video' tab selected in the top navigation bar. Below it, the 'General' sub-tab is active. The 'Video General Setting' section contains four checkboxes: 'Enable Stream 1' (checked), 'Enable Stream 2' (checked), 'Enabled Digital PTZ' (unchecked), and 'Enable Stream 3' (checked). The 'OSD Setting' section contains three checkboxes: 'Enable' (checked), 'Camera Name:' (checked) with a text input field containing 'CH1' and a '(20 character max)' label, and 'Date/Time' (checked). A 'Save' button is located at the bottom right of the form.

Video General Setting: The RN series cameras allow you to configure default three types of streaming video with different video settings. And 'you can display the LIVE switch between streaming with just one click. In this section you can define how many streaming enabled. Note that stream 1 is enabled in the factory and that the PTZ control (for models with this feature) is available only for streaming 2. (NB The RN-636E model does not provide for the management of multiple streaming)

OSD Setting: Tick OSD Enable to enable the overlay of the camera name, and the current date and time. E 'can set a distinctive name of max camera. 20 characters.

advanced



| Stream 1 Setting | |
|-------------------|-------------------|
| RTSP Path: | v00 |
| Image Format: | H.264 |
| Resolution: | 640 x 480 |
| GOP: | 30 (1~150) |
| Video Mode: | CBR |
| Frame Rates: | 30 (5~30 FPS) |
| Target Bit Rates: | 2000 (64~6000 Kb) |

| Stream 2 Setting | |
|------------------|---------------|
| RTSP Path: | v01 |
| Image Format: | H.264 |
| Resolution: | 640 x 480 |
| GOP: | 30 (1~150) |
| Video Mode: | VBR |
| Frame Rates: | 30 (5~30 FPS) |
| Quality Level: | Standard |

| Stream 3 Setting | |
|------------------|---------------|
| RTSP Path: | v02 |
| Image Format: | H.264 |
| Resolution: | 320x240 |
| GOP: | 30 |
| Video Mode: | VBR |
| Frame Rates: | 30 (5~30 FPS) |
| Quality Level: | Standard |

Save

In this tab you set the parameters for the 3 streaming video available, (NB. The RN-636E camera, you can set one video streaming)

RTSP Path -

It 'a streaming identifier value used by RTSP players like VLC Player to identify which stream play. The default values are **v00**, **v01**, **v02** for the respective stream 1, stream 2 and stream 3. In the field you have to enter a combination of numbers and letters.

Resolution -

It is intended that the RESOLUTION is expressed by two values, which are the width and height of the display screen.

From the Stream 1 there are several options RESOLUTION: 1600x1200 (2 megapixels), 1280x720 (HD), 800x600 (VGA), 320x240 (QVGA).

From the Stream 2 VGA and QVGA are available. From the Stream 3 of the resolution option is only QVGA.

In RN-636E camera resolution options are reduced compared to other cameras and depend on the type of the camera assembly and the display so that you choose.



The table below shows the resolutions available each mounting type and any type of display.

| | WALL (wall) | CEILING (Ceiling) | TABLE (table) |
|------------------------------|---------------------------------|---------------------------------|---------------------------------|
| ORIGINAL VIEW | 1600X1200 800X600 640X480 | 1600X1200 800X600 640X480 | 1600X1200 800X600 640X480 |
| BROAD VIEW | 1600X600 | 1600X300 | - |
| DOUBLE VIEW | - | 1600X300 | 1600X1200 800X600 640X480 |
| TRIPLE VIEW | 1600X1200 800X600 640X480 | 1600X1200 800X600 640X480 | - |
| QUAD VIEW | - | 1600X1200 800X600 640X480 | - |
| QUAD WITH SOURCE VIEW | 1600X1200 800X600 640X480 | 1600X1200 800X600 640X480 | - |

Video Mode -

This section gives the possibility to choose between two different modes to manage the bandwidth occupied: CONSTANT BIT RATE (CBR) and VARIABLE BIT RATE (VBR).

In the CBR mode, the camera maintains a constant bit rate that can be set to 64 and 6000 Kb (default 2000 Kb). In the VBR mode instead of changing the bit rate camera in different operating conditions in order to maintain a constant video quality. In this mode you do not set the band but the video quality (STANDARD, GOOD, BEST).

The CBR mode is recommended if you plan continued use of connection via the Internet, especially with modest bandwidth. VBR mode allows for better optimization of bandwidth available, but it is recommended only for use on the local network and not via the Internet.

Image Format -

The RN series cameras are Dual Codec equipment, ie allow to choose 2 different type of video compression: dynamic (H.264) or static (MJPEG). The H.264 is the latest development in video compression and occupies little bandwidth while maintaining high image quality. The H.264 compression is preferred in almost all video surveillance applications for most smooth operation and the ability to transfer full-resolution megapixel images without overstraining the



Network and equipment.

The compression MJPEG is a much less efficient compression but which in certain circumstances may provide more detail of image. In view of the greater bandwidth demand it is not recommended in access via the Internet, but only on the local network ..

GOP -

Group of Pictures. This parameter relates to the compression mechanism H.264 and each indicates how many frames an I-Frame is inserted. Since an I-Frame is less compressed than the other frames it is the highest GOP (distance between two I-frames), the smaller the bandwidth required for the transmission. Excessive GOP size can, however, lead to transmission errors.

The GOP size of the DVD is 15. And 'possible to set higher values for the GOP size (1 to 150) to reduce the occupied bandwidth. 30 is the recommended factory setting and is normally a good compromise.

Frame Rates -

And 'the number of frames per second that make streaming video. The PAL system provides 25 f / sec real-time, but you can set lower values to take up less bandwidth if necessary. If you use the maximum resolution megapixel 1600x1200 maximum value of Frame Network is 15 f / sec.

NOTE: FURTHER DETAILS ABOUT STREAMING SETTINGS IN APPENDIX

External Video Source

The screenshot shows a web interface with three tabs: 'General', 'Advanced', and 'External Video Source'. The 'External Video Source' tab is active. It contains two main sections: 'External Video Source List' and 'External Video Source Setup'. The 'List' section has a table with columns 'Name' and 'IP address', which is currently empty. Below the table are 'Add...' and 'Remove' buttons, and a note: '(Note: The maximum number of external video sources is 10.)'. The 'Setup' section contains various configuration fields: 'Name' (text box with 'NewVideoSource'), 'IP address' (text box with '0.0.0.0'), 'Video Port' (text box with '554'), 'Product Type' (dropdown menu with '7:P600/605/606/607/614/615/616/617/621/623/625'), 'Video Format' (dropdown menu with 'H.264'), 'Resolution' (dropdown menu with '640x480'), 'Rotation' (dropdown menu with '0'), 'Audio Enable' (checkbox set to 'Off'), 'RTSP Path' (text box with 'v00'), and 'Test Video' (button labeled 'Connect').

On this page you can configure the display of other **LINK** Video belonging to other cameras connected to the **RN NETWORK**. This application is primarily used for **VIDEO CONFERENCING**.

To add a **LINK** External video must click **ADD**, then complete all connection parameters relating to the remote camera. When you have completed this page, click **CONNECT** to test the display.



Video Conference

When the **EXTERNAL VIDEO SOURCE** is set up, will appear in the Live View button

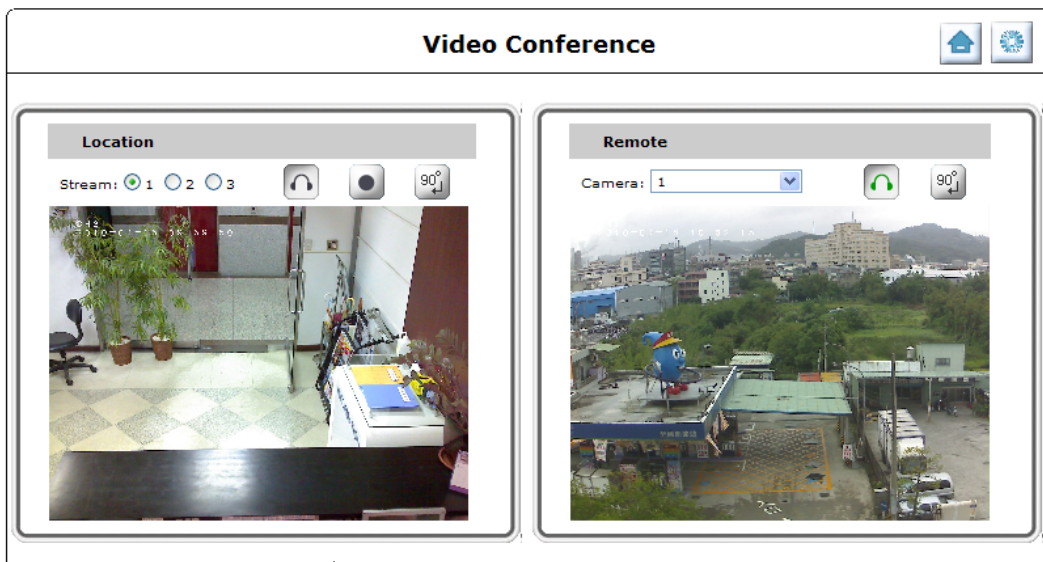


that

It allows you to activate the **VIDEO CONFERENCE**.



Click the button to start the video conference between the local camera and those configured as external links.




CAMERA - Camera Setup

The second programming table refers to the settings of the camera and is divided into 2 sections: GENERAL and ADVANCED

General

General

Advanced



Camera General Setting

Brightness:

0

Hue:

0

Saturation:

0

☐ Rotation 180

Audio Setting

☒ Audio Enable

Web Record Setting

Save Path:

File Name:

Browse

Web Snapshot Image Setting

Save Path:

File Name:

Browse

Default

Save

Chamber General Setting:

Brightness: adjusts the brightness of the image. Hue: Adjusts the color tone of the image. Saturation: Adjusts the intensity of the image.

Rotation: rotates the image. This option can be applied when the camera is to be mounted to a ceiling and the image is then inverted.

Audio Setting:

To enable or disable incoming audio of the camera. In RN-636E model it is also possible to select whether you want to use the microphone and speaker built-in or external inputs.

Web Record / Snapshot Image Setting:

This section defines where to save movies and photos recorded with the web interface controls. Click on the Browse button to select where to save the file and give it the name as a prefix. Movies are saved in AVI or MP4 format, pictures in JPG format.

Default:


Restore the factory settings only **CHAMBER GENERAL SETTING** and **AUDIO SETTING**. **Save:**

Save the changes to the settings.

Advance

General

Advanced



Camera Advanced Setting:

| | |
|--------------------------|----------------------|
| White balance: | Auto ▼ |
| Exposure: | Flicker-free 50 Hz ▼ |
| Max Exposure Time: | 1/30 ▼ s |
| Max Gain Control: | 31 ▼ dB |
| Infrared(IR) Cut Filter: | Auto ▼ |
| Color/Mono Mode: | Auto ▼ |

Video External Output Setting:

| | |
|-------------------------------|------------|
| Video External Output Format: | PAL |
|-------------------------------|------------|

White balance: This setting allows to adapt the quality of the white light source that there is in the environment in order to make the colors in the best way. They have several options to be selected based on the visual result.

Exposure: This Anti-flicker setting is used to adapt the lighting frequency. The frequency is 50 Hz for most European countries, while in the United States is 60 Hz. This setting should therefore be set according to the reference area. The Default value is 50Hz

Max Exposure Time: It refers to the SHUTTER speed. Of brighter rule it is the shortest environment can be the shutter.

Max Gain Control: And 'the amplification factor of the incoming light. Increasing the Gain you get a better night vision, however, the amplified image potrebbe also increase the noise (noise of

bottom) of the image.

Infrared IR cut filter: to enable or disable the automatic removal of IR filter in night vision. The default setting is AUTO, so that the camera automatically manages the transition from day to night depending on the ambient brightness.

LED Status: turn on or off the LEDs of the camera status.

Color / Mono Mode: the default value is AUTO so that the camera provides color images until there is sufficient light, and black / white in the gloom cases. If you want you can also force a color camera with low light as in the case of shows and demonstrations resumed.

Advance - RN-636E Only

In RN-636E camera CAMERA / ADVANCE section includes some additional options:



Day / Night Threshold: sets the threshold to activate DAY or NIGHT mode. The default value is 20 lux. When the light falls below 20 lux the NIGHT mode is activated, and the camera becomes

sensitive IR illumination when shooting in black / white ..

Mount House: here you must indicate the type of the camera mount: Wall (wall), Ceiling (ceiling), Table (table).

- **WALL:** If the camera is installed on the wall choose WALL. Back to Live View, you have four types of video layouts to choose from: Original view, Broad view, Quad view with source, Triple view.



1. ORIGINAL VIEW



2. BROAD VIEW



3. QUAD WITH SOURCE VIEW



4. TRIPLE VIEW



- **CEILING:** to install the ceiling camera choose CEILING. Back to Live View, there are six kinds of layouts to choose from: Original view, Broad view, Quad view, Quad view with source, view Double, Triple view.



1. ORIGINAL VIEW



2. BROAD VIEW



3. QUAD VIEW



4. SOURCE WITH QUAD VIEW



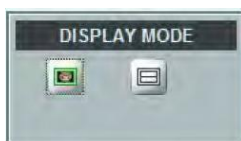
5. DOUBLE VIEW



6. TRIPLE VIEW



- **TABLE:** to position the camera on a table choose TABLE. Returning to Live View, you have two types of video layouts to choose from: Original view, Double view



1. ORIGINAL VIEW



2. DOUBLE VIEW.



PTZ (RN-6901 only)

In the section **ROOM** the menu of the RN-6901 video server instead of the voice **ADVANCED** There is the voice

PTZ to set the options for the communication protocol to control a possible speed dome camera connected to the RS485 port of the video server. In this section we find the following items:

PTZ STATUS deactivates or activates the PTZ control through the RS485 port.

PTZ PROTOCOL select the communication protocol. There are the protocols Pelco P, Pelco D (to be used for speed dome SD-22 / SD-27), LI-LIN, LI-LIN NEW, Dynacolor.

DEVICE ID It indicates the address that has been set in the camera typically via microswitches and that identifies the BUS.

SPEED set the movement speed of the camera (1 to 10).

PORT MODE BUS sets which type of use for the command speed dome (RS485 or RS232) almost the speed dome SD-22/27 cameras use RS485 BUS.

BAUD RATE tax the speed of the RS485 protocol, from 300 to 115200 baud. The speed dome SD-22/27 cameras support 1200, 2400, 4800 or 9600 baud. The prescribed speed must match the speed controlled by the camera that the rule is selected with DIP switches on the camera itself ..

DATA BIT to be set according to information provided by the camera manufacturer

STOP BIT to be set according to information provided by the camera manufacturer

PARITY to be set according to information provided by the camera manufacturer

PTZ control (RN-636E only)

The dome camera RN-636E has a panoramic vision to 180 degrees and provides the ability to digitally simulate the PTZ camera movement as if it were a motorized camera. To enable this feature, click the PTZ button.



The PTZ button is present only if you choose the option to CEILING ceiling mounting, as seen in chapter CAMERA / ADVANCE.

The PTZ function is available only in BROAD VIEW, VIEW QUAD, QUAD WITH SOURCE VIEW, VIEW DOUBLE and TRIPLE VIEW.

Clicking on the button will appear on the screen PTZ PTZ control panel that takes on different aspects depending on which view we chose:

IN BROAD VIEW, VIEW DOUBLE, TRIPLE VIEW

- STEP 1. to set the speed of the pan function (1-10)
2. PAN movement: to move the image horizontally
3. To move the PTZ panel in the screen
4. To close the PTZ panel



IN VIEW QUAD, QUAD WITH SOURCE VIEW

1. Ch: to select the window to apply the PTZ function
2. STEP: to set the speed of the pan / tilt function (1-10)
3. For moving the image both horizontally and vertically
4. ZOOM: Digital Zoom (1-10)
5. To move the PTZ panel in the screen
6. To close the PTZ panel
7. List of Preset points (1-16). Here you can set the preset by pressing the number button and click SAVE. The presets can be recalled quickly by clicking the numbered button.





EVENT - Alarms

The RN series cameras are able to generate alarms with a detection control of the movement or via alarm inputs. It 'also possible to generate alarm events with manual activation, or on a time basis.

Following an alarm, you can send photos and videos to an FTP server, but also send email alert or turn on the camera's alarm output. This section allows the alert actions configurations. Click the folder **EVENT**

Event Server

The SERVER EVENT LIST lists the FTP server (and HTTP to RN-636E) that can receive alarm events. E 'can enter the network parameters and the access credentials.



Click [**Add FTP**] to enter a new FTP server

FTP Server:

- Name: enter the name of the FTP server
- Network Address: Enter the IP address of the FTP server
- Upload Path: choose the path where you want to upload the alarm information
- Port: enter the port number used by FTP servers

Login Information:

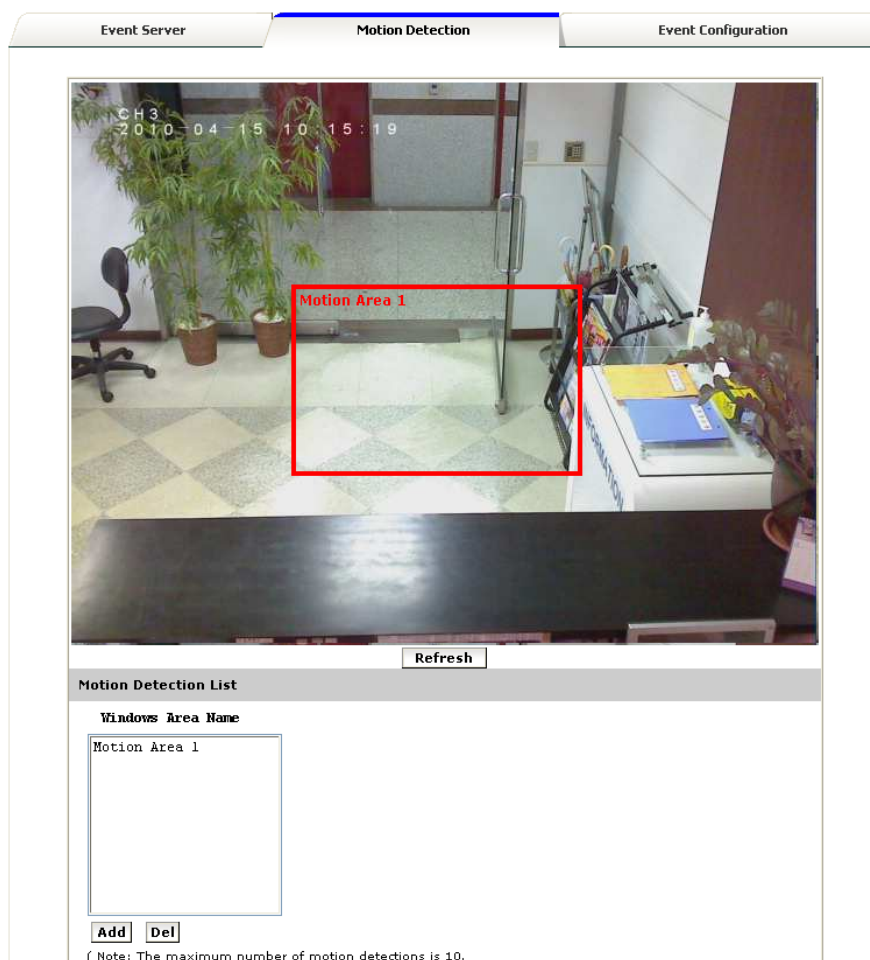
- Username / Password: Enter USER NAME AND PASSWORD of the FTP server

The RN-636E camera also allows you to enter an HTTP server:

A screenshot of a web-based configuration interface for an HTTP server. At the top, there are three buttons: 'AddFTP..', 'AddHTTP..', and 'Remove'. The 'AddHTTP..' button is circled in blue. Below these buttons is a note: '(Note: The maximum number of event servers is 10.)'. The main section is titled 'HTTP Server' and contains four input fields: 'Name:' with the value 'NewHTTPServer', 'URL:' with the value 'http://', 'User Name:', and 'Password:'. At the bottom of the form is a 'Save' button.

Motion Detection

The image will appear coming from the camera. E 'can set the areas within which the movement will be detected that will generate the alarm. To select a motion detection area, click directly on the image, and then change the size and position by dragging with the mouse the rectangular design. They can be added up to 10 motion zones. For each detection area, a value of intervention and sensitivity threshold can be set.



To add an area of motion detection:

1. Click [**Add**] to set an area (a settings menu is displayed)

Motion Detection Setup

Windows Area Name:

Trigger Level : 0

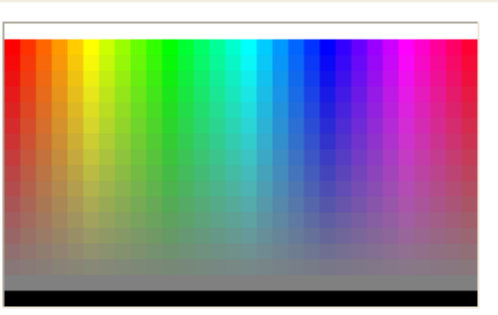
Sensitivity : 0
(Sensitivity value:0~100[low~High])

Color: #FF0000

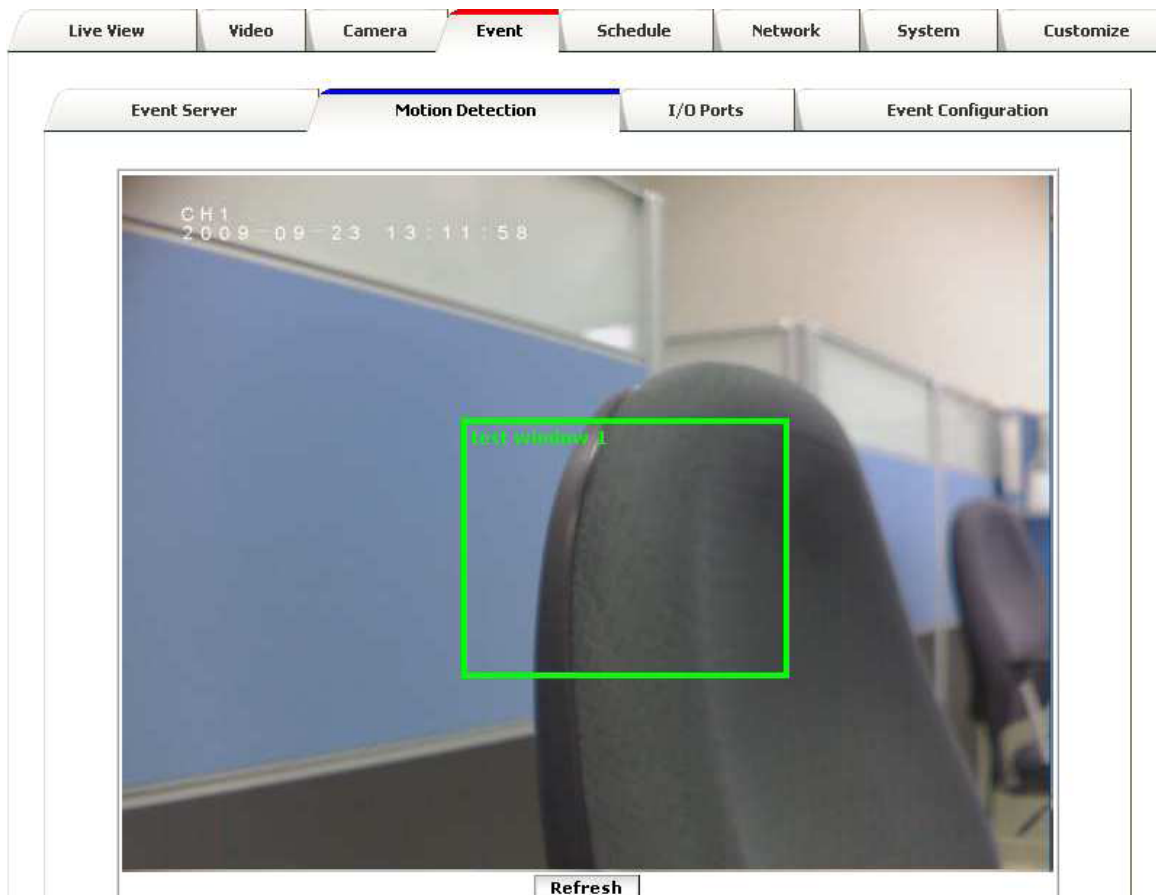
☒ View All Windows
☐ View Selected Window

2. Give a name to the area of detection
3. Select INTERVENTION THRESHOLD (TRIGGER LEVEL) and SENSITIVITY '(SENSIVITY) per detection area (0 ~ 100, Hi ~)
4. Select the color that identifies the window

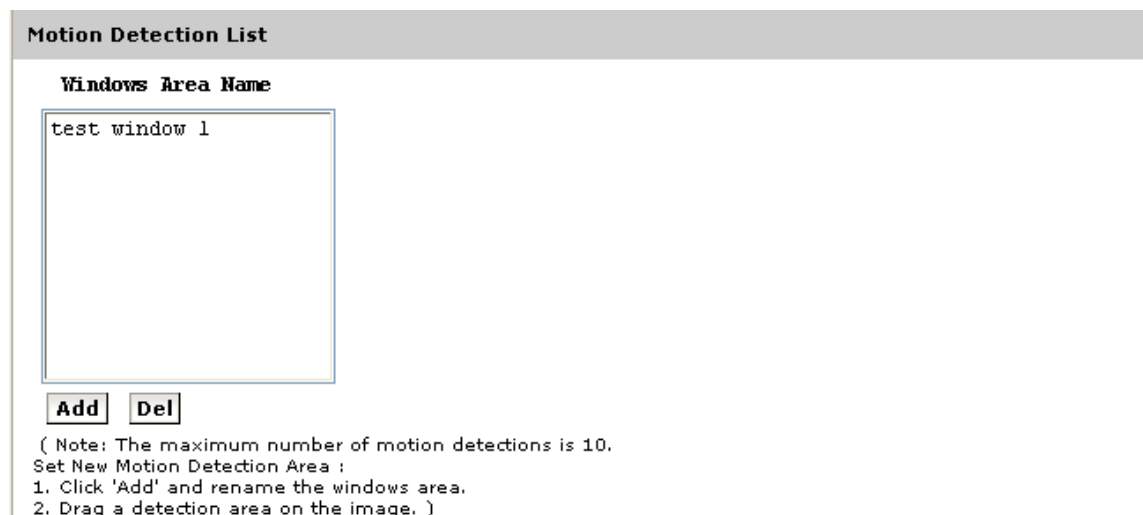
Color: #1AE61A



5. Draw the image sensing window



6. After that, click [**Save**] to save the configuration. The new detection area will be listed in the motion detection list





I / O Ports

If the camera you purchased is equipped with inputs and alarm outputs for connecting any external equipment, here it is possible to visualize the state of operation.

| Live View | Video | Camera | Event | Schedule | Network | System | Customize | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------------------|-----------|---------------------|----------|---------|--------|-----------|--------------|------------------|-----------|---------------------|------------------------------|--|--|--|--------------|--|--|--|---------------------|--|--|--|------------------------------|--|--|--|--------------|--|--|--|---------------------|--|--|--|-----------------------------|--|--|--|---------------|--|--|--|--------------------|--|--|--|
| <table border="1"><thead><tr><th>Event Server</th><th>Motion Detection</th><th>I/O Ports</th><th>Event Configuration</th></tr></thead><tbody><tr><td colspan="4">Input Ports Setting 1</td></tr><tr><td colspan="4">Name: Input1</td></tr><tr><td colspan="4">Current State: high</td></tr><tr><td colspan="4">Input Ports Setting 2</td></tr><tr><td colspan="4">Name: Input2</td></tr><tr><td colspan="4">Current State: high</td></tr><tr><td colspan="4">Output Ports Setting</td></tr><tr><td colspan="4">Name: Output1</td></tr><tr><td colspan="4">Current State: low</td></tr></tbody></table> | | | | | | | | Event Server | Motion Detection | I/O Ports | Event Configuration | Input Ports Setting 1 | | | | Name: Input1 | | | | Current State: high | | | | Input Ports Setting 2 | | | | Name: Input2 | | | | Current State: high | | | | Output Ports Setting | | | | Name: Output1 | | | | Current State: low | | | |
| Event Server | Motion Detection | I/O Ports | Event Configuration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Input Ports Setting 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Name: Input1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current State: high | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Input Ports Setting 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Name: Input2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current State: high | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Output Ports Setting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Name: Output1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current State: low | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Event Configuration

In CONFIGURATION EVENT tab to assign the actions that you should take after specific events. E 'can set up to 10 different events

The screenshot shows a web-based configuration interface with three tabs: 'Event Server', 'Motion Detection', and 'Event Configuration'. The 'Event Configuration' tab is active. It contains a section for 'Event Record File' with 'File Format' set to 'JPEG'. Below this is an 'Event Type List' table. The table has five columns: 'Name', 'Status', 'Enable', 'Trigger', and 'Actions'. It contains one row with the event 'NewEvent', which is 'Active', 'Enabled', triggered by 'Motion Det.', and has actions 'Eu, En'. Below the table are 'Add...' and 'Remove' buttons. A note at the bottom states: '(Note: The maximum number of events is 10. Fu=FTP Upload, Eu=Email Upload, Du=Disk Upload, O=Output Port, En=Email Notification, Tn=TCP Notification.)'.

The table lists the configured events. Click on " Add ..."To add a new event

Live View
Video
Camera
Event
Network
System
Customize

Event Server
Motion Detection
I/O Ports
Event Configuration

Event Record File

File Format: ☐ JPEG ☒ H264

Event Type List

| Name | Status | Enable | Trigger | Actions |
|------|--------|--------|---------|---------|
| | | | | |

Add...
Remove

(Note: The maximum number of events is 10.
Fu=FTP Upload, Eu=Email Upload, Du=Disk Upload, O=Output Port, En=Email Notification,
Tn=TCP Notification.)

Event Type Setup

Name:

Set min time between triggers: (max 23:59:59)

Respond to Trigger

☒ Always
☐ During time between

☒ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat

Start Time : (max 23:59:59)

Duration : (max 168:00:00)

☐ Never

Trigger by

When Triggered...

☐ Upload Images
☐ Activate Output Port
☐ Send Email Notification

Save

Event records files - E 'can choose whether on alarm only send photographs (JPEG) or video about 15 seconds (H.264). To change this option you must first disable the scheduled recording in the folder SCHEDULE

Name - indicative of the event Name

Set Minimum time between triggers - E 'can set the minimum time that must elapse between two consecutive alarms. In practice, after generating an alarm, the camera will wait for the set time before being able to generate another.

Respond to trigger - E 'can enable the alarm ALWAYS, or in special groups



Hourly outside of which the detection will not be active. You can set the day of the week, the beginning of the recognition and the duration of the activation period. E 'can also set NEVER (NEVER) to temporarily disable the detection.

Trigger by - In this window you set the cause that triggers the event. There are 4 options: INPUT CAMERA ALERT (GPIN) with a choice of resting state / alarm DRIVE MANUAL (MANUAL TRIGGER)

MOTION DETECTION (MOTION DETECTION) area with a choice of TIMER detection (PERIOD) to trigger the event every XX minutes or hours

When Triggered - In this window you set the action to take after the alarm. The following options are available:

UPLOAD IMAGES - Send images to FTP server or EMAIL address. In this option you can also choose to record images on the SD card on board. OUTPUT ACTIVATE - Activate the SEND EMAIL camera alarm output - Send E-mail alarm information

SEND MESSAGE NOTIFICATION (TCP) - Available only for input drive event (GPIN) allows you to send event notifications to a web site with a TCP / IP packet that can be used by developers to integrate other software.



SCHEDULE - Local Video Storage

Some SD series cameras are equipped with an SD card or Micro SD card for recording video onboard the camera itself. Registration is carried out on the basis of a weekly programmer. E 'can also save JPG images on alarm.

Insert the SD card into the slot and click the folder SCHEDULE (available only on cameras with SD card slot).

Live View
Video
Camera
Event
Schedule
Network
System
Customize

GeneralStorage

☒ Enabled

Stream: 1

Slice File Size:
50
(MB)

Save Device Type:
Local Disk

| All | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Mon. | | | | | | | | | | | | | | | | | | | | | | | | |
| Tue. | | | | | | | | | | | | | | | | | | | | | | | | |
| Wed. | | | | | | | | | | | | | | | | | | | | | | | | |
| Thu. | | | | | | | | | | | | | | | | | | | | | | | | |
| Fri. | | | | | | | | | | | | | | | | | | | | | | | | |
| Sat. | | | | | | | | | | | | | | | | | | | | | | | | |
| Sun. | | | | | | | | | | | | | | | | | | | | | | | | |

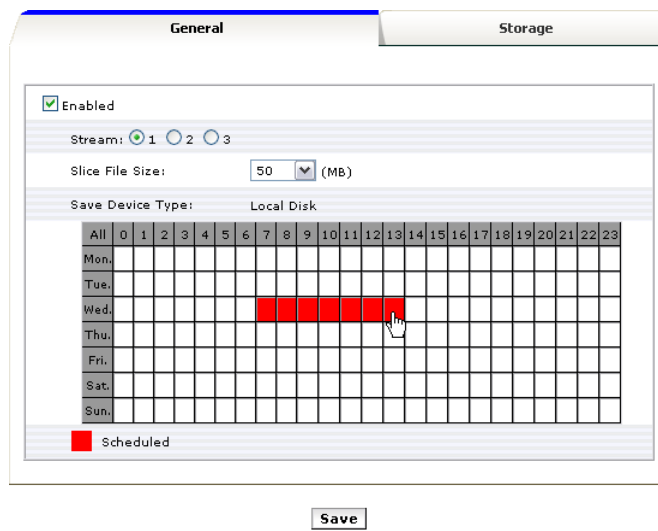
☒ Scheduled

Save

The folder is divided into two sections: GENERAL and STORAGE

General

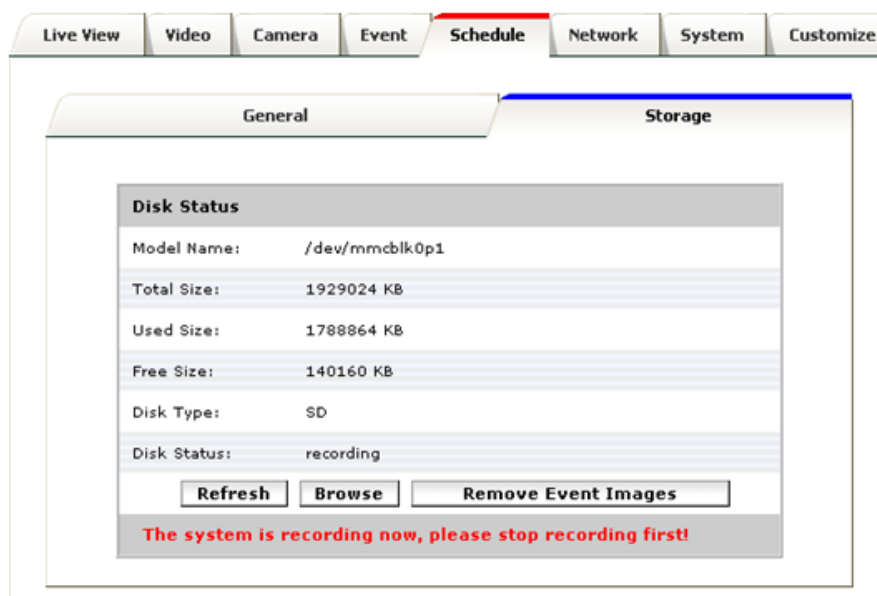
Define the date and time you want to record by clicking on the corresponding boxes a day and time when you want to record will remain marked in red. You can also specify which of the enabled video streams to be recorded and the size of each file in which the recording will be divided.



The screenshot shows the 'General' tab of a recording schedule configuration window. It includes a 'Stream' selection (1, 2, 3), a 'Slice File Size' dropdown set to 50 MB, and a 'Save Device Type' dropdown set to 'Local Disk'. Below these is a calendar grid with days of the week (Mon. to Sun.) and hours (0 to 23). A red square indicates a scheduled recording time, specifically on Wednesday at 13:00. A legend at the bottom left shows a red square labeled 'Scheduled'. A 'Save' button is located at the bottom center.

Storage

View the storage of information, including the size of the type and status. The warning message indicates when the recording is in action. The SD card must not be removed during the registration process.



The screenshot shows the 'Storage' tab of a 'Disk Status' window. It displays the following information:

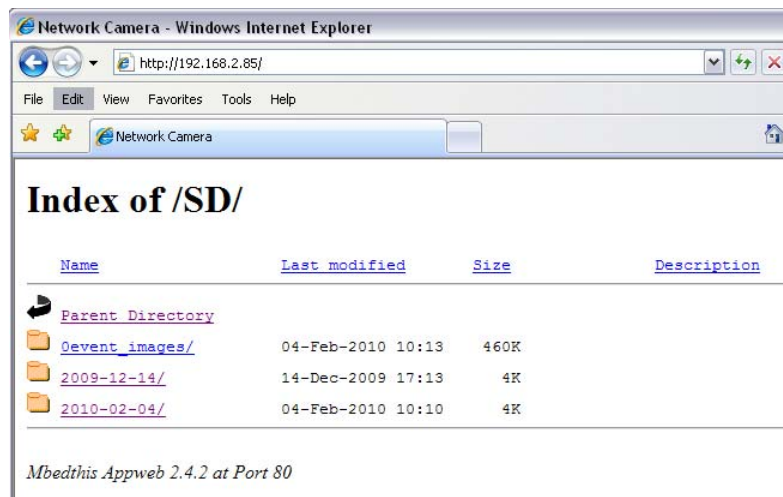
| Disk Status | |
|--------------|----------------|
| Model Name: | /dev/mmcblk0p1 |
| Total Size: | 1929024 KB |
| Used Size: | 1788864 KB |
| Free Size: | 140160 KB |
| Disk Type: | SD |
| Disk Status: | recording |

Below the table are three buttons: 'Refresh', 'Browse', and 'Remove Event Images'. At the bottom, a red warning message states: 'The system is recording now, please stop recording first!'.

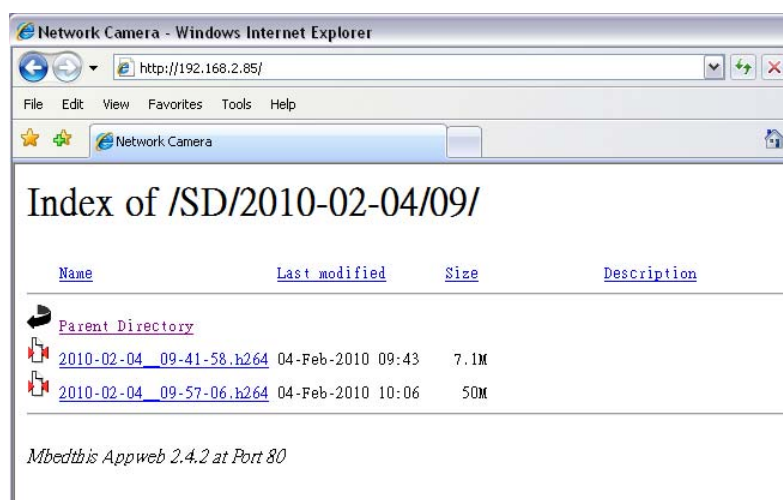
The window **Disk Status** It contains information on the status of the memory card, namely: CAPACITY (Total Size), SPACE OCCUPIED (Used Size), SPACE (Free Size), PAPER TYPE (Disk Type), CONDITIONS (Disk Status).



The button **Browse** It allows you to view the list of recorded files. The list includes several folders including **Parent Directory** which returns to the main camera control page, **Event images** containing JPEG images captured in response to alarm events and folders video files divided by day.



The video files are named using the date and time and the extension of the file. " **h264** ". The files in h264 format can be performed with free media player **VLC** media player. Note that recording is done for video only and NOT FOR AUDIO.



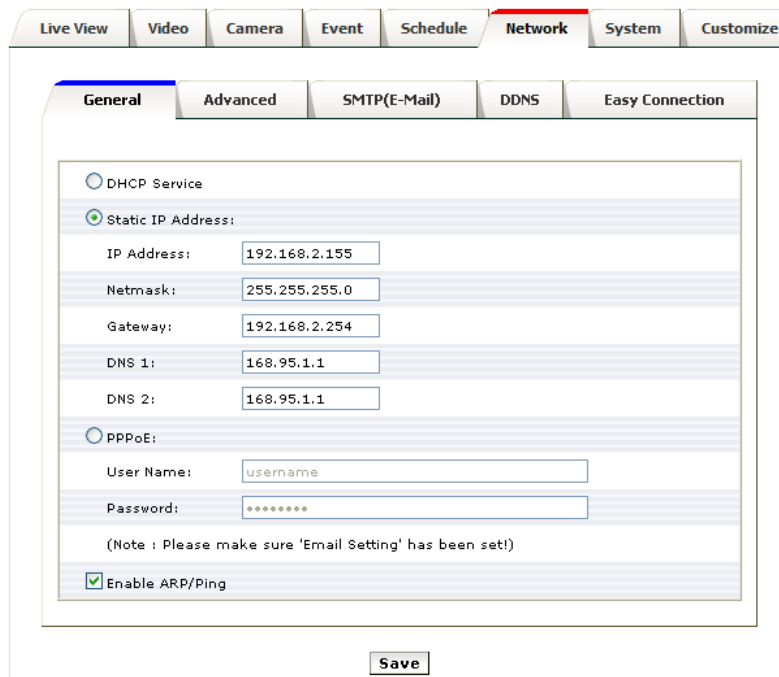
NOTE: The timer recording setting inhibits the activation of the system settings. Disable the timer recording to be able to freely access all the programming options.

NETWORK - Network Settings

This series of cameras acts as a any network device. This section describes how to configure the network settings. The board is divided into sections: GENERAL, ADVANCED, SMTP, DDNS.

General

In this section you can be configured to assign IP address to the device and the main network parameters.



The screenshot shows the 'Network' configuration interface with the 'General' tab selected. The 'Static IP Address' option is chosen, and the following fields are filled: IP Address (192.168.2.155), Netmask (255.255.255.0), Gateway (192.168.2.254), DNS 1 (168.95.1.1), and DNS 2 (168.95.1.1). The 'PPPoE' option is unselected, and the 'User Name' field contains 'username' and the 'Password' field contains '*****'. A note states: '(Note : Please make sure 'Email Setting' has been set!)'. The 'Enable ARP/Ping' checkbox is checked. A 'Save' button is located at the bottom right.

DHCP - Select whether the network works with IP addresses automatically assigned by a DHCP server.

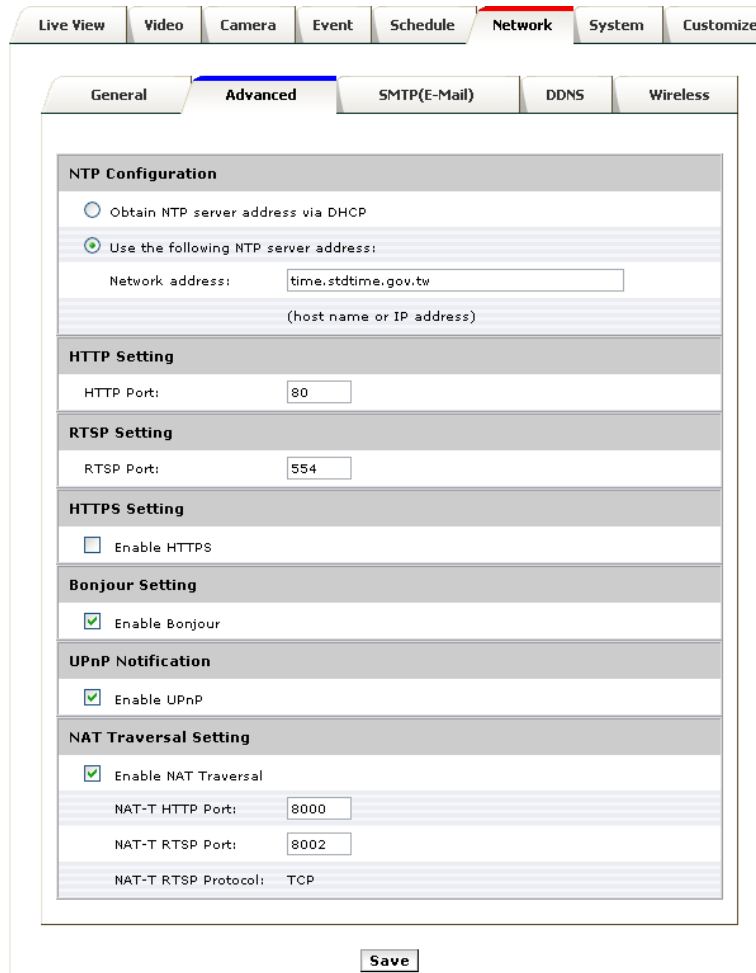
STATIC IP - This section allows you to instead set a fixed IP address, with relative Netmask, Gateway and DNS.

PPPoE - If the camera is not connected to a network but directly to an ADSL modem must enable PPPoE and enter the login information to connect to the internet

ENABLE ARP / PING It allows to enable ARP packets or PING from the network. Disabling this option is recommended if you want to make the camera not easily found the net with traditional PING.

advanced

In this folder are set advanced network configurations, not strictly necessary to the operation of the camera.



NTP: Configure an NTP (Network Time Protocol), so that the date and time of the camera to be automatically synchronized. E 'can set a specific server by entering the name or get the name of the NTP server from the equipment that manages the distribution of DHCP address if it allows.

HTTP: sets the HTTP port that is used to access the browser (default: 80)

RTSP: set the RTSP port (Video) which is used for video data transmission (default: 554).

HTTPS: enables or disables the use of the HTTPS security communication and allows you to set the port to use (default: 443). HTTPS (Hypertext Transfer Protocol over Secure Socket Layer) is an encrypted language used in internet secure connections, typical of protected services (banking etc.)

All cameras in the range support https so you can connect to a camera via the Internet by typing https: // instead of http: // The standard communication port will vary from 80 of http to 443 of https.

Bonjour: BONJOUR enables the communication protocol. Bonjour is a protocol created by Apple that allows you to configure network equipment through a wizard without setting parameters directly. Many applications use this protocol to configure network equipment easily. For more information, visit the Apple website.



UPnP: enables the UPnP (universal plug and play). Enable UPnP (Universal Plug and Play) is highly recommended to make sure that Windows Explorer can automatically detect the cameras between the network resources.

NAT Traversal: Enable NAT TRAVERSAL so that from the Internet clients can easily access the camera placed behind the router. With the UPnP enabled routers that support this dialogue function with the camera to set the directing of the doors you need to communication from the Internet to the local network.

SMTP (E-Mail)

The RN Series cameras can send E-mails after alarm events. In this section you set the parameters for the SMTP server for sending e-mail.

Mail Server: Name of the SMTP server that is used for sending email

Server Port: Port used for sending emails

Authentication: If the SMTP server requires a user name and password to send email you can place

from: Enter the sender address that will appear in the email sent by the camera.

Test: E 'can enter an email address and send a test email by pressing SEND to check the proper functioning.

The screenshot shows the web interface of a DSE camera. At the top, there is a navigation bar with tabs: Live View, Video, Camera, Event, Schedule, Network (highlighted in red), System, and Customize. Below this, there is a sub-navigation bar with tabs: General, Advanced, SMTP(E-Mail) (highlighted in blue), DDNS, and Wireless. The main content area is titled 'SMTP (email) Setting'. It contains several input fields: 'Mail Server:' with the value 'smtphost.yourdomain.name' and a note '(host name or IP address)'; 'Server Port:' with the value '25' and a range '[0..65535]'; an 'Authentication' checkbox which is unchecked; 'User Name:' with the value 'username'; 'Password:' with masked characters '.....'; 'From (Email Address):' with the value 'username@yourdomain.name'. Below these fields is a 'Test' section with a 'Send test email to:' field containing 'mailto@mailto.com' and a 'Send' button. At the bottom of the interface is a 'Save' button.



DDNS

To connect to an IP camera through the Internet is highly advisable to have a fixed IP address so that you always know the exact address to connect. If it can not get from your provider, all cameras in the range support services DDNS (Dynamic DNS) that allow you to constantly monitor the machine's IP address. These services, also available for free, provide the user with a domain name that you type into your browser. The DDNS provider redirects communication to the IP address that the camera has at that moment.

All RN Series cameras support the most common DDNS services and are able to send to the DDNS provider periodically Internet IP address assigned to them. You can set the following parameters:

Host Name: personal domain name that is assigned by the DDNS provider to the device

User Name / Password: account authentication for access to the service.

Update Time: frequency with which the camera sends its IP address to DDNS server.

Response: It indicates whether the camera is properly connected to the service and the DDNS is in operation.

The screenshot shows a web-based configuration interface for a camera. At the top, there are several tabs: 'Live View', 'Video', 'Camera', 'Event', 'Schedule', 'Network' (which is highlighted with a red underline), 'System', and 'Customize'. Below these, there are sub-tabs for the 'Network' section: 'General', 'Advanced', 'SMTP(E-Mail)', 'DDNS' (which is highlighted with a blue underline), and 'Wireless'. The 'DDNS' sub-tab is active, showing a 'Dynamic DNS Setting' form. The form includes a 'DDNS Enable' checkbox (which is unchecked), a 'Host Name' field with the value 'hostname' and a link to 'http://www.dyndns.org', a 'User Name' field with the value 'username', a 'Password' field with masked characters '*****', an 'Update Time' field with the value '600' and a note '(600~86400 Seconds)', and a 'Response' field with the value 'no'. A 'Save' button is located at the bottom of the form.

The following describes how to use the DDNS service offered by one of the leading providers DYNDNS.COM whose link is also present in the configuration tab. Open the web page www.dyndns.com



The screenshot shows the DynDNS.com website. At the top, there's a navigation bar with links: About, Services, Account, Support, News. Below this, a section titled "I'd like to..." lists several services: Remotely access my home computer, Control my DVR from anywhere, Get a free domain name, Safeguard my email, and Protect and speed up my Internet. To the right, there's a large banner for "Introducing the NEW DynDNS Community" with a "Join Now" button. Below the banner, there are two main sections: "Free Dynamic DNS" and "DNS Hosting & Domains". The "Free Dynamic DNS" section includes a form to add a new host with fields for hostname and domain, and a list of services. The "DNS Hosting & Domains" section includes a form to register a domain and a list of services. At the bottom, there are four columns of links: Resources, Services, Support, and Follow Us.

DynDNS.com
by Dynamic Network Services Inc.

Username Password [Log in](#)
[Lost Password?](#) [Create Account](#)

[About](#) [Services](#) [Account](#) [Support](#) [News](#)

I'd like to...

- [Remotely access my home computer](#)
- [Control my DVR from anywhere](#)
- [Get a free domain name](#)
- [Safeguard my email](#)
- [Protect and speed up my Internet](#)

[Search](#)

Introducing the NEW DynDNS Community
An all new format to help you get the absolute most out of DynDNS.com and help others do the same.

- Community voting on Questions/Answers
- Reputation Points and Service Badges
- Single Sign on for DynDNS.com Users

[Join Now](#)

Free Dynamic DNS

Point a hostname to a dynamic or static IP address or URL.

- Host your own website at home for free!
- Connect to your workstation, DVR, webcam from anywhere.

[Add](#)

[» DDNS service details...](#)

DNS Hosting & Domains

Register **your domain** and point it to an IP address or URL.

- Easy-to-use web interface with powerful expert tools.
- Secondary and primary DNS servers around the globe!

[Add](#)

[» more about Custom DNS hosting...](#)

Resources

- [What is DNS?](#)
- [DNS Tools](#)
- [Home DNS Solutions](#)
- [Business DNS Solutions](#)

Services

- [DNS Hosting](#)
- [Free Dynamic DNS](#)
- [Spring Server VPS](#)
- [Domain Registration](#)

Support

- [DynStatus](#)
- [Knowledge Base](#)
- [24/7 Premier Support](#)
- [DNS Update Clients](#)

Follow Us

- [Our News](#)
- [Twitter @dyninc](#)
- [LinkedIn](#)
- [DNS Ninjas | Facebook](#)



Creating an account with DYNDNS.COM

Create an account or log in to continue

Username:
Password:
Confirm password:
Email:
Confirm email:

Subscribe to: ☒ DynDNS.com newsletter (1 or 2 per month)
☐ Dyn Inc. press releases
☐ Remove HTML formatting from email

Security Image:

Enter the numbers from the above image:

☐ I agree with the [acceptable use policy \(AUP\)](#) and [privacy policy](#).

If you're having difficulty creating your account, for any reason, feel free to [contact us](#).

Already Registered?
Username:
Password:

[Forgot your password?](#)

Enter USER NAME, PASSWORD and EMAIL to create an account to use for your camera.

Username: Password:
[Lost Password?](#) [Create Account](#)

About Services Account Support News

One more step to go...

We've sent an email to *******@pixord.com**, to verify your account. Please check your inbox and click on the confirmation link.

If you do not receive the email in the next few minutes you can try [resending it](#).

Thanks for choosing DynDNS.com!

© 1998-2010 [Dynamic Network Services Inc.](#) - [Legal Notices](#) - [Privacy Policy](#) - [Contacts](#)

The site has accepted the new account and send an e-mail verification.

Your DynDNS.com Account Information

DynDNS.com Support [support@dyndns.com]

This message has extra line breaks.

To: [REDACTED]@pixord.com

Your DynDNS.com Account 'pixord-ddns' has been created. You need to visit the confirmation address below within 48 hours to complete the account creation process:

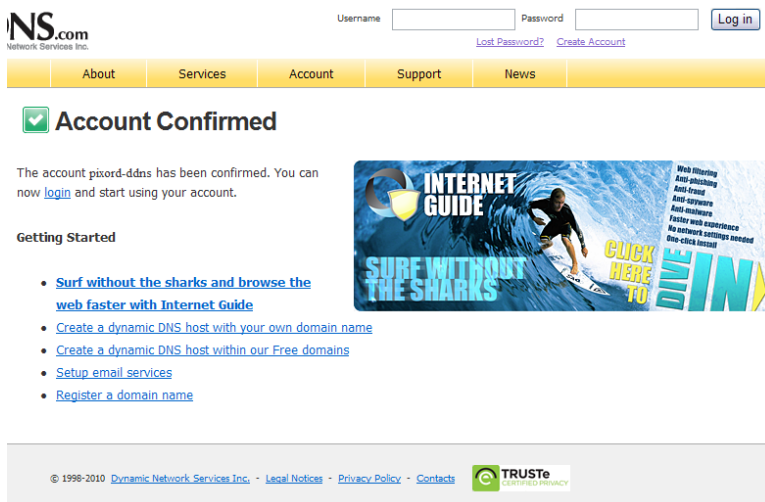
<https://www.dyndns.com/account/confirm/90QcDYRuvX1RnO9FvK7ng>

Our basic service offerings are free, but they are supported by our paid services. See <http://www.dyndns.com/services/> for a full listing of all of our available services.

If you did not sign up for this account, this will be the only communication you will receive. All non-confirmed accounts are automatically deleted after 48 hours, and no addresses are kept on file. We apologize for any inconvenience this correspondence may have caused, and we assure you that it was only sent at the request of someone visiting our site requesting an account.

Sincerely,
The DynDNS.com Team
Dynamic Network Services Inc.


In the email sent by DynDNS, you need to click the link to activate the service. The account will be activated by entering the web site to confirm.



The account pixord-ddns has been confirmed. You can now [login](#) and start using your account.

Getting Started

- [Surf without the sharks and browse the web faster with Internet Guide](#)
- [Create a dynamic DNS host with your own domain name](#)
- [Create a dynamic DNS host within our Free domains](#)
- [Setup email services](#)
- [Register a domain name](#)

© 1998-2010 Dynamic Network Services Inc. - [Legal Notices](#) - [Privacy Policy](#) - [Contacts](#) 

Login and use the service DYNDNS.COM

Username Password

[Lost Password?](#) [Create Account](#)

[Support](#) [News](#)

For the LOGIN, enter USER NAME and PASSWORD assigned



After entering the created, in the " My Services "Click" Add Host Services ".

Add New Hostname

[↑ Host Services](#)

Note: You currently don't have any active [Dynamic DNS Pro upgrades](#) in your account. You cannot use some of our Host Service features. Paying for an Dynamic DNS Pro upgrade will make this form fully functional and will add several other features.

Hostname: .

Wildcard Status: Disabled [\[Want Wildcard support?\]](#)

Service Type:
☒ Host with IP address [\[?\]](#)
☐ WebHop Redirect [\[?\]](#)
☐ Offline Hostname [\[?\]](#)

IP Address:
[Your current location's IP address is 220.135.207.231](#)
TTL value is 60 seconds. [Edit TTL](#).

Mail Routing: ☐ Yes, let me configure Email routing. [\[?\]](#)

What do you want to use this host for?
 Select services and devices you would like to use with this hostname.

Work From Home Office or VPN:

Hosting and Design For Web Sites and Blogs:

Remote Access For Devices:

HOST Enter the name given to the device. The field where "IP Address" is entered can be filled with any address as it will be updated once the device is registered to the service. click on



"Add To Cart" to move to the next step.

Shopping Cart

p600.gotdns.com added to cart. **You must checkout to activate.**

Your cart contains **free services only**. You will not be asked for credit card information.

Upgrade Options

Free accounts allow only five Dynamic DNS hosts.

- To add more and enjoy [additional benefits](#) for only \$15.00 per year, [purchase Dynamic DNS Pro](#).
- To get Dynamic DNS for **your own domain**, use [Custom DNS](#).

| Dynamic DNS Hosts | | |
|---------------------------------|---|---------------|
| p600.gotdns.com | - | remove \$0.00 |

Please enter coupons in the box below and click "Add Coupon".

Sub-Total:

\$0.00

Order Total:

\$0.00

Would you like to [print an estimate/quote](#)?

[view our refund policy](#)

The Dynamic DNS hosting service is free. only on "Next" Click.

Free Services Checkout

Once you have confirmed the contents of your cart your services will be instantly activated.

| Service | Period | Price |
|---------------------------------|--------|--------|
| Dynamic DNS Hosts | | |
| p600.gotdns.com | - | \$0.00 |
| Sub-Total: | | \$0.00 |

[view our refund policy](#)



Host Services

[↑ My Services](#)

[p600.gotdns.com](#) successfully activated.

| Hostname | Service | Details | Last Updated |
|---------------------------------|---------|-----------------|-----------------------|
| p600.gotdns.com | Host | 220.135.207.231 | Feb. 25, 2010 2:58 AM |

[» Host Update Logs](#)

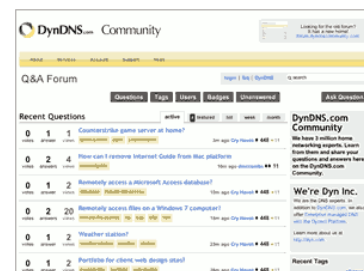
[Add New Host](#)

Join the discussion in the [DynDNS Community](#) for tips and tricks, demos, suggestions, user help and much more.

Check out what our users are talking about below:

Recent conversations on webcam:

- [Can't see my webcam by using my computer at job, but can see the cams by using other computers](#)
- [remote dvr from blackberry](#)
- [Multiple Webcams \[closed\]](#)
- [Two Webcams - Separate DynDNS hostnames](#)
- [Can't access Remote IP Cam via Broadband 3G](#)



Click "Add New Host" option if you want to record other additional IP cameras.

Enter the DDNS parameters in the camera

General

Advanced

SMTP(E-Mail)

DDNS

Easy Connection

Dynamic DNS Setting

☒ DDNS Enable

Host Name:

p600.gotdns.com

(Link to <http://www.dyndns.org>)

User Name:

DSE-ddns

Password:

Update Time:

600 (600~86400 Seconds)

Response:

no

On the Device Configuration page, Setup -> Network -> DDNS, enter the name HOST logged and the username and password. Enable DDNS then save the settings. In the "Response" she says "yes" to indicate that registration has been successful. If you click on the LINK in blue will show the Live View page of the device.

Wireless

This section is only available in cameras that support the connection to the wireless network Wi-Fi. E 'need to access the camera via hardwired connection initially to configure the disconnection wireless power and subsequently disconnect the network cable. The window shows all the wireless networks available in the environment (Access Points) and indicates the type, the safety guard and the signal strength.

Enter the connection parameters adjusted according to the settings of your wireless network SSID and especially any security parameters to connect

Live View
Video
Camera
Event
Schedule
Network
System
Customize

General
Advanced
SMTP(E-Mail)
DDNS
Wireless

Status of Wireless Networks

| SSID | Mode | Security | Signal strength |
|------------------|----------------|----------|-----------------|
| SolleronWireless | infrastructure | WPA-PSK | -68 |
| GLCON | infrastructure | WEP | -68 |
| LF6 | infrastructure | WEP | -66 |

Wireless Setting

MAC Address:
0E:B4:9A:18:6F:83

IP Address:
not-connect-yet

Netmask:
not-connect-yet

Gateway:
not-connect-yet

Mode:
Infrastructure

Operation Mode:
Auto

SSID:
Default

Security:
None

Save

Reconnect



SYSTEM - System Settings

In this section you set the general options for system

Information

This tab summarizes the information about the product and network configuration.

Live View
Video
Camera
Event
Schedule
Network
System
Customize

Information
User
Date & Time
Server Maintenance
Log Service

System

Model: N600E
System up time: 2010-06-28 00:03:14
Firmware version: 1.1.0_rc1_27_pixord
MAC Address: 00:04:29:00:c5:01
ActiveX Control version: 1.0.1.133

Ethernet

Status: Connected
Mode: DHCP
IP Address: 192.168.2.5
Netmask: 255.255.255.0
Default Gateway: 192.168.2.1

PPPoE

Status: No connection
IP Address: none

DNS Server

Primary DNS IP address: 0.0.0.0
Secondary DNS IP address: 0.0.0.0

DDNS

Status: no

Refresh

User

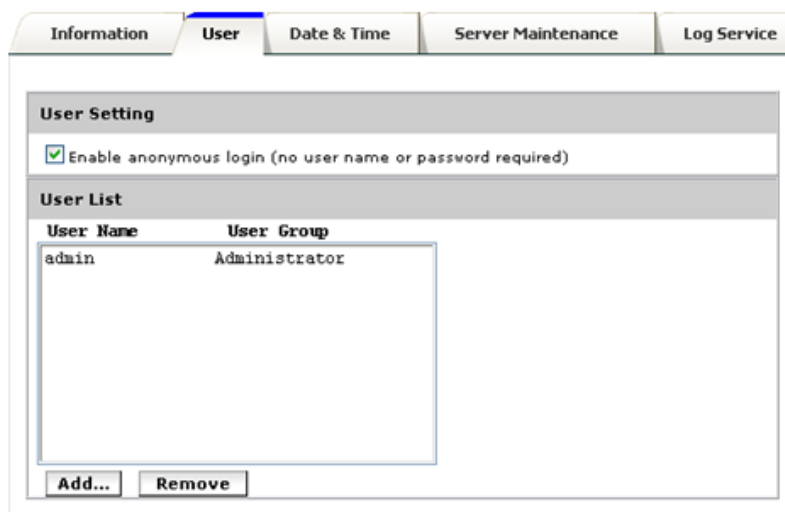
Access to the camera is controlled by a password so that only authorized personnel can access them. E 'can enter up to 20 users

Each user can have one of the following levels of access to the system:

ADMINISTRATOR: full access

OPERATOR: Access to display and single programming sections and VIDEO CAMERA.

VIEWER: Access to only live viewing



The screenshot shows a web interface with a tabbed menu at the top: Information, User (selected), Date & Time, Server Maintenance, and Log Service. Below the tabs is a 'User Setting' section with a checked checkbox labeled 'Enable anonymous login (no user name or password required)'. Underneath is a 'User List' section containing a table with two columns: 'User Name' and 'User Group'. The table has one entry: 'admin' in the 'User Name' column and 'Administrator' in the 'User Group' column. Below the table are two buttons: 'Add...' and 'Remove'.

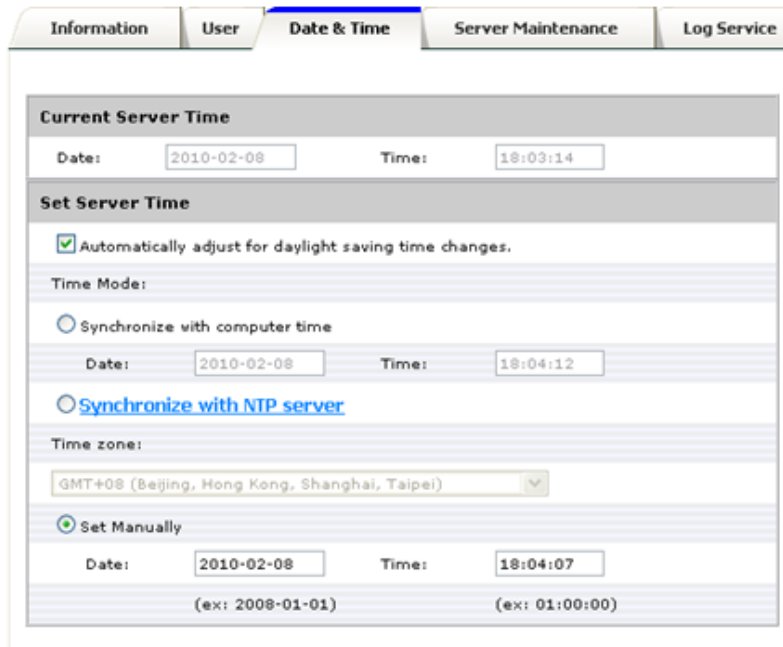
| User Name | User Group |
|-----------|---------------|
| admin | Administrator |

Use the ADD button to add a new user.

The default user ADMIN can not be eliminated, but you can of course customize the password to it combined. The option **ENABLE ANONYMOUS LOGIN** You can be enabled if you want to allow access to only viewing without requiring any access passowrd.

Date & Time

In this tab, it is possible to configure the date and time of the device. The options for synchronization with PC and NTP server are provided for the automatic adjustment.



The screenshot shows the 'Date & Time' configuration tab in a web interface. It features five tabs at the top: 'Information', 'User', 'Date & Time' (selected), 'Server Maintenance', and 'Log Service'. The main content area is divided into two sections. The first section, 'Current Server Time', displays the current date as '2010-02-08' and time as '18:03:14'. The second section, 'Set Server Time', contains several options. A checkbox labeled 'Automatically adjust for daylight saving time changes.' is checked. Below this, the 'Time Mode' section has three radio buttons: 'Synchronize with computer time' (unselected), 'Synchronize with NTP server' (selected and highlighted with a blue link), and 'Set Manually' (unselected). The 'Synchronize with NTP server' option shows a date of '2010-02-08' and a time of '18:04:12'. Below this, the 'Time zone' section has a dropdown menu showing 'GMT+08 (Beijing, Hong Kong, Shanghai, Taipei)'. The 'Set Manually' option shows a date of '2010-02-08' and a time of '18:04:07'. At the bottom, there are examples for date and time: '(ex: 2008-01-01)' and '(ex: 01:00:00)'.

AUTOMATICALLY ADJUST FOR DST - Automatically adjust clock for summer / winter

SYNCHRONIZE WITH COMPUTER TIME - Sync time to that of the PC

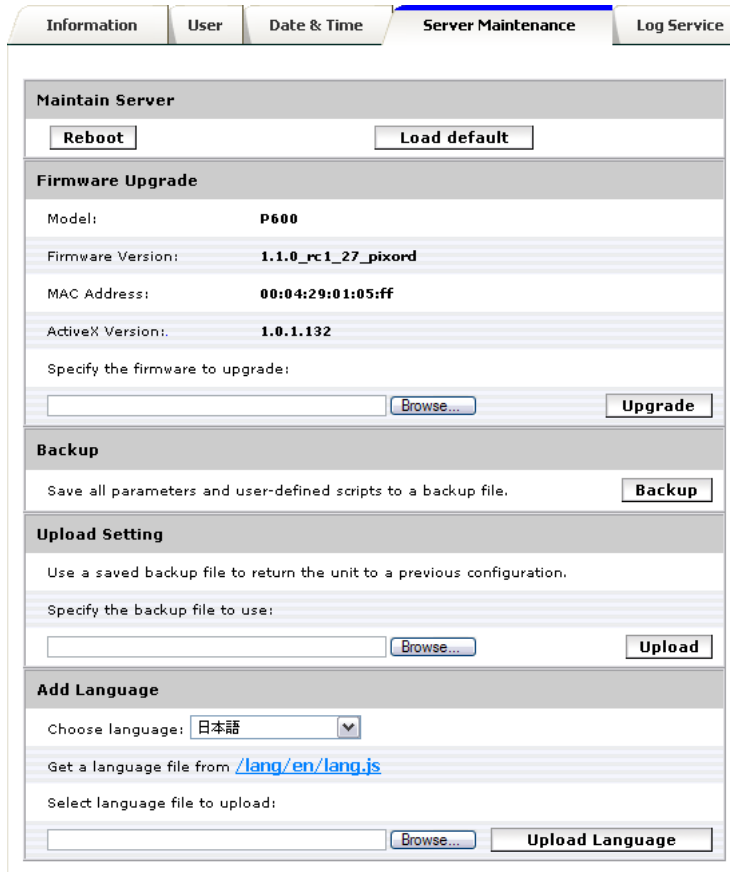
SYNCHRONIZE WITH NTP SERVER - Rule automaticamente time with an NTP server on the network to configure in the NETWORK section.

TIME ZONE - Set the time zone (GMT + 1 in Italy)

Set Manually - Set date and time manually

Server Maintenance

This page provides tools for maintenance of the camera system on board.



The screenshot shows a web interface with a top navigation bar containing tabs: Information, User, Date & Time, **Server Maintenance**, and Log Service. The main content area is titled 'Maintain Server' and contains several sections:

- Reboot** and **Load default** buttons.
- Firmware Upgrade** section with fields for Model (P600), Firmware Version (1.1.0_rc1_27_pixord), MAC Address (00:04:29:01:05:ff), and ActiveX Version (1.0.1.132). It includes a 'Specify the firmware to upgrade:' field with a 'Browse...' button and an 'Upgrade' button.
- Backup** section with a description 'Save all parameters and user-defined scripts to a backup file.' and a 'Backup' button.
- Upload Setting** section with a description 'Use a saved backup file to return the unit to a previous configuration.' and a 'Specify the backup file to use:' field with a 'Browse...' button and an 'Upload' button.
- Add Language** section with a 'Choose language:' dropdown menu (set to 日本語), a link to 'Get a language file from /lang/en/lang.js', and a 'Select language file to upload:' field with a 'Browse...' button and an 'Upload Language' button.

REBOOT - Reboot the camera

LOAD DEFAULT - Restore the factory parameters

UPGRADE - Allows you to choose and to send a new updated Camera Firmware

BACK UP - Save the camera configuration in a file .TGZ

UPLOAD - Allows you to send to a previously saved configuration Camera

ADD LANGUAGE - This command is useful if you want to translate the English text web interface of the camera or change it at will. E

'can by clicking the link in blue, from the camera to download the file containing all the web interface texts in the international factory

language (English) and translate them into any language using any text editor such as notepad windows With the command **UPLOAD**

LANGUAGE you can send the translated file to the camera.



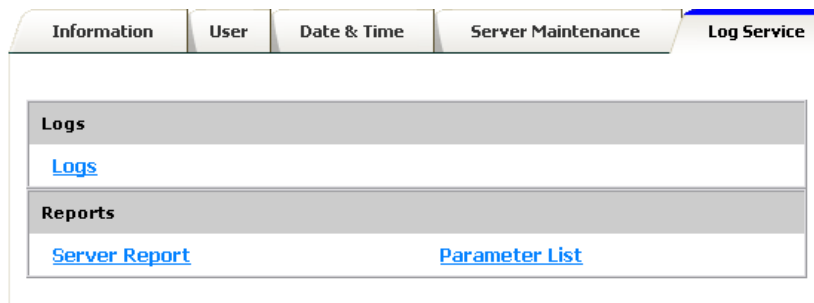
Log Service

Most system operations are stored in a LOG. On this page you can view the log in a browser window. There are 3 types:

LOGS - List of transactions carried out the network

PARAMETER LIST - Complete programming

REPORTS SERVER - Full report





CUSTOMIZE - Customization

In this section there is the possibility to customize the appearance of the LIVE camera view page. There are two types of layout setting: the factory DEFAULT display or use custom settings.

Use Default Look: Use the aesthetics of the graphical Factory

Use Defined Links: E 'can enter the IP addresses that link will be shown in the live display of the camera. For example, you can enter the IP address of other cameras or network devices (NAME: see description URL: address).

Use Custom Settings: E 'can customize the graphical web interface according to your needs: BACKGROUD COLOR - background color
TEXT COLOR - text color

BACKGROUND PICTURE - Background image (file or external link) TITLE - the page
title

DESCRIPTION - description LOGI page - Logo reproduced on the
page (file or external link)

☐ Use Default Look
 ☒ Use Custom Settings

Show Custom Link 1

Name: Custom Link 0

URL: http://

Show Custom Link 2

Name: Custom Link 1

URL: http://

Show Custom Link 3

Name: Custom Link 2

URL: http://

Show Custom Link 4

Name: Custom Link 3

URL: http://

Custom Settings

Modify the Default Look:

Background Color:

☒ Default
 ☐ Own: White

Text Color:

☒ Default
 ☐ Own: Black

Background picture:

☒ None
 ☐ External: http://

Title:

☒ None
 ☐ Default
 ☐ Own: Title

Description:

☒ None
 ☐ Default
 ☐ Own: Description

Logo Link:

☒ None
 ☐ Default
 ☐ Own: http://

Logo:

☐ None
 ☒ Default
 ☐ External: http://
 ☐ Own

Select image file to upload:



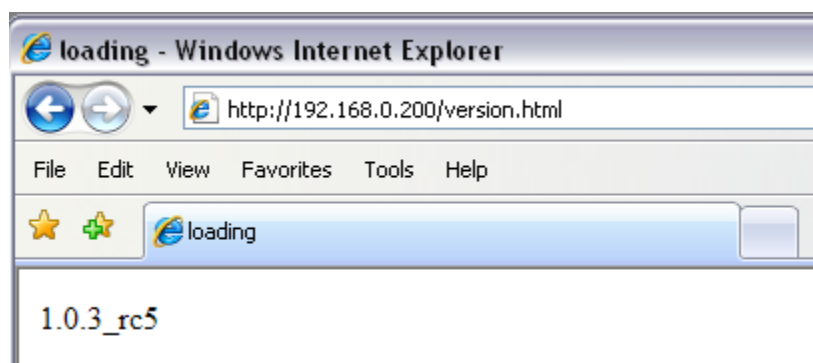
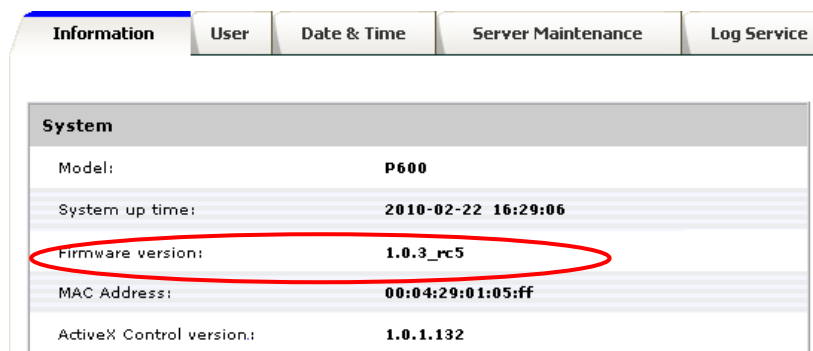
firmware Update

Check Firmware Version

How Firmware is the set of software instructions within the camera that govern its operation. The version of the Firmware installed in the device can be checked by entering the menu

Setup, then System, in the folder Information.

You can come to knowledge of the firmware version also simply typing "version.html" after the camera address, for example <http://192.168.0.200/version.html>



Firmware Update

All RN series cameras allow you to upgrade the camera firmware with a newer one. In any case it is never recommended to update the firmware unless under indication of our technicians.

The

the firmware update process is done through the browser by going to **Information -> Server Maintenance -> Firmware Upgrade.**

Follow the following guidelines:

1. Obtain the latest version of firmware and save it on the client PC.
2. Disconnect all clients connected to the camera.
3. Turn off any scheduled recording SCHEDULE.
4. Go to the page for updating the firmware, try the update file by clicking on BROWSE,

then click on UPGRADE to start the update.

| Firmware Upgrade | |
|--|--|
| Model: | P600 |
| Firmware Version: | 1.0.3_rc5 |
| MAC Address: | 00:04:29:01:a0:ff |
| ActiveX Version: | 1.0.1.132 |
| Specify the firmware to upgrade: | |
| <input type="text" value="C:\Documents and Settings\PC\Desktop\H.2i"/> | <input type="button" value="Browse..."/> |
| <input type="button" value="Upgrade"/> | |

- The update will start in a few minutes depending upon the transfer status. The update process takes about 5-10 minutes. Do not disconnect the device during the update process to avoid any damage.

Firmware Upgrade

It is strongly recommended to stop any unnecessary jobs while updating firmware.
Please be patient and the updating process may take a long time.
Please waiting about two or three minutes!

Writing Progress:



- The orange indicator LED camera flash during the update process. When the LED is again fixed the camera will be ready for use.



Restoring the factory settings

If you are not satisfied with the settings made or if detected irregularities in operation due to incorrect settings may be convenient to restore the factory parameters of the camera. All cameras and video servers RN for this series are fitted with a reset button indicated by RESET or DEFAULT.

If the button is not directly accessible from the outside there is a small hole inside which it is possible to insert a thin object, such as a suitably deformed paperweight clips so as to press the reset button inside.

Some models, in waterproof, do not have a button accessible from the outside. In this case there is a DEFAULT terminal in the terminal inputs and outputs. Instead of pressing the reset button will connect together the DEFAULT terminal with a GND terminal to start procedura.

To restore the factory settings is not simply press the reset button, but you must scrupulously perform the following steps:

1. Disconnect the power supply of the camera and the outlet.
2. Insert a pin into the RESET hole and hold (in the models without the reset hole to short the DEFAULT and GND terminals)
3. Connect the power of the camera while continuing to press the button for a few seconds until the status LED flashes rapidly
..
4. Releasing the reset button by removing the pin from the hole (in the models without the reset hole to remove the connection between the DEFAULT and GND terminals)
5. Wait until the LED flash quickly and reconnect terms of the network

The camera has now returned to its factory settings.

CAUTION: Restoring the factory settings also includes access passwords, and network parameters.



Video streaming Specifications

OPTIONS

As previously seen the RN series cameras, except for the RN-636E camera, they can manage 3 different video streams simultaneously.

You should consider the following rules:

1. Each stream can be set in MJPEG or H.264 mode
2. Each stream can be configured to CBR or VBR
3. The Stream1 (main stream) is available in all resolutions listed
4. The maximum settable resolution for Stream 2 is 640x480
5. The maximum settable resolution for Stream 3 is 320x240
6. The maximum frame rate for the transfer is 1600x1200 15fps. Other resolution can be up to 30fps

| | STREAM1 | STREAM2 | STREAM3 |
|---------------------------------|---------|---------|---------|
| coding mode | | | |
| <i>H.264 / MJPEG</i> | V | V | V |
| Transfer Mode | | | |
| <i>CBR / VBR</i> | V | V | V |
| Maximum resolution / FPS | | | |
| <i>1600x1200 @ 15</i> | V | | |
| <i>1280x720 @ 30</i> | V | | |
| <i>800x600 @ 30</i> | V | | |
| <i>640x480 @ 30</i> | V | V | |
| <i>320x240 @ 30</i> | V | V | V |

RELATIONS

Some of the video streaming settings are dependent STREAM 1 adjustment.

1. **Fps Maximum:** when **Stream1** It is set in **1600x1200**, the maximum frame rate is **15fps**. As a result, both the **Stream2** that **Stream3** They can be configured with frame rate 15.05 fps
2. **resolution Dependency:** the maximum resolution for the **Stream2** It depends on the resolution set for **Stream1**. When Stream1 is set to 320x240, Stream 2 is limited to 320x240.
3. **Independence frame rate:** The setting frame rate for each stream can be independent.

| STREAM1 | STREAM 2 | | STREAM3 |
|----------------------------------|-------------------------|---------------|------------|
| | 640x480 320x240 320x240 | 40 (Fixed) | |
| 1600x1200, 5 ~ 15 fps 5 ~ 15 fps | | | 5 ~ 15 fps |
| 1280x720, 30 fps 5 ~ | 5 ~ 30 fps | | 5 ~ 30 fps |
| 800x600, 640x480 5 ~ 30 | | | |
| fps, 30 fps 320x240 5 ~, 5 | | | |
| ~ 30 fps | | | |
| | 5 ~ 30 fps | | |

The resolution setting should follow: Stream1 \geq Stream2 \geq Stream3.

VIEW ANGLE

The influence of the STREAM1 setting the angle of view of the camera. The photo below shows the same shot with 3 1600x1200 resolutions, 960x720 and 1280x720 (the latter not available in the camera menu. As can be seen the angle of view is different in the 3 situations.

The 800x600, 640x480, 320x240, are the reduction in the original image scale and vary depending on whether the stream 1 has 1600x1200 resolution or 1280x720.



Angle actual view of the stream 1 to 1600x1200, 1280x720 and 960x720



STREAM 1 to 1600x1200



Angle of view with STREAM 1 to 1280x720