

# blue PiraT2

## Camera User Guide

Version 1.9.1 - 29.01.2014



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### 3. Overview

The following documentation describes the usage of a system composed of an AXIS Video-Encoder Q7404 or P7214, the AXIS Network-Cameras 207, 210 or 211 and a blue PiraT2 data logger. The Video-Encoders are used to connect analog (PAL / NTSC) cameras. The network cameras can be connected directly.

For general points refer to the manual "User Guide". For special functions, appropriate instructions are available.

The system allows the recording of one to four different videos streams at the same time. To make it work, the server and the data logger must be connected to each other and configured separately by a HTML based client. The procedure is explained from chapter 3.

The video streams are recorded in real-time and in a specified time interval in the logger. They can be downloaded into a control unit for offline use. They can also be converted to a video file and transferred from the logger into a computer. The video block length can be adjusted between 15 and 60 seconds and the videos are stored in the mpeg4 format.

When converting into a video file, the system can combine a maximum of 400 blocks per file. The length of the blocks can change. If more video blocks are available and they cannot be converted to one file, then the system creates several files. In this way no video data is lost.

#### **Attention:**

The Video-Encoder and the cameras are not set by default to standby mode, which may be a reason for an empty battery.

After rebooting, the system takes approximately 60 seconds to be synchronized. The recording starts immediately after the synchronization.

If the Ethernet cable was removed from the Video-Encoder during the recording and plugged in again, the system takes around 11 seconds for the resynchronization.

If the supply voltage is removed from the Video-Encoder during the recording, the server takes about 54 seconds to be synchronized (after a reconnection).

AXIS camera or Video-Encoder should be operating within the AXIS specification. This is especially true for power and environmental parameters.

This document refers to blue PiraT2 FW 01.09.01 and blue PiraT2 client version 1.9.1. Some features depending on model and feature license or may not be available in older versions.

Software updates are frequently available in the blue PiraT Service Center. Please make sure to use current software.

## **4. System requirements**

### **Control Unit**

A Laptop or a PC is used to configure the devices by a software client. It also allows to save the recorded data and to use them offline.

### **blue PiraT2**

The blue PiraT2 is an optimized data logger developed by Telemotive AG. The communication of bus systems and control units are monitored and relevant data can be recorded very precisely with the blue PiraT2. The collected data are stored on the blue PiraT2 and can be downloaded to a PC

### **blue PiraT2 Ethernet Kit**

This device is connected via a FCI cable to the blue PiraT2 and via Ethernet with the AXIS Server. This establishes the connection between blue PiraT2 and the AXIS Video-Encoder and allows connecting to a Local Area Network (LAN).

### **AXIS Q7404 / P7214 Video Encoder**

The AXIS Video Encoder is a powerful standalone device with 4 channels. It integrates 4 analog cameras simultaneously into an IP-based video surveillance system. It delivers also super video quality with H.264 and significant savings in bandwidth and storage requirements.

AXIS Q7404 will use 4 different IP addresses for each group of 4 input channels.

AXIS P7214 however will use 1 IP address for each group of 4 input channels.

### **Network-Cameras**

1 to 4 cameras are supported to record the video streams. These cameras can be connected to the 4 channels of the encoder. These cameras are supported: AXIS 207, 210 and 211.

The setup of AXIS Network-Cameras 207/210/211 is similar to the configuration of AXIS Q7404 Video-Encoder.

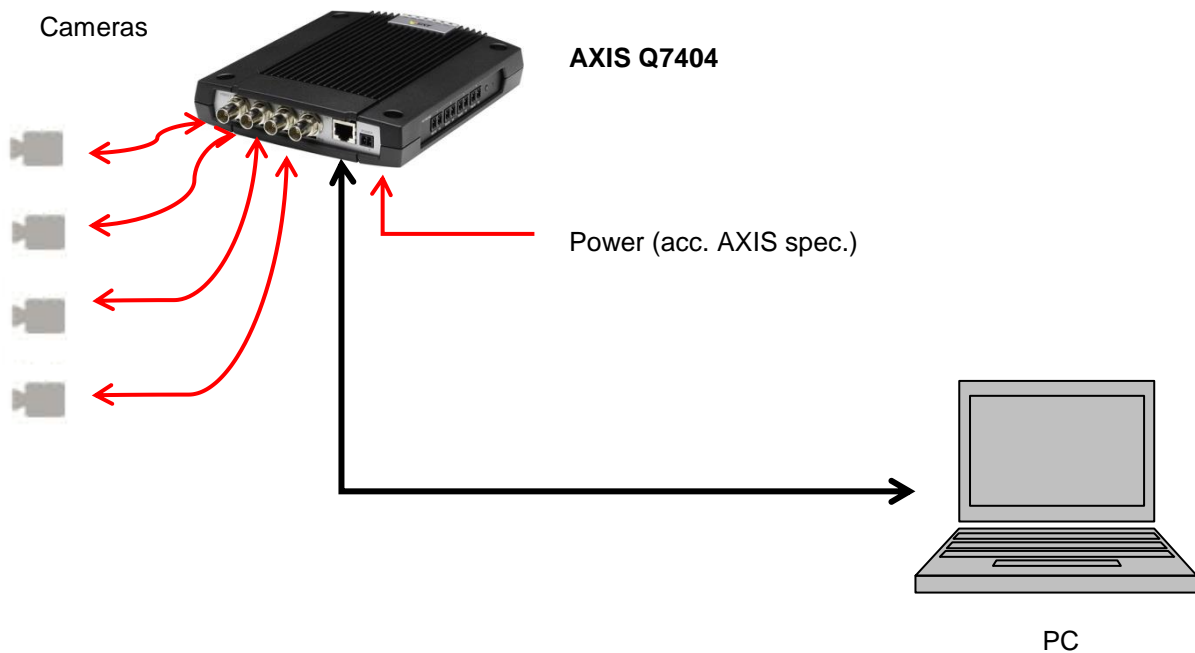
### **Camera License**

For using the camera feature, a license file must be installed on each blue PiraT2.

## 5. Setup Video Encoder AXIS Q7404

### 5.1. Connecting to the Q7404

Connect your PC with the Video-Encoder via Ethernet. The video signal has to be connected to the Video-Encoder port. Connect the Video-Encoder to the power supply. Wait until the startup is complete (All LEDs are colored in green).



Change your PC IP configuration. Use static IP address with the following setting:

IP address: 192.168.1.80
Subnet mask: 255.255.255.0

### 5.2. Access to Axis Q7404

Open your browser and type in the following URL: **192.168.0.90**

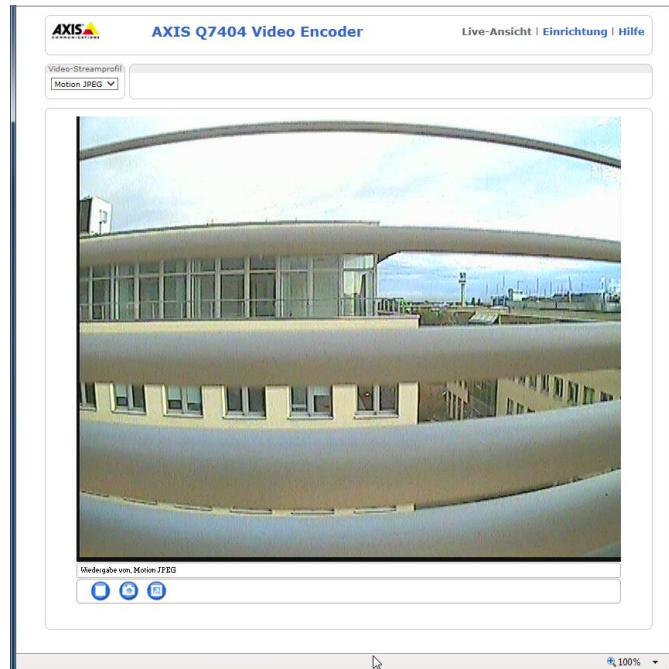
Type in your password and keep it in mind or write it down. If the system asks for a further authentication (in some cases), please type in the same user and password like before.



After setting the password please login to the Video Encoder

When you logged into the Video Encoder the first time, you can change the language settings if required.

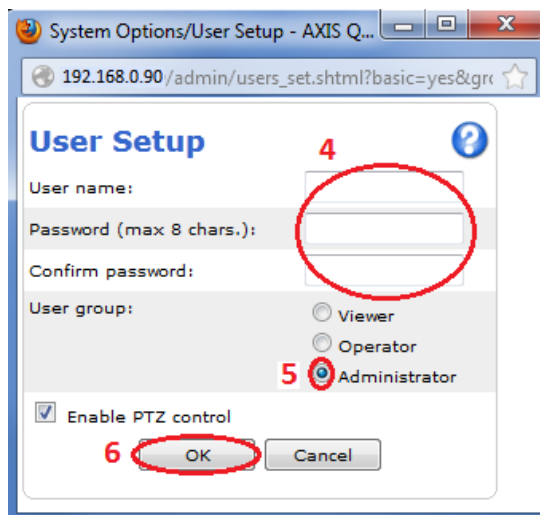
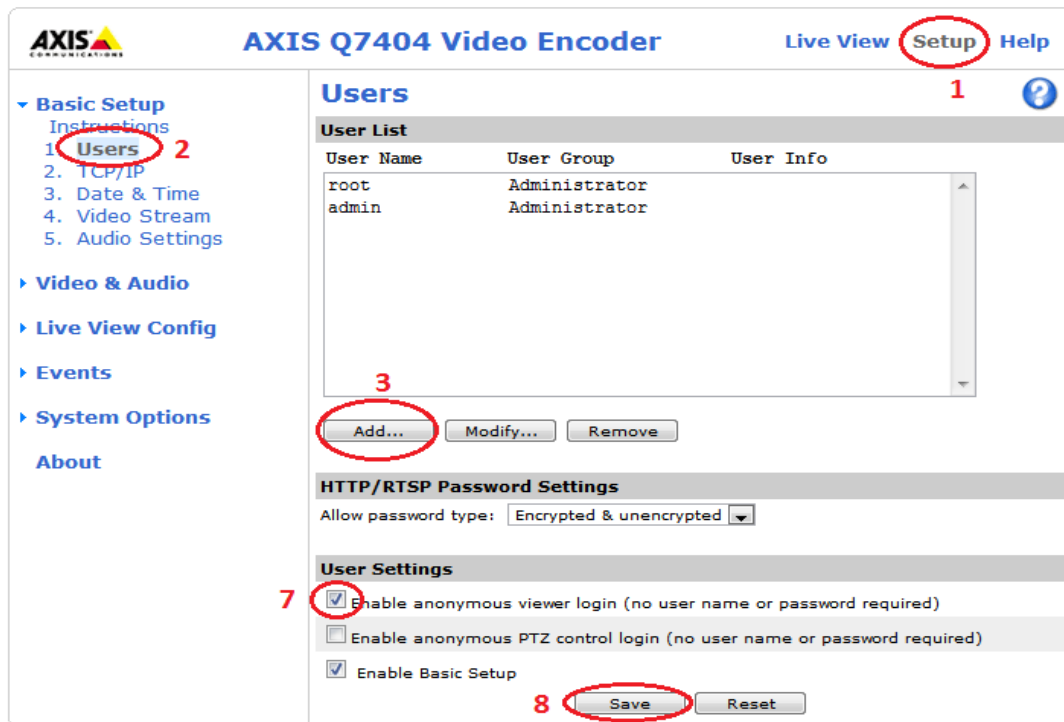
After your confirmation, you can see the live stream from camera 1.



### 5.3. Installing the admin user

The blue PiraT2 camera application needs a special user with administrator rights.

Open "Setup" (1), "Basic Setup" => "Users" (2) and choose "Add..." (3). Name the new user "admin" and define a password (4). Keep the data in mind or write it down. Choose the option "Administrator" (5) and click "OK" (6). Afterwards, mark the checkbox "Enable anonymous viewer login (no user name or password required)" (7) and confirm all with "Save" (8).



We recommend these settings:

User name: admin  
Password: 2x8bg4

**Note:**

To be sure to get access to the Video Encoder by the blue PiraT2 please use the properties above.

## 5.4. Setting date and time

Change to the entry “Date & Time” (9) and activate the checkbox “Set manually” (10).

Set up Date and Time and click “Save” (11).

### Comment:

The time set here is initially only a temporary adjustment. In our system, the data logger is the time master and overwrites it after successful synchronization with the Video-Encoder, with the logger time.

The screenshot shows the 'Date & Time Settings' page in the AXIS Q7404 Video Encoder web interface. On the left, a navigation menu lists 'Basic Setup' with sub-items: 'Instructions', '1. Users', '2. TCP/IP', '3. Date & Time' (circled in red and labeled '9'), '4. Video Stream', and '5. Audio Settings'. Below this are 'Video & Audio', 'Live View Config', 'Events', 'System Options', and 'About'. The main content area is titled 'Date & Time Settings' and contains several sections: 'Current Server Time' (Date: 2012-07-20, Time: 18:15:59), 'New Server Time' (Time zone: GMT (Dublin, Lisbon, London, Reykjavik), a checkbox for 'Automatically adjust for daylight saving time changes', and 'Time mode' options: 'Synchronize with computer time', 'Synchronize with NTP server' (NTP server: No server specified), and 'Set manually' (10, circled in red). Below this is 'Date & Time Format Used in Images' with 'Specify date format' (Predefined: YYYY-MM-DD, Own: %F) and 'Specify time format' (Predefined: 24h, Own: %T, With resolution: 1 second). At the bottom, the 'Save' button (11, circled in red) and 'Reset' button are visible.

You can also display the date and time on the video image. The settings for this feature are described in the following.

### Attention:

Always set the blue PiraT2 time before you start logging. It is impossible to change the timestamp at recorded video data. This means, the setup of a new logger time before downloading does not change the time within the video pictures. In this case, the timestamps of the other channels and the video picture timestamp could not match.

The setup for embedded timestamp has to be done in the Video-Encoder setup. If the date and time are already set up like described within step 9, 10 and 11 (see above), the format can be set up under „Date and Time Format Used in Images“. Confirm these settings with “Save”.

Click on “Video Stream” (6) and set up the Overlay Settings. Activate both checkboxes “Include date” and “Include time” (7). If desired, change the format options like “Text color”, “Background color”, “Text Place” (8) and so on. Confirm the settings again with “Save” (9).



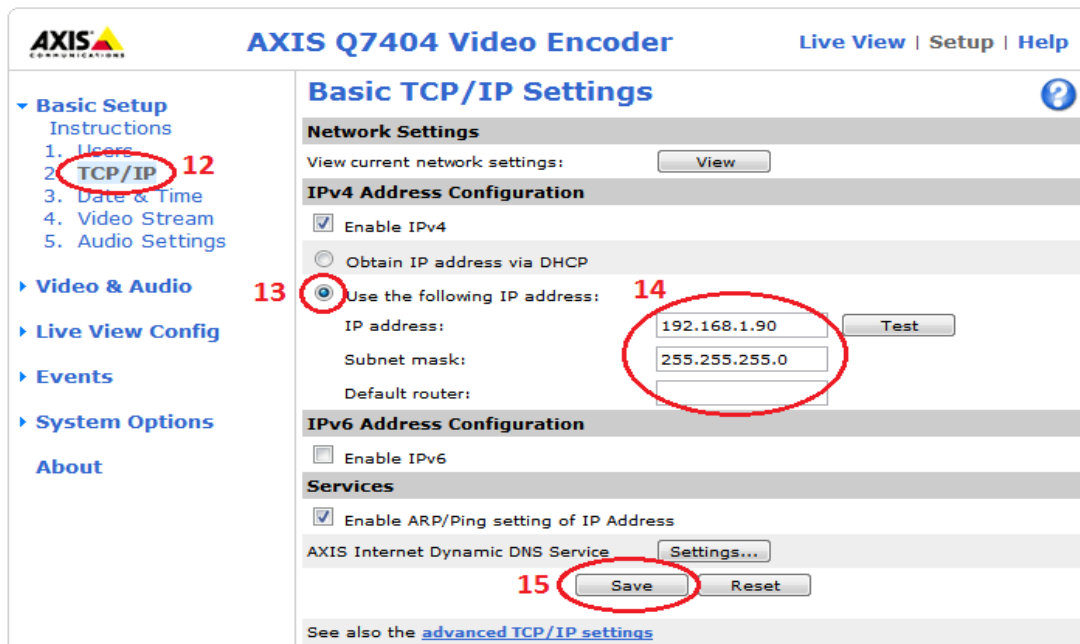
The set up for embedded timestamp is finished.

## 5.5. IP-configuration

Change to the entry "TCP/IP" (12) and use static IP (13) with the following data (14):

IP address:	192.168.1.90
Subnet mask:	255.255.255.0

Confirm your setting with save (15).



### Note:

By pressing [Save] the new IP address is set to the Video Encoder and in this moment you loose the connection to the device!

For reconnecting you have to connect to the Video Encoder again as described in chapter 5.2.

The first camera, connected to the Video-Encoder, is now configured. If more than one camera should be connected, the same changes for all connected cameras has to be done

	<b>camera 2</b>	<b>camera 3</b>	<b>camera 4</b>
IP address	192.168.1.91	192.168.1.92	192.168.1.93
subnet mask	255.255.255.0	255.255.255.0	255.255.255.0

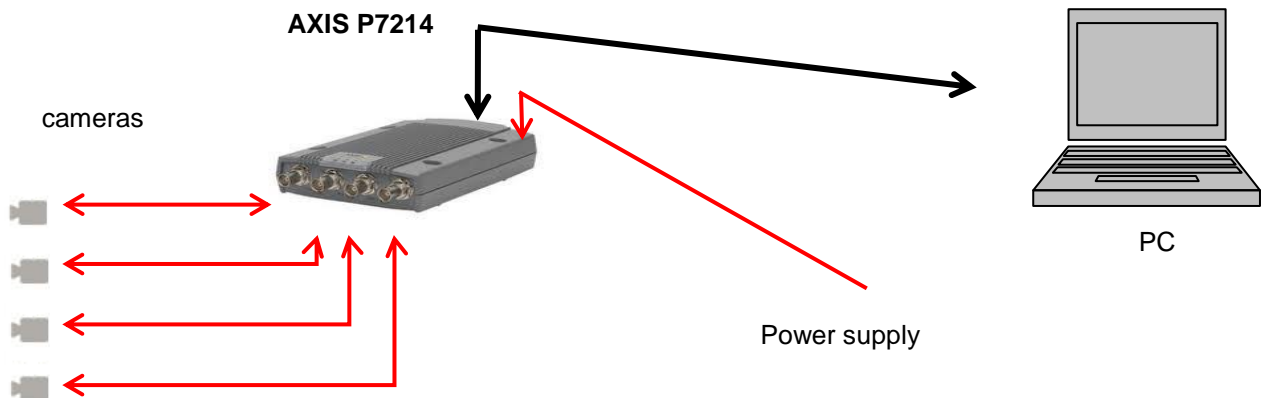
**Note:**

Change your computers IP configuration back to dynamic configuration.

## 6. Setup Video Encoder AXIS P7214

### 6.1. Connecting to the P7214

Connect the AXIS P7214 via Ethernet to your PC and to the power supply. The video signal has to be connected to the Video-Encoder port. Wait until the startup is complete (All LEDs are colored in green).



Change your PC's IP configuration. Use static IP address with the following settings

IP address:	192.168.1.80
Subnet mask:	255.255.255.0

### 6.2. Access to Axis P7214

Open your browser and type in the following URL: **192.168.0.90**

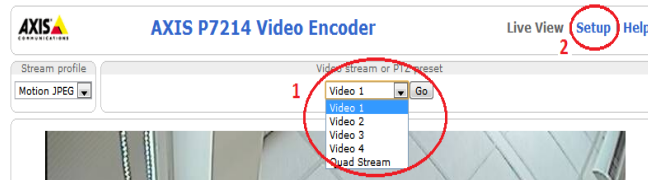
Type in your password and keep it in mind or write it down. If the system asks for a further authentication (in some cases), please type in the same user and password like before.

The screenshot shows the web interface of the AXIS P7214. The top section is titled 'Create Certificate' and includes a button 'Create self-signed certificate...'. The bottom section is titled 'Configure Root Password using HTTP' and contains fields for 'User name:' (pre-filled with 'root'), 'Password (max 64 characters):', and 'Confirm password:'. An 'OK' button is located at the bottom right of this section. Below the form, there is a warning message: 'The password for the pre-configured administrator root must be changed before the product can be used.' and a note: 'If the password for root is lost, the product must be reset to the factory default settings, by pressing the button located in the product's casing. Please see the user documentation for more information.'

After setting the password please login to the Video Encoder

When you logged into the Video Encoder the first time, you can change the language settings if required.

After your confirmation, you can see the live stream from camera 1.

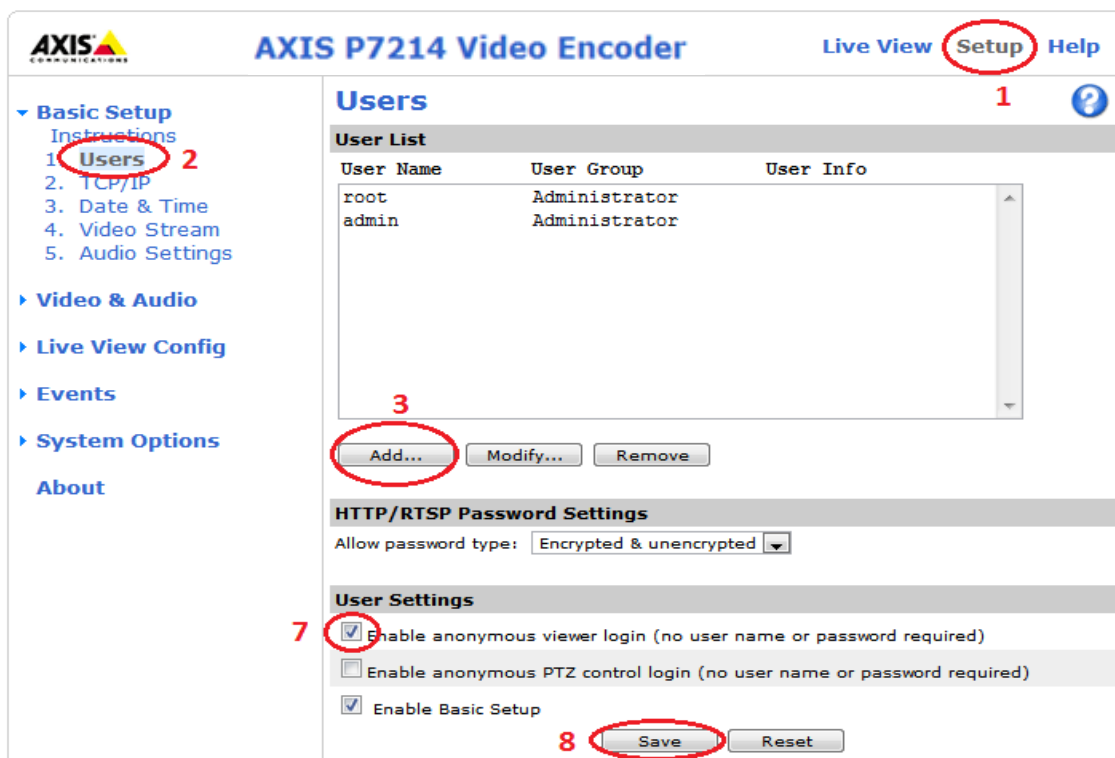


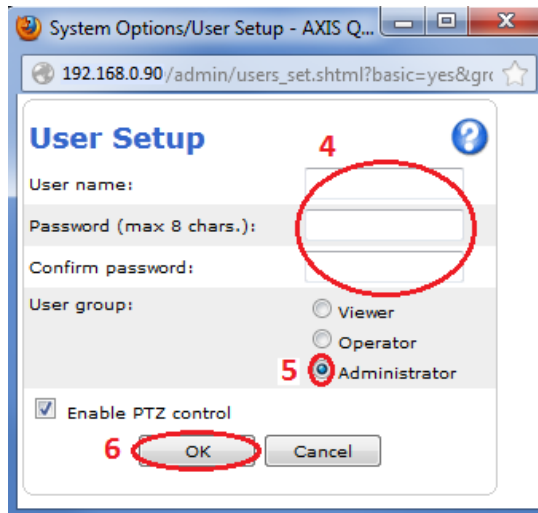
To have a look at the other cameras please choose the one you want to see in the drop-down menu.

### 6.3. Installing the admin user

The blue PiraT2 camera application needs a special user with administrator rights.

Open "Setup" (1), "Basic Setup" => "Users" (2) and choose "Add..." (3). Name the new user "admin" and define a password (4). Keep the data in mind or write it down. Choose the option "Administrator" (5) and click "OK (6). Afterwards, mark the checkbox "Enable anonymous viewer login (no user name or password required)" (7) and confirm all with "Save" (8).





**We recommend these settings:**

User name: admin  
Password: 2x8bg4

**Note:**

To be sure to get access to the Video Encoder by the blue PiraT2 please use the properties above.

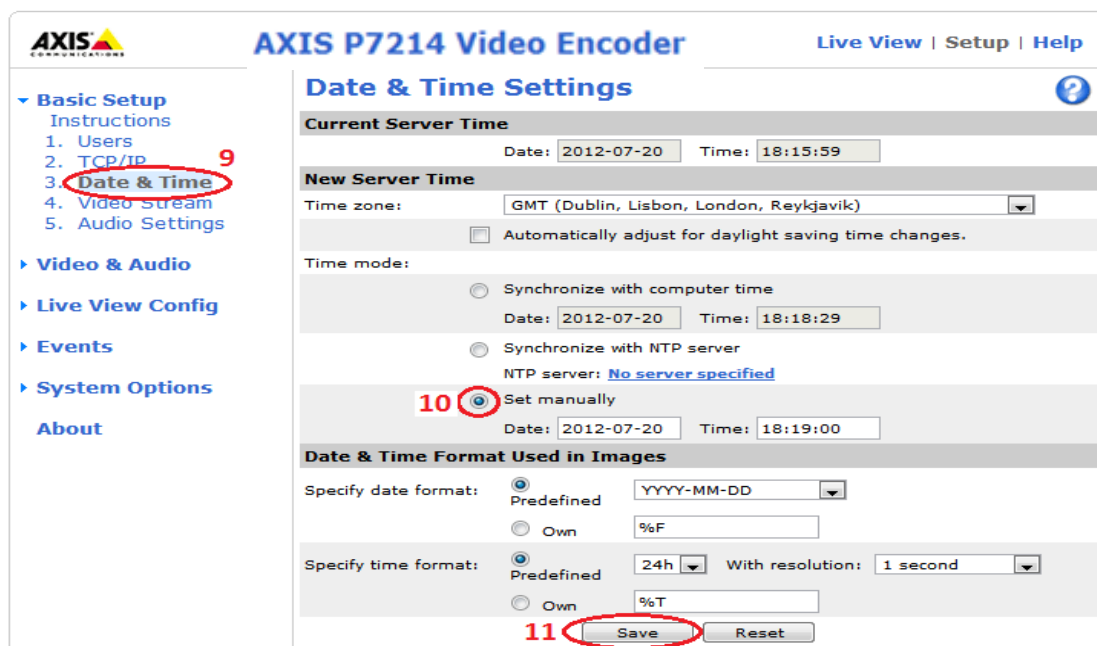
### 6.4. Setting date and time

Change to the entry "Date & Time" (9) and activate the checkbox "Set manually" (10).

Set up Date and Time and click "Save" (11).

**Comment:**

The time set here is initially only a temporary adjustment. In our system, the data logger is the time master and overwrites it after successful synchronization with the Video-Encoder, with the logger time.



You can also display the date and time on the video image. The settings for this feature are described in the following.

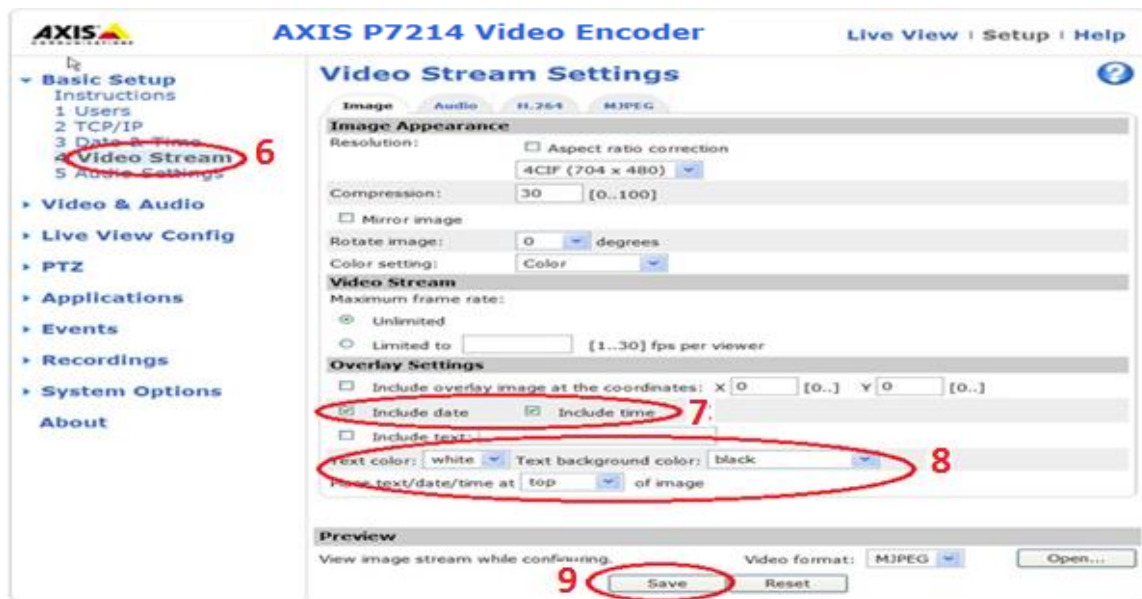


**Attention:**

Always set the blue PiraT2 time before you start logging. It is impossible to change the timestamp at recorded video data. This means, the setup of a new logger time before downloading does not change the time within the video pictures. In this case, the timestamps of the other channels and the video picture timestamp could not match.

The setup for embedded timestamp has to be done in the Video-Encoder setup. If the date and time are already set up like described within step 9, 10 and 11 (see above), the format can be set up under „Date and Time Format Used in Images“. Confirm these settings with “Save”.

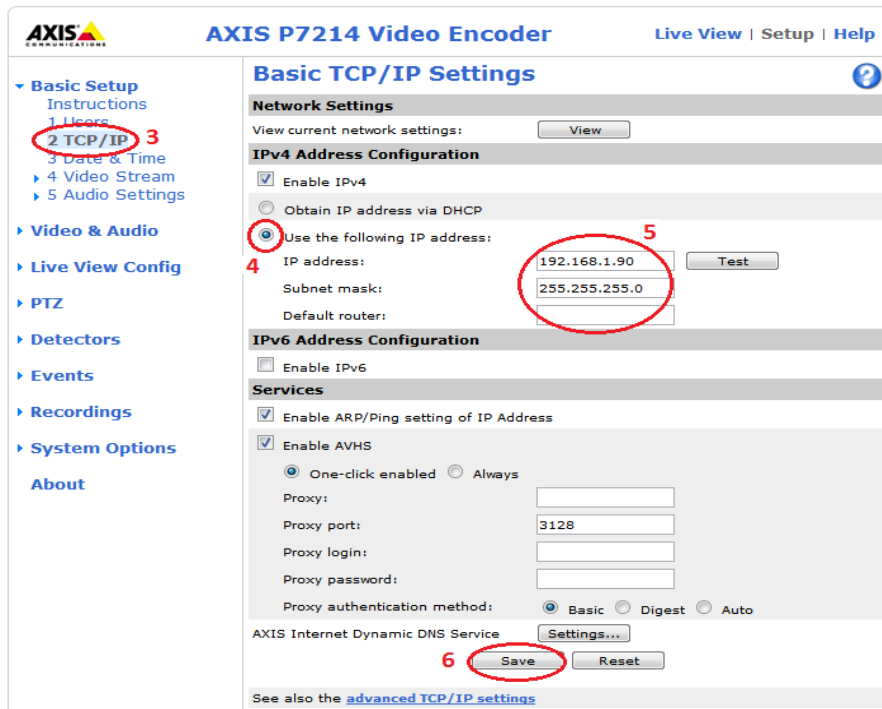
Click on “Video Stream” (6) and set up the Overlay Settings. Activate both checkboxes “Include date” and “Include time” (7). If desired, change the format options like “Text color”, “Background color”, “Text Place” (8) and so on. Confirm the settings again with “Save” (9).



**6.5. IP-configuration**

Change to the entry “TCP/IP” (3) and use static IP (4) with the follow data (5) and confirm the setting (6):

IP address:	192.168.1.90
Subnet mask:	255.255.255.0



The AXIS P7214 has only one IP address. The configuration of a camera automatically changes the settings of the others. It is therefore unnecessary to set the other cameras.

**Note:**

Change your PCs IP configuration back to dynamic configuration.

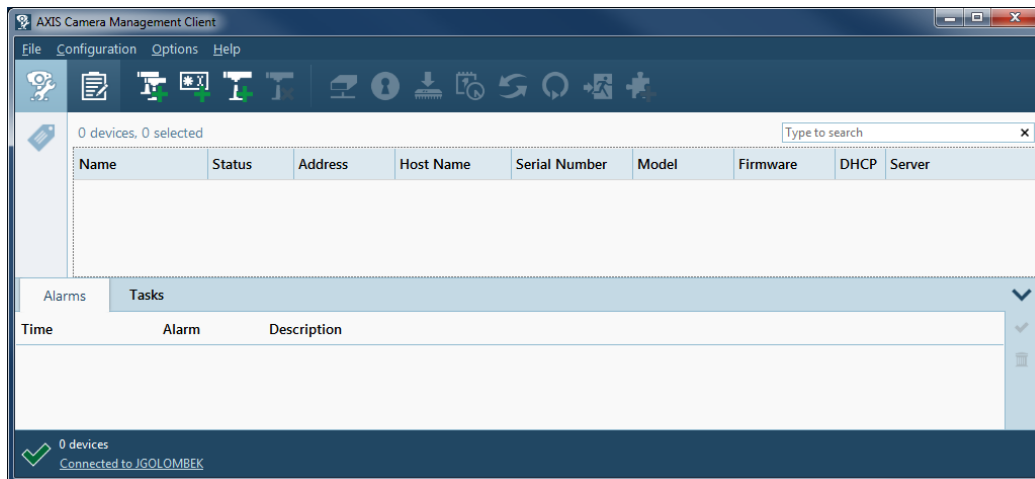
## 7. Save and restore the Video Encoder settings

To save all settings of the Video Encoder you can use the tool **AXIS Camera Management Software**, which you can download from AXIS after registration.

[http://www.axis.com/de/products/cam\\_mgmt\\_software/interface.htm](http://www.axis.com/de/products/cam_mgmt_software/interface.htm)

After installing the software you can start it by using

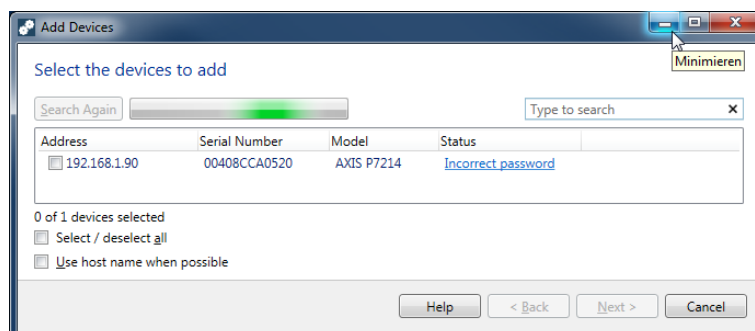
Start => *AXIS Camera Management* => *AXIS Camera Management Client*

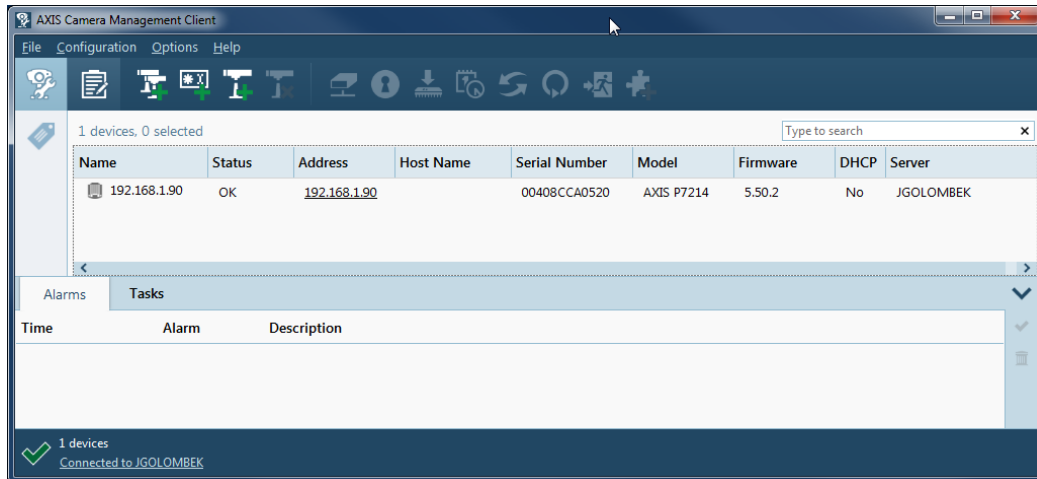
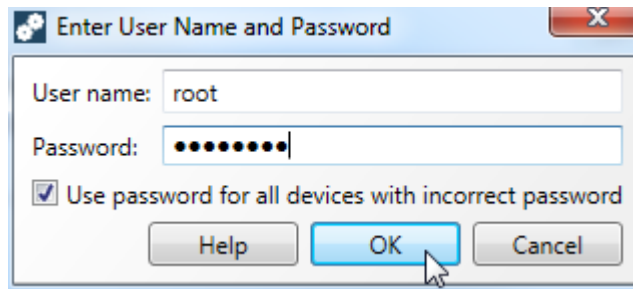


You can add your device by clicking to **[Add devices]**

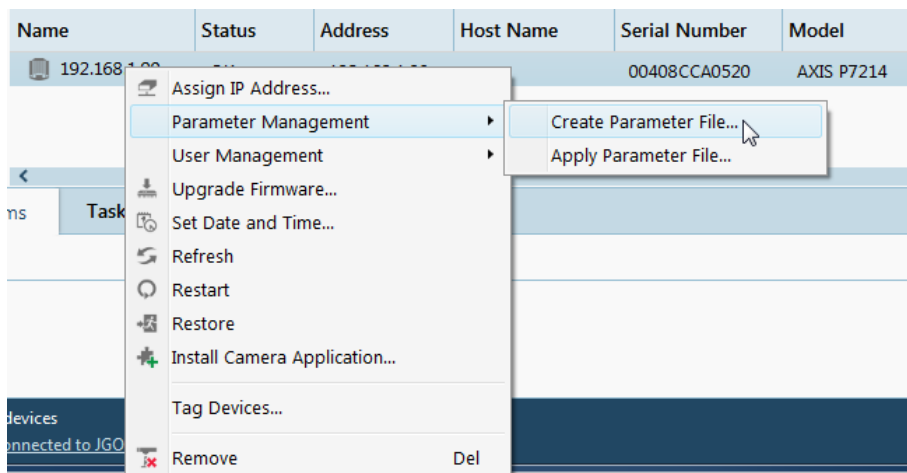


After selecting your device and connecting to the Video Encoder you add the device with **[Next>]** and **[Finish]** in the next window.





To save the current settings please rightclick your device and use the option => Parameter Management => Create Parameter File ...



With **[X] Select / Deselect all** and then **[Save]** you can save the configuration of the Video Encoder to your local system..

To restore the saved settings to your device please use the option => Parameter Management => Aply Parameter File ...

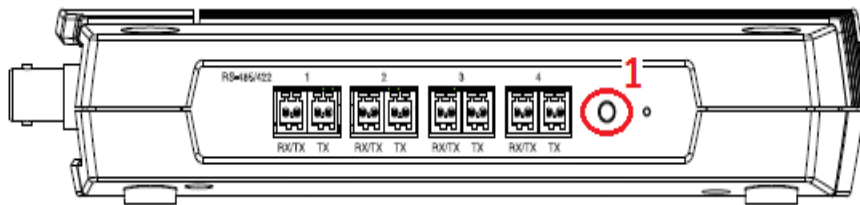
## 8. Resetting the Video Encoder AXIS Q7404 or P7214

If something is configured incorrectly in the camera or the password is lost, it is important to reset the video-server for a new configuration. This will reset all parameters in all 4 video channels (including all IP addresses) to the factory default settings:

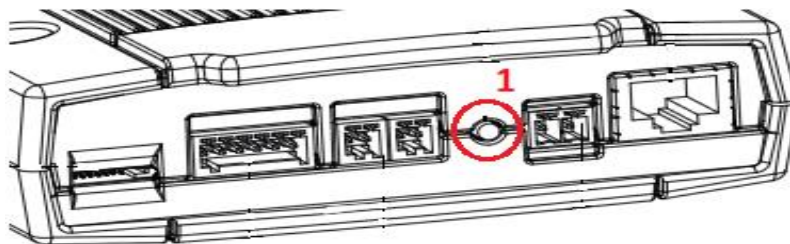
First disconnect the power from the AXIS Server.

Then press and hold the "RESET button" (1) and reconnect power.

### AXIS Q7404



### AXIS P7214



Keep the RESET button pressed until the status LED turn amber. This may take up to 15 seconds.

Hold the RESET button until the status LED display permanently green (which can take up to 1 minute). The process is complete and the video encoder has been reset.

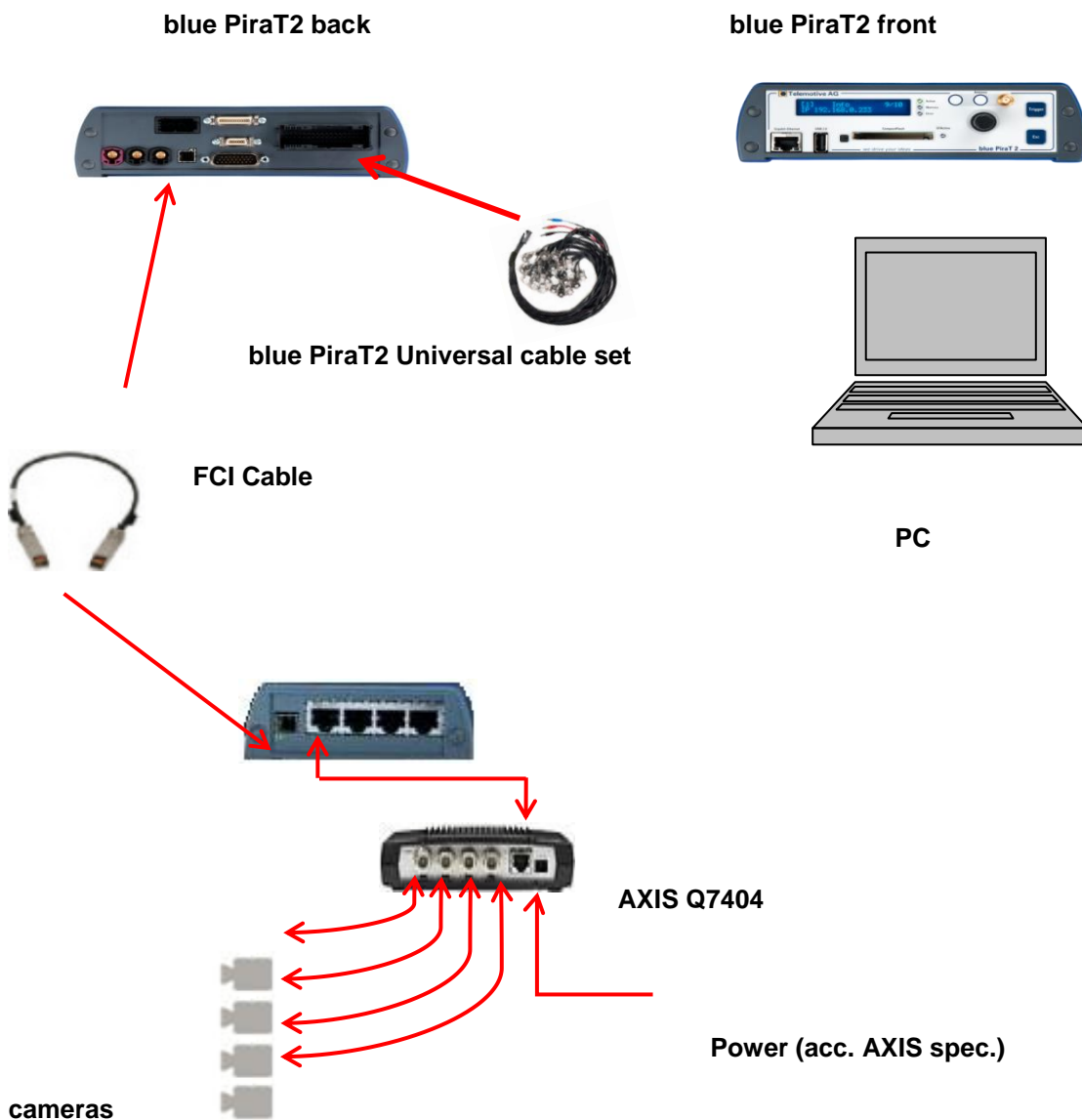
The video-server is set back to factory defaults now and can be configured again.

## 9. Connecting AXIS Video Encoder to blue PiraT2

There are two possibilities, to connect the Video-Server or Network-Camera to a blue PiraT2. Either you connect both via Gigabit Ethernet-Port (front side), or by using the Ethernet-Kit on the backside of the Blue PiraT2. The last one should be preferred. In this case the front connector could use for access the Video-Server during data recording.

Connect the Gigabit-Ethernet port of the logger via a Ethernet cable with the Ethernet port of your PC. (Note: the blue PiraT2 is configured as DHCP-Server as default!). Connect the blue PiraT2 via the power harness (red/+/clamp30 and black/GND/-/clamp31) with the vehicle battery or a power supply.

Connect the blue PiraT2 via the FCI cable with the blue PiraT2 Ethernet Kit and the Ethernet Kit with the AXIS Server via Ethernet. The video signal has already to be connected to the Video-Encoder port. Connect the AXIS Server to the power supply. Wait until the startup is complete (All LEDs are colored in green).



## 10. Configuring stand alone cameras AXIS 207/210/211

By using an blue PiraT2 without an switch or build in switch you have to connect the camera with an Crossover Ethernet cable. This is a point to point connection without autonegotiation.

### 10.1. Further applicable documents

- AXIS 207 User Manual [1]
- AXIS 210 User Manual [2]
- AXIS 211 User Manual [3]

### 10.2. Configuration of the Ethernet camera AXIS 207/210/211

#### Warning:

The camera must have installed at least the firmware version 4.40. If there is another firmware version installed it is recommended to downgrade to version 4.40.

Any camera that is used with the blue PiraT2 data logger must have a special configuration. There is the possibility of manual and automatic (recommended) camera configuration.

The **manual configuration** is done over the camera web interface.

The recommended **automatic configuration** is done with the "AXIS Camera management" SW tool. A blue PiraT2 camera configuration template is available.

### 10.3. Automatic configuration (recommended)

#### Needed SW:

1. AXIS Camera Management v2.00.31

<http://www.axis.com/techsup/software/index.htm>

#### Camera configuration steps:

1. Check/Update camera FW v4-40 ([1],[2] ,[3] or **AXIS online**)
2. Resetting camera to the Factory Default Settings. ([1],[2] ,[3] Chapter: „ *Resetting to the Factory Default Settings* “).
3. Connect the camera with the PC/Laptop via a cross-over Ethernet cable.
4. Set the password ([1],[2],[3] Chapter: „*Set the password* “).
5. Install blue PiraT camera configuration-template on the camera with „AXIS Camera Management“
6. Add camera user „admin“

The camera configuration steps 4 und 5 are described in the following chapters. The displayed figures contain screen shots of the AXIS camera management tool.

#### 10.3.1. Installing the camera configuration-template

Installing the camera configuration-template „blue PiraT\_Kamera\_AXIS-ConfigTemplate\_vX.X.cmt“ will automatically configure the camera to be used with the blue PiraT camera application.

The template can be downloaded in our ServiceCenter.

1. Open with „Apply Template“ menu the delivered blue PiraT2 camera configuration-template
2. Confirm the “Apply Template Dialog” with OK
3. Check the configuration process in the “Results” Dialog.

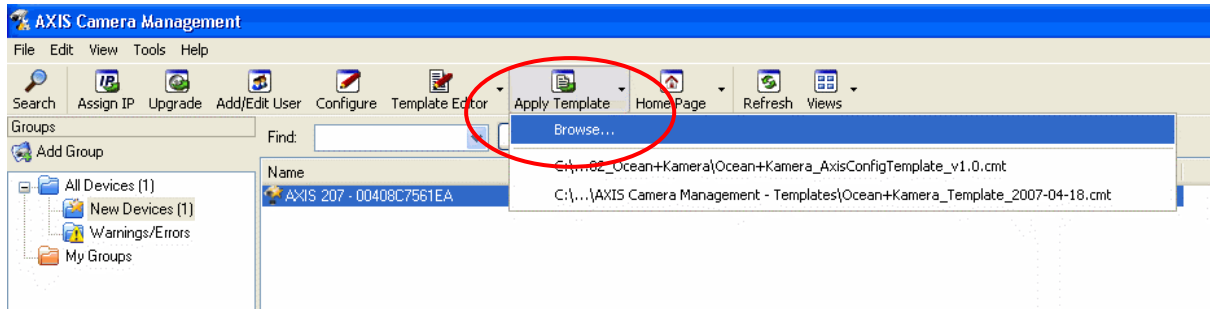


Figure 1: Open blue PiraT2 camera configuration-template

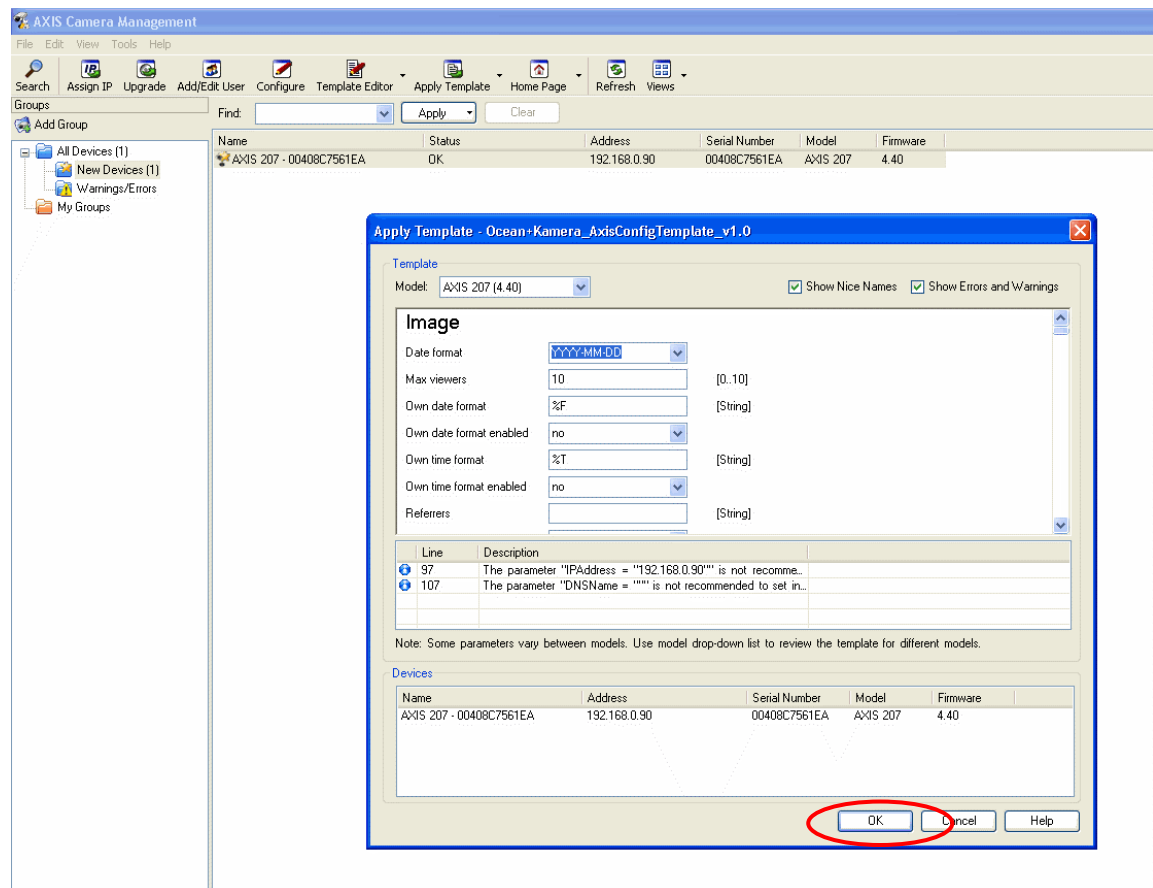


Figure 2: Confirm the “Apply Template Dialogue” with OK



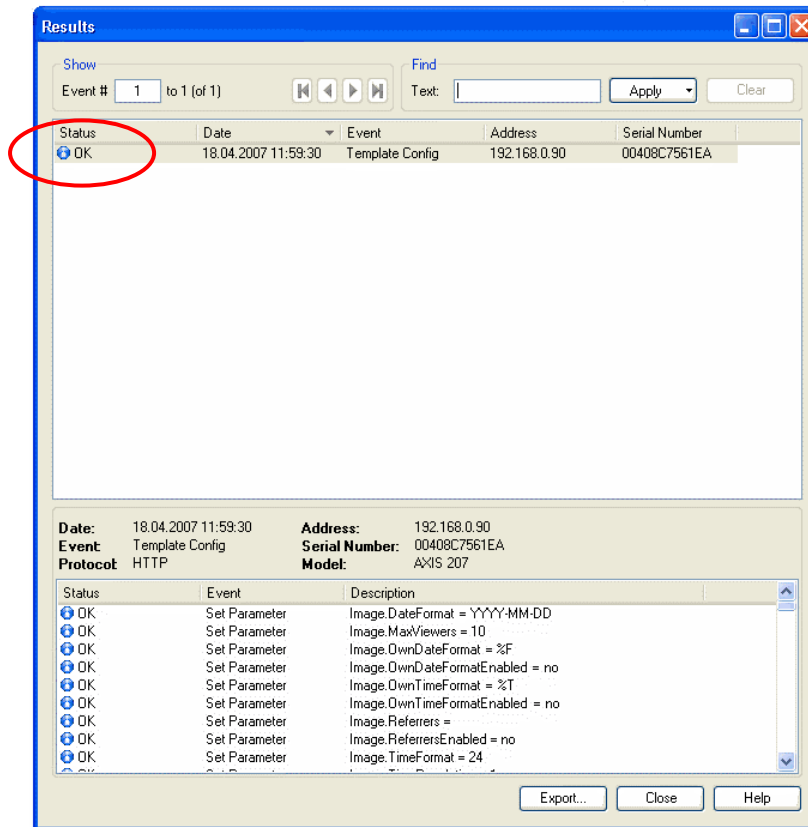


Figure 3: Check the configuration process in the “Results” dialogue

### 10.3.2. Adding the camera user „admin“

The blue PiraT2 camera application needs a special user „admin“.

1. Select configured AXIS camera and activate the camera menu with the right mouse button.  
“User Management -> Add/Edit User...”
2. Add user „admin“.

#### User “admin” properties:

**User name:** admin  
**Password:** 2x8bg4  
**Access rights:** Administrator

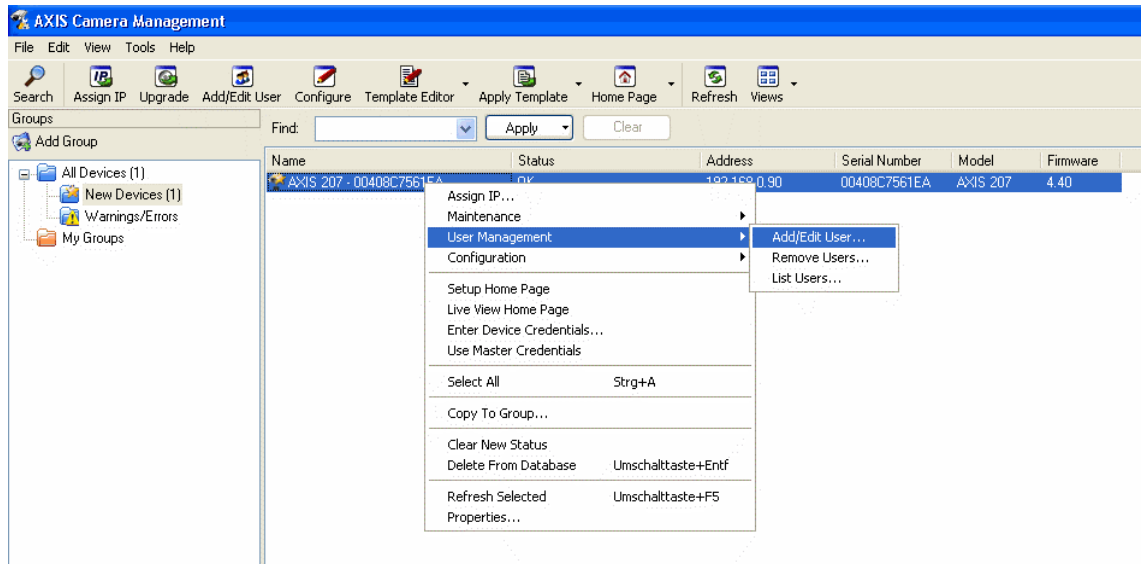


Figure 4: Select the “Add/Edit User...” dialog



Figure 5: Adding the camera user “admin”

## 10.4. Manual configuration of AXIS 207/210/211

Please connect the camera with the PC/Laptop via a cross-over Ethernet cable, enter the camera's IP address in your web browser and click on *Setup*. If you don't know the camera's IP address, use the IP-Utility tool on the Axis CD-ROM for detection.

If it is still not possible to connect to the camera setup, please reset the camera via hardware reset (this is described in the camera manual), use the fix IP address 192.168.0.10 for your PC/Laptop and enter the default camera IP (192.168.0.90) in your web browser.

A step by step configuration of the camera is described in the following chapters below.

The following instructions are illustrated by screenshots of the camera setup of the Axis 210. The layout of the other supported cameras 207, 207W and 211 can differ.

### Note:

All modifications of one setup screen must be applied by the "Save" button. Otherwise the settings will not be stored.

Otherwise

### 10.4.1. Reset configuration

Before starting with the configuration, the camera should be reset to original factory settings. To do so, press the **Default** button in **Options** → **Maintenance** → **Maintain Server**.

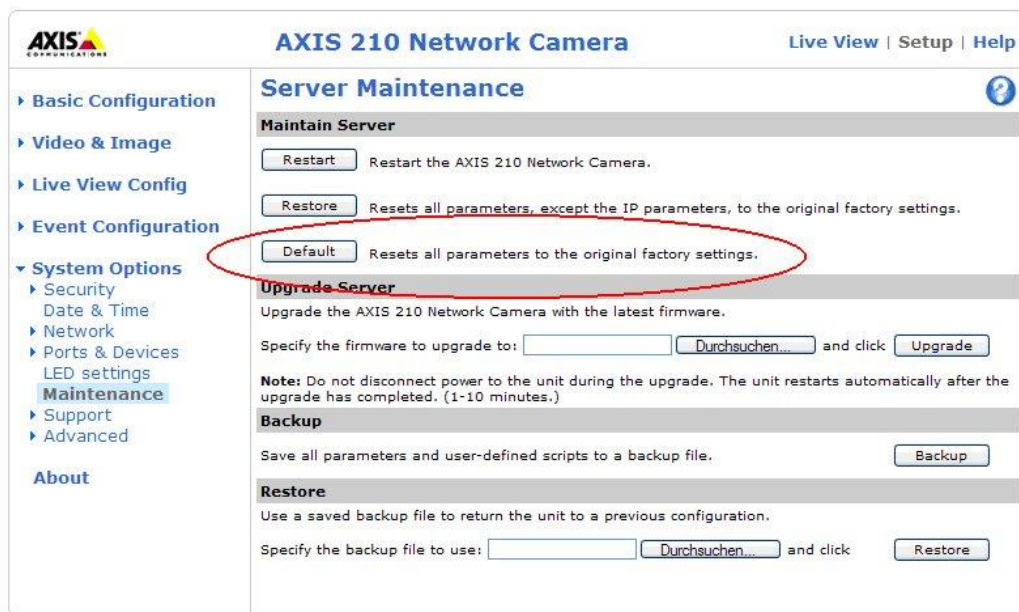


Figure 6: Resetting the camera settings

### 10.4.2. Setting up the IP-address

Enter the following values under **Basic Configuration** -> **TCP/IP**:

**IP-Address:** 192.168.0.XXX  
**Subnet:** 255.255.255.0  
**Default-Router:** 192.168.0.1

Note: The same IP-address has to be used in the data logger's configuration (Recommendation: 192.168.0.90)

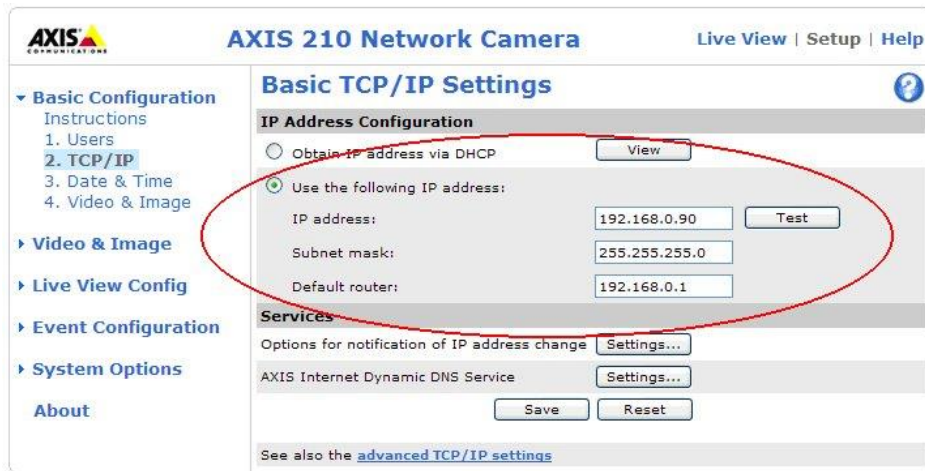


Figure 7: TCP/IP settings

### 10.4.3. Create admin user account

For the aim of automatic time synchronization between the data logger and the camera it is necessary to create an admin user account on the camera. This can be done under **Basis Configuration** → **Users**.

Press "Add..." below the *User List* to create a new user account. Enter the following settings:

User: admin  
Passw.: 2x8bg4  
User group: Administrator

The checkbox **Enable anonymous viewer login** must be selected!

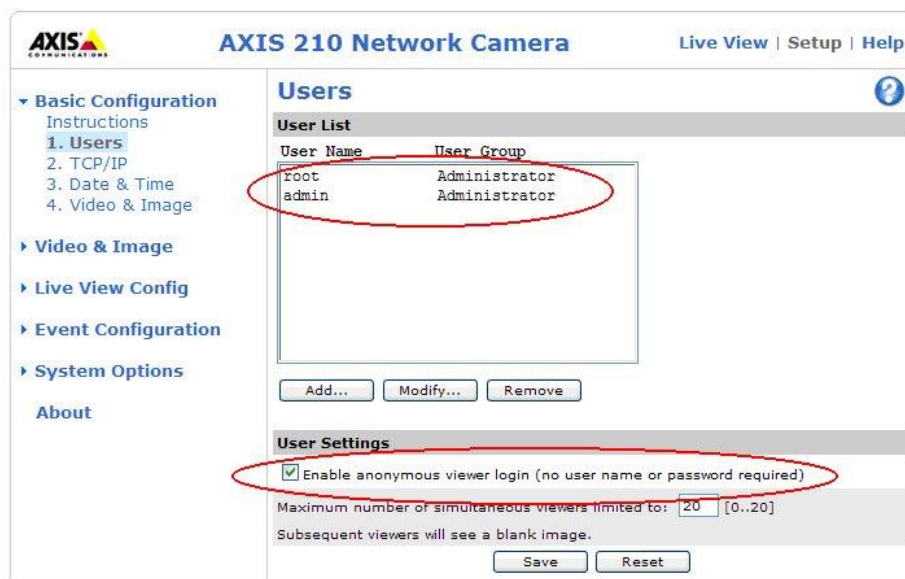


Figure 8: Create admin account

If you want to use an individual password for the camera (not default), than you have to **deactivate** checkbox **Enable anonymous viewer login**. Now you can change the password for user: admin individually

**Caution:** This password has also to be configured in the client.

#### 10.4.4. Video and image settings

To display the data logger time at the top of the video image, the checkboxes **Include date** and **Include time** under **Video & Image** → **Image**. The stream should be limited to 15 fps.

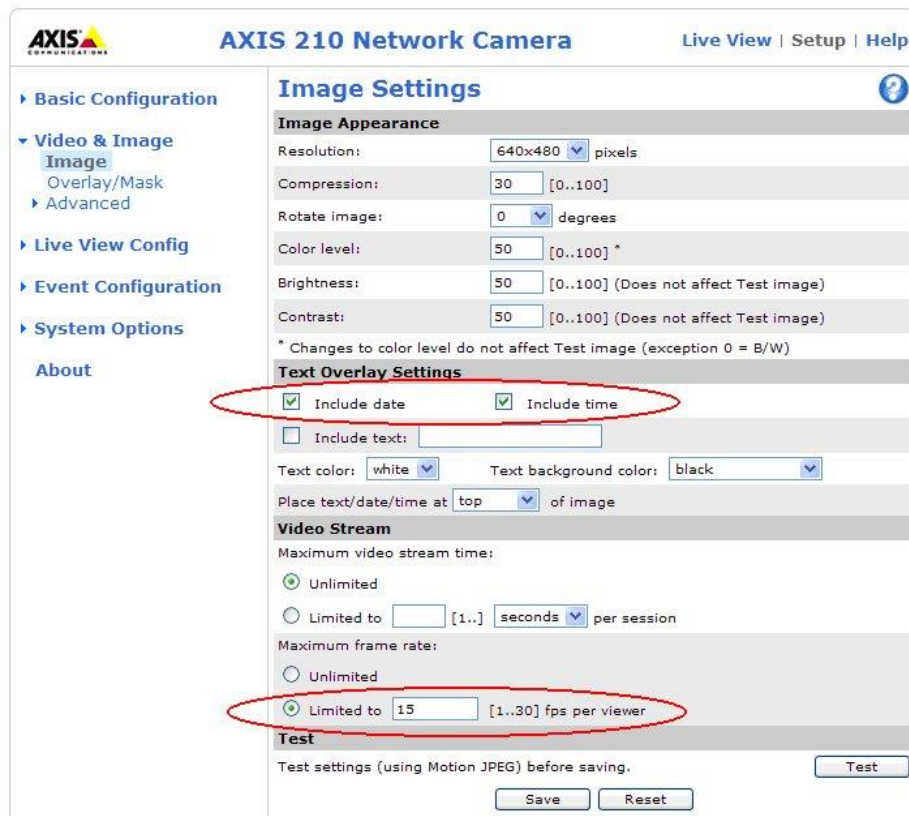


Figure 9: Video and image settings

#### 10.4.5. Date and time settings

Choose **Set manually** as **Time mode** under **Basic Configuration** → **Date & Time** → **New Server Time**. The text fields below this setting don't have to be filled in. The data logger manages the time synchronization between camera and logger.

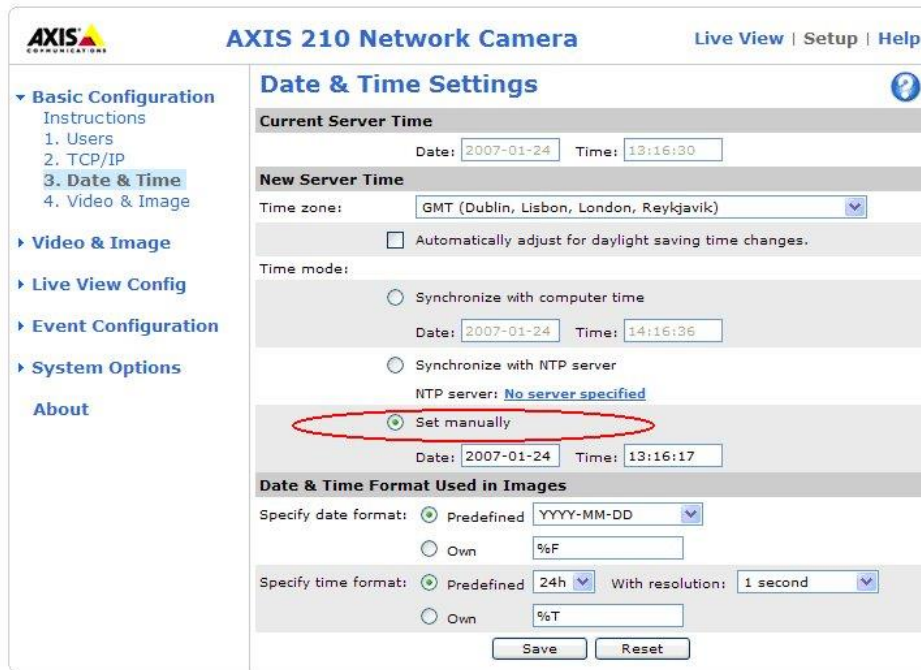


Figure 10: Date and time settings

#### 10.4.6. MPEG-4 settings

The following settings have to be entered under **Video & Image** → **Advanced** → **MPEG-4**:

**Length: 32 (GOV Settings). The maximum bit rate is limited to 3000 kbit/s (Bit Rate Control)**

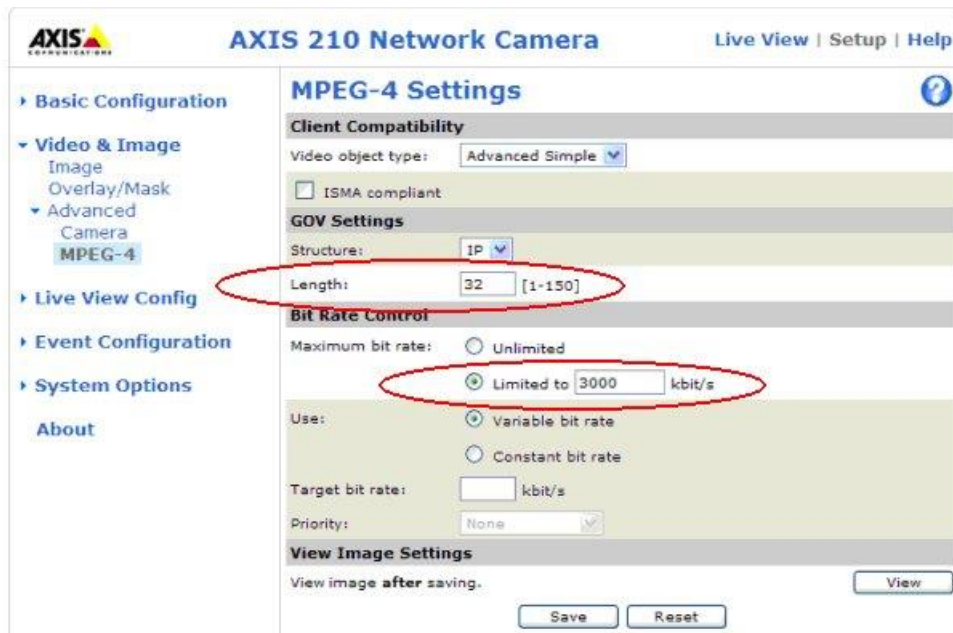


Figure 11: MPEG-4 settings

## 11. Preparing the blue PiraT2

### 11.1. Startup blue PiraT2

Switch the blue PiraT2 on by pressing the [Trigger] button (1) and wait until the Logger is ready (Startup display disappears). By pressing the rotary knob (2) you will enter the Operation menu. Here choose the Menu „[1] Info“ and then the Info-Screen „9/10 IP-address“(3).

Open your web browser and enter the IP address that appears on the display of Logger (4). The connection between Logger and PC will be established (5).

Note: Java Runtime Environment (JRE) 32-bit is necessary to run the program!



4.



A mouse click on the blue PiraT2 screen starts the Client download (~60MB). Confirm the installation by pressing [Execute]. Follow the installation steps, choose a directory and finalize the installation by pressing [Install]. After successful installation you will find a blue Pirat2 client icon on your desktop. Double-click the icon to start the application.

In the „Network Logger“ window you will find the connected data logger. By pressing one of the 5 icons (6) you can choose one of the desired operations below.



Download data



Convert data



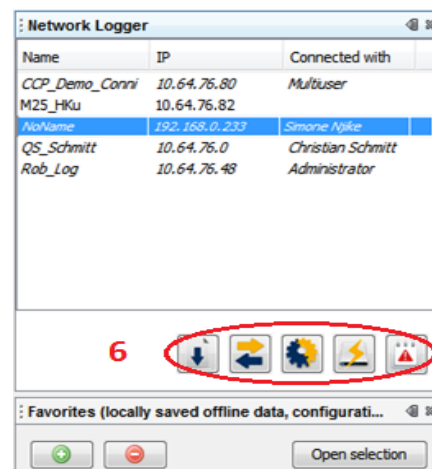
Open configuration



Update firmware



Open bug report



## 11.2. Shutting down blue PiraT2 manually

To shut down the blue PiraT2 manually you can use the rotating knob (1) by choosing **[3] Functions**, shown in the display (2) and accept the Standby mode by pressing the rotating knob.



To restart the logger please use the **ON/Trigger** button (3).

The second way to go into standby mode is to press [ESC] button (4) for 5 seconds till the memory- and error5-LEDs are blinking for a short period of time.



To restart the logger please use the **ON/Trigger** button (6).

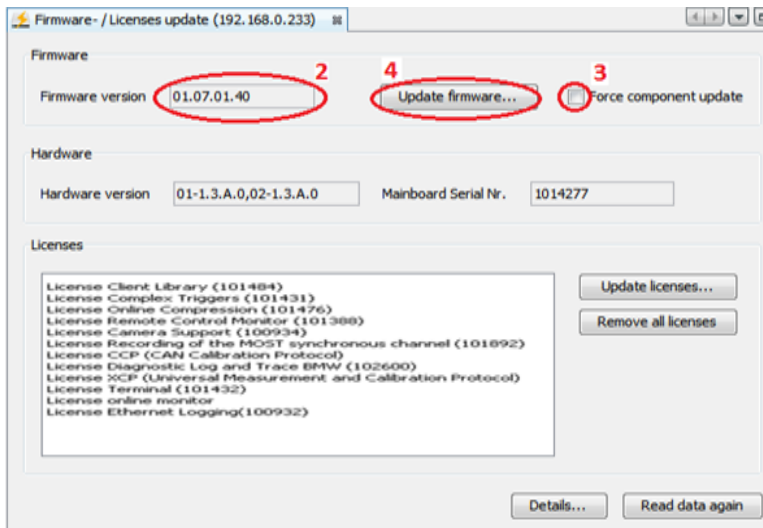
## 11.3. Updating the blue PiraT2's firmware

After clicking on the "Update firmware" button (1), the current version of the firmware on the data logger appears (2). Check the button "Force component update" (3) to flash the same version again or to reinstall an older version on the logger.

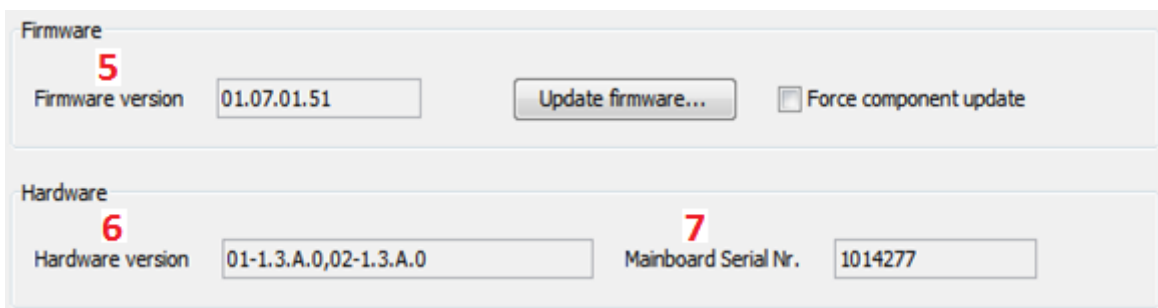


Click on the "Update firmware"- button (4) and select the file containing the wanted version (the file extension should be .dat). Open it and wait until the update process is completed.





As for the firmware (5), the current hardware version (6) appears. There is the Mainboard Serial Number too (7).

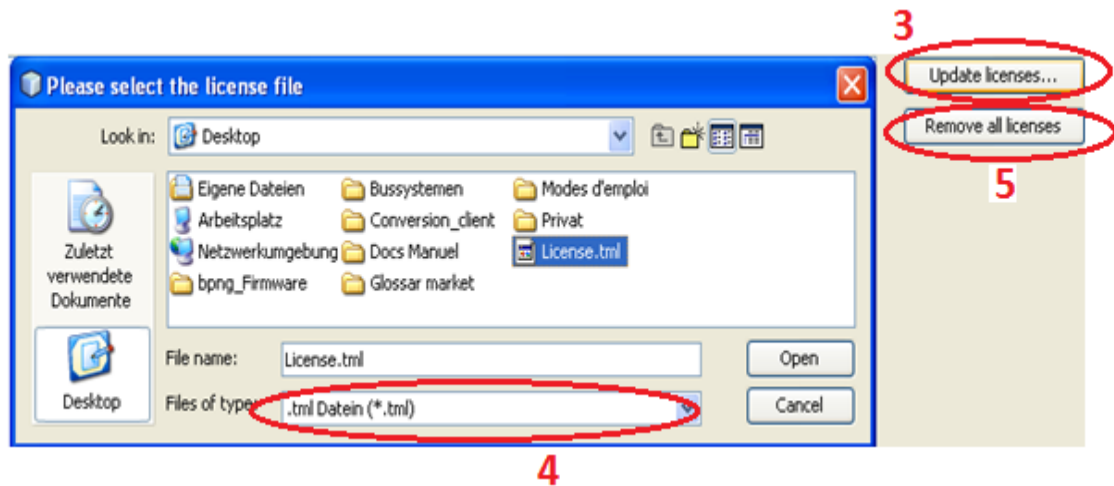


#### 11.4. Updating the license of a blue PiraT2

After clicking of “Update firmware” ((1) chapter 8), the current licenses appear (2):



In order to update licenses, click on the “Update licenses” button (3) and choose the file containing the license (4) (the file extension should be .tml). It is possible to remove all licenses by a click on the corresponding button (5).



## 11.5. Updating blue PiraT2's client

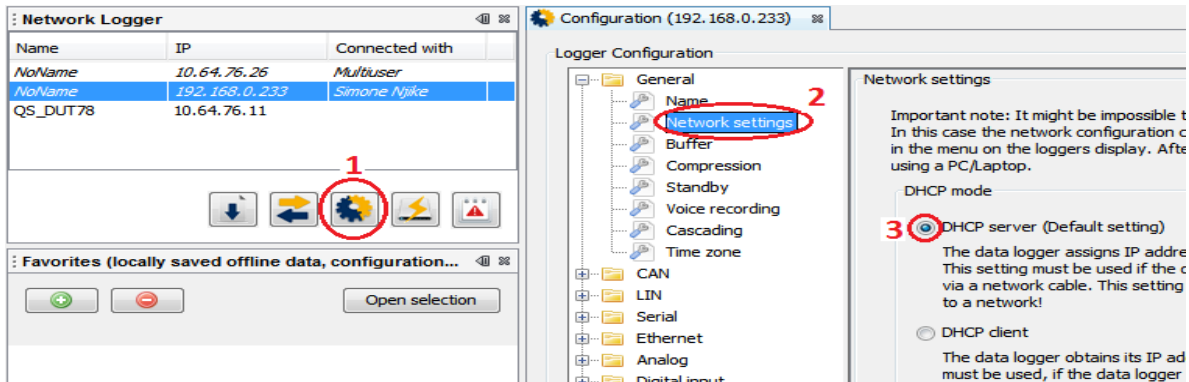
After a successfully update, the logger now is running with the new firmware.

For using all new features in the client too, please install the new version of the client which you can now download from the logger as described in chapter 9.

## 12. Configuration of the blue PiraT2 to use cameras or video encoder

### 12.1. General settings

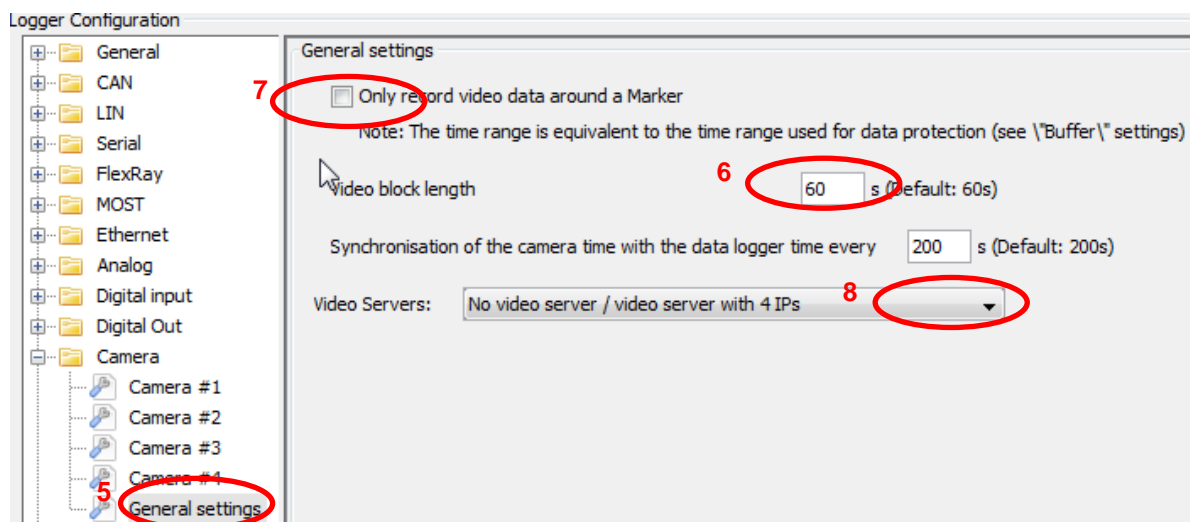
Configure the blue PiraT2 as DHCP-Server: Open configuration (1), "General", "Network settings" (2) and activate the checkbox "DHCP – Server" (3).



Please be sure about your "Standby" setting (General -> Standby). You can activate or deactivate automatic standby. If active, there are two different time settings for network connection.

Switch to "General settings" (5) and type the desired video block length value in seconds (6).

**Attention:** Is the checkbox "only record video data around a marker" (7) activated, the video stream will only be recorded around a marker. In this case there are no data if you don't set any marker. If you do not use marker, please deactivate this checkbox. If deactivated, the logger always records all video data.



Choose the connected camera/Video-Encoder (8).

- No video server / video server with 4 IPs (AXIS Q7404, 207, 210, 211)
- Video server with one IP and 4 channels (AXIS P7214)
- Video server with one IP and one \*quad\* channel (AXIS P7214)

If an AXIS P7214 is used, please type the IP address in the field below.

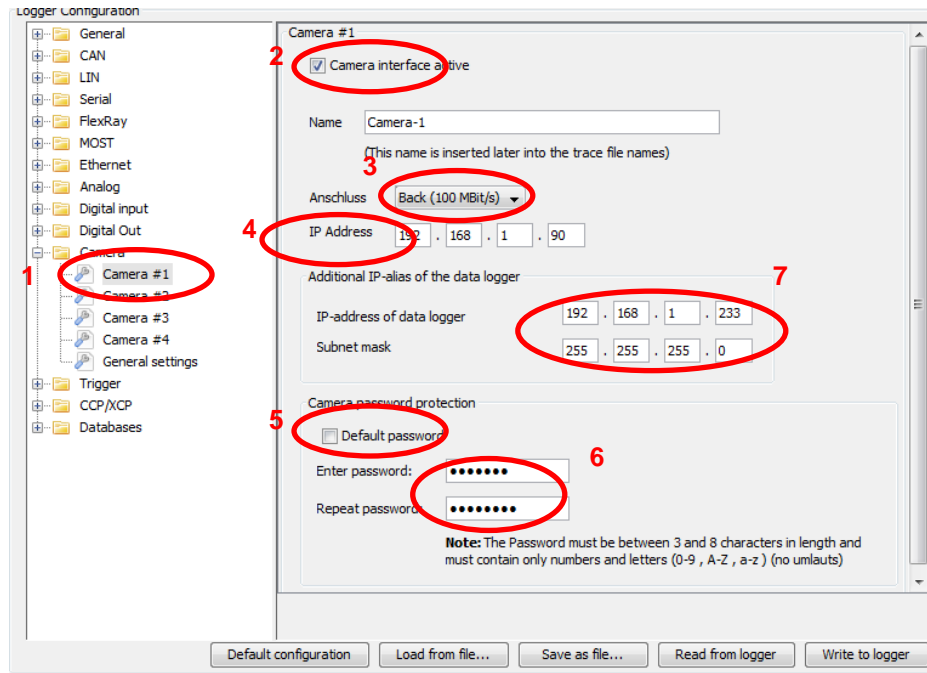
## 12.2. Camera settings in blue PiraT2 client

Switch to Camera #1 (1), activate the checkbox “Camera interface active” (2) and choose the connector (3). Connector back or front is available.

Enter the cameras IP Address (4). If the AXIS P7214 is used, the IP address is already done in the general settings.

Deactivate the checkbox “Default password” (5) and type in the “admin” password (6).

Type in the additional IP-alias of the data logger (7). The data logger has to be in the same subnet as the camera or Video-Encoder.



Make the same changes for all connected cameras with the following addresses:

	Camera 1	Camera 2	Camera 3	Camera 4
AXIS Q7404, 207, 210, 211	192.168.1.90	192.168.1.91	192.168.1.92	192.168.1.93
AXIS P7214	192.168.1.90	192.168.1.90	192.168.1.90	192.168.1.90

After set up, click on the button “Write to data logger”. The button is placed right below in the blue PiraT2 client.

The configuration is finished and the blue PiraT2 starts recording the Video signal.

### 12.3. Front display of blue PiraT2

By pressing the “Esc” button at the front of the blue PiraT 2 once or several times, the main window appears on the display.

By switching the rotary knob you can change the displayed interfaces. There you can see the configuration of the 4 cameras, represented by “VID” and meaning video. Each sign after the word “VID” is placed for one video channel. 3 cases are listed:

1. The license is installed but no configuration has been performed. The 4 channels are however recognized (see Figure 1).

**Display: VID ---- (like in the following picture)**



2. All parameters are configured. The video data are not recorded or there is no connection between logger and server.

The figure 2 means that the first and second cameras are configured but not recorded and the third and fourth are not activated.

**Display: VID XX-- (like in the following picture)**



3. Logger and server are connected and the videos are recorded.

The figure 3 means that the first and second cameras are recording and the third and fourth are not configured.

**Display: VID TT-- (like in the following picture)**



Does the data recording runs without errors, there should always a “T” showing for each video channel.

## 13. Download video data

This application allows to save internal data (in Telemotive format) from the logger on the computers disk and to use it offline.

This function is explained in detail in the document “blue PiraT2 manual”.

For the video application, there is an special characteristic about the video block length

If you select a time period or a marker for download, so the downloaded data does not match exactly to the expected start- and end time. The reason is that the video block lengt of 60 seconds does not match exactly to the selected download time. The system always downloads complete video blocks. The downloaded video is in all cases longer than selected. It starts earlier and ends later than the selected period but the selected time is always included.

## 14. Converting the video data

The application [Convert data] allows the storage of data from the blue PiraT2 in a requested format on a PC or external storage device.

For the video application, the video blocks can either store as single video blocks (like set up in the configuration) or as one video file.

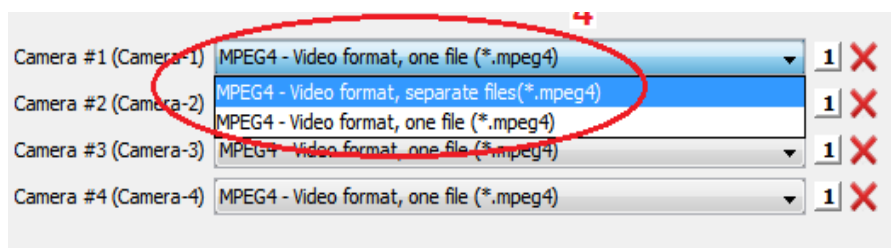
The conversion function is explained in detail in the document “User Guide”.

This document describes only the specifics for the video conversion.

The conversion can left the video blocks separate (untouched) or converted to one video file. Choose the required option in the client output window.

Please keep in mind: When converting into one video file, the system can combine a maximum of 400 blocks per file.

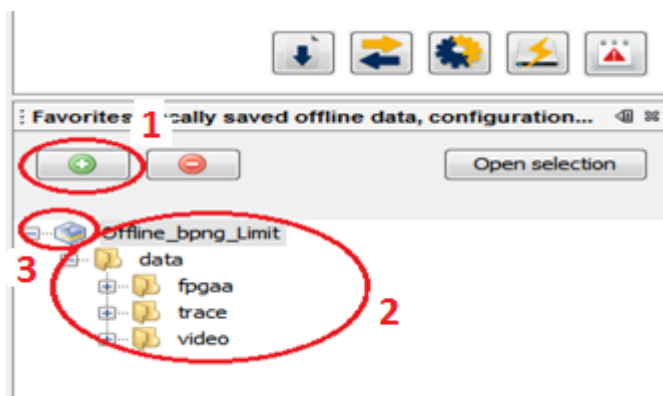
For both options, the result will be the “.mpeg4” video format.



The Client can also convert offline data, which are downloaded already from the blue PiraT2. There is only an installed Client necessary.

In the “Favorite” window, open the offline data set. Click + (1) and choose the main download folder.

The download folder appears (2). Double click the main folder (3) open the conversion tab.



## 15. Watching the videos

The \*.Mpeg4 video files can be used only if they have been stored on a computers disk first.

They can be played on any standard video player.

## 16. Contact



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