

Wireless IP Camera



**Article number 36-2914
18-2062**

**Model RC8030
RC8030-UK**

Ver. 200806

CLAS OHLSON

www.clasohlson.com

Wireless IP Camera

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Please read the entire instruction manual before using the product and save it for future reference. We apologise for any text or photographic errors and any changes of technical data. If you have any questions concerning technical problems please contact our Customer Service Department (see address on reverse).

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1. Safety

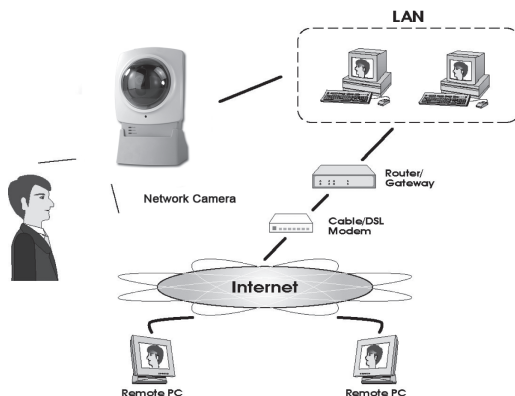
- The camera is for indoor use only.
- Use only the supplied or recommended power adaptor (5 V DC).
- Never expose the camera to moisture or humidity.
- Always disconnect the camera from the electricity network before cleaning.
- Never dismantle the camera. Certain parts inside the casing carry dangerous currents. Touching these can give you an electric shock.

2. Product Description

2.1 Features

Wireless IP camera with motor with the possibility to control the camera from another computer.

- 126° (horizontal) + 64° (vertical) panorama angle.
- CMOS Picture sensor.
- The MPEG 4 technology offers high video quality but reduced band width directly to pc.
- Built-in microphone and connector for speakers for two-way communication between computer and camera.
- Software programme for configuration, monitoring, and recording.
- Configuration via installation guide.
- Alarm and recording during motion detection.
- Scheduled recording.



Internet functions

- **Definable http-port** Allows the user to pick a port for access via the Internet.
- **Support for DDNS (Dynamic DNS)** Function for updates against a Dynamic DNS-server.
- **NTP (Network Time Protocol)** Synchronization of the clock against an Internet time server.

Safety Features

- **User verification** The camera can be password protected for up to 20 users.
- **Password protected configuration** Prevents unauthorized change of the camera's properties.

2.2 System requirements

- Network connected PC with Windows 2000 or XP
- Microsoft Internet Explorer 6.0 or later
- Router/Wireless access point

2.3 The package contains

- Network camera with aerial
- Power adaptor (5 V DC)
- Installation disc
- Instruction manual

3. Features

3.1 Front of camera

Camera lens	The camera lens can not be adjusted. However make sure that it is free from dirt and dust to obtain the best image.
Microphone	The built-in microphone is located on the front of the camera. There is also a socket on the back of the camera for an extra microphone. When an external microphone is connected the internal microphone is disconnected.
POWER	LEDs illuminate when the camera is turned on. When the camera starts the LEDs flash for 15-20 seconds.
ACTIVE	When the LEDs flash, the camera image is transferred in real time to one or several users.
NETWORK	LEDs are lit when the camera is connected to a network. The LEDs flash when data is transmitted on the network.

3.2 Back of camera

Power input	Connection for the supplied power adaptor.
MIC In	Connection (3.5 mm) for external microphone (e.g. a regular pc microphone). The camera's built-in microphone is automatically disconnected when an external microphone is connected.
LAN	Use a standard network cable to connect the camera to your network switch or router. N.B. <ul style="list-style-type: none"> • When a network cable is connected the wireless network (WLAN) is automatically disconnected. • The power adaptor must always be disconnected before you connect or disconnect the network cable for the camera to be able to change between LAN or WLAN.
RESET	The reset button has two functions: <ul style="list-style-type: none"> • A quick press restores the camera to a DHCP client (the camera obtains an IP address from e.g. a router. Any personal configured IP address is removed). • A long press (press and hold in for 3 seconds) restores the IP address, administrator's name and the administrator's password. The LED (Power) blinks three times when the camera is restored. • IP address: DHCP • Administrator's name: administrator • Administrator's password: (no password)
SPEAK	Connection for speakers (3,5 mm).

4. Mounting & Installation

1. Mounting the aerial

Attach the supplied aerial to the bracket on top of the camera. The aerial can be angled for the best possible reception. The best reception is obtained with the aerial angled vertically.

2. Mounting the camera

Mount the camera on the included table stand. The table stand can also be ceiling or wall mounted.

3. Connecting the network cable

Use a standard network cable for the **LAN** connection to connect the camera to your network switch or router.

N.B. You must first connect the camera with the network lead in order to configure the camera for the wireless network. You can remove the network lead after configuration.

4. Switching on the camera

Connect the supplied power adaptor to the outlet marked **POWER**. The camera starts up automatically. Use only the included or recommended adaptor.

5. LED Indicators

- **POWER** - At start-up the indicator is lit for a short while before it begins flashing for 15-20 seconds. The indicator then remains lit.
- **ACTIVE** - Lights only when video is transmitted in real time to one or several users.
- **NETWORK** - Lights when the camera is connected to the network.

5. Basic Setup

5.1 Configuring the camera

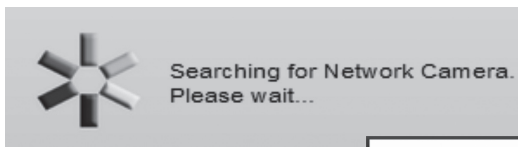
The camera must first be configured before using.

These installation instructions apply to Windows XP with Service pack 2 installed.

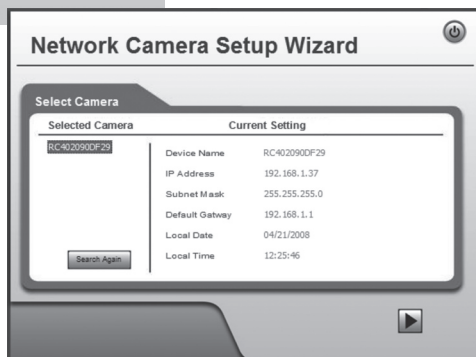
1. Connect the camera according to the instructions in section 4.
2. Insert the supplied CD into the computer's CD-ROM drive. If the installation does not start automatically, use the file **NetworkCamera.exe** application found directly under the root folder on the CD-ROM.
3. When the installation programme has started a welcome screen is displayed. Click on **Setup Camera** to start the installation.



4. The installation programme searches for the camera on the network and then displays the camera on the list to the left.



If there is more than one camera in the network, select the first camera on the list and click ►.

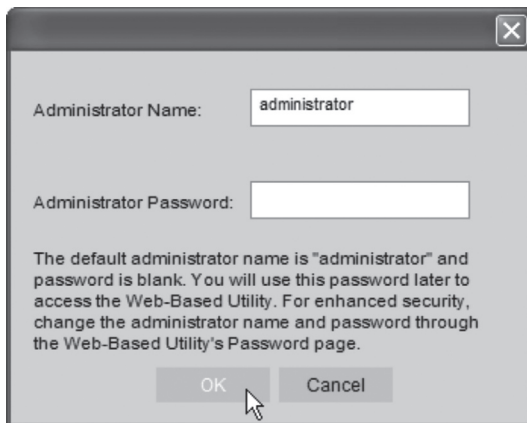


- On the next screen you will be prompted to enter a user name and password. Then click ►.

The preset username and password are:

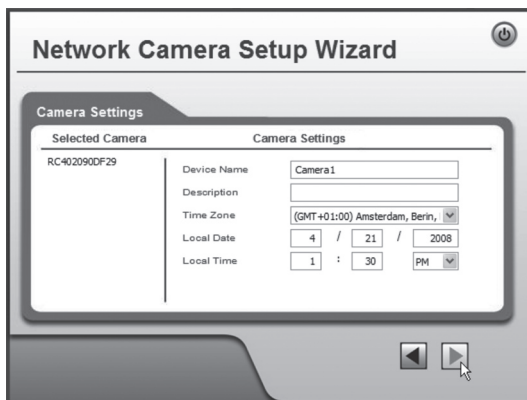
User name: administrator

Password: (no password)



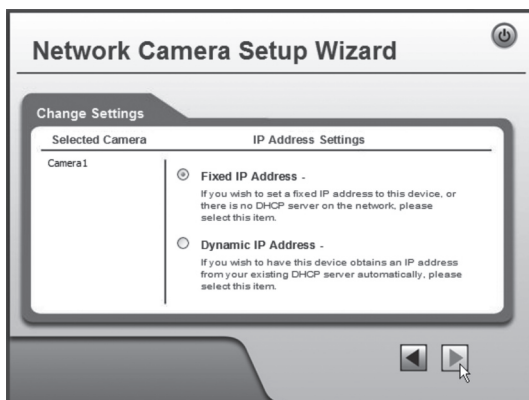
A dialog box for administrator login. It has a title bar with a close button (X). The main area contains two input fields: "Administrator Name:" with the text "administrator" entered, and "Administrator Password:" which is empty. Below the fields is a paragraph of text: "The default administrator name is 'administrator' and password is blank. You will use this password later to access the Web-Based Utility. For enhanced security, change the administrator name and password through the Web-Based Utility's Password page." At the bottom are two buttons: "OK" and "Cancel". A mouse cursor is pointing at the "OK" button.

- In the following dialogue box you will set the time zone and date. You can also give a name and description for the camera. Enter your settings and click ►.

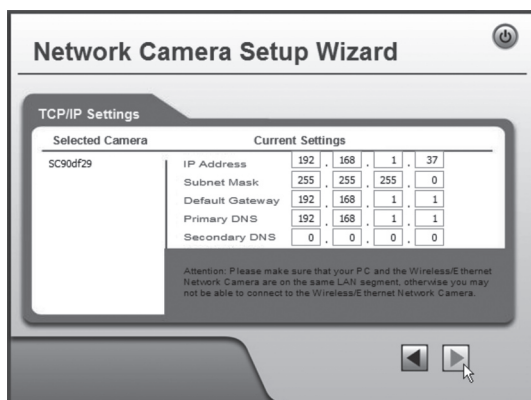


The "Network Camera Setup Wizard" window, titled "Camera Settings". It features a sidebar on the left with "Selected Camera" showing "RC402090DF29". The main area is titled "Camera Settings" and contains several fields: "Device Name" (set to "Camera1"), "Description" (empty), "Time Zone" (set to "(GMT+01:00) Amsterdam, Berlin"), "Local Date" (set to "4 / 21 / 2008"), and "Local Time" (set to "1 : 30 PM"). At the bottom right are two navigation buttons: a left arrow and a right arrow, with a mouse cursor pointing at the right arrow.

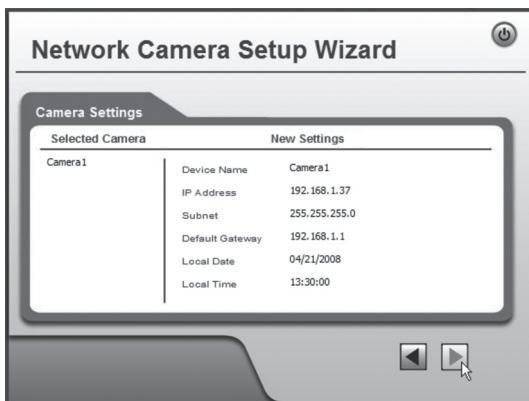
6. Select the camera to use a fixed IP address (**Fixed IP address**) or to automatically obtain an IP address (**Dynamic IP address**) from e.g. a router with DHCP function. Make your selection and click ►.



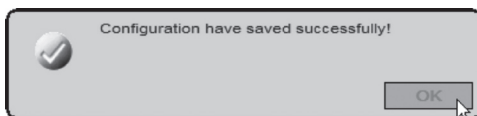
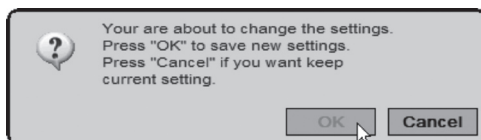
7. If you have previously chosen to give the camera a fixed IP address the **TCP/IP Settings** will appear in the dialogue box.
- Enter an available **IP address**, **Subnet Mask** and **Default Gateway** for your network.
 - Fill in a **Primary DNS** and a **Secondary DNS** if you wish to use the e-mail and DNS functions. Refer to the information provided by your Internet service provider.
 - Click ► next to continue.
- N.B.** Write down the IP address; you will need it later to configure the camera.



8. The following dialogue box shows the settings you have just entered. Click ►.



9. Click **OK** to save and then **OK** again.



10. Click **Exit** to complete the installation.



6. Show the camera image via the web browser

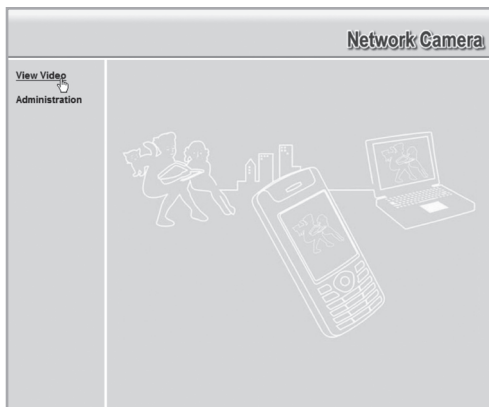
The camera shows video in real time via the camera's web interface.

Real time video can only be shown if the web browser is ActiveX 8.0 compatible (e.g. Internet Explorer 6.0).

1. Start the computer's web browser and enter the camera's IP address (in this case **http://192.168.1.37**) and press **Enter**.

Tip! Add this page to the web browser's favourites/bookmarks!

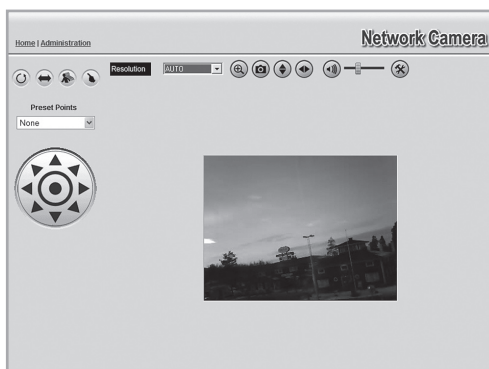
2. Click on **View Video**.



3. Check the picture quality and change the picture's properties with the controls on the screen.

Obs!

- Real time video can only be shown if the web browser is ActiveX 8.0 – compatible (e.g. Internet Explorer 6.0).
- You must accept and install the Active X component when requested in the web browser window.



Explanation of buttons and functions:

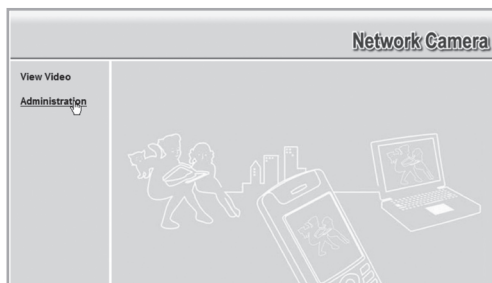
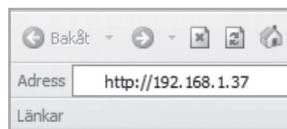
	Selects the camera resolution/picture size
	Zooms in
	Takes a snapshot
	Rotates the picture vertically
	Rotates the picture horizontally (mirror image)
	Turns on/off the microphone sound
	Adjusts the microphone's sound level
	Setup
	Controls the camera's position
	Preset positions
	Automatic switching/Automatic panning/Motion detector/ Quick panning

7. Configuration via the web browser

7.1 Opening the configuration interface

1. Start the computer's web browser and enter the camera's IP address (in this case **http://192.168.1.37**) and press **Enter**.

Tip! Add this page to the web browser's favourites/bookmarks!

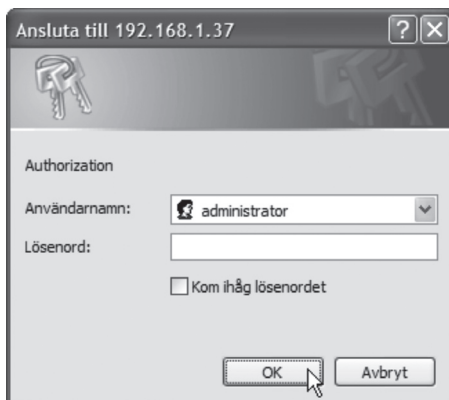


2. Click on **Administration** to access the control panel.

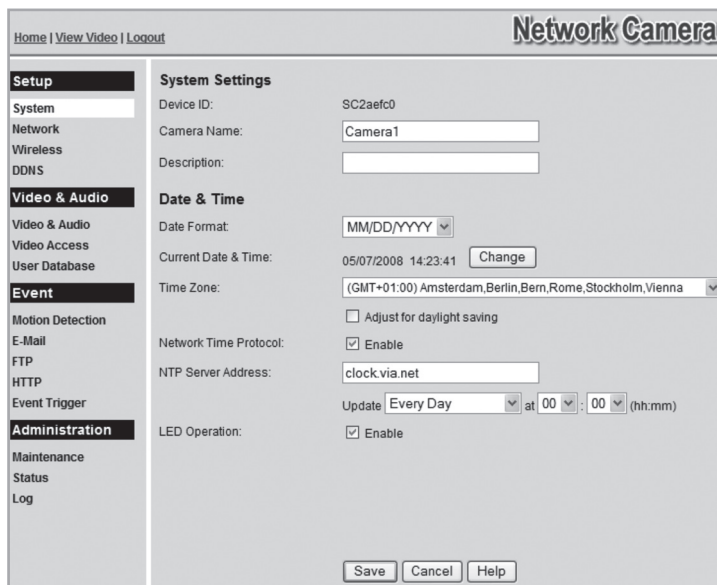
- In order to change the camera's settings the correct password must be entered. Log in with the preset username and password:

User name: administrator

Password: (no password)



- In the menu to the left, configuration interface options are shown.



- The configuration is divided into submenus which are described in the **7.2 Setup** section.
- Enter your desired settings and click on **Save** to save your settings. You can at any time click on **Help** to read the help section for each respective.

7.2 Setup

7.2.1 System

System Settings

Device ID: SC90df29

Camera Name:

Description:

Date & Time

Date Format:

Current Date & Time: 04/24/2008 07:52:21

Time Zone:

☐ Adjust for daylight saving

Network Time Protocol: ☒ Enable

NTP Server Address:

Update at : (hh:mm)

LED Operation: ☒ Enable

System Settings	
Camera Name	Enter a desired name for the camera.
Description	Enter a desired description for the camera.
Date & Time	
Time Zone	Choose time zone.
Network Time Protocol	Check to synchronize the clock against an Internet-time server.
NTP Server Address	Does not normally have to be changed (preset address: clock.via.net).
Update	Enter the interval for time synchronization.
LED Operation	Deselect to turn off the LEDs on the camera's front (for discrete surveillance).

7.2.2 Network

IP Address: ☐ Obtain an IP address automatically (DHCP)
☒ Use the following IP address

IP address:
 Subnet mask:
 Default gateway:

DNS Server Address: ☐ Obtain DNS server address automatically
☒ Use the following DNS server address

Primary DNS server: (IP address)
 Secondary DNS server: (IP address)

Secondary Port: ☐ Enable HTTP Secondary Port (1024-65535)

RTP/RTSP: RTSP Port: (554, 1024-65535)
 RTP Data Port: (mobile phone only)
 Max RTP Data Packet: bytes (400-1400)

Multicast RTP/RTSP: ☐ Enable Multicast

Video Address:
 Video Port: (1024-65534; Even Value)
 Audio Address:
 Audio Port: (1024-65534; Even Value)
 Time to Live: (1-255)

UPnP: ☐ Enable Discovery
☒ Enable Traversal (Port Mapping)

QoS: ☐ Enable QoS Mode (for Video and Audio)

IP Address	Configures the camera's IP address.
Obtain an IP address automatically (DHCP)	Receive an IP address automatically from a DHCP server.
Use the following IP address	Give the camera its own IP address.
DNS Server Address	Enter desired DNS servers. Normally the router's DNS setting can be used, then type in the router's IP address here.
Secondary Port	Select to activate a secondary http port for access to the camera (if port 80 is used for another application). Enter desired port number.
RTP/RTSP	RTSP (Real-time Streaming Protocol): Indicates port for streaming of media over the Internet. RTP (Real-time Transport Protocol): Indicates port for streaming in real time of sound and picture over the Internet.
Multicast RTP/RTSP	Select to activate Multicast. Enter address and port number for video and sound.
UPnP	Select to activate UPnP.
QoS	Activates QoS.

7.2.3 Wireless

Configures the camera for use in a wireless network. Select network type, SSID (name of network) and the network's security settings. Enter the same information you gave for other wireless devices which also communicate on the wireless network. Contact the network administrator for assistance if you do not own the network yourself.

Connect the camera to a wireless network

1. Connect and configure the camera according to section 4 & 5.
2. Go to the **Wireless** menu and enter the settings for your wireless network. Select **Save** in order to save your settings and then close your browser.
3. Detach the network cable and restart the camera by disconnecting it from, and then reconnecting to the adaptor.

Wireless Network	
WSC PIN Code:	28138884
Network Type:	Infrastructure
SSID:	
Domain:	Europe
Channel No:	Auto
Security	
Security System:	WPA/WPA2 Personal
Shared Key:	<input type="text"/> (8 to 63 characters)

If you are satisfied with the settings, connect the camera to network after it has been restarted.

Wireless Network	
Network Type	Select the type of wireless network you will be connecting the camera to. Infrastructure – If you are connecting to a wireless router/access point. Ad-hoc – Peer to peer network.
SSID	Enter the network's SSID (network name). The name must correspond to the network's SSID.
Domain	Select your region from the drop-down list.
Channel No	Auto – Chooses a channel automatically (selected automatically when connecting to a router/access point). 1-13 – Only used when connecting to an Ad-Hoc network. Select the same channel as the other wireless stations which the camera connects to.
Security	
Security System	Use the same security settings as the wireless network you will be connecting to. Disabled – No security is in use, the wireless network is available for all connections. WEP – Select the network you wish to be protected by WEP. WPA/WPA2 Personal – Choose the wireless network you wish to be protect by a WPA key.

7.2.3 DDNS

☐ Enable DDNS

Service Provider: DynDNS.org Web Site

Domain (Host) Name:

Account/E-Mail:

Password/Key:

Check WAN IP Address: Every 24 Hrs

Starting at 12 Hour(s) 00 Minute(s)

If you are provided with a dynamic IP address from your Internet provider instead of a permanent IP address you may with help of a dynamic DNS server connect a domain name to your external IP address.

The camera automatically contacts and updates the DNS server with the new IP address if your Internet connection is given a new IP address. The dynamic domain name always updated to your IP address in that way.

An example of Dynamic DNS sever is dyndns.org where you can register for free for a dynamic domain name.

N.B.

If your router has its own function for dynamic dns it can be used instead of the camera's ddns service.

Enable DDNS	Select to activate the feature.
Service Provider	Choose in the list the dynamic dns server you are using.
Web Site	Click to open the website for chosen dns server.
Domain (Host) Name	Type in your dynamic domain name.
Account/E-Mail	Username/login name for the account.
Password/Key	Password for the account.
Check WAN IP Address	Enter how often the camera should search for changed IP address.

7.3.2 Video Access

User Access:

☐ Enable Security Checking

Video Access:

☐ Enable Scheduled Video Access

Access Schedule

Delete

Add New Schedule

Day:

Every day

Start Time:

00 : 00 (hh:mm)

End Time:

00 : 00 (hh:mm)

Add

Clear

User Access	Protects access to the camera. The users must enter a username and password to access to the camera. Add the users in the User Database menu.
Video Access	Activate scheduled access to the camera. Access to the camera is only given during specified times. NB: Regardless of setting the administrator always has access to the camera.
Access Schedule	
Delete	Removes marked schedules from the list.
Add New Schedule	
Day	Choose desired days to be scheduled.
Start Time	Enter a start time.
End Time	Enter a stop time.
Add	Adds a schedule to the list.

7.3.3 User Database

Existing Users

Edit

Delete

Delete All

User Properties

User Name:

User Password:

Confirm Password:

Add

Clear

Existing Users	
Edit	Edits users.
Delete	Removes users.
Delete All	Removes all users.
User Properties	
User Name	Type in desired username.
User Password	Password for the user.
Confirm Password	Confirm the password one more time.
Add	Adds the user to the user database.

7.3 Video & Audio

7.3.1 Video & Audio

MPEG-4 Settings	
Resolution	The camera's picture resolution.
Video Quality Control	Constant Bit Rate: Choose desired Bit Rate. Fixed Quality: Choose picture quality.
Max Frame Rate	Choose frames per second.
MJPEG Settings	
Resolution	The camera's picture resolution.
Fixed Video Quality	Choose picture quality.
Max Frame Rate	Choose frames per second.
Mobile Settings	
Enable Mobile Streaming	See section 8.2 Streaming to the mobile phone.
Video Adjustments	
Power Line Frequency	Choose the frequency that corresponds with the power supply's frequency (with fluorescent tube lighting).
White Balance	Indicates the white balance.
Lighting Condition	Lighting conditions.
Brightness	Light intensity.
Sharpness	Sharpness.
Options	
Enable Microphone	See section 9.4 Using the microphone and speakers.
Enable Speaker	
Flip	Turns the picture upside down.
Mirror	Mirrors the picture.
Enable Time Stamp	Adds current time to the picture.
Enable Text Display	For (camera) identification when several cameras are being used. Type in desired text to be displayed in the picture (up to 20 characters).

MPEG-4 Settings

Resolution: 640*480

Video Quality Control:

☐ Constant Bit Rate 256 Kb ps

☐ Fixed Quality Very High

Max Frame Rate: 30 fps

MJPEG Settings

Resolution: 640*480

Fixed Video Quality: Very High

Max Frame Rate: 30 fps

Mobile Settings

☒ Enable Mobile Streaming

Resolution: 160*120

Video Quality Control:

☐ Constant Bit Rate 32 Kb ps

☐ Fixed Quality Normal

Max Frame Rate: 15 fps

Access Code: 1234

Video Adjustments

Power Line Frequency: 60Hz (for fluorescent lighting)

White Balance: Auto

Lighting Condition: High Frame

Brightness: Normal

Sharpness: Normal

Options

☐ Enable Microphone Audio Type: G.726

☐ Enable Speaker

☐ Flip

☐ Enable Time Stamp

☐ Enable Text Display

☐ Mirror

7.4 Event

7.4.1 Motion Detection



See the section 8.3 Motion Detection.

7.4.2 E-mail

Primary SMTP Server

SMTP Server Address: Port:

Authentication:

SMTP Login name:

SMTP Password:

POP server name:

Show "From" as: (E-Mail Address)

Secondary SMTP Server

☒ Secondary SMTP (enable this if the camera can not connect to the primary SMTP)

SMTP Server Address: Port:

Authentication:

SMTP Login name:

SMTP Password:

POP server name:

Show "From" as: (E-Mail Address)

E-Mail Setup

☐ E-Mail Address #1:

☐ E-Mail Address #2:

☐ E-Mail Address #3:

Subject:

E-mail settings for sending images as an attached file to one or several e-mail addresses.

- See the settings for e-mail that you received from your Internet provider.

Primary SMTP Server	
SMTP Server Address	Enter the SMTP-address which is used to send e-mail.*
Authentication	Indicates if the SMTP-server requires authorization.
SMTP Login Name	Username (only at authorization).
SMTP Password	Password (only at authorization)
POP server name	Only at authorization.
Show "From" as	Type in the e-mail address which is shown in the "from" field when the e-mail reaches the receiver.
Secondary SMTP Server	
Enter settings for a secondary SMTP-server if the primary SMTP-server cannot be reached.	
E-mail Setup	
E-mail Address	Enter at least one e-mail address to send an image to.
Subject	Indicate a subject for the e-mail.

* Some Internet providers require that a special SMTP-server is used if you have your own e-mail server or if you are using e-mail from an external provider. Contact your Internet provider.

7.4.3 FTP

Settings for automatic uploading of images to an FTP-server.

Primary FTP

FTP Server: Port:

Login Name:

Password:

☐ Enable Passive Mode

File Path Name:

Secondary FTP

☐ Secondary FTP (enable this if the camera can not connect to the primary FTP)

FTP Server: Port:

Login Name:

Password:

☐ Enable Passive Mode

File Path Name:

Primary FTP	
FTP Server	The FTP-server's address.
Port	The FTP-server's port number (usually 21).
Login Name	Username.
Password	Password.
Enable Passive Mode	Select to activate passive mode.
File Path Name	Indicates to which catalogue the picture file will be saved.
Secondary FTP	
Enter settings for a secondary FTP-server if the primary FTP-server cannot be reached.	

7.4.4 HTTP

Settings for HTTP notification.

HTTP Notification ☐ Enable

URL:

Proxy Server Name:

Port Number:

Method:

HTTP Notification	
Enable	Select to activate the feature.
URL	Enter the server's URL.
Proxy Server Name	Possible proxy server for indirect connection.
Port Number	Enter the proxy server's port number.
Method	Choose method for http notification. GET or POST.

7.4.5 Event Trigger

Sets schedule for trigger events and method of notification, via e-mail, FTP, or HTTP.

Event Schedule	
Displays created event schedules.	
New Schedule	
Effective Time Frame	Indicates which days the schedule will be valid for.
Day	Choose desired schedule days.
Start Time	Enter a start time.
End Time	Enter a stop time.
Add	Adds a schedule to the list.
Trigger Event	
Motion Detection	Select to activate motion detection. Detection of movement.
Actions	Select method of notification: E-Mail, FTP or HTTP.
Attachement Type	Choose type of attached file: JPEG picture or video.

7.5 Administration

7.5.1 Maintenance

General settings for password administration, software upgrades, backups and resetting.

The screenshot shows a web-based administration interface with three main sections:

- Administrator Login:** Contains three input fields: 'Administrator ID' (with 'administrator' pre-filled), 'Administrator Password', and 'Verify Password'. Below these are 'Save' and 'Cancel' buttons.
- Firmware Upgrade:** Contains an 'Upgrade File' input field with a 'Browse...' button. Below are 'Start' and 'Clear File Name' buttons.
- Backup & Restore:** Contains two sections:
 - Backup Configuration File:** A 'Backup' button.
 - Restore Configuration File:** An input field with a 'Browse...' button, and 'Restore' and 'Clear File Name' buttons below it.
 - Restore Factory Defaults:** A 'Defaults' button.
 - Restart Camera:** A 'Restart' button.

Administrator Login	
Administrator ID	Changes the preset administrator name (preset username: <i>administrator</i>) which is used at login.
Administrator Password	Indicates a password for administrator login.
Verify Password	Verify the password by retyping it.
Firmware Upgrade	
Upgrade File	Click on Browse to choose an upgrade file for upgrading the camera's software.
Start	Click on Start to start the upgrading. The camera restarts when the upgrading is done.
Clear File Name	Clears the Upgrade File field.

Backup & Restore	
Backup	Click on Backup to save the camera's current configuration to a text file.
Restore Configuration File	Click on Restore to resume the configuration file.
Restore Factory Defaults	Resets the camera to factory settings.
Restart Camera	Push to restart the camera.

7.5.2 Status

Displays the camera's software version and the camera's network and video settings.

System	
Device Name:	Camera1
Description:	
FW version:	V1.0.04
Network	
MAC Address:	00:c0:02:90:df:29
IP Address:	192.168.1.37
Network Mask:	255.255.255.0
Gateway:	192.168.1.1
MPEG-4	
Resolution:	640*480
Video Quality:	Very High
Frame Rate:	30
MJPEG	
Resolution:	640*480
Video Quality:	Very High
Frame Rate:	30

7.5.3 Log

Displays the camera's log file for settings and events.

04/28/2008 09:06:10 LOG: Clear all messages

Refresh

Clear Log

☐ Enable Syslog Service

Syslog Server Address

8. Advanced use

8.1 Connecting the camera via the Internet

If the camera is installed on the network behind e.g. a router, the router must be configured in order for the camera to be reached from the Internet.

8.1.1 Prepare your router/firewall

- If you are using e.g. a router or a firewall in your network it is necessary that the camera's ports are opened in the router/the firewall and is directed to the camera's internal IP address. See the router's/firewall's instruction manual for help.
- Preset port number to connect the camera is: **80**.

If you want to connect with a different port number a secondary port number is entered in the **Setup > Network** menu.

Secondary Port:	<input checked="" type="checkbox"/> Enable HTTP Secondary Port	<input type="text" value="1024"/> (1024-65535)
-----------------	----------------------------------------------------------------	------------------------------------------------

- You also have to find the IP address for your Internet connection. A simple way of doing this is to enter "*What's My IP*" as search word in a search engine for links that show your external IP address.

8.1.2 Connect to the camera

1. Start the computer's web browser and type in the Internet connection's IP address (<http://xxx.xxx.xx.xx>) and press **Enter**.

N.B.

This can usually not be done from a computer on the same network as the camera. Use a computer on another network or another Internet connection to connect the camera (from the internal network you would instead connect to the camera's internal IP address).

2. Click on **View Video** to show the camera image or choose **Administration** to configure the camera.

8.2 Streaming to a mobile phone

The camera picture can be streamed to most 3G mobile phones that support video streaming via the RTSP protocol.

8.2.1 Prepare the camera for streaming to a 3G mobile phone

Mobile Settings

☒ Enable Mobile Streaming

Resolution: **160*120**

Video Quality Control:

☒ Constant Bit Rate **32 Kb ps**

☐ Fixed Quality **Normal**

Max Frame Rate: **15** fps

Access Code: **1234**

1. Select the option **Enable Mobile Streaming** in the **Video and Audio** menu.
2. Choose video quality (Constant Bit Rate) and picture frequency (Max Frame Rate).
3. Enter any code of choice for the camera (Access Code), but in this case **1234**. This code will then be entered at the end of the web address you indicate in your mobile phone.
4. Click **Save** to save your settings.

NB:

- If you are using e.g. a router or a firewall in your network it is necessary that the camera's ports are opened in the router/firewall and is directed to the camera's internal IP address. See the router's/firewall's instruction manual for help.
- The preset port numbers for video streaming can be changed in the camera's network settings in the menu **Setup > Network**:

RTP/RTSP:

RTSP Port: **554** (554,1024-65535)

RTP Data Port: **5000** (mobile phone only)

Max RTP Data Packet: **1400** bytes (400-1400)

Preset ports in the camera:

RTSP: 554 (TCP)
RTP: 5000 (UDP)

You also have to find the IP address for your Internet connection. A simple way of doing that is to enter "*What's My IP*" as search word in a search engine for links that show your external IP address.

8.2.2 Connecting to the camera with a 3G mobile phone

1. In the mobile phone's web browser enter **rtsp://** followed by the camera's/router's external IP address followed by the access code.

Example: **rtsp://XXX.XXX.XXX.XXX/1234** where X stands for the camera's external IP address and **1234** is the access code.

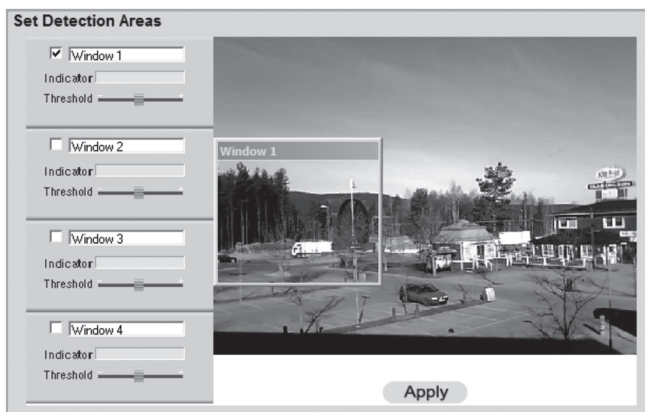
2. If the camera and the router/firewall are correctly configured the camera picture will be displayed in the mobile phone.

Important!

The mobile phone must support the RTSP protocol to be able to receive the camera's video streaming. Follow the mobile phone's instruction manual.

Your mobile phone plan must also be activated for data traffic via the 3G net.

8.3 Motion detection



NB: Motion detection can besides detectin moving objects also react to quick light changes. It is therefore recommended that the feature is only used on cameras used indoors.

1. Select the box for one or several areas (**Window 1-4**). **Up to four detection areas can be defined for detection of movement.**
2. **Use the cursor to** move each detection area to the area or areas the motion detector should react to.
3. Adjust the (**Threshold**) for the detection.
4. Click on **Apply** to confirm your settings.
5. Follow section **7.4.2 E-mail** to set one or several e-mail addresses to send the picture to.
6. Activate **Motion Detection**, type of event (e-mail, FTP, or http) and type of attached file in the menu **Event Trigger** (see section 7.4.5).

9. Monitor Manager

With the included programme **Monitor Manager** several other cameras can be monitored simultaneously.

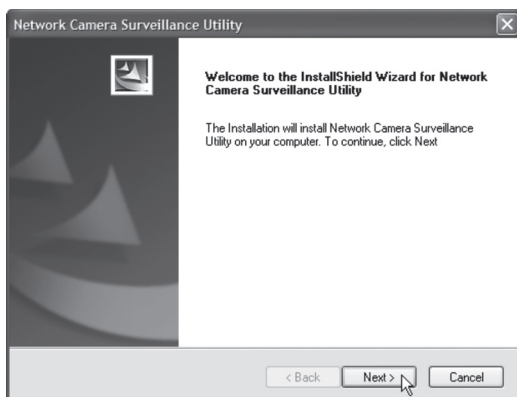
9.1 Installation

The installation guidelines applies to Windows XP with Service pack 2 installed.

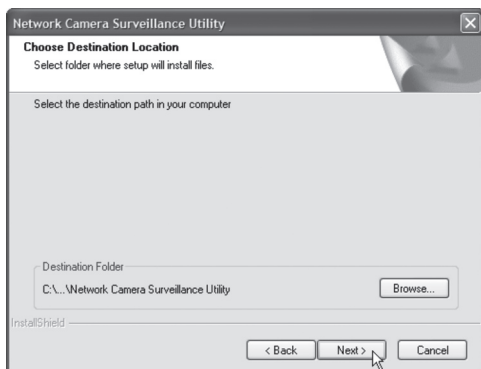
1. Connect the camera according to the instructions in section 4.
2. Insert the supplied CD into the computer's CD-ROM drive. If the installation does not start automatically, use the file **NetworkCamera.exe** application found directly under the root folder on the CD-ROM.
3. When the installation programme has started a welcome screen is displayed. Click on **Install Utility** to begin the installation.



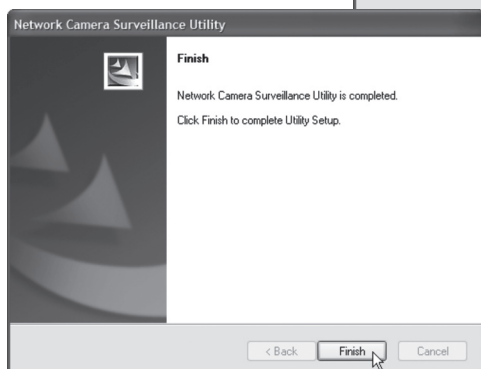
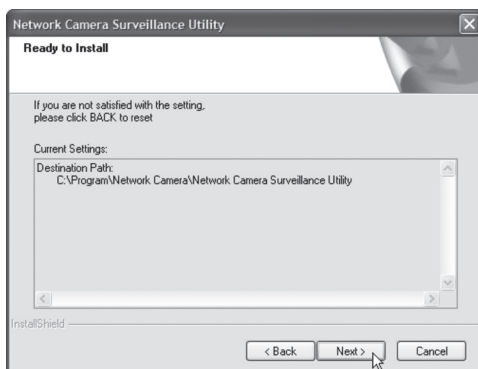
4. Click on **Next** to continue.



- Click on **Browse** if you wish to install the programme in another folder than the one suggested, otherwise click **Next**.



- Click **Next** to confirm.




- Click **Finish** to complete the installation. The programme will start automatically.

9.2 Use Monitor Manager

9.2.1 Connect to the camera and display the camera picture

To display the camera in the programme it must first be connected and given its own channel number.

1. Install and start the programme according to the instruction in step 7.1.
2. Click on  to change the programme's properties and search for the camera on the network.
3. Select **Lan** (the camera should be listed) and click on **Refresh** to search for connected cameras.
4. Select the camera on the list.
5. Give the camera a channel number (in this case 1) and click on **Add** to add the camera in the list.

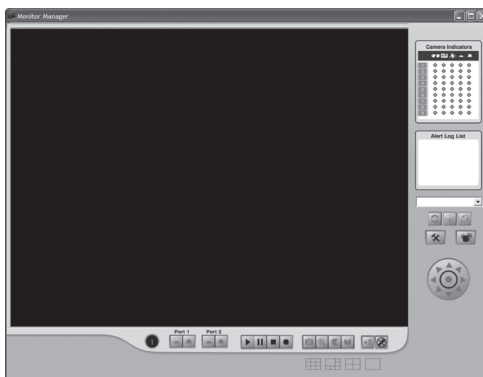
Camera Data

Local ID	11
Camera Name	SC90df29
IP Address	192.168.1.37
Port Number	80
Name	
Password	
Stream Type	MPEG4
<input type="checkbox"/> Enable Trigger Event	












Add

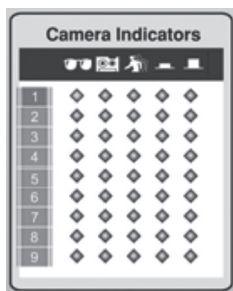


- Click **Exit** to close down the dialogue box.
- Press ► to start the playback. The camera picture should now be displayed in the programme.



Explanation of the programme's controls and features

Button		Function
	Channel	Displays the chosen camera's channel number.
	Play	Starts playback for the chosen camera.
	Pause	Freezes the picture.
	Stop	Stops playback.
	Record	Push to record current picture. While recording the button changes colour to red.
	Snapshot	Push to take a snapshot of the camera picture.
	Zoom	Click on the icon and then click in the area of the picture that you want to enlarge.
	Flip	Rotates the picture horizontally.
	Mirror	Mirrors the picture.
	Sound On/Off	Turns the sound on or off (can only be chosen when the function is activated according to section 9.4).
	Microphone On/Off	Turns the microphone on or off (can only be chosen when the function is activated according to section 9.4).



Camera Indicators







Used to quickly choose between connected cameras. Also displays status for chosen camera.

- Column 1** Green indicator is displayed when the camera is available.
- Column 2** Red indicator indicates when recording is in session.
- Column 3** Yellow indicator is displayed when the motion detector is activated.
- Column 4 and 5** Indicates I/O-status.



Alert Log List

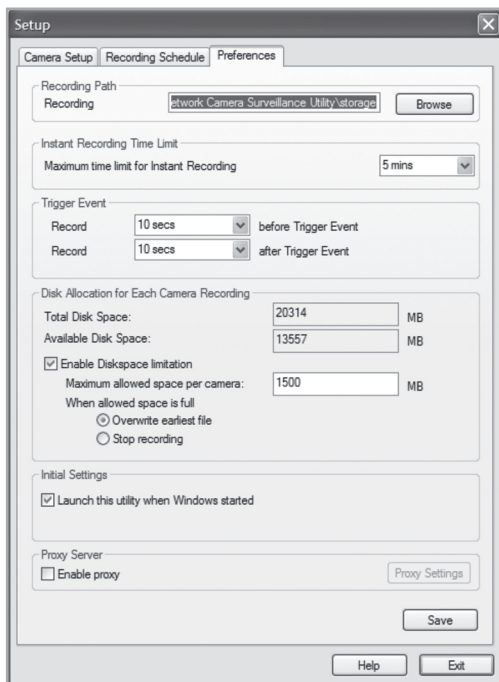
Shows history of possible alarms during motion detection.


	Setup	<ul style="list-style-type: none"> - Searches and connects network connected cameras. - Sets scheduled recordings. - Changes recording properties.
	Playback	Opens the programme for playback of recorded sequences. Refer to the 7.4 Playback section.
	One Video Layout	Displays the selected camera only.
	Four Video Layout	<ul style="list-style-type: none"> - Displays up to four cameras simultaneously (if more than one camera is connected). - Use "drag and drop" to move the image to the desired screen section.
	Six Video Layout	<ul style="list-style-type: none"> - Displays up to six cameras simultaneously (if more than one camera is connected). - Use "drag and drop" to move the image to the desired screen section.
	Nine Video Layout	<ul style="list-style-type: none"> - Displays up to nine cameras simultaneously (if more than one camera is connected). - Use "drag and drop" to move the image to the desired screen section.

9.3 Recording playback

Recording can be done simultaneously with playback, or according to a recording schedule.

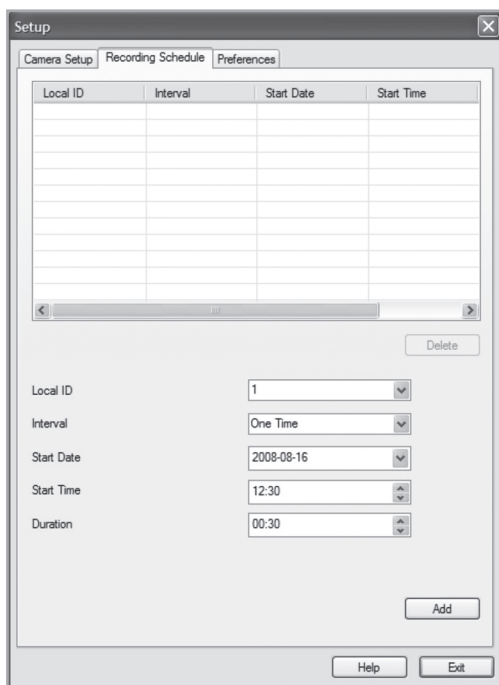
9.3.1 Preparing the computer for recording




1. Click on **Setup**  to change the programme's settings.
2. Select the **Preferences** tab and enter the desired settings:
 - **Recording Path** – Choose a folder where the recordings will be stored.
 - **Instant Recording Time Limit** – Enter a max. time limit for recording.
 - **Trigger Event**
 - **before Trigger Event** – Enter a time a recording should start before motion is detected. The programme can save up to 30 seconds of recording in memory before a trigger event.
 - **after Trigger Event** – Set a time for recording after motion is detected.

- **Disc Allocation** for Each Camera Recording – Displays the amount of disk space allocated to each camera.
 - **Initial Setting** – Select if you wish the programme to start when starting Windows.
 - **Proxy Server** – Enter proxy settings when using a proxy server.
3. Click on **Save** to save your settings and **Exit** to return to Monitor Manager.

9.3.2 Scheduling recording



1. Click on **Setup**  to change the programme's settings.
2. Select the **Recording Schedule** tab to create a recording schedule. Enter desired settings for the following:
 - **Local ID** – Select the camera to record.
 - **Interval** – Select the interval for recording.
 - **Start Date** – Start date for recording.
 - **Start Time** – Start time for recording.
 - **Duration** – Select length of recording (up to 24 hours).

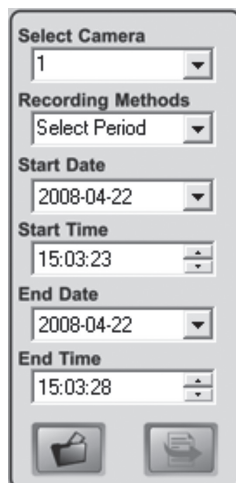
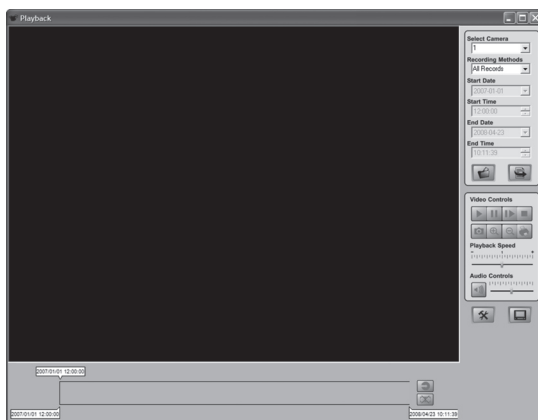
- Click **Add** to save the newly created schedule on the recording schedule list.
The programme will now automatically start recording according to the programmed schedule.
- Repeat steps 2-3 if you wish to add more recording schedules.

N.B.

In order for the recording schedule to function the **Recorder** programme must be started. The **Recorder** programme starts automatically when the Monitor Manager programme starts, and continues to be active even when Manager becomes inactive.

9.3.3 Playing back recorded files

- Click on  to open the video player.



Explanation of control functions:

Select Camera	Select a desired camera number.
Recording Methods	Select the type of recording to be viewed.
Start Date/Time	Enter the date and time you want to begin showing the recording.
End Date/Time	Enter the date and time you wish to end the showing of the recording.
Load other Cameras	Load additional cameras from the network.
Submit	Start playback according to the above settings.

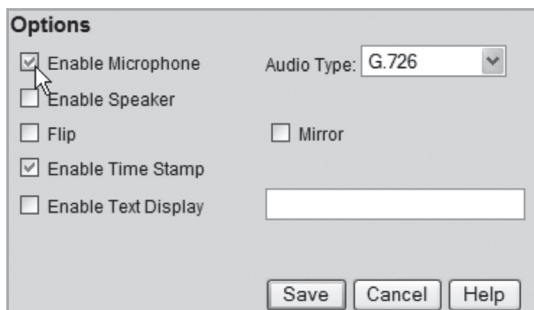
Play	Resumes playback after stopping or pausing
Pause	Temporarily stops/freezes playback
Frame by Frame	Each mouse click progress video sequences frame by frame
Stop	Stops playback
Snapshot	Takes a snapshot from the video sequence
Zoom In	Enlarges the image
Zoom Out	Reduces the image
Print	Prints out the current image
Playback Speed	Regulates playback speed
Audio Controls	Volume control
Setup	Changes programme settings
Monitor	Opens the Monitor Manager programme
Convert	Converts selected video sequence to AVI-format
Delete	Erases selected video sequence



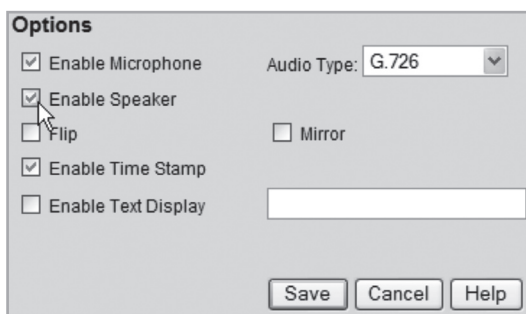
9.4 Using the microphone and speakers

The camera is equipped with a built-in microphone for audio monitoring. Audio is played back on the computer at the monitoring location.

9.4.1 Activates the camera's microphone



1. Select the **Enable Microphone** alternative in the **Video & Audio** menu.
2. Click on **Save** to save your settings.
3. Click on **View Video** to display the camera image. Audio from the camera's microphone is played on the computer's speakers.



9.4.2 Activating the camera's speaker output

1. Connect the speaker (e.g. a computer speaker) to the outlet marked **SPKR Out** (3.5 mm mono) at the back of the camera.
2. Connect a computer microphone to the computer's mic. outlet.
3. Select the **Enable Speaker** alternative in the **Video & Audio** menu.
4. Click on **Save** to save your settings.
5. Click on **View Video** to display the camera image. Audio from the microphone should now be heard from the speaker.

10. Care and Maintenance

Use a soft moist cloth to clean the product.
Never use strong detergents or solvents for cleaning.

11. Troubleshooting

It is not possible to connect to the camera/the programme does not have any contact with the camera

- Make sure that your computer's firewall is not blocking the camera's connection to the network. Turn off or reconfigure your firewall.
- Make sure that the IP address you have given to the camera corresponds to the network's series of IP addresses. Connect the camera and run the configuration programme again.
- Make sure that the network cable you are using is undamaged and of the same type that was included with the camera.
- Shortly disconnect the camera from the power source, reconnect and try again.
- Try to restart the camera by pressing the reset button on the camera's underside.

There is no connection between the camera and the wireless network

- Connect the camera with network cable and check the settings for your wireless network.
- Make sure that you have given the right security settings for your wireless network. Contact the network administrator for assistance if you do not own the network yourself.
- Try to connect another wireless device in order to make sure that your connection settings are proper and that the wireless network is functioning.

12. Disposal

When it is time to dispose of the product, dispose of it according to your local ordinances. If you are unsure please contact your municipality.

13. Specifications

Power supply	5 V DC, 2 A (via included adaptor)
Network	LAN/WLAN with support for TCP/IP, SMTP, SHCP, HTTP, DDNS 802.11b/g (WPA2-PSK, WEP, 64/128 bits security)
Network connection	Ethernet 10/100BaseT (RJ45)
Lens	F4.6 mm @ F1.89 Fixed Focus
Max. resolution	640 x 480 (VGA)
Dimensions	90 x 35 x 90 mm (W x H x L)
Operating temperature	0 °C to 40 °C
Storage temperature	0 °C to 40 °C

Declaration of Conformity



Hereby, Clas Ohlson AB declares that following product(s):

Wireless IP-CAMERA
36-2914/18-2062
RC8030/RC8030-UK

is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Article 3.1a (Safety):	EN 60950-1 EN 50385
Article 3.1b (EMC):	EN 301489-1 EN 301489-17
Article 3.2 (Radio):	EN 300328



Insjön, Sweden, June 2008

A handwritten signature in black ink, appearing to read 'Klas Balkow', with a long horizontal flourish extending to the right.

Klas Balkow
President

Clas Ohlson, 793 85 Insjön, Sweden

This product's intended usage is within the countries of Sweden, Norway, Finland and United Kingdom.

SVERIGE

KUNDTJÄNST Tel: 0247/445 00
Fax: 0247/445 09
E-post: kundtjanst@clasohlson.se

INTERNET www.clasohlson.se

BREV Clas Ohlson AB, 793 85 INSJÖN

NORGE

KUNDESENER Tlf.: 23 21 40 00
Faks: 23 21 40 80
E-post: kundesenter@clasohlson.no

INTERNETT www.clasohlson.no

POST Clas Ohlson AS, Postboks 485 Sentrum, 0105 OSLO

SUOMI

ASIAKASPALVELU Puh: 020 111 2222
Faksi: 020 111 2221
Sähköposti: info@clasohlson.fi

INTERNET www.clasohlson.fi

OSOITE Clas Ohlson Oy, Yrjönkatu 23 A, 00100 HELSINKI

GREAT BRITAIN

For consumer contact, please visit
www.clasohlson.co.uk and click on
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