







BLUEPIRAT Series Camera User Guide / 21.07.2020 Version 3.4.3

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2 PRODUCT LIABILITY

The General Terms and Conditions of Sale and Delivery of MAGNA Telemotive GmbH can be found on our website (<u>https://telemotive.magna.com</u>) under imprint.

3 Overview

This user guide describes the installation and usage of a system for video recording. It consists of one network camera AXIS P12-series / F-series / 211 / 210 / 207 or a Video Encoder AXIS Q7404 / P7214 with analog cameras and a one of the data logger

- BLUEPIRAT2
- BLUEPIRAT2 5E
- BLUEPIRAT Mini
- BLUEPIRAT Remote
- BLUEPIRAT Rapid

of MAGNA Telemotive GmbH. The Video Encoders are used to connect analog cameras (NTSC/PAL). The network cameras can be connected directly to the data logger.

The system allows the recording of up to four different video streams at the same time. For that the server (or a network camera) and the data logger must be connected to each other and configured separately by a HTML-based client.

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 to 15 up to 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, 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 120 seconds to be synchronized. The recording starts immediately after the synchronization.

If the Ethernet cable was removed between the Video Encoder / camera and the data logger and plugged in again, the system takes around 11 seconds for the resynchronization. If the supply voltage is removed from the Video Encoder / camera during the recording, it takes about 120 seconds to be synchronized (after a reconnection).

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

This user guide describes the configuration and usage of this feature. The general configuration is described in the user guides of the used data logger as well as the System Client, which is valid together.

This document refers to **firmware version 03.04.03** and the **System Client** from **version 3.4.3**. Some features depending on model and feature license or may not be available in older versions.

Software updates and user guides for other, optional, licensed enhancements are available in our ServiceCenter. (Please find the address under Contact at the last page.)

To ensure the most reliable operation of your system as possible, please make sure to use always current firmware and software versions.

Please note these important instructions about the handling of devices of MAGNA Telemotive GmbH!

There's a linux system running on the devices and sometimes when the device has a dirty shutdown due to a power break down or unplugging the power supply, the system is corrupt from this time. You know this situation from a PC, when you switch it off some times it maybe will not work any more or show you some mistakes.

In most cases this issue is catched up and repaired by the linux system we use, but sometimes it can happen that the system on the logger is damaged and there's no access to the device any more.

We are optimizing the handling of corrupted systems permanently and are integrating some new enhancements regarding this kind of issues with every new release to save the system. But we can't make the system for 100% save against these influences.

So please use always the provided mechanism for shutting down the device or the implemented standby function in which the device shutting down when no traffic is detected any more in an adjustable time.

4 System requirements

Control Unit

A Windows based Laptop or PC is needed to configure the devices by **System Client**. It also allows to save the recorded data and to use them offline later.

System Client

The software client is used for configuring the data logger as well as downloading the recorded data or convert these into your needed file format. An firmware update can be performed by the **System Client** too to ensure that your devices are always up to date.

BLUEPIRAT2 / BLUEPIRAT2 5E / BLUEPIRAT Mini

The communication between bus systems and control units is monitored and relevant data can be recorded very precisely with the data logger. The collected data are stored to the logger and can be downloaded via Ethernet to a PC.

The **BLUEPIRAT2** is our top-class all-in-one data logger. Seven models cover a wide range of interfaces.

Additionally, the **BLUEPIRAT2 5E** offers improved power management and power backup, five integrated Ethernet ports and super-fast start-up behavior. The BLUEPIRAT2 can be flexibly expanded via <u>System Link</u>.

The **BLUEPIRAT Mini** is smallest data logger in the world with an outstanding functional scope. It offers a wide range of interfaces, stable temperature behavior, very low energy consumption, four GBit Ethernet ports, and much more. Different BLUEPIRAT Mini can be flexibly expanded to one cluster and therefore handled very easily by using <u>System Link</u>.

Remote Control Touch (optional)

Operate your BLUEPIRAT Mini or BLUEPIRAT2 data loggers safely and comfortably from the driver's or passenger seat. Via System Link our new remote control becomes part of your logger network. One remote control can handle all connected loggers.

BLUEPIRAT Remote

While Remote Control Touch is just a control unit for handling unique devices or a TSL network, the BLUEPIRAT Remote additional has logger functionality by offering internal storage and some interfaces.

BLUEPIRAT2 Ethernet kit

This optional enhancement Ethernet kit is connected via a FCI cable to the rear side of the **BLUEPIRAT2**. With his four Ethernet interfaces it establishes the connection between data logger and the Video Encoder or one single camera and allows connecting to a Local Area Network (LAN).

In this way the Ethernet port on the front side of the data logger is open. This allows using the front Ethernet port for communication with the System Client and manages the logger. The Ethernet kit is available for BLUEPIRAT2 only, because **BLUEPIRAT2 5E** has an integrated Ethernet switch and four ports at the rear side.

Network camera AXIS P12 / F44 / F41 / 211 / 210 / 207

Network cameras have an Ethernet port and therefore can be connected directly to the data logger. Up to four cameras are supported to record the video streams. These cameras can be connected to the four channels of the encoder. The following AXIS camera types are supported: P12, F44, F41, 211, 210 and 207.

AXIS Q7404 / P7214 Video Encoder

The AXIS Video Encoder is a high performance, four-channel standalone device that integrates up to four analog cameras (NTSC/PAL) at a time into an IP-based video surveillance system. Video Encoder and camera are connected via BNC connector.

Both Video Encoders support the compression formats H.264, MJPEG and MPEG-4. Therefore they are capable to reduce bandwidth and storage requirements without compromising image quality.

The AXIS Q7404 Video Encoder contains four separate video channels, one for each video input. Each channel has its own IP address.

The AXIS P7214 Video Encoder uses only one IP address for all four channels.

License

For the additional feature **Camera Link**, an installed license is required. Settings for licensed features can be performed with a valid license only.

If you need a license for your logger, please contact our sales department (please find the address under contact at the last page).

4.1 Accessing a connected camera / camera server

If the camera / camera server is connected to a data logger and has to be modified, it can be reached by the IP address of the logger and **port 11400**.

To access the configuration just put the IP address and port into your browser, e.g.: **192.168.0.233:11400**

If there are more cameras / camera server connected, they can be reached by the ports 11401, 11402, 11403.

4.2 Additional features by optional licenses

Additional features can be activated by purchasing and installing licenses. Licenses can be ordered at our sales team. You find the user guides for these additional features in our Service Center. Currently the following licensed features are available.

Feature	Description
Camera Link	video recording via video server or network cameras
WLAN	supporting wireless LAN (802.11ac from FW 02.04.01)
GPS logging	tracking of GPS data
Measurements with CCP	CAN Calibration Protocol
Measurements with XCP	Universal Measurement and Calibration Protocol Currently the functionality for Ethernet (XCP on Ethernet) and the CAN-bus (XCP on CAN) are available.
MOST150 Streaming	logging MOST150 synchronous/isochronous data
MLBevo	The license Connected-Gateway MLBevo enables the recording of data of the ATOP control unit MLBevo via USB to the Telemotive data logger and convert these data with the System Client. (from FW 02.03.01)
Download Terminal	Download Terminal allows an automatization of configured tasks for a de- fined group of devices. (from FW 02.03.01)
TPE	TPE = Telemotive Performance Extension Increasing the logging rate for Ethernet data up to 100Mbit/s (from FW 02.04.01)
Test automatisation	Interface for connecting to test automation tools. At the moment, the sending of CAN messages is supported. (from FW 02.04.01)
Cellular network	Allows the logger to send status messages over cellular network. (from FW 03.01.01)

Table 4.1: Additional features by optional licenses

4.3 Further manuals

Beside this user guide we offer the main manuals for our client as well as for the different data logger generations in our ServiceCenter at <u>https://sc.telemotive.de/bluepirat</u>.

User manual for the System Client

https://sc.telemotive.de/4/uploads/media/TelemotiveSystemClient_UserManual.pdf

User manual for BLUEPIRAT2 / BLUEPIRAT2 5E

https://www.telemotive.de/4/uploads/media/blue_PiraT2_UserManual.pdf

User manual for BLUEPIRAT Mini

https://www.telemotive.de/4/uploads/media/blue_PiraT_Mini_UserManual.pdf

User manual for Remote Control Touch

https://sc.telemotive.de/4/uploads/media/RCTouch_UserGuide.pdf

User manual for BLUEPIRAT Remote

https://sc.telemotive.de/4/uploads/media/blue_PiraT_Remote_UserGuide.pdf

For having an easy access if necessary, the most important manuals are linked in the client under the menu item [Help] and are reachable easily from there.

File Tools Window	Help	
Network Logger %	Telemotive System Client manual	
Name	blue PiraT 2 manual	s 🕅
E CS_TSL (3)	blue PiraT Mini manual	
CS_bP2_10036	Remote Control Touch manual	
CS_bPR_10057	blue PiraT Remote manual	=
CS_RCT_10060	Info	-

Figure 4.1: links to the manuals

Our licensed enhancements have own manuals which are stored in the Service Center too. You will find a list of these enhancements in the user manuals in the chapter **Additional features by optional licenses**.

4.4 Firmware Care

MAGNA Telemotive GmbH invests a great amount in the further development of its products.

For this we regularly provide new functions and enhancements via firmware and client releases.

Basic conditions

As part of the "Service Product Firmware Care ", new software and firmware versions are made available for download for a limited period of time. This service is available for 12 months from the date of purchasing the **BLUEPIRAT Rapid**. This period can be extended.

For details, please contact your sales partner (see contact at the end of the manual for addresses).

Affected products

- BLUEPIRAT Mini
- BLUEPIRAT2 5E
- BLUEPIRAT2
- BLUEPIRAT Remote
- Remote Control Touch
- BLUEPIRAT Rapid

Note:

Enhancements are only possible in current firmware releases.

Attention:

Please note that updates to main firmware versions (04.00.01 / 05.00.01) need a special update license and can't be flashed to a device without this license.

To buy these licenses please contact our sales department under <u>TMO.Sales@magna.com</u> (please find the complete address under Contact on the last page).

PC / laptop

5 Configuring the network camera AXIS F41/F44

5.1 Connecting the network camera AXIS F41/F44

Connect the camera with the associated main unit. Connect the power supply to the main unit. Connect your PC or laptop via Ethernet cable to the main unit. Turn on the power supply. All LEDs should light green after about 60 seconds.

Network camera AXIS F41

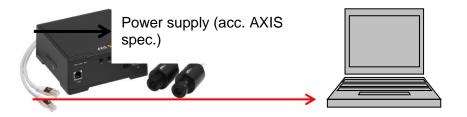


Figure 5.1: Connecting the network camera with a PC/ laptop

Change your PCs IP configuration. Use static IP address with the following settings:

Internet Protocol Version 4 (TCP/IPv4)	Properties			
General				
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.				
O Obtain an IP address automatical	y			
• Use the following IP address:				
IP address:	192.168.0.80			
S <u>u</u> bnet mask:	255.255.255.0			
Default gateway:				
C Obtain DNS server address automatically				
□ Use the following DNS server addresses:				
Preferred DNS server:				
Alternate DNS server:				
Validate settings upon exit	Ad <u>v</u> anced			
	OK Cancel			

Figure 5.2: Setting a static IP address

5.2 Access to the network camera AXIS F41/F44

Open your browser and type in the preset IP address of the network camera: **192.168.0.90**.

Choose your password and type it in. This password will be needed later. If the system asks for a further authentication, please type in the same password like before.

AXISA			
Create Certificate			
Secure configuration of the root password via HTTPS requires a self-signed certificate.			
Create self-signed certificate			
Configure Root Password using HTTP			
User name: root			
Password (max 64 characters):			
Confirm password:			
ОК			
The password for the pre-configured administrator root must be changed before the product can be used.			
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.			
ONVIF will be disabled. To enable ONVIF go to Setup > System Options > Security > ONVIF			

Figure 5.3: Creating an user password

After setting the password please login to the AXIS F41/F44 web interface:

Authentication	Authentication Required			
?	http://192.168.1.90 is requesting your username and password. The site says: "AXIS_ACCC8E0CE158"			
User Name:				
Password:				
	OK Cancel			

Figure 5.4: Login to the web interface

User name: root

Password: (your chosen password from before)

In some cases a browser add-on is necessary to display the video stream.

Thereafter you have to set the capture mode and the power line frequency of the power supply. In Europe 50 Hz is common.



Figure 5.5: Configure the capture mode F41

AXIS		
Configu	ire capture mode	
Capture Mode:	1080p 1920×1080 (16:9) @ 15/12.5fps 🛛 🗸	
Mode:	1080p 1920×1080 (16:9) @ 15/12.5fps 🛛 🗸	
	1080p 1920×1080 (16:9) @ 15/12.5fps 🛛 🗸	
	1080p 1920×1080 (16:9) @ 15/12.5fps 🛛 🗸	
	ок	
	e defines how the image data will be taken with a priority given to tion or frame rate.	
Note: The Capture mode is intended to be set the first time the camera is configured. If changed later, some settings will be either removed or reset.		

Figure 5.1: Configure the capture mode F44

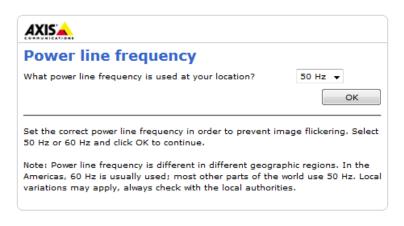


Figure 5.6: Configure the power line frequency

Now you should see the live stream of the connected network camera.



Figure 5.7: Picture of a connected network camera

5.3 Creating the user "admin"

For communicating with the data logger a special user is needed with administrator rights.

Click [Setup] →	[Basic Setup]	\rightarrow [1 Users] \rightarrow	[Add].
------------------------	---------------	---------------------------------------	--------

AXISA	AXIS F41 Network Camera Live View Setup Help
→ Basic Setup	Users
Instructions 1 Users	User List
2 TCP/IP 3 Date & Time 4 Video Stream 5 Audio Settings	User Name User Group root Administrator admin Administrator
Video & Audio	
Live View Config	
Detectors	
 Applications 	~
• Events	Add Modify Remove
Recordings	
Languages	Allow password type: Encrypted & unencrypted V
 System Options 	User Settings
About	Enable anonymous viewer login (no user name or password required) Enable Basic Setup
	Save Reset

Figure 5.8: Adding a new user

A new window is opened.

User Setup	0
User name:	admin
Password (max 64 characters.):	•••••
Confirm password:	•••••
User group:	◯ Viewer ◯ Operator ၛ Administrator
OK Car	ncel

Name the new user "admin" and define a password. This user and password will be needed later too.

Recommended:User name:addPassword:2x8

admin 2x8bg4

Choose the <User group> (o) Administrator and click [OK].

Activate at <User Settings> the checkbox **Enable anonymous viewer login (no user name or password required)**. Confirm the settings with **[Save]**.

User Settings	
Enable anonymous viewer login (no user name or password required)	
Enable Basic Setup	

Figure 5.9: Enable anonymous viewer login

5.4 Setting date and time

Change to the entry [Basic Setup] \rightarrow [3 Date & Time]. Choose the <Time mode> (o) Set manually. Set up date and time. Confirm the settings with [Save].

Comment:

The time set here is initially only a temporary adjustment. In our system the data logger is the time master and overwrites the logger time after successfully synchronizing with the video server.

AXIS	AXIS F41 Network Camera Live View Setup Help
	Date & Time Settings
Instructions 1 Users	Current Server Time
2 TCP/IP	Date: 2014-11-18 Time: 15;29;10
3 Date & Time	New Server Time
4 Video Stream 5 Audio Settings	Time zone: GMT+08 (Beijing, Hong Kong, Shanghai) 🗸
5 Audio Securigs	 Automatically adjust for daylight saving time changes.
Video & Audio	Time mode:
Live View Config	 Synchronize with computer time
Detectors	Date: 2014-11-18 Time: 15;29;51
Detectors	O Synchronize with NTP server
 Applications 	NTP server: No server specified
Events	Set manually
	Date: 2014-11-18 Time: 15:29:08
Recordings	Date & Time Format Used in Images
Languages	Specify date format: Predefined YYYY-MM-DD
System Options	O own
	Specify time format: Predefined 24h With resolution: 1 second
About	O own %T
	Save Reset

Figure 5.10: Set date and time manually

You can also display date and time on the video image.

Attention:

Before you start recording always set the date and time in the data logger first. 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.

Click [Basic Setup] \rightarrow [4 Video Stream]. Activate both checkboxes Include date and Include time to activate the display on the video image. Confirm the settings with [Save].

If desired, change format options like <Text color>, <Text background color> and text place. Confirm the settings with **[Save]**.

Note:

Using the AXIS F44 these settings must be made for Camera 1 to 4. [Basic Setup] \rightarrow [4 Video Stream] \rightarrow [Camera ...]

AXIS	AXIS F44 Network Camera		ive View Setup Help	
 Basic Setup 	Video Strea	Video Stream Settings		
Instructions	Image Audio	Image Audio H.264 MJPEG		
1 Users 2 TCP/IP	Image Appearan	Image Appearance		
3 Date & Time	Capture mode:	Capture mode: 1080p 1920×1080 (16:9) @ 15/12.5fg		
▼ 4 Video Stream	Resolution:	1920×1080 (16:9) 👻 pixels		
Camera 1	Compression:	30 [0100]		
Camera 2 Camera 3	Mirror image			
Camera 4	Rotate image:	0 👻 degrees		
Quad Stream	Video Stream			
5 Audio Settings	Maximum frame rat	ie:		

Figure 5.11: Settings for cameras 1 - 4

	XIS F41 Network Camera Live View Setup Help		
Basic Setup Instructions	Video Stream Settings(2)		
1 Users	Image Audio H.264 MJPEG		
2 TCP/IP	Image Appearance		
3 Date & Time 4 Video Stream 5 Audio Settings	Capture mode: 1080p 1920×1080 (16:9) @ 25/30 fps (WDR) Resolution: 1920×1080 (16:9) V		
J Addio Settings	Compression: 30 [0100]		
Video & Audio	Mirror image		
Line Many Confin	Rotate image: 0 V degrees		
Live View Config	Video Stream		
Detectors	Maximum frame rate:		
	Unlimited		
 Applications 	C Limited to [125] fps per viewer		
Events Overlay Settings			
	Include overlay image at the coordinates: X 0 [0] Y 0 [0]		
 Recordings 	✓ Include date ✓ Include time		
Languages	Include text:		
System Options	Text overlay size: medium 💙		
/ System options	Text color: white 💙 Text background color: black 🗸		
About	Place text/date/time at top 🗸 of image		
	Preview		
	View image stream while configuring. Video format: MJPEG V Open Save Reset		

Figure 5.12: Include date and time in the video stream

The setup for in the video image embedded timestamps is finished.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <Maximum frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

5.5 Audio settings (FW 2.0.1 onwards)

Change to [Basic Setup] \rightarrow [4 Video Stream] and switch to the tab [Audio]. Activate the checkbox Enable audio to enable the general audio functionality.

Note:

Using the AXIS F44 these settings must be made for Camera 1 to 4. [Basic Setup] \rightarrow [4 Video Stream] \rightarrow [Camera ...]

AXIS	AXIS F41 Network Camera	Live View Setup Help
Basic Setup Instructions 1 Users 2 TCP/IP	Video Stream Settings	0
3 Date & Time 4 Video Stream 5 Audio Settings • Video & Audio • Live View Config	 Enable audio Current Audio Settings: AAC, Full duplex 	Note that the image preview is without audio.

Figure 5.13: Enable audio

5.5.1 Adjusting audio source

Change to the entry [Video & Audio] \rightarrow [Audio Settings]. Here you can configure the connected source as well as the recorded audio quality.

AXIS	AXIS F41 Net	work Camera	Live View Setup	Help	
Basic Setup	Audio Se	ttings		0	
	Audio Channel	5			
 Video & Audio Video Stream 	Audio mode:	Full duplex	~		
Stream Profiles	Audio Input				
Camera Settings	Source:	Microphone 🗸			
Overlay Image Privacy Mask	Microphone p	ower			
Audio Settings Audio Clips	Input gain:	0 ✓ dB Let	vel: -40 -46	0 dB	
	Encoding:	AAC 🗸			
Live View Config	Sample rate:	32 V kHz			
Detector	Bit rate:	128 V kbits/s			
 Detectors 	Note: The Java a	Note: The Java applet only supports G711 audio. QuickTime supports G711 and AAC.			
 Applications 	Audio Output				
Events Recordings	Output gain:	0 V dB	Reset		

Figure 5.14: Configure audio settings

In the dropdown box next to <Source> you can choose between [Line] for an audio source like an MP3 player and [Microphone].

Audio Input				
Source:	Line 🗸			
Microphone power				
Input gain:	0 💙 dB	Level: -40	-46	0 dB

Figure 5.15: Select audio input (Line)

The source [Microphone] supports additionally the functionality to power a microphone.

Audio Input			
Source:	Microphone 🗸		
Microphone power			
Input gain:	0 🗸 dB	Level: -40	-46 0 dB

Figure 5.16: Select audio input (Microphone)

The setting of the <Input gain> can be used to configure an internal preamplifier for signal improvement.

Note:

If the source configuration is not valid the audio signal may be distorted.

5.5.2 Adjusting audio quality

For a high audio quality we recommend to configure the <Sample rate> and the <Bit rate> at the highest value. The <Encoding> is left by default (AAC).

Encoding:	AAC 🗸
Sample rate:	32 🗸 kHz
Bit rate:	128 🗸 kbits/s

Figure 5.17: Adjust audio quality

5.6 IP configuration

Change to the entry [Basic Setup] \rightarrow [2 TCP/IP]. Choose the <IPv4 Address Configuration> (o) Use the following IP address. Type in these data:

	IP address:	192.168.1.90	
	Subnet mask:	255.255.255.	0
TD- 4 Address			
IPv4 Addres	s Configuration		
🗹 Enable IP	v4		
Obtain IP	address via DHCP		
Ose the format is the second secon	ollowing IP address:		
IP addres	s:	192.168.1.90	Test
Subnet m	ask:	255.255.255.0	
Default ro	outer:		

Figure 5.18: Setting an IP address

Confirm the settings with [Save].

Note:

By changing the IP address you lose the connection to the network camera.

This also will be told to you in an information window:

You have changed the Autor	matic IP Configuration.
or else the server might not	settings are correct before clicking OK, t be reachable afterwards. eset to the factory default settings.
	OK Abbrechen

Figure 5.19: Hint 1

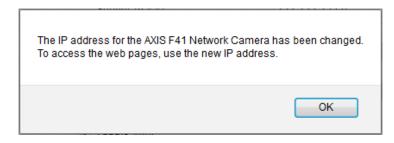


Figure 5.20: Hint 2

For reconnecting you have to change your computers IP address to **192.168.1.80**. Then type in your browser the new IP address of the network camera, to access the configuration again.

Note:

Finally, change your PCs or laptops IP configuration back to dynamic configuration.

5.7 Resetting configuration

The camera AXIS F41/F44 can be set to default settings by the following steps:

- 1. Disconnect the connection to the power supply.
- 2. Press and hold the control button next to the SD slot and
- 3. reconnect to the power supply.
- 4. Hold the control button for 15 to 30 seconds till the Stat-LED flashes yellow.

When the Stat-LED turns green the process is finished.

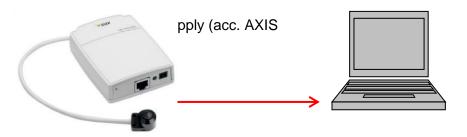
PC / Laptop

6 Configuring the network camera AXIS P12xx

6.1 Connecting the network camera AXIS P1204 / P1214 / P1224

Connect the camera with the associated main unit. Connect the power supply to the main unit. Connect your PC or laptop via Ethernet cable to the main unit. Turn on the power supply. All LEDs should light green after about 60 seconds.

Network camera AXIS P1204 / P1214 / P1224



Change your PCs IP configuration. Use static IP address with the following settings:

Internet Protocol Version 4 (TCP/IPv4)	Properties
General	1
You can get IP settings assigned autom this capability. Otherwise, you need to for the appropriate IP settings.	
O Obtain an IP address automatical	ly
• Use the following IP address:	
IP address:	192.168.0.80
Subnet mask:	255.255.255.0
Default gateway:	
C Obtain DNS server address auton	natically
└ Use the following DNS server add	resses:
Preferred DNS server:	
Alternate DNS server:	
Validate settings upon exit	Ad <u>v</u> anced
	OK Cancel

Figure 6.1: Setting a static IP address

6.2 Access to the network camera AXIS P12xx

Open your browser and type in the preset IP address of the network camera: **192.168.0.90**. (<u>http://192.168.0.90</u>)

Choose your password and type it in. This password will be needed later. If the system asks for a further authentication, please type in the same password like before.

Create Certificate
Secure configuration of the root password via HTTPS requires a self-signed certificate.
Create self-signed certificate
Configure Root Password using HTTP
User name: root
Password (max 64 characters):
Confirm password:
ОК
The password for the pre-configured administrator root must be changed before the product can be used.
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.
ONVIF will be disabled. To enable ONVIF go to Setup > System Options > Security > ONVIF

Figure 6.2: Create a user password

After setting the password please login to the web interface:

Authentication	Required
0	http://192.168.0.90 is requesting your username and password. The site says: "AXIS_ACCC8E06A3A6"
User Name:	root
Password:	••••
	OK Cancel

Figure 6.3: Login to the web interface

User name: root

Password: (your chosen password from before)

A browser add-on is necessary to display the video stream in some cases.

Thereafter you have to set the power line frequency of the power supply. In Europe 50 Hz is common.

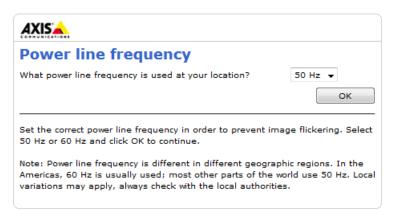


Figure 6.4: Configure the power line frequency



Now you should see the live stream of the connected network camera.

Figure 6.5: Picture of a connected network camera

6.3 Creating the user "admin"

For communicating with the blue data logger a special user is needed with administrator rights.

Click [Setup]	$ \rightarrow$	[Basic \$	Setup] –	→ [1	Users]	$ \rightarrow$	[Add].
-----------------------	-----------------	-----------	----------	------	--------	-----------------	--------

AXIS	XIS P1204 Network Camera Live View Setu	p Help
 Basic Setup 	Users	0
Instructions	User List	
1 Users	User Name User Group	
2 TCP/IP 3 Date & Time 4 Video Stream	root Administrator	*
▶ Video		
Live View Config		
Detectors		$\overline{\mathbf{v}}$
Applications	Add Modify Remove	
• Events	HTTP/RTSP Password Settings	
Recordings	Allow password type: Encrypted & unencrypted 👻	
System Options	User Settings	
About	Enable anonymous viewer login (no user name or password required)	
	Enable Basic Setup	
	Save Reset	

Figure 6.6: Add a new user

A new window is opened.

User Setup	0
User name:	admin
Password (max 64 characters.):	•••••
Confirm password:	•••••
User group:	 ○ Viewer ○ Operator ● Administrator
OK Car	ncel

Name the new user "admin" and define a password. This user and password will be needed later too.

Recommended:User name:adminPassword:2x8bg4

Choose the <User group> (o) Administrator and click [OK].

Activate at <User Settings> the checkbox **Enable anonymous viewer login (no user name or password required)**. Confirm the settings with **[Save]**.

User Settings
Enable anonymous viewer login (no user name or password required)
Enable Basic Setup

Figure 6.7: Enable anonymous viewer login

6.4 Setting date and time

Change to the entry [Basic Setup] \rightarrow [3 Date & Time]. Choose the <Time mode> (o) Set manually. Set up date and time. Confirm the settings with [Save].

Comment:

The time set here is initially only a temporary adjustment. In our system the data logger is the time master and overwrites the logger time after successfully synchronizing with the video server.

	IS P1204 Netv	vork Camera Live View Setup Help
• Basic Setup	Date & Time	Settings
Instructions	Current Server Tin	ie
1 Users 2 TCP/IP		Date: 2014-08-01 Time: 12:13:40
3 Date & Time	New Server Time	
4 Video Stream	Time zone:	GMT (Dublin, Lisbon, London, Reykjavik) 🔹
▶ Video		Automatically adjust for daylight saving time changes.
	Time mode:	
Live View Config	\odot	Synchronize with computer time
Detectors		Date: 2014-08-01 Time: 14:13:44
	0	Synchronize with NTP server
Applications		Date: 2014-08-01 Time: 14:13:44 Synchronize with NTP server NTP server: <u>No server specified</u>
• Events	٩	Set manually
Recordings	N	Date: 2014-08-01 Time: 12:13:11
Recordings	Date & Time Forma	at Used in Images
System Options	Specify date format:	O Predefined YYYY-MM-DD ▼
About		Own %F
	Specify time format:	 ● 24h ▼ With resolution: 1 second ▼
		© Own %T
		Save Reset

Figure 6.8: Set date and time manually

You can also display date and time on the video image.

Attention:

Before you start recording always set the date and time in the data logger first. 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.

Click [Video] \rightarrow [Video Stream]. Activate both checkboxes Include date and Include time to activate the display on the video image. Confirm the settings with [Save].

If desired, change format options like <Text color>, <Text background color> and text place. Confirm the settings with **[Save]**.

	IS P1204 Network Camera Live View Setup Help				
▶ Basic Setup	Video Stream Settings				
	Image H.264 MJPEG				
	Image Appearance				
Stream Profiles	Resolution: 1280x720 (16:9) 🔻 pixels				
Camera Settings	Compression: 30 [0100]				
, ,	Mirror image				
	Rotate image: 0 👻 degrees				
Live View Config	Video Stream				
Detectors	Maximum frame rate:				
	Inlimited				
Applications	Limited to [130] fps per viewer				
▶ Events	Overlay Settings				
Literes	Include overlay image at the coordinates: X 0 [0] Y 0 [0]				
 Basic Setup Video Video Stream Stream Profiles Camera Settings Overlay Image Privacy Mask Live View Config Detectors Applications Events Video Stream Settings Overlay Settings Overlay Image Inage Appearance Resolution: 1280x720 (16:9) pixels Ompression: 30 [0100] pixels Detectors Overlay Settings Unlimited Limited to [130] fps per viewer 					
System Options	Include text:				
	Text color: white 👻 Text background color: black 👻				
About	Place text/date/time at top				
	Preview				
	View image stream while configuring. Video format: MJPEG V				

Figure 6.9: Include date and time in the video stream

The setup for in the video image embedded timestamps is finished.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <<u>Maximum</u> frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

6.5 IP configuration

Change to the entry [Basic Setup] \rightarrow [2 TCP/IP]. Choose the <IPv4 Address Configuration> (o) Use the following IP address. Type in these data:

IP address:	192.168.1.90
Subnet mask:	255.255.255.0

IP	4 Address Configuration		
V	Enable IPv4		
\bigcirc	Obtain IP address via DHCP		
0	Use the following IP address:		
	IP address:	192.168.1.90	Test
	Subnet mask:	255.255.255.0	
	Default router:		

Figure 6.10: Setting an IP address

Confirm the settings with [Save].

Note: By changing the IP address you lose the connection to the network camera.

This also will be told to you in an information window:

You have changed the Automatic	: IP Configuration.
Check that all your TCP/IP setting or else the server might not be re If this happens it must be reset t	
	OK Abbrechen

Figure 6.11: popup window 1



Figure 6.12: popup window 2

For reconnecting you have to change your computers IP address to **192.168.1.80**. Then type in your browser the new IP address of the network camera, to access the configuration again.

(<u>http://192.168.1.90</u>)

Note:

Finally, change your PCs or laptops IP configuration back to dynamic configuration.

6.6 Resetting configuration

The AXIS P-series can be set to default settings by the following steps:

- 5. Disconnect the connection to the power supply.
- 6. Press and hold the control button next to the PWR connector and
- 7. reconnect to the power supply.
- 8. Hold the control button for 15 to 30 seconds till the Stat-LED flashes yellow.

When the Stat-LED turns green the process is finished.

7 Configuring the network camera AXIS 207/210/211

Warning:

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

Any camera that is used with the data loggers BLUEPIRAT2 / BLUEPIRAT2 5E / BLUEPIRAT Mini can be installed manually or automatically (recommended).

The manual configuration is done over the camera web interface.

The automatic configuration is done with the program "AXIS Camera Management". For this variant a template is available.

7.1 Related manuals

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

7.2 Automatic configuration (recommended)

Needed software: AXIS Camera Management v2.00.31 <u>http://www.axis.com/techsup/software/index.htm</u> or <u>http://www.axis.com/de/products/cam_mgmt_software/interface.htm</u>

Configuration steps:

- 9. Check firmware version. Recommended: 4.40 (more information see [1], [2], [3] or AXIS online).
- 10. Resetting camera to the factory default settings (more information see [1], [2] or [3] chapter "Resetting to the Factory Default Settings").
- 11. Connect the camera with the PC / laptop via an Ethernet cable.
- 12. Set the password (more information see [1], [2] or [3] chapter "Set the password").
- 13. Install camera template by using the program "AXIS Camera Management".
- 14. Add administrator.

7.2.1 Installing the camera template

The template "BLUEPIRAT_Kamera_AXIS-ConfigTemplate_vX.X.cmt" configures your camera automatically. The download file is available in our ServiceCenter at [BLUEPIRAT] \rightarrow [Dokumentations] under the manual of the camera connection.

- 15. Click [Apply Template].
- 16. Click on the template file in the shortcut menu or choose it from the memory location with **[Browse...]**.

🐔 AXIS Camera Management		
File Edit View Tools Help		
Search Assign IP Upgrade Add/E	🗟 📝 🛃 🚽	Apply Template Home Page Refresh Views
Groups	Find:	Browse
Ald Group All Devices (1) New Devices (1)	Name AXIS 207 - 00408C7561EA	C:\02_Ocean+Kamera\Ocean+Kamera_AxisConfigTemplate_v1.0.cmt C:\\AXIS Camera Management - Templates\Ocean+Kamera_Template_2007-04-18.cmt
└── Warnings/Errors └── Ə My Groups		

Figure 7.1: Select a template

A dialog opens:

Add Group	ind:	V Apply 🔹	Clear			
	lame	Status	Address	Serial Number Model	Firmware	
All Devices (1) Warnings/Errors My Groups	AXIS 207 - 00408C7561EA	OK Apply Template - O	192.168.0.90 cean+Kamera_AxisConfigTemp	00408C7561EA AXIS 20	7 4.40	
		Template	cean-vamera_wisconngrem	hate_v1.0		
		Model: AXIS 207 (4.40) 💌	🔽 Show Ni	ice Names 🛛 V Show Errors and Warnin	ngs
		Image				^
		Date format	YYYY-MM-DD 🗸			
		Max viewers	10	[010]		
		· Own date format	%F	[String]		
		Own date format e	nabled no 🗸			
		Own time format	%T.	[String]		
		Own time format er		[]		
		· · · · · · · · · · · · · · · · · · ·		101 1		
		Referrers		[String]		~
		Line De	escription			
		📀 97 Th	e parameter "IPAddress = "192.168.0			
		🗿 107 Th	e parameter "DNSName = """ is not r	ecommended to set in		
		Note: Some parame	ters vary between models. Use model	drop-down list to review the te	mplate for different models.	
		Devices				
		Name	Address	Serial Number	Model Firmware	
		AXIS 207 - 00408C		00408C7561EA	AXIS 207 4.40	
					OK Cancel He	

Figure 7.2: Apply template

17. Click **[OK]** to confirm the template.

A dialog opens.

18. Check the configuration process.

Show Event # 1 to 1 (of 1) R Find Text: Status Date Event OK 18.04.2007 11:59:30 Template Config	Apply Clear Address Serial Number 192.168.0.90 00408C7561EA
Status Date Tevent	Address Serial Number
0K 18.04.2007 11:59:30 Template Config	192.168.0.90 00408C7561EA
	168.0.90
Event Template Config Serial Number: 00408 Protocot HTTP Model: AXIS	8C7561EA 207
Status Event Description	
🚯 OK 🥼 Set Parameter Image.DateForma	at = YYYY-MM-DD
OK Set Parameter Image.MaxViewe	
OK Set Parameter Image. MaxViewe OK Set Parameter Image. OwnDateF	Format = %F
OK Set Parameter Image.MaxViewe OK Set Parameter Image.DwnDateF OK Set Parameter Image.DwnDateF OK Set Parameter Image.DwnDateF	Format = %F FormatEnabled = no
OK Set Parameter Image. MaxViewe OK Set Parameter Image. OwnDateF OK Set Parameter Image. OwnDateF OK Set Parameter Image. OwnDateF OK Set Parameter Image. OwnTimeF OK Set Parameter Image. OwnTimeF	Format = %F FormatEnabled = no Format = %T
OK Set Parameter Image. MaxViewe OK Set Parameter Image. OwnDateF OK Set Parameter Image. OwnDateF OK Set Parameter Image. OwnDateF OK Set Parameter Image. OwnTimeF OK Set Parameter Image. OwnTimeF OK Set Parameter Image. OwnTimeF	Format = %F Format = %T Format = %T FormatEnabled = no
OK Set Parameter Image. MaxViewe OK Set Parameter Image. OwnDatef OK Set Parameter Image. OwnDatef OK Set Parameter Image. OwnDatef OK Set Parameter Image. OwnTimef OK Set Parameter Image. OwnTimef OK Set Parameter Image. References OK Set Parameter Image. References	Format = %F FormatEnabled = no Format = %T FormatEnabled = no =
OK Set Parameter Image.MaxViewe OK Set Parameter Image.OwnDateF OK Set Parameter Image.OwnDateF OK Set Parameter Image.OwnDateF OK Set Parameter Image.OwnDateF OK Set Parameter Image.OwnTimeF OK Set Parameter Image.OwnTimeF OK Set Parameter Image.OwnTimeF	Format = %F Format = %T FormatEnabled = no = :nabled = no

Figure 7.3: Result of the configuration process

7.2.2 Creating the user "admin"

For communicating with the data logger a special user is needed with administrator rights.

- 19. Click the configured AXIS camera with the right mouse button.
- 20. Click [User Management] → [Add/Edit User...] in the shortcut menu.

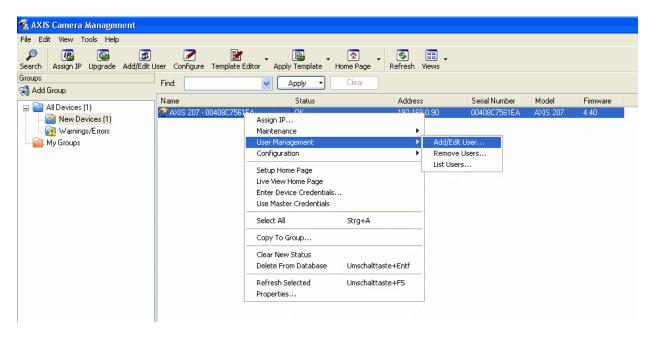


Figure 7.4: Add a user

A dialog opens.

21. Add administrator as follows:



Name the new user "admin" and define a password. This user and password will be needed later too.

Recommended: User name:

Password:

admin 2x8bg4

Choose the <Access rights> "Administrator" and click **[OK]**.

Figure 7.5: Select a user password

7.3 Manual configuration

- 22. Reset camera to the factory default settings.
- 23. Connect camera with the PC / laptop via an Ethernet cable.
- 24. Open browser.
- 25. Type in the preset IP address of the network camera: **192.168.0.90**.
- 26. Press [Enter].
- 27. Click [Setup].
- 28. Add administrator.

If you don't know the cameras IP address, use the program "IP-Utility" 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. In this case you have to use the fix IP address 192.168.0.10 for your PC. The camera is reachable by the IP address 192.168.0.90.

A step by step configuration of the camera is described in the section 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 changes will be discarded.

7.3.1 Resetting configuration

The camera AXIS 207/210/211 can be set to default settings at [System Options] \rightarrow [Maintenance] with the [Default] button under <Maintain Server>.

AXIS	AXIS 210 Network Camera	Live View Setup Help
Basic Configuration	Server Maintenance	0
 Video & Image Live View Config 	Maintain Server Restart Restart the AXIS 210 Network Camera.	
• Event Configuration	Restore Resets all parameters, except the IP parameter Default Resets all parameters to the original factory sett	
 System Options Security Date & Time Network Ports & Devices LED settings Maintenance 	Upgrade Server Upgrade the AXIS 210 Network Camera with the latest firmware Specify the firmware to upgrade to:	chsuchen and click Upgrade
 Support Advanced 	Backup Save all parameters and user-defined scripts to a backup file.	Backup
About	Restore Use a saved backup file to return the unit to a previous configu Specify the backup file to use: Durchsuc	iration.

Figure 7.6: Reset configuration

7.3.2 IP configuration

Change to the entry [Basic Configuration] \rightarrow [2. TCP/IP]. Choose the <IPv4 Address Configuration> (o) Use the following IP address. Type in these data:

	IP address:	192.168.1.90	7
	Subnet mask:	255.255.255.0	
	Default router:	192.168.1.1	
AXIS	XIS 210 Network	c Camera	Live View Setup Help
 Basic Configuration 	Basic TCP/IP Se	ettings	0
Instructions	IP Address Configuratio	n	
1. Users 2. TCP/IP	O Obtain IP address via D	HCP View	
3. Date & Time 4. Video & Image	Use the following IP add IP address:	dress:	0.90 Test
› Video & Image	Subnet mask:	255.255.	
Live View Config	Default router:	192.168.	0.1
Event Configuration	Services		
· Event configuration	Options for notification of IP	address change Settings	
System Options	AXIS Internet Dynamic DNS	Service Settings)
About		Save Reset	
	See also the <u>advanced TCP</u>	IP settings	

Figure 7.7: Setting an IP address

Note:

When using a port on the rear side of the logger, please type in the <IP address> 192.168.0.90 and the <Default router> 192.168.0.1. The same IP address has to be used in the data loggers configuration.

Confirm the settings with [Save].

Note: By changing the IP address you lose the connection to the network camera.

This also will be told to you in an information window:

You have changed the Automatic IP Configuration.
Check that all your TCP/IP settings are correct before clicking OK, or else the server might not be reachable afterwards. If this happens it must be reset to the factory default settings.
OK Abbrechen

The IP address for the AXIS 211A Network Car To access the web pages, use the new IP add	-
	ОК

Figure 7.9: Hint 2

For reconnecting you have to change your computers IP address to **192.168.1.80**. Then type in your browser the new IP address of the network camera, to access the configuration again.

Note:

Finally, change your PCs or laptops IP configuration back to dynamic configuration.

7.3.3 Creating the user "admin"

For communicating with the data logger a special user is needed with administrator rights.

Click [Setup] \rightarrow [Basic Configuration] \rightarrow [1. Users] \rightarrow [Add...].

A new window is opened.

Name the new user "admin" and define a password. This user and password will be needed later too.

Recommended:

User name:	admin
Password:	2x8bg4

Choose the <User group> (o) Administrator and click [OK].

Activate at <User Settings> the checkbox **Enable anonymous viewer login (no user name or password required)**. Confirm the settings with **[Save]**.

Note:

If you want to use an individual password for the camera, you have to deactivate this checkbox. Now you can change the password for the user "admin" individually. This password has also to be configured in the client.

AXIS A	XIS 210 Network Camera	Live View Setup Help
Basic Configuration	Users	0
Instructions 1. Users 2. TCP/IP 3. Date & Time 4. Video & Image	User List User Name User Group Foot Administrator admin Administrator	
 Video & Image Live View Config Event Configuration System Options 	Add Modify Remove	
About	User Settings Enable anonymous viewer login (no user nar Maximum number of simultaneous viewers limit Subsequent viewers will see a blank image.	

Figure 7.10: Enable anonymous viewer login

7.3.4 Setting date and time

Change to the entry [Basic Configuration] \rightarrow [3. Date & Time]. Choose the <Time mode> (o) Set manually. Set up date and time. Confirm the settings with [Save].

Comment:

The time set here is initially only a temporary adjustment. In our system the data logger is the time master and overwrites the logger time after successfully synchronizing with the video server.

 Basic Configuration 	Date & Time Settings	0
Instructions	Current Server Time	
1. Users 2. TCP/IP	Date: 2007-01-24 Time: 13:16:30	
3. Date & Time	New Server Time	
4. Video & Image	Time zone: GMT (Dublin, Lisbon, London, Reykjavik)	~
Video & Image	Automatically adjust for daylight saving time changes.	
	Time mode:	
Live View Config	O Synchronize with computer time	
Event Configuration	Date: 2007-01-24 Time: 14:16:36	
System Options	Synchronize with NTP server	
About	NTP server: <u>No server specified</u>	
ADOUL	Set manually	
	Date: 2007-01-24 Time: 13:16:17	
	Date & Time Format Used in Images	
	Specify date format: O Predefined YYYY-MM-DD	
	O Own %F	
	Specify time format: Predefined 24h With resolution: 1 second	~
	O Own %T	

Figure 7.11: Set date and time manually

You can also display date and time on the video image.

Attention:

Before you start recording always set the date and time in the data logger first. 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.

Click [Video & Image] \rightarrow [Image]. Activate both checkboxes Include date and Include time to activate the display on the video image. Confirm the settings with [Save].

If desired, change format options like <Text color>, <Text background color> and text place. Confirm the settings with **[Save]**.

Basic Configuration	Image Settings		0
	Image Appearance		
 Video & Image Image 	Resolution:	640x480 💓 pixels	
Overlay/Mask	Compression:	30 [0100]	
▶ Advanced	Rotate image:	0 🕑 degrees	
Live View Config	Color level:	50 [0100] *	
• Event Configuration	Brightness:	50 [0100] (Does not affect Test image)	
System Options	Contrast:	50 [0100] (Does not affect Test image)	
system options	* Changes to color level do not affect Test image (exception 0 = B/W)		
About	Text Overlay Settings		
<	Include date	Include time	
Debay	Include text:		
	Text color: white 💌	Text background color: black	
	Place text/date/time at top 🕑 of image		
	Video Stream		
	Maximum video stream time:		
	O Unlimited		
	O Limited to [1] seconds 🍸 per session		
	Maximum frame rate:		
<			
	S Limited to 15	[130] fps per viewer	
	Test		
	man an area of the test	otion JPEG) before saving.	Test
		Save Reset	

Figure 7.12: Include date and time in the video stream

The setup for in the video image embedded timestamps is finished.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <Maximum frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

7.3.5 Setting MPEG-4

Change to the entry [Video & Image] \rightarrow [Advanced] \rightarrow [MPEG-4]. Change <Length> to 32. Choose the <Maximum bit rate> (o) Limited to ... kbit/s. Type in "3000".

AXIS	AXIS 210 Netwo	ork Camera	Live View Setup Help
Basic Configuration	MPEG-4 Se	ttings	0
	Client Compatibil	ity	
 Video & Image Image 	Video object type:	Advanced Simple 💌	
Overlay/Mask	ISMA compliant		
 Advanced Camera 	GOV Settings		
MPEG-4	Structure:	IP V	
	Length	32 [1-150]	
Live View Config	Bit Rate Control		
+ Event Configuration	Maximum bit rate:	O Unlimited	
• System Options	\subset	Elimited to 3000	kbit/s
About	Use:	Variable bit rate	
About		O Constant bit rate	
	Target bit rate:	kbit/s	
	Priority:	None	
	View Image Setti	ngs	
	View image after sa		View

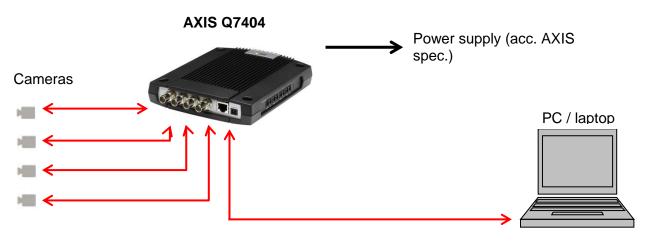
Figure 7.13: MPEG-4 settings

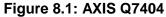
8 Configuring the Video Encoder AXIS Q7404

8.1 Connecting the Video Encoder AXIS Q7404

Connect the required cameras with the Video Encoder. The BNC connectors of the Video Encoder are numbered. Always start with the first connector.

Connect the power supply to the Video Encoder. Connect your PC or laptop via Ethernet cable to the Video Encoder. Turn on the power supply. All LEDs should light green after about 60 seconds.





Change your PCs IP configuration. Use static IP address with the following settings:

Internet Protocol Version 4 (TCP/IPv4)	Properties ?	
General		
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.		
O Obtain an IP address automatical	ly	
Use the following IP address:		
IP address:	192.168.0.80	
S <u>u</u> bnet mask:	255.255.255.0	
Default gateway:		
C Obtain DNS server address auton	natically	
○ Use the following DNS server add	resses:	
Preferred DNS server:		
Alternate DNS server:	· · ·	
Validate settings upon exit	Ad <u>v</u> anced	
	OK Cancel	

Figure 8.2: Setting a static IP address

8.2 Access to the Video Encoder AXIS Q7404

Open your browser and type in the preset IP address of the video server: **192.168.0.90**.

Choose your password and type it in. This password will be needed later. If the system asks for a further authentication, please type in the same password like before.

AXISA		
Create Certificate		
Secure configuration of the root password via HTTPS requires a self-signed certificate.		
Create self-signed certificate		
Configure Root Password using HTTP		
User name: root		
Password (max 64 characters):		
Confirm password:		
ОК		
The password for the pre-configured administrator root must be changed before the product can be used.		
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.		

Figure 8.3: Creating a user password

After setting the password please login to the video server:

Authentication	Authentication Required		
0	http://192.168.0.90 is requesting your username and password. The site says: "AXIS_00408CC0FBC9"		
User Name:			
Password:			
	OK Cancel		

Figure 8.4: Login to the video server

User name: root

Password: (your chosen password from before)

Depending on the installed language at the video server you can download a new language file or select the existing.

AXISA P	XIS Q7404 Video Encoder	Live View Setup Help
Basic Setup	Languages	0
	Get Language	
Video & Audio	Get a language file from <u>www.axincom</u>	
Live View Config	Upload Language	
▶ PTZ	Select language file to upload: Browse No file selected.	and click Upload Language
	Select Language	
Detectors	English	
Applications	Save Reset	
• Events		
Recordings		
Languages		
System Options		
About		

Figure 8.5: Selecting a language

In some cases a browser add-on is necessary to display the video stream.

Now you should see the live stream of the connected network camera number 1.

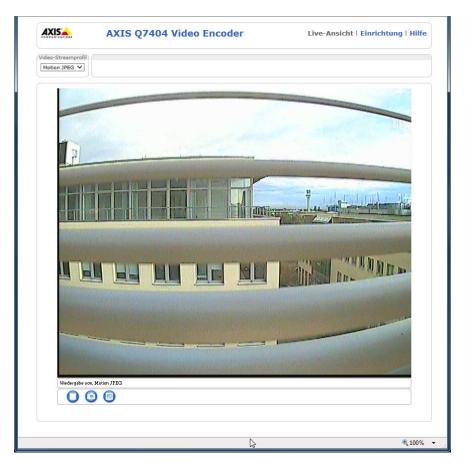


Figure 8.6: Picture of a connected network camera

Creating the user "admin" 8.3

For communicating with the data logger a special user is needed with administrator rights.

```
Click [Setup] (1) \rightarrow [Basic Setup] \rightarrow [1 Users] (2) \rightarrow [Add...] (3).
```

AXIS	AXIS	6 Q7404 Vi	deo Encoder	Live View	Setup	Help
▼ Basic Setup		Users			1	0
Instructions		User List				
1 Users 2 2. TCP/IP		User Name	User Group	User Info		
3. Date & Time 4. Video Stream 5. Audio Settings		root admin	Administrator Administrator		*	
▶ Video & Audio						
Live View Config						
• Events		3			-	
• System Options		Add	1odify Remove			
About		\sim				
		HTTP/RTSP Pas	sword Settings			
		Allow password typ	e: Encrypted & unencryp	ted 🖵		
		User Settings				
	7	🕢 Bhable anonyn	nous viewer login (no user	name or password req	uired)	
		Enable anonyn	nous PTZ control login (no	user name or passwor	d required)	
		🗹 Enable Basic S	Setup 8 Save	Reset		

Figure 8.7: Adding a new user

A new window opens.

System Options/User Setu	ıp - AXIS Q 💶 🗉 💌 🗙	
🛞 192.168.0.90/admin/user	rs_set.shtml?basic=yes&gr(🏠	
User Setup User name: Password (max 8 chars.): Confirm password: User group:	4 Viewer	Name the no (4). This use Recommen User name: Password:
✓ Enable PTZ control 6 ОК	Operator Cancel	Choose the click [OK] (6

new user "admin" and define a password ser and password will be needed later too.

nded:

admin 2x8bg4

e <User group> (o) Administrator (5) and (6).

Activate at <User Settings> the checkbox Enable anonymous viewer login (no user name or password required) (7). Confirm the settings with [Save] (8).

8.4 Setting date and time

Change to the entry [Basic Setup] \rightarrow [3. Date & Time] (9). Choose the <Time mode> (o) Set manually (10). Set up date and time. Confirm the settings with [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 the logger time after successfully synchronizing with the video server.

AXIS	AXIS Q7404 Video Encoder Live View Setup Hel	р
▼ Basic Setup	Date & Time Settings	3
Instructions	Current Server Time	
1. Users 2. T <u>CP/IP</u> 9	Date: 2012-07-20 Time: 18:15:59	
3. Date & Time	New Server Time	
4. Video Stream	Time zone: GMT (Dublin, Lisbon, London, Reykjavik)	
5. Audio Settings	Automatically adjust for daylight saving time changes.	
Video & Audio	Time mode:	
▸ Live View Config	Synchronize with computer time	
circ rich comg	Date: 2012-07-20 Time: 18:18:29	
Events	Synchronize with NTP server	
System Options	NTP server: <u>No server specified</u>	
y system options	10 Set manually	
About	Date: 2012-07-20 Time: 18:19:00	
	Date & Time Format Used in Images	
	Specify date format: Predefined YYYY-MM-DD	
	Own %F	
	Specify time format: Predefined 24h With resolution: 1 second	
	Own %T	
	11 Save Reset	

Figure 8.8: Set date and time manually

You can also display date and time on the video image.

Attention:

Before you start recording always set the date and time in the data logger first. 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.

Click [Basic Setup] \rightarrow [4 Video Stream] (6). <----- Unterschied zu deutscher Version. Activate both checkboxes Include date and Include time (7) to activate the display on the video image. Confirm the settings with [Save] (9).

If desired, change format options like <Text color>, <Text background color> and text place (8). Confirm the settings with [Save] (9).

Le .	Midae Chur	Cattlana Q	
- Basic Setup	Video Stre	am Settings	
Instructions 1 Users	Image Audio	H.264 MJPEG	
2 TCP/IP	Image Appeara	nce	
3 Date & Time	Resolution:	Aspect ratio correction	
5 Abdie Settings		4CIF (704 x 480)	
Video & Audio	Compression:	30 [0100]	
VIDEO & AUDIO	D Mirror image		
Live View Config	Rotate image:	0 💌 degrees	
PTZ	Color setting:	Color	
and a second	Video Stream		
 Applications 	Maximum frame rate:		
• Events	Unlimited		
A CONTRACTOR OF	O Limited to	[130] fps per viewer	
Recordings	Overlay Settings		
System Options	D Include overla	y mage at the coordinates: X 0 [0] Y 0 [0]	
A company of the set of the set	Ed Include date	I Include time 7	
About	D Include text:		
	Text color: white V Text background color: black V 8		
	Contraction of the second seco	and a second	
	Press.text/date/tim	ie at top 🧭 of image	
	Preview		
	View image stream	while confinuing Video format: MJPEG 👻 Open	

Figure 8.9: Including date and time in the video stream

The setup for in the video image embedded timestamps is finished.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <Maximum frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

8.5 IP configuration

Change to the entry [Basic Setup] \rightarrow [2. TCP/IP] (12). Choose the <IPv4 Address Configuration> (o) Use the following IP address (13). Type in these data (14):

IP address:	192.168.1.90
Subnet mask:	255.255.255.0

Confirm the settings with [Save] (15).

AXISA	AX	IS Q7404 Video Encoder Live View Setup Help
• Basic Setup		Basic TCP/IP Settings
Instructions		Network Settings
1. Ucers 2 TCP/IP 12		View current network settings: View
3. Date & Time		IPv4 Address Configuration
4. Video Stream 5. Audio Settings		Enable IPv4
5. Audio Securiys		Obtain IP address via DHCP
Video & Audio	13	Use the following IP address: 14
Live View Config		IP address: 192.168.1.90 Test
1. Example		Subnet mask: 255.255.255.0
Events		Default router:
System Options		IPv6 Address Configuration
About		Enable IPv6
About		Services
		Enable ARP/Ping setting of IP Address
		AXIS Internet Dynamic DNS Service Settings
		15 Save Reset
		See also the advanced TCP/IP settings

Figure 8.10: Setting an IP address

Note: By changing the IP address you lose the connection to the video server.

This also will be told to you in an information window:

The IP address for the AXIS Q7404 Video Encoder has been changed. To access the web pages, use the new IP address.
ОК

Figure 8.11: Hint

For reconnecting you have to change your computers IP address to **192.168.1.80**. Then type in your browser the new IP address of the network camera, to access the configuration again.

The first camera connected to the Video Encoder AXIS Q7404 is now configured. If more than one camera should be connected, the same changes for all connected cameras have to be done. Use the specified IP address in the following table for its respective camera.

	Camera 2	Camera 3	Camera 4
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:

Finally, change your PCs or laptops IP configuration back to dynamic configuration.

9 Configuring the Video Encoder AXIS P7214

9.1 Connecting the Video Encoder AXIS P7214

Connect the required cameras with the Video Encoder. The BNC connectors of the Video Encoder are numbered. Always start with the first connector.

Connect the power supply to the Video Encoder. Connect your PC or laptop via Ethernet cable to the Video Encoder. Turn on the power supply. All LEDs should light green after about 60 seconds.

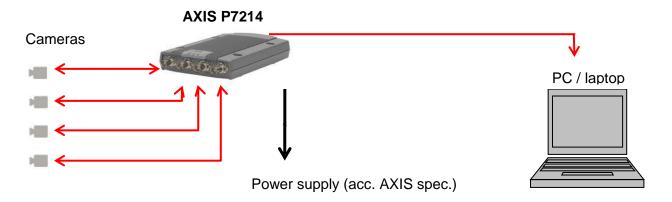


Figure 9.1: Connecting a Video Encoder

Change your PCs IP configuration. Use static IP address with the following settings:

Internet Protocol Version 4 (TCP/IPv4)	Properties
General	
You can get IP settings assigned autom this capability. Otherwise, you need to for the appropriate IP settings.	
O Obtain an IP address automatical	ly
• Use the following IP address:	
IP address:	192.168.0.80
S <u>u</u> bnet mask:	255.255.255.0
Default gateway:	
C Obtain DNS server address autor	natically
□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	resses:
Preferred DNS server:	
Alternate DNS server:	
Validate settings upon exit	Ad <u>v</u> anced
	OK Cancel

Figure 9.2: Setting a static IP address

9.2 Access to the Video Encoder AXIS P7214

Open your browser and type in the preset IP address of the video server: **192.168.0.90**.

Choose your password and type it in. This password will be needed later. If the system asks for a further authentication, please type in the same password like before.

AXISA		
Create Certificate		
Secure configuration of the root password via HTTPS requires a self-signed certificate.		
Create self-signed certificate		
Configure Root Password using HTTP		
User name: root		
Password (max 64 characters):		
Confirm password:		
The password for the pre-configured administrator root must be changed before the product can be used.		
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.		

Figure 9.3: Selecting a user password

After setting the password please login to the video server:

Authentication	Required
2	http://192.168.0.90 is requesting your username and password. The site says: "AXIS_ACCC8E06A3A6"
User Name:	
Password:	
	OK Cancel

Figure 9.4: Login to the video server

User name: root

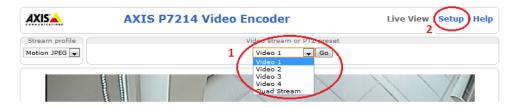
Password: (your chosen password from before)

Depending on the installed language at the video server you can download a new language file or select the existing.

AXIS	AXIS P7214 Video Encoder	Live View Setup Help
Basic Setup	Languages	0
	Get Language	
Video & Audio	Get a language file from www.anis.com	
Live View Config	Upload Language	
▶ PTZ	Select language file to upload: Browse No file selected.	and click Upload Language
	Select Language	
Detectors	English	
• Events	Save Reset]
• Recordings		
Languages		
System Options		
About		

Figure 9.5: Select a language

In some cases a browser add-on is necessary to display the video stream.



Now you should see the live stream of the connected network camera number 1.

Figure 9.6: Display a video stream

To have a look at the other cameras open the dropdown menu on top and select the one you want to see or to see the videos of all four cameras in one screen click **[Quad Stream]**.

9.3 Creating the user "admin"

For communicating with the data logger a special user is needed with administrator rights.

```
Click [Setup] (1) \rightarrow [Basic Setup] \rightarrow [1. Users] (2) \rightarrow [Add...] (3).
```

AXIS	AXIS P721 4	4 Vide	eo Encoder		Live View	Setup	Help
• Basic Setup	Users					1	0
Instructions	User List						
1 Users 2 2. TCP/IP	User Name	e	User Group	User	Info		
 TCP/IP Date & Time Video Stream Audio Settings 	root admin		Administrator Administrator			*	
• Video & Audio							
▶ Live View Config							
Events	3					-	
System Options	Add	Mod	lify Remove]			
About		D D	and Cattings				
			ord Settings				
	Allow passw	vord type:	Encrypted & unencr	ypted 💌			
	User Setti	ings					
	7 💽 hable :	anonymou	us viewer login (no us	er name or	password requi	red)	
	Enable :	anonymou	us PTZ control login (r	no user nam	e or password	required)	
	🗹 Enable	Basic Set	up 8 Save	Reset			

Figure 9.7: Adding a new user

🕙 System Options/User Setup - AXIS Q 💶 💷 🗮 🗶
🛞 192.168.0.90/admin/users_set.shtml?basic=yes&gra
User Setup 4 🕜
User name:
Password (max 8 chars.):
Confirm password:
User group: Oviewer Operator 5 Operator
Enable PTZ control

A new window is opened.

Name the new user "admin" and define a password (4). This password will be needed later.

Recommended:

User name: admin Password: 2x8bg4

Choose the <User group> (o) Administrator (5) and click [OK] (6).

Figure 9.8: Choose a password for the new user

Activate at <User Settings> the checkbox **Enable anonymous viewer login (no user name or password required) (7)**. Confirm the settings with **[Save] (8)**.

9.4 Setting date and time

Change to the entry [Basic Setup] \rightarrow [3. Date & Time] (9). Choose the <Time mode> (o) Set manually (10). Set up date and time. Confirm the settings with [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 the logger time after successfully synchronizing with the video server.

	KIS P7214 Vid	Live View Setup Help				
	Date & Time	Settings 💡				
Instructions	Current Server Tim	e				
1. Users 2. TCP/IP 9		Date: 2012-07-20 Time: 18:15:59				
3. Date & Time	New Server Time					
4. Video Stream	Time zone:	GMT (Dublin, Lisbon, London, Reykjavik)				
5. Audio Settings		Automatically adjust for daylight saving time changes.				
Video & Audio	Time mode:					
Live View Config	O	Synchronize with computer time Date: 2012-07-20 Time: 18:18:29				
Events						
/ Events	Synchronize with NTP server					
System Options	10 💿	NTP server: <u>No server specified</u> Set manually				
About	Ŭ	Date: 2012-07-20 Time: 18:19:00				
	Date & Time Forma	t Used in Images				
	Specify date format:	Predefined YYYY-MM-DD				
		Own %F				
	Specify time format:	Operation 24h Vith resolution: 1 second Vita Second				
		Own %T				
		11 Save Reset				

Figure 9.9: Set date and time manually

You can also display date and time on the video image.

Attention:

Before you start recording always set the date and time in the data logger first. 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.

Click [Basic Setup] \rightarrow [4 Video Stream] (6). Activate both checkboxes Include date and Include time (7) to activate the display on the video image. Confirm the settings with [Save] (9).

If desired, change format options like <Text color>, <Text background color> and text place (8). Confirm the settings with [Save] (9).

AXIS	AXIS P7214	Video Encoder	Live View Setup Help
- Basic Setup Instructions	Video Stre	eam Settings	0
 1 Users 2 TCP/IP 3 Date & Time and Sectors Video & Audio Live View Config PTZ Applications Events Recordings System Options About 	Image Appearan Resolution: Compression: Mirror image Rotate image: Color setting: Video Stream Maximum frame ra @ Unlimited Unlimited to Dverlay Settings Include overlay Difficulte date	Aspect ratio correction 4CIF (704 x 480) • 30 (0100) 0 • degrees Color • te: (130) fps per viewer (130) fps per viewer ty image at the coordinates: X 0 Include time Text background color: black ne at top • of image while confirming. Vide	[0] ¥0 [0] 8 o format: MJPEG ♥ Open eset

Figure 9.10: Include date and time in the video stream

The setup for in the video image embedded timestamps is finished.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <Maximum frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

9.5 IP configuration

Change to the entry [Basic Setup] \rightarrow [2 TCP/IP] (3). Choose the <IPv4 Address Configuration> (o) Use the following IP address (4). Type in these data (5):

IP address:	192.168.1.90				
Subnet mask:	255.255.255.0				

Confirm the settings with [Save] (6).

AXIS	AXIS P7214 Video Encoder Live View Setup Help
• Basic Setup	Basic TCP/IP Settings
Instructions	Network Settings
2 TCP/IP 3	View current network settings: View
3 Date & Time	IPv4 Address Configuration
 4 Video Stream 5 Audio Settings 	Enable IPv4
S Audio Securigs	Obtain IP address via DHCP
Video & Audio	Use the following IP address:
Live View Config	4 IP address: 192.168.1.90 Test
-	Subnet mask: 255.255.255.0
• PTZ	Default router:
Detectors	IPv6 Address Configuration
→ Events	Enable IPv6
- Livenes	Services
Recordings	Enable ARP/Ping setting of IP Address
System Options	Enable AVHS
	One-click enabled O Always
About	Proxy:
	Proxy port: 3128
	Proxy login:
	Proxy password:
	Proxy authentication method:
	AXIS Internet Dynamic DNS Service Settings
	6 Save Reset
	See also the advanced TCP/IP settings

Figure 9.11: Setting an IP address

Note:

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

Note:

By changing the IP address you lose the connection to the video server.

This also will be told to you in an information window:

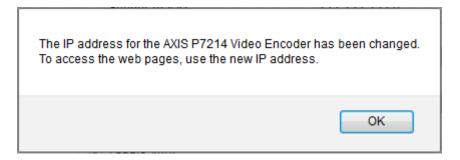


Figure 9.12: Hint

For reconnecting you have to change your computers IP address to **192.168.1.80**. Then type in your browser the new IP address of the network camera, to access the configuration again.

Note:

Finally, change your PCs or laptops IP configuration back to dynamic configuration.

10 Save and restore the Video Encoder settings

To save all settings of the AXIS video server you can use the program "AXIS Camera Management", which can be downloaded on the website of AXIS (registration required).

Needed software: AXIS Camera Management v2.00.31 <u>http://www.axis.com/techsup/software/index.htm</u> or <u>http://www.axis.com/de/products/cam_mgmt_software/interface.htm</u>

Attention:

If you use a newer version of the program it may be that the communication between software client and data logger is disturbed. That is because the program changes some network settings, so UDP pings are not correctly transferred from the logger to the AXIS Camera Management Client.

In this case the older version (mentioned above) should be used or the program should be uninstalled after the saving.

After installing the software you can start it by using [Start] \rightarrow [AXIS Camera Management] \rightarrow [AXIS Camera Management Client].

😵 AXIS	Camera Man	agement Clie	nt								x
<u>File C</u> onfiguration <u>O</u> ptions <u>H</u> elp											
%	Ē	🐺 📲	1 1	: 2 (8 📥 🖾 🖱	い の 点	4				
Ø	0 devices	s, 0 selected						Type to s	earch		×
Ľ	Name		Status	Address	Host Name	Serial Number	Model	Firmware	DHCP	Server	
Ala	rms 1	Tasks									~
Time		Alarm	Des	scription							\sim
											Ī
$ \sim /$) devices Connected to	JGOLOMBEK									

Figure 10.1: AXIS Camera Management Client

You can add your device by clicking [Add devices].



Figure 10.2: Adding devices step 1

After selecting your device and logging in with your chosen password for the user "root" from before you add the device to the device list with **[Next >]** and **[Finish]** in the next window.

Add Devices						
Select the devices	s to add					Minimierer
Search Again	_			Type to	search	×
Address	Serial Number	Model	Status			
192.168.1.90	00408CCA0520	AXIS P7214	Incorrect pas	ssword		
0 of 1 devices selected						
Select / deselect <u>all</u>						
Use host name whe	n possible					
			Help <	Back	<u>N</u> ext >	Cancel

Figure 10.3: Adding devices step 2

P Enter User Name and Password								
User name:	root							
Password:	•••••							
Use pass	✓ Use password for all devices with incorrect password							
	Help OK Cancel							

Figure 10.4: Adding devices step 3

😵 AXI	IS Camera M	anagement Clie	nt								x
<u>F</u> ile	<u>File C</u> onfiguration <u>O</u> ptions <u>H</u> elp										
Ľ.	Ē	T •	1	Tx 🕿 (0 📥 🖾	504	4				
6	1 devid	es, 0 selected						Type to	search		×
Ľ	Name		Status	Address	Host Name	Serial Number	Model	Firmware	DHCP	Server	
	19	2.168.1.90	ОК	<u>192.168.1.90</u>	1	00408CCA0520	AXIS P7214	5.50.2	No	JGOLOMBEK	
A	larms	Tasks									~
Time		Alarm		Description							~
											Ē
Ø	1 devices Connected	to JGOLOMBEK									

Figure 10.5: Device added

To save the current settings please right click your device. In the shortcut menu select [Parameter Management] \rightarrow [Create Parameter File...].

Name		Status	Address	Host	Nam	ne	Serial Number	Model	
🧻 192.168		Assign IP Addres					00408CCA0520	AXIS P7214	
	<u></u>	Parameter Mana		•		Create	Parameter File		
		User Manageme	2			Apply P			
< .		Upgrade Firmwa	re	L	F				
ns Task	₽₀	Set Date and Tim	e						
	5	Refresh							
	Ģ	Restart							
	<u>+</u> ₹	Restore							
	*	Install Camera Ap	plication						
devices		Tag Devices							
onnected to JGO	X	Remove		Del					

Figure 10.6: Creating Parameter File

The program reads the configuration from the video server. Activate the checkbox **Select / De-select all** and then click **[Save]** to save the configuration to your local system.

To restore the saved settings to your device select [Parameter Management] \rightarrow [Apply Parameter File...] in the shortcut menu of the device.

11 Resetting the Video Encoder AXIS Q7404 / 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 four video channels (including all IP addresses) to the factory default settings.

First disconnect the power supply from the AXIS Video Encoder. Then press and hold the **[RE-SET]** button (1) while reconnecting with the power supply.

AXIS Q7404

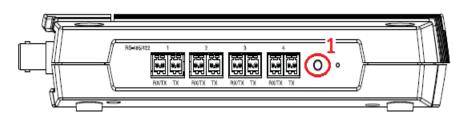


Figure 11.1: Reset button AXIS Q7404

AXIS P7214

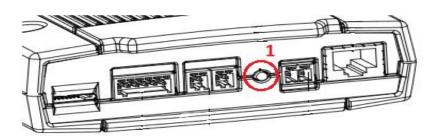


Figure 11.2: Reset button AXIS P7214

Keep the **[RESET]** button **(1)** pressed. The STATUS LED turns yellow. This may take up to 15 seconds.

Release the **[RESET]** button (1) when the STATUS LED lights permanently green. This may take up to one minute.

The video server is set back to factory default settings and can be configured again.

12 Connecting video equipment to the data logger

Depending on the logger model you have several ways to connect the network camera or Video Encoder to the logger.

BLUEPIRAT Mini: It is possible to use one of the front Ethernet ports (ETH #1 / TSL or ETH #2 / TSL) or one of the back ports (ETH #3 or ETH #4).

BLUEPIRAT2 5E: It is possible to use the front Ethernet port (**ETH #1 / TSL**) or one of the back ports (**ETH #2** to **ETH #5**).

BLUEPIRAT2: It is possible to use the **Gigabit-Ethernet** port on the front side or the **Ethernet kit** on the back.

At the BLUEPIRAT2 / BLUEPIRAT2 5E the back ports should be preferred. In this case the front port still can be used for access to the logger while the Video Encoder is recording data. This alternative is described in the following.

Connect the Gigabit-Ethernet port of the logger via an Ethernet cable with the Ethernet port of your PC / laptop. The data logger is configured as a DHCP server by default.

Connect the logger via the affiliated power harness (red/+/clamp 30 and black/-/clamp 31) with a power supply (e.g., the vehicle battery).

Connect the Ethernet kit with the FCI port of the BLUEPIRAT2 (rear side). Connect the Ethernet kit with the network camera or the Video Encoder.

When using a Video Encoder the network camera can be connected to its BNC connector number 1. Connect the Video Encoder and if required even the network camera to the according power supply. The Video Encoder is starting. Wait until all its LEDs turn green.

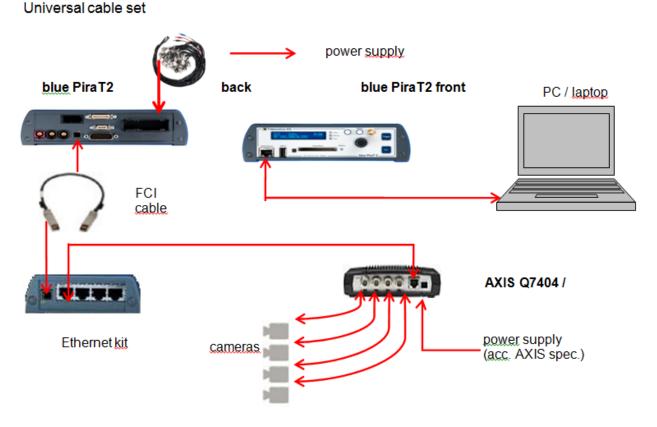


Figure 12.1: Connecting video equipment to a data logger

13 Configuring the data logger

13.1 General settings

The logger should be configured as DHCP server, if it is not already configured accordingly (default value).

Therefore click on the application **[Open configuration] (5)** in the System Client. Expand the folder **[General]** in the window to the right and click on **[Network settings]**. Enable the <DHCP mode> **(o) DHCP server** or **(o) Automatic DHCP Configuration for TSL.**

Network Logger 🕺				=
Name	IP	Connected with	S/N	8
📩 CS_bP2-S_1003696	192.168.0.233		1003696	-
L_EN_II_KBr	10.64.76.48	qi11214		
- DUT 199	10.64.76.189	qi 10382	1005419	Ξ
DUT_187	10.64.76.205	qi 10695	1001704	
EN_PhS_touchTSL (4)				
+ Enter IP address	4	2 3 4	56	7
	_		J U	_
	0	D 🖡 🚬	i 📣 🗵	A

Figure 13.1: Selecting an application in the System Client

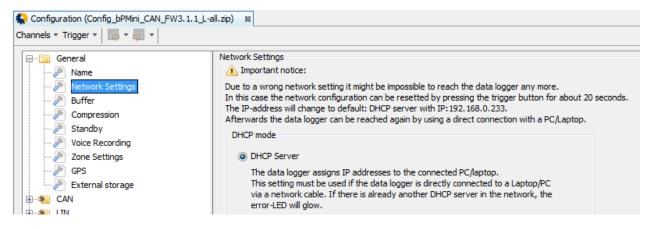


Figure 13.2: Setting the network settings in the System Client

Please be sure about the setting of the logger's standby.

You can activate or deactivate the automatic standby at [General] \rightarrow [Standby]. If active, there are two different time settings for network connection.

If the data logger is not connected to a network at the front Ethernet port and does not receive any data during the timeout entered in the upper text field, then it shuts down and enters standby mode. If the data logger is connected to a network at the front Ethernet port with active link and does not receive any data during the timeout entered in the lower text field, then it shuts down and enters standby mode.

This has important implications when using the camera function since Ethernet is required. If you activated the automatic standby, no further channels are connected or they are inactive, the logger shuts down and enters standby mode according to the lower time indication despite the video recording. So you have two options:

- Deactivating the automatic standby and shifting the device to standby manually, if necessary or
- Configuring a channel (e.g., CAN channel), whose activity coincides with the camera activity.

13.2 Camera settings

13.2.1 Camera | General settings

Click on the application **[Open configuration]** in the System Client. Expand the folder **[Camera]** in the window to the right and click on **[General settings]**.

🕀 🖻 General	General Settings						
🖶 🖷 CAN	Only Record Video Data Around a Marker						
🖶 🖷 LIN	Note: The time range is equivalent to the time range used for data protection. See Buffer Settings						
🖶 📲 Serial							
🖶 🍋 Ethernet	Video Block Length: 60 s (Default: 60s)						
🖶 📲 Analog	Synchronisation of the camera time with the data logger time every 0 s (Default: 0s)						
🖶 🍋 Digital Input	(A) Important notice: 0 = No synchronisation while recording						
🗄 🐀 Digital Output							
🖨 📲 Camera	Encrypt video data: Inactive						
Diagonal Marca Marca Provinse P	Password:						
Diagona Marca Marca Provinse Provinse Provinse Provinse Provinse Provinse	Change Delete						
inactive #3 (Camera-3) inactive							
inactive #4 (Camera-4) inactive	Hint: The password settings can be reset by setting the default-configuration.						
🖉 General Settings	Hint: Already encrypted video data remain encrypted when the password is changed/deleted.						
🖶 📲 USB							
🖶 🖷 🔚 Trigger	Video Servers: No video server / video server with 4 IPs 👻						
🖶 🖻 📔 Signal Based Filter							

Figure 13.3: Camera => General settings

If the checkbox for Only record video data around a Marker is:

- activated: the logger records no data, except these around a Marker.
- deactivated: the logger always records all video data.

You can define the time range around a marker under [General] => [Buffer]:

🖃 💼 General	Buffer
···· P Name ···· P Network Settings ···· P Buffer	☑ Circular Buffer Mode Active Protection of Startup Data
Description Compression Description	End Time of Protected Data Block: 0 Seconds After Startup
Voice Recording	Protection of Marker Data
Zone Settings GPS Wi-Fi External Storage	 In case of a full data logger with enabled circular buffer mode: Delete the video data first, only then the remaining trace data Protect the data of a Marker from being overwritten
⊕	
🗄 📲 LIN	Start Time of the Data Block
🗄 📲 Serial	Cast startup before the marker
ie	600 seconds before the Marker
🗄 📲 Ethernet	End Time of the Data Block
ie	 First shutdown after the marker 600 seconds after the Marker
⊞…≉i Digital Output ⊞…≉i Camera	600 seconds after the Marker
🕀 💼 Trigger	

Figure 13.4: Setting the time range around a marker

General Settings						
Only Record Video Data Around a Marker						
Note: The time range is equivalent to the time range used for data protection. See Buffer Settings						
Video Block Length: 60 s (Default: 60s)						
Synchronisation of the camera time with the data logger time every 0 s (Default: 0s)						
▲ Important notice: 0 = No synchronisation while recording						
Encrypt video data: Inactive						
Password:						
Change Delete						
Hint: The password settings can be reset by setting the default-configuration.						
Hint: Already encrypted video data remain encrypted when the password is changed/deleted.						
Video Servers: No video server / video server with 4 IPs 🔹						

Figure 13.5: Camera => General settings

To record video blocks of certain length, type in your desired value in seconds at **<Video block** length>.

The field **<Synchronisation of the camera time with the data logger time every** [] **s>** allows defining his time range.

Note:

If there are some gaps in the recording it may be caused by this synchronisation. In this case please deactivate the synchronization by inserting *0* into the field.

If you use more than one single camera like Axis 207/210/211 the synchonisation must be enabled to guarantee a synchronised recording of all cameras.

13.2.1.1 Encrypting video data

If the video data should be encrypted, the Client offers the possibility to set, change or delete a password in this field:

Encrypt video data: Inactive				
Password:				
Change	Delete			

13.2.1.2 Setting the video server

In the dropdown menu at **Video Servers**> select the connected network camera / Video Encoder. The following options are available:

Option 1: No video server / video server with 4 IPs AXIS Q7404 / 207 / 210 / 211 / P12 series / F41

Option 2: Video server with one IP and 4 channels AXIS P7214 / F44

Option 3: Video server with one IP and one *quad* channel AXIS P7214 / F44

Note:

Quad channel means that up to 4 video streams are recorded in one window.

Attention:

With the setting Quad-View, the same maximum frame rate must be set for all cameras! You can find this setting in the camera configuration under Axis Setup => Basic Setup => Video Stream => Camera 1, Camera 2,... At different frame rates, otherwise connection breaks may occur.

If you select **option 2** or **3**, please type the IP address of the AXIS P7214 / F44 in the approaching fields below.

Video Servers:	Video server with one IP and 4 channels -							
	IP Address:	192].	168].	1].	90

Figure 13.6: Setting an IP address

13.2.1.3 Configuring the cameras

In the folder [Camera] click [Camera #1] (1) and activate the checkbox for Camera interface active (2). Choose the connector (3) depending on the Ethernet port the Video Encoder / network camera is connected to. Enter the Video Encoders / network cameras IP address (4). If the AXIS P7214 is used, the IP address is already specified in the general settings. It is taken from there.

If you have chosen to use the recommended user and password, you can activate the checkbox for **Default password (5)**.

If you have chosen to use your own password, deactivate the checkbox for **Default password** (5) and type in your chosen "admin" password from before (6).

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

	S #1					
🕀 🖻 🔁 General	Camera #1					
🗄 🖷 🏎 🍋 CAN	2 📿 Camera Interface A	ctive				
🖶 🏝 LIN	Note: Only record v	video data around a Marker" is active! See general camera settings				
😟 🍋 Serial						
🖶 🍋 Ethernet	Name:	Camera-1				
🖶 🏚 Analog		Back				
🖶 📲 Digital Input	3 Connector:	Back				
🖶 📲 Digital Output	IP Address:	192 . 168 . 1 . 90 4				
🖨 📲 Camera	IF Address.					
PC Camera #1 (Camera-1)	IP Address of Data Log	er: 192 . 168 . 1 . 233				
P Camera #2 (Camera-2)						
🥬 Camera #3 (Camera-3)	- <i>inactive</i> Subnet Mask:	255 . 255 . 255 . 0				
🥬 Camera #4 (Camera-4)	- inactive					
General Settings	5 👽 Default password					
🖶 🍋 USB						
🖶 🖓 🔚 Trigger	Enter Password:					
🗄 🖓 📴 Signal Based Filter	Repeat Password:					
i ⊕… 📴 CCP/XCP						
🗄 🖓 📴 Online Streaming		Note: The Password must be between 3 and 8 characters in length and must contain only numbers and letters (0-9 , A-Z , a-z) (no umlauts)				
🖶 🖓 🔁 Live View						
🗄 🖓 🔚 Channel Mapping						
🖶 🖓 📴 System Link (TSL)						
🗄 🖓 🔁 Databases						
		8				
	Default config	uration Load from file Save as file Write to logger				

Figure 13.7: Configuring the cameras

If you have selected No video server / video server with 4 IPs under [General], make the same changes for all connected cameras with the following IP addresses:

	Camera 1	Camera 2	Camera 3	Camera 4
AXIS Q7404, 207, 210, 211 AXIS P1204, F41	192.168.1.90	192.168.1.91	192.168.1.92	192.168.1.93
AXIS P7214, F44	192.168.1.90	192.168.1.90	192.168.1.90	192.168.1.90

After setup click on the button [Write to logger] (8).

The configuration is finished. The logger starts recording the video signal as configured.

13.3 Front display of BLUEPIRAT2

With the **[OFF / Esc]** button at the front of the data logger 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 four cameras, represented by "VID" and meaning video. Each sign after the word "VID" is placed for one video channel.

Three cases are listed:

Case 1

"-" means, the camera license is installed but no configuration has been performed. All four channels are however recognized.



Figure 13.1: Display: VID ---

Case 2

"X" means, all parameters are configured. The video data are not recorded or there is no connection between logger and server. The following figure shows that camera 1 and 2 are configured but not recorded and camera 3 and 4 are not activated.



Figure 13.2: Display: VID XX--

Case 3

"T" means, logger and server are connected and the videos are recorded. The following figure shows that camera 1 and 2 are recording and camera 3 and 4 are not configured.

- 💽 Tel	lemoti	ve AG —
	SER	NNNNN TT

Figure 13.3: Display: VID TT--

Does the data recording runs without errors, there should always be shown a "T" (Traffic).

14 Downloading video data

The System Client application allows downloading and saving the recorded data as offline data set from the logger on the computers disk to use it later or to convert the data directly from the logger. (see chapter 15)

Download and conversion of data is explained in detail in the **System Client User Guide**. This manual you can find in the ServiceCenter of MAGNA Telemotive GmbH or directly under this link:

https://sc.telemotive.de/4/uploads/media/TelemotiveSystemClient_UserManual.pdf

While all of the other trace files are recorded in the Telemotive format from the logger, video signals are directly provided as MPEG4 stream from the camera and saved as it is on the logger.

For the video application, there is a 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 length 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.

15 Converting video data

The System Client additionally allows to save data from the logger in a requested format on a PC or external storage device. Because video signals are directly provided as MPEG4 stream there is no direct conversion possible.

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 (4).

Please keep in mind, that when converting into one video file, the system can combine a maximum of 400 video blocks per file. After that the client opens a new file.

For both options the result will be the ".mpeg4" video format.

	4	
Camera #1 (Camera 1)	MPEG4 - Video format, one file (*.mpeg4)	1 X
Camera #2 (Camera-2)	MPEG4 - Video format, separate files(*.mpeg4)	1 X
	MPEG4 - video format, one file (*.mpeg4)	1 X
Camera #4 (Camera-4)	MPEG4 - Video format, one file (*.mpeg4)	<u>1</u> X

Figure 15.1: Settings for converting video data in the System Client

The System Client can also convert offline data, which are downloaded already from the data logger. Only an installed client is necessary.

In the tab <Favorites> click the green [+] (1) and choose the main download folder. The download folder appears (2). Double clicking the main folder (3) will open the conversion tab.

Offline_bpng_Limit	
data	
trace /2	

Figure 15.2: Choose an offline dataset

Like this you can convert every part of an offline data set at any time.

16 Watching videos

The .mpeg4 video files cannot be watched with the data logger. They can be used only if they have been downloaded or converted and saved to a computers disk first.

They can be played on any standard video player.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <Maximum frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

17 Axis IP Utility

is a small tool that you can download from the Axis Hompepage over the following link:

http://www.axis.com/global/en/support/downloads/axis-ip-utility

File View Tools Help			
£\$5		Suchwort eingeben	:
Name	IP-Adresse	Seriennummer	
AXIS F44 - ACCC8E37769F	192.168.1.90	ACCC8E37769F	
AXIS P1214 - ACCC8E06A3A6	192.168.1.91	ACCC8E06A3A6	

Figure 17.1: Axis IP Utility

AXIS IP Utility helps you set the IP address of an Axis network video product. Axis devices on the network are automatically discovered and displayed. Assign network parameters (IP Address, Subnet mask and Default router) or configure the device to obtain its IP address from DHCP.

The Axis device and the client computer must be on the same subnet/network segment.

18 A

19 bbreviations

Kürzel / abbreviation	Bedeutung / meaning
BLUEPIRAT	Processing Information Recording Analyzing Tool
bP	BLUEPIRAT
bP2	BLUEPIRAT2
bP2 5E	BLUEPIRAT2 5E
bPMini	BLUEPIRAT Mini
RC Touch	Remote Control Touch
bP Remote	BLUEPIRAT Remote
A2L	ASAM MCD-2 MC Language
AE	Automotive Electronics
ACK	ACKnowledged
CAN	Controller Area Network
ССР	CAN Calibration Protocol
CF	Compact Flash
CRO	Command Receive Object
D 40	
DAQ	Data Acquisition
DTO	Data Transmission Object
	Fleetring Control Line
ECL	Electrical Control Line
ECU	Electronic Control Unit
FIBEX	Fleld Bus Exchange Format
FW	Firmware
GMT	Greenwich Mean Time
INCA	INtegrated Calibration and Application Tool
LAN	Local Area Network = Netzwerk
LIN	Local Interconnect Network
MAC	Media Access Control
MCD	Measure Calibrate Diagnose
MDX	Meta Data EXchange Format
MEP	MOST Ethernet Packet
MOST	Media Oriented Systems Transport (www.mostnet.de)
ODT	Object Descriptor Table
ODX	Open Data EXchange
OEM	Original Equipment Manufacturer
PHY	PHYsical Bus Connect
PW	Passwort
RX	Receiver Data
SD	Secure Digital
SFTP	Secure File Transfer Protocol
SHA	Secure Hash
SSL	Secure Sockets Layer
TCP/IP	Transmission Control Protocol/Internet Protocol
TLS	Transport Layer Security
TMP	Telemotive Packetformat
TSL	Telemotive System Link
UDP	User Datagram Protocol
USB	Universal Serial Bus

UTC	Universal Time, Coordinated
Wi-Fi WLAN	Wireless Fidelity Wireless Local Area Network
ХСР	Universal Measurement and Calibration Protocol

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22 Version history

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DRIVING **EXCELLENCE.** INSPIRING **INNOVATION.**

MAGNA Telemotive GmbH

Office München Frankfurter Ring 115a 80807 München / Germany

Tel.:	+49 89 357186-0
Fax.:	+49 89 357186-520
E-Mail:	TMO.info@magna.com
Web:	https://telemotive.magna.com

 Sales

 Tel.:
 +49 89 357186-550

 Fax.:
 +49 89 357186-520

 E-Mail:
 TMO.Sales@magna.com

 Support

 Tel.:
 +49 89 357186-518

 E-Mail:
 TMO.productsupport@magna.com

 ServiceCenter:
 https://sc.telemotive.de/bluepirat

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