Vandal Resistant IP Video Station

STENTOFON
VINGTOR

CONFIGURATION MANUAL

A100K11377

Document Scope

This document describes the configuration and setup of the STENTOFON IP Video Station.

Product	Item No.
Vandal Resistant IP Video Station	1401110100
Flush Mount Back Box	1401199101
Surface Mount Back Box	1401199111
Protective Roof	1401199112

Publication Log

Rev.	Date	Author	Status
1.0	1.2.2013	HKL	Published
1.1	31.10.2013	HKL	screen resolution p.22

Related Documentation

For further information, refer to the following documentation:

Doc. number	Documentation
A100K10803	IP Substation Installation & Configuration
A100K11311	Pulse Technical Manual
A100K10812	SIP Substation Installation & Configuration

Contents

1 Introduction

1.1 Product Description

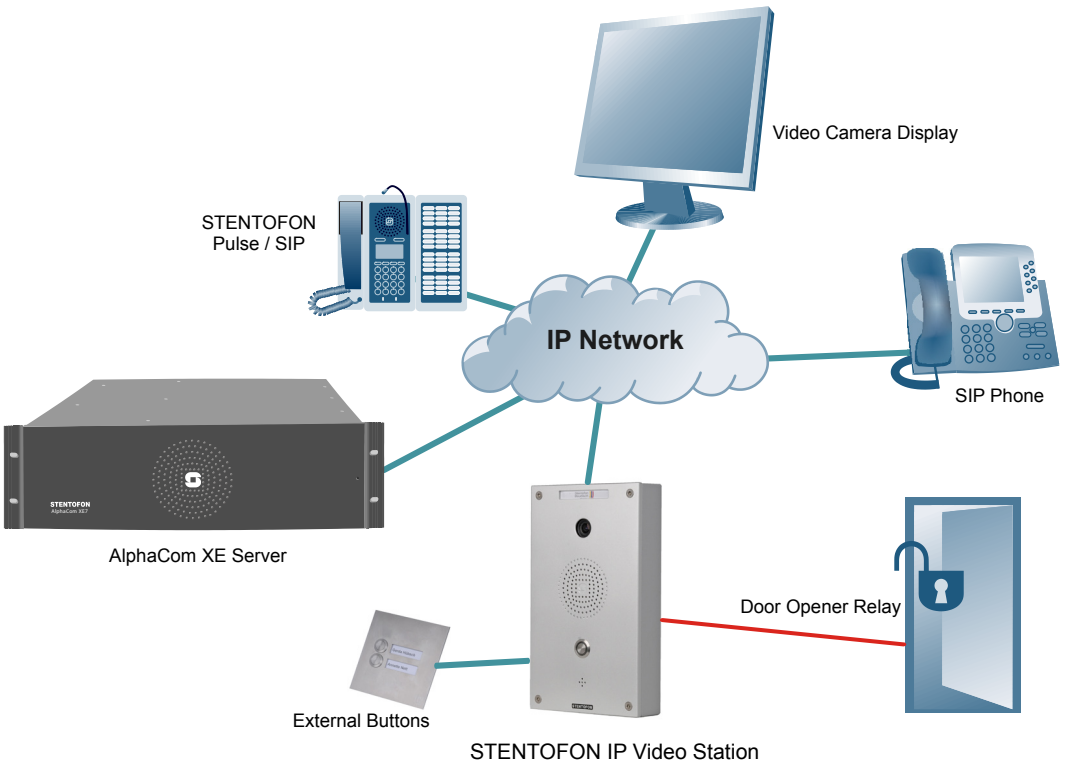
The STENTOFON Vandal Resistant IP Video Station is tough, durable and resilient, and designed for use in the harshest of environments. The station is typically used as a communication, information or emergency help point and connects directly to the IP network making it easy to deploy – anywhere and at any distance. Designed for CCoIP® the station offers a set of critical communication features such as integrated firewall, group call, call priority and over-ride, to name just a few. This enables you to deliver instant, efficient and secure voice, video and data services in an IP environment.

The station is a compact video intercom comprising an IP Camera and a central call button. It can either be installed in a surface-mounted or a flush-mounted housing. This device is preferably powered via PoE. In case this option is not available, a mains power supply with 24 V can also be used. A potential-free relay contact is available to control a door opener. Up to six external direct call buttons can be connected.

Features

- Robust housing with anodized aluminium frontplate
- IP65 protection class for frontplate
- PoE powered from one IP network cable
- IP Video Camera
- Relay output for remote control, e.g. doors, signal lamps, gates
- Button with bi-color LED ring

1.2 System Overview



2 Starting Up The System

2.1 Default Factory Settings

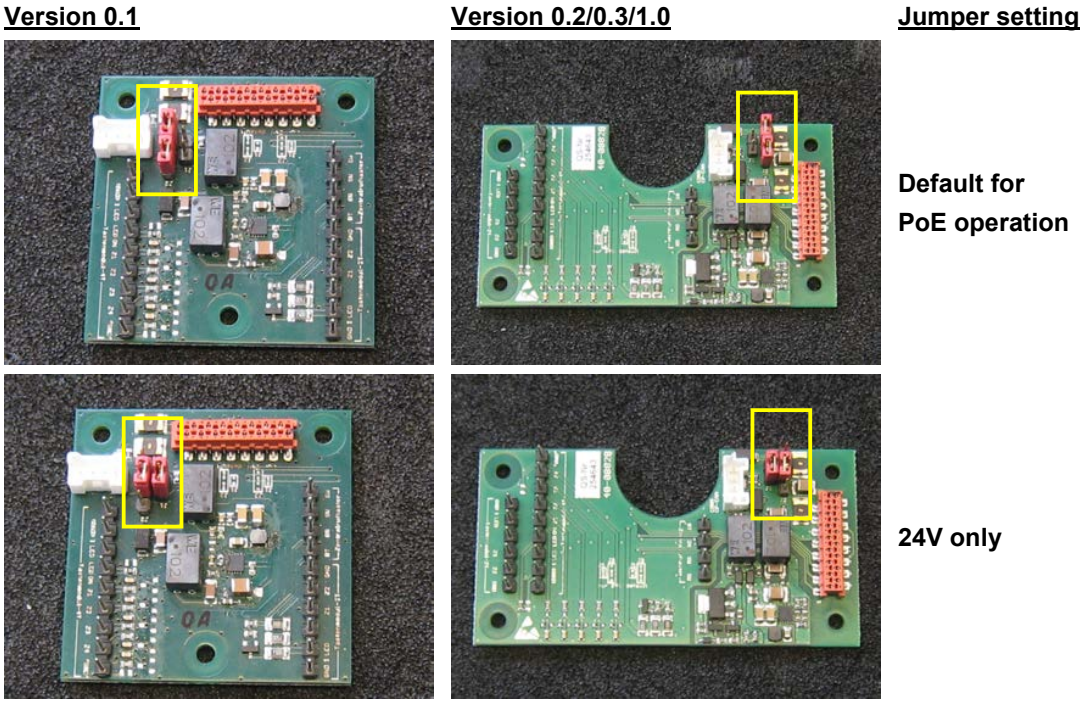
The STENTOFON IP Video Station has default IP addresses on delivery:

- IP Station: **169.254.1.100**
- IP Camera: **169.254.1.101**

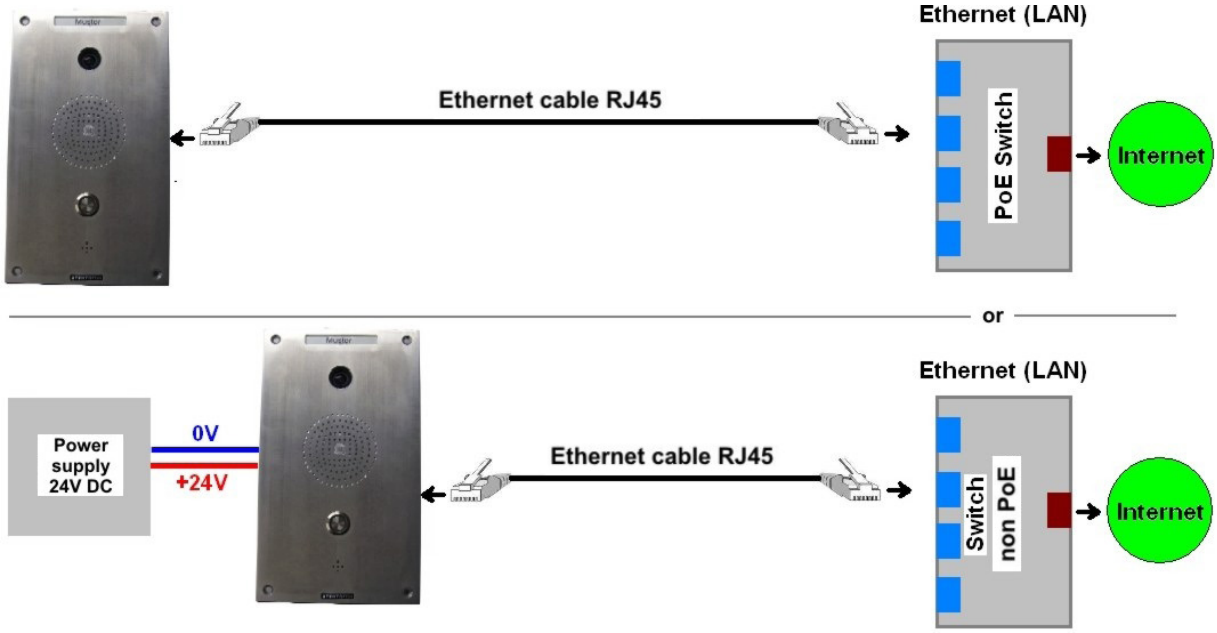
2.2 Hardware Presettings

2.2.1 Connector Board

The jumpers J1 and J2 on the Connector Board are set to **default for PoE operation** on delivery. For hardware version 0.1, it is required to adjust the jumper setting to **24V only** when using an external power supply. For hardware versions 0.2/0.3/1.0, it is not mandatory but recommended.



2.2.2 Connecting the IP Video Station



Connection Option 1: Switch with PoE

- Connect the PoE switch with a network cable to the LAN port P1 on the station.

Connection Option 2: Switch without PoE

- Connect a 24VDC power supply (24VDC, 1A secured) to 0V EXT and 24V EXT of the P3 terminal block on the station.
- Connect the non-PoE switch with a network cable to the LAN port P1 on the station.

Connecting external add-on buttons

Up to six external buttons can be connected on the Connector Board. For SIP and Pulse operation, only buttons 2 and 3 can be used. All six buttons (No. 2 to 7) can be utilized when operating with a AlphaCom IP system.

- Buttons 2 and 3 are connected to terminal X2 for version 0.1 and terminal X3 for versions 0.2/0.3/1.0, pins Z1 and Z2 as well as common ground.
- Buttons 4 to 7 are connected to terminal X3 for version 0.1 and terminal X4 for versions 0.2/0.3/1.0, pins Z1 to Z4 as well as common ground.
- Double and quadruple button modules as well as an emergency button can be delivered on request.

ⓘ *In case no 24V mains power supply is used, additional measures to avoid emission noise on the power cable must be taken!*

ⓘ *In order to avoid damage, connect accessories only in a voltage-free state.*

3 IP Video Station Configuration

3.1 Preliminary Requirements

- Ethernet 10/100 LAN for connecting the IP Video Station
- Electrical PoE (Standard) switch or 24V mains power supply

3.2 IP Station Configuration

3.2.1 Log into the Web Interface

The station features an embedded web interface which allows users to log in via a standard web browser.

First, your PC and the IP station have to be connected together via a PoE or network switch using network cables:

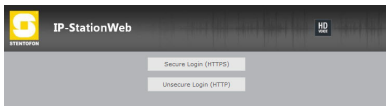
- Connect the PC to the PoE or network switch
- Connect the LAN port (P1) on the IP station to the switch

The factory default IP address of the station is **169.254.1.100**. In order for your PC to communicate with the station it is necessary to change its **Internet Protocol Properties** to use an IP address that is in the same range as 169.254.1.100, e.g. 169.254.1.1 with subnet mask 255.255.255.0.

After the IP properties have been changed, access the station by logging into the web interface using a standard web browser:

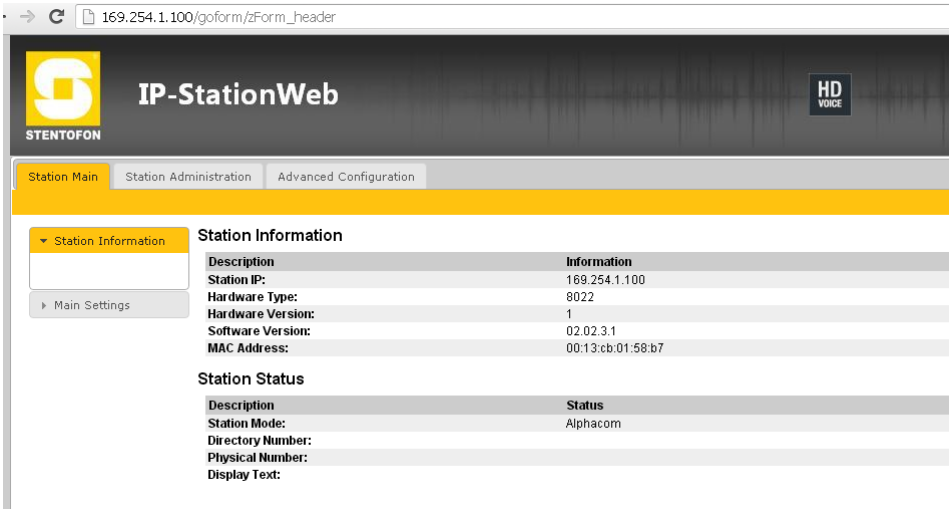
1. Open a web browser
2. In the browser's address bar, type the default IP address **169.254.1.100** and press the ENTER key
   - The station login page will be displayed

To log into the station:



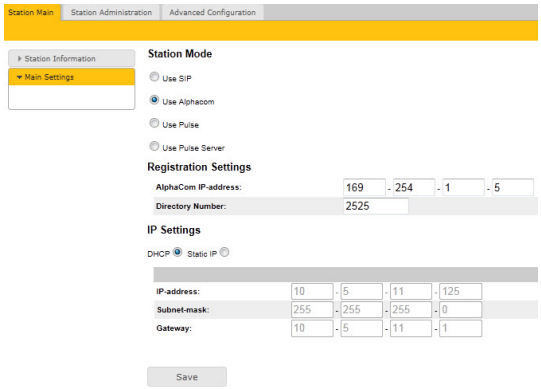
1. Click **Login**
2. Enter the default User name: **admin**
3. Enter the default password: **alphaadmin**

The **Station Information** page will now be displayed, showing the IP station configuration including the MAC address.



3.2.2 Station Mode and IP Settings

- Click **Station Main** > **Main Settings** to access the page for configuring station mode and IP parameters.



Station Mode

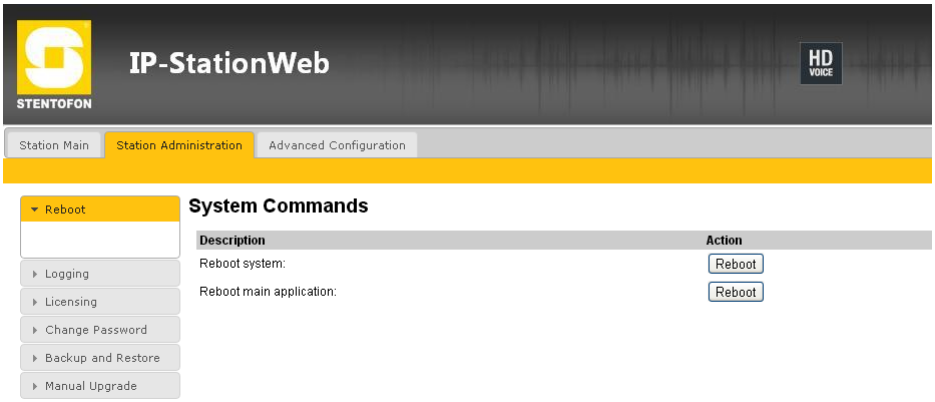
- **Use Alphacom** radio-button
  - The IP Station works as an Alphacom intercom station
  - Under Registration Settings:
  - Enter the IP address of the AlphaCom server in which the IP station is to be a subscriber in the **AlphaCom IP-address** field.
  - Enter the directory number of the station in the **Directory Number** field.
- **Use SIP** radio-button
  - The IP Station works as a SIP client
- **Use Pulse** radio-button
  - The IP Station works as a Pulse client
- **Use Pulse Server** radio-button
  - The IP Station works as a Pulse server

IP Settings

- **DHCP** – Use this option if the IP station shall receive IP Settings from a DHCP server.
- **Static IP** – Select this option if the IP station shall use a static IP address. Enter values for:
  - **IP-address:** IP address of the IP Station
  - **Subnet-mask:** Subnet mask of the IP Station
  - **Gateway:** IP address of the router
- Click **Save** followed by **Apply** to apply the new configuration settings. The IP Station restarts and is available again after about 60 seconds.

3.2.3 General Administration

- Select **Station Administration**



Reboot

- Reboot system
  - Hardware reboot of the IP Station
- Reboot main application
  - Firmware restart of the IP Station

Logging

Display of various system messages

Licensing

By entering license keys, the number of registered clients in the Pulse Server operation can be extended.

Change Password

Here the login password can be changed for access via the web interface. The default setting is **alphaadmin**. A factory reset restores the default password.

Backup and Restore

- Download Configuration File

To back up the current configuration of the IP Station:

- Right-click on **Download** and select **Save target as**.
- Select the directory for the configuration file and click **Save**.

- Upload Configuration File

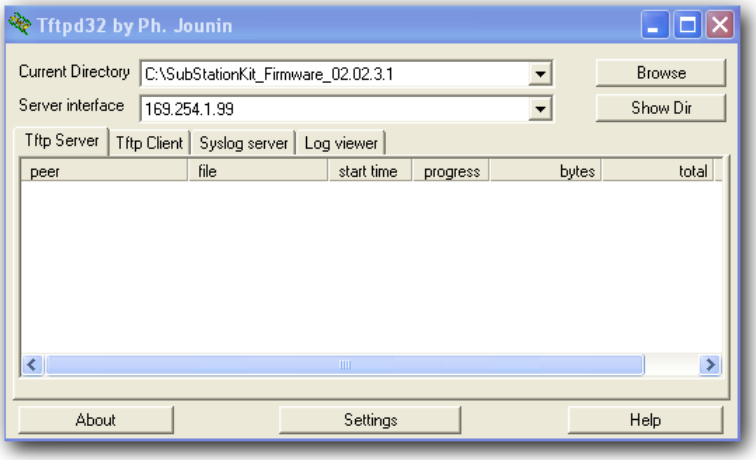
To transfer a saved configuration file to the IP Station and restore the settings:

- Click **Browse**
- Browse to the location of the configuration file, select it and click **Open**
- Make sure the file name is **ipst_config.xml** as required.
- Click **Upload**
- The IP Station must be restarted after a successful upload in order to apply the new settings.

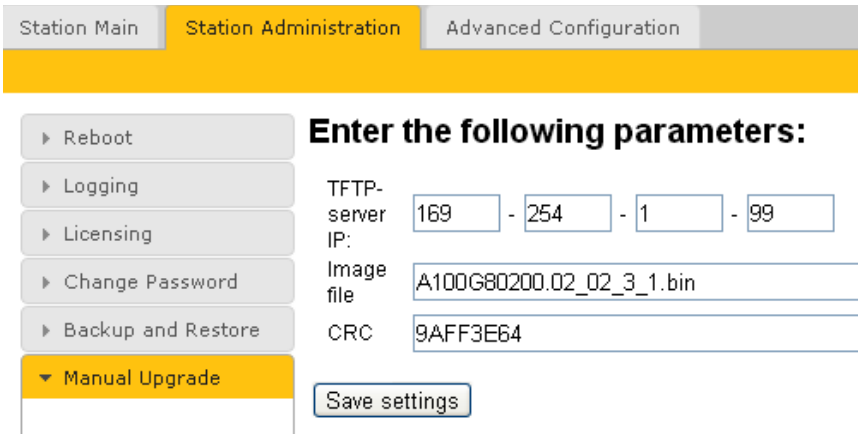
Manual Upgrade

To carry out a software upgrade, proceed as follows:

- Download the latest image file for the IP Station from the Zenitel support website (AlphaWiki).
- Start a TFTP server on your PC. A free TFTP server can be downloaded from http://tftpd32.jounin.net.
- Make sure that the working directory of the TFTP server is set to the folder of the downloaded image file.



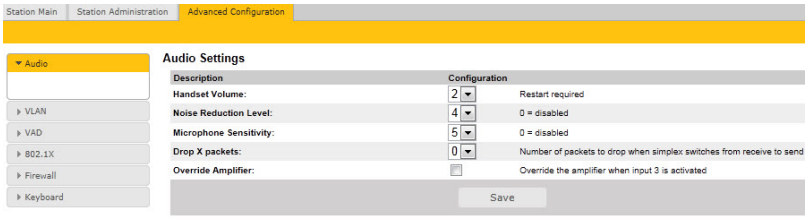
- Enter the following parameters in the web interface of the IP Station



- TFTP Server IP
  - The IP address of the PC where the TFTP server is running
- Image file
  - The name of the image file including the file extension **.bin**
- CRC
  - The CRC checksum is found in a text file which accompanies the image file.
- Click **Save settings** to start the upgrade process.

3.2.4 Audio Settings

- Select **Advanced Configuration** > **Audio** from the menu



Handset Volume

- Volume of the internal speaker

Noise Reduction Levels

- Level 0 means that noise reduction is disabled
- Level 1 gives a maximum noise reduction of 0.2 dB
- Level 2 gives a maximum noise reduction of 6.2 dB
- Level 3 gives a maximum noise reduction of 12.2 dB
- Level 4 gives a maximum noise reduction of 18.3 dB
- Level 5 gives a maximum noise reduction of 24.3 dB
- Level 6 gives a maximum noise reduction of 30.3 dB
- Level 7 gives a maximum noise reduction of 36.3 dB

By default, the noise reduction level is disabled, i.e. set to 0. In very noisy environments, we recommend setting the noise reduction level to 4. At this level, the audio quality is good when quiet, and when noisy, most of the noise is filtered out.

Try different settings to find the optimum level for your environment. Always hold a conversation to observe the audio quality. Is a setting too high, the transmitted voice will also get filtered out. Note that the new setting is active only after it has been saved.

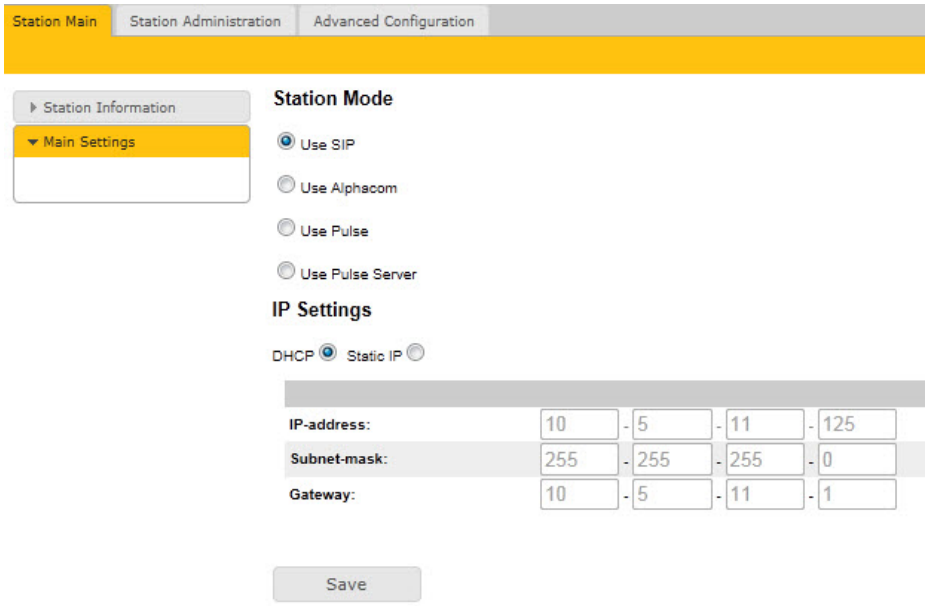
Microphone Sensitivity

- Sensitivity of the internal microphone

- Click **Save** to apply the new settings. Be aware that a restart of the IP Station may be required.

3.2.5 Operating as SIP Client

- Click **Station Main** > **Main Settings** to access the page for configuring station mode and IP parameters.



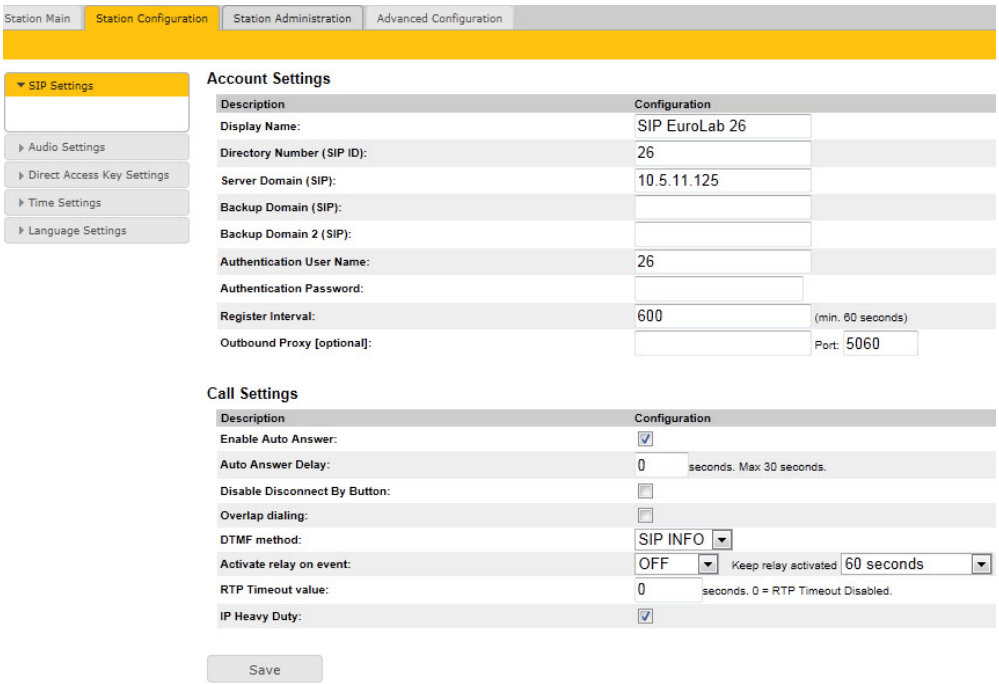
Station Mode

- Select the **Use SIP** radio-button
- If necessary, adjust the settings under **IP Settings**
- Click **Save** followed by **Apply**

The IP Station restarts and is available again after about 60 seconds.

SIP Settings

- Click **Station Configuration** > **SIP Settings** to access the page for configuring SIP parameters.



Account Settings

Display Name

- Enter a name that will be shown on the display at the remote party.

Directory Number (SIP ID)

- This is the identification of the station in the SIP domain, i.e. the phone number for the station. This parameter is mandatory. Enter the SIP ID in integers according to the SIP account on the SIP domain server.

Server Domain (SIP)

- This parameter is mandatory and specifies the primary domain for the station and is the IP address for the SIP server (e.g. Asterisk or Cisco Call Manager). Enter the IP address in regular dot notation, e.g. 10.5.2.138.

Backup Domain (SIP)

- This is the secondary (or fallback) domain. If the station loses connection to the primary SIP domain, it will switch over to the secondary one. Enter the IP address in regular dot notation.

Backup Domain 2 (SIP)

- This is the tertiary backup domain.

Authentication User Name

- This is the authentication user name used to register the station to the SIP server. This is required only if the SIP server requires authentication and is normally the same as the SIP ID.

Authentication Password

- The authentication user password used to register the station to the SIP server. This is required only if the SIP server requires authentication

Register interval

- This parameter specifies how often the station will register, and reregister in the SIP domain. This parameter will affect the time it takes to detect that a connection to a SIP domain is lost.
- Enter the values in number of seconds from 60 to 999999. The default interval is 600 seconds.

Outbound Proxy [optional]

- Enter the IP address of the outbound proxy server in regular dot notation, e.g. 10.5.2.100

Port

- Enter the port number used for SIP on the outbound proxy server. The default port number is 5060.

<u>Call Settings</u>

Enable Auto Answer

- This is not required. Enables automatic answer after a set number of seconds.
- Check the box to enable this function and enter the delay in seconds in the field for **Auto Answer Delay**. The default delay setting is 0 and the maximum is 30 seconds.

Disable Disconnect By Button

- An existing voice communication can not be ended by pressing the call button of the IP Video Station. Check the box to enable this function.

Overlap dialing

- This will lead to the phone starting to dial each time a digit is entered and the SIP proxy replying with ‘Number incomplete’ until such time as the number has been entered and the call can be initiated successfully without the enter key having to be pressed.

DTMF method

- Choose between SIP INFO or RFC 2833 to select DTMF signalling method.

Activate relay on event

- When enabled, the station will activate the relay when receiving the specified DTMF character in the RTP stream. Select from the dropdown menu. Options are OFF, 1-9, *, In call or Ringing. The default setting is OFF.
- Select the number of seconds to keep the relay open in the range 1 to 240 from the dropdown menu. The default setting is 60 seconds.
- Options are: 1 - 240 seconds, during call, during ringing, until DTMF # or 0.

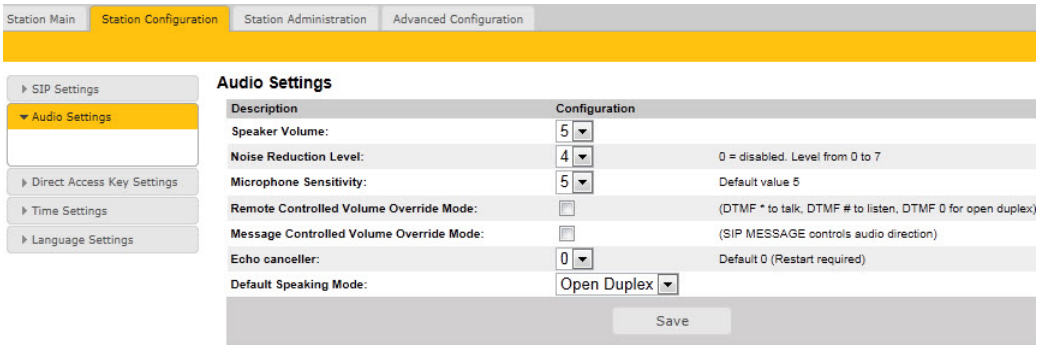
RTP Timeout value

- This cancels a call if the station does not receive RTP packets from the remote party. Enter values in the range 0-9999 seconds. The default setting is 0 which means RTP timeout is disabled.

After entering all the desired values, click **Save** and then click **Reboot** to enable the SIP settings.

Audio Settings

- Click **Station Configuration** > **Audio Settings**



Speaker Volume

- Select the volume level in the range 0 to 7 from the dropdown menu. The default setting is 5.

Noise Reduction Level

- Amount of reduction of background noise. See section 3.2.4

Microphone Sensitivity

- Select the sensitivity level in the range 0 to 7 from the dropdown menu. The default setting is 5.

Remote Controlled Volume Override Mode

- By activating this function, the voice direction can be set by pressing certain buttons during an existing voice communication.
  By pressing the asterisk button ***** on the phone, the microphone in the IP Video Station is turned off (by activated speaker - only speaking). By pressing the hash button **#** on the phone, the speaker in the IP Video Station is turned off (by activated microphone - only listening). By pressing the zero button **0** on the phone, the microphone as well as the speaker in the IP Video Station are turned on (Open Duplex).

Message Controlled Volume Override Mode

- By activating this function, the audio direction can be set via the transfer of certain SIP messages to the IP Video Station during an existing connection (only speaking, only listening, Open Duplex).

Echo canceller

- Strength setting of the echo canceller. A change of this setting requires a restart of the IP Station.

Default Speaking Mode

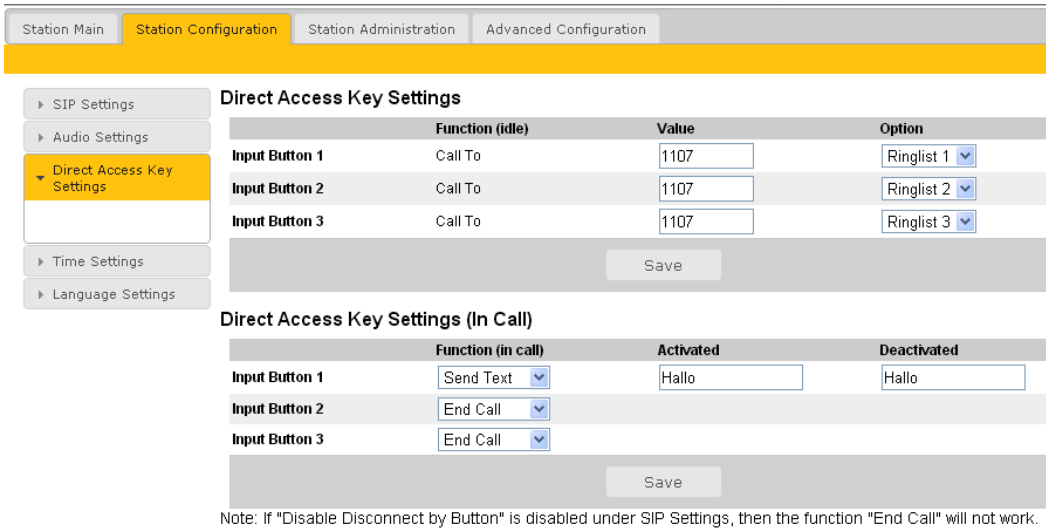
Standard mode of the audio direction:

- Open Duplex
  - Speaking / Listening in both directions
- Push to Talk
  - Speaking in one direction only by pressing the button *. Pressing the button # switches the direction.

After entering all the desired values, click **Save** to enable the audio settings.

Direct Access Key Settings

- Click **Station Configuration** > **Direct Access Key Settings** to access the page for configuring DAKs.



Note: If "Disable Disconnect by Button" is disabled under SIP Settings, then the function "End Call" will not work.

Input Button 1/2/3

- This corresponds to the fixed call button of the IP Video Station. If you want to connect the emergency call button or the double button module to the IP Video Station, the corresponding buttons would be

2 and 3.

- The standard function of the Input Buttons is Call To and can not be changed.
- Enter the phone number in the field **Value**, which should be dialed after pressing the call button.
- When necessary, a ring list can be selected in the field **Option**, which contains up to 9 phone numbers to be dialed, in case the defined participant under Value is not available.

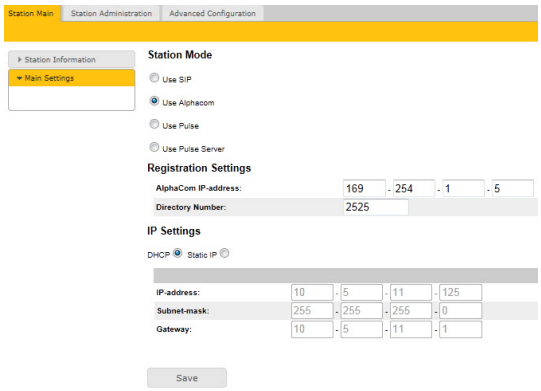
Direct Access Key Settings (In Call)

Under **Function (in call)**, three Input Buttons can be assigned a function during the conversation:

- End Call
  - Disconnects the voice communication (unless the SIP Settings > Disable Disconnect By Button parameter was disabled).
- Do Nothing
  - No function.
- Send DTMF
  - Sends a defined character of the telephone keypad:
  - Activated: enter the character which should be sent when pressing the call button.
  - Deactivated: enter the character which should be sent when releasing the call button.
- If applicable, be aware of the correct selection of the DTMF method in the SIP settings. (SIP Info / RFC 2833)

3.2.6 Operating as AlphaCom Client

- Click **Station Main** > **Main Settings**



Station Mode

- Select the **Use Alphacom** radio-button

Registration Settings

- Enter the IP address of the AlphaCom server/exchange in which the IP station is to be a subscriber in the **AlphaCom IP-address** field.
- Enter the directory number of the station in the **Directory Number** field.

IP Settings

- **DHCP** – Use this option if the IP station shall receive IP Settings from a DHCP server.

- **Static IP** – Select this option if the IP station shall use a static IP address.
- Click **Save** followed by **Apply**

3.2.7 Operating as Pulse Client

- Click **Station Main** > **Main Settings**

Station Mode

- Select the **Use Pulse** radio-button

IP Settings

- **DHCP** – the IP station gets IP Settings from a DHCP server.
- **Static IP** – the IP station uses a static IP address.
- Click **Save** followed by **Apply**

3.2.8 Operating as Pulse Server

3.2.8.1 Basic Settings

- Click **Station Main** > **Main Settings**

Station Mode

- Select the **Use Pulse Server** radio-button

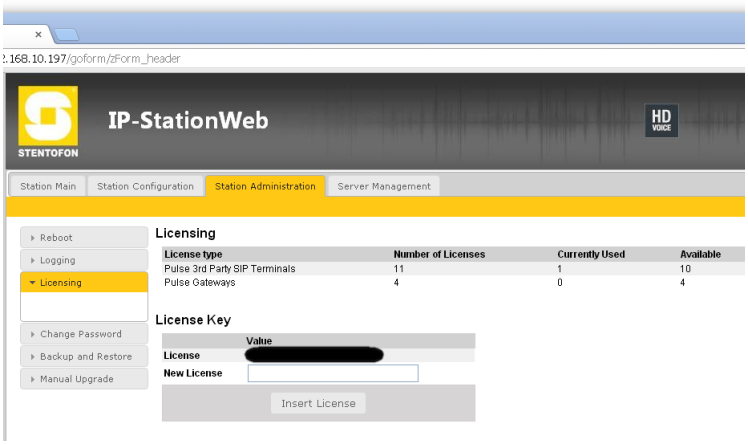
IP Settings

- **DHCP** – the IP station gets IP Settings from a DHCP server.
- **Static IP** – the IP station uses a static IP address.
- Click **Save** followed by **Apply**

The IP Station restarts and is available again after about 60 seconds.

In order to integrated SIP clients from third-party providers into the Pulse Server system, the corresponding licenses are required.

- Click **Station Administration** > **Licensing**



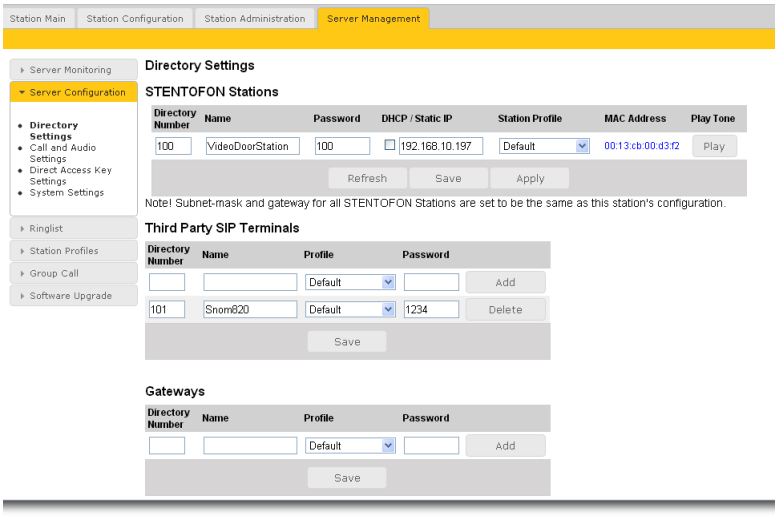
License Key

- Enter the license code in the field **New License** and confirm by clicking **Insert License**.

After successful insertion of the license, the available licenses will be displayed under **Licensing**.

3.2.8.2 Create SIP Clients

- Click **Server Management** > **Server Configuration** >**Directory Settings**



Under **STENTOFON Stations**, the Video Station itself as well as all available STENTOFON clients in the Pulse system are displayed. Enter the following data:

Directory Number

SIP ID (registration name of the station), any valid number (e.g. 100)

Name

The name of the station (e.g. VideoDoorStation)

Password

The login password of the station (e.g. 100)

- Click **Save** followed by **Apply**

The IP Station will restart and is available again after about 60 seconds.

Under **Third Party SIP Terminals**, SIP clients from third-party providers can be created. The following fields should be filled in:

Directory Number

SIP ID (registration name of the client), any valid number (e.g. 101)

Name

The name of the SIP client (e.g. Snom820)

Password

The login password of the SIP client (e.g. 1234)

- Click **Add** for each new client.

3.2.9 Default Settings

3.2.9.1 Restore Default Settings with Static IP

1. While pressing the call button, power up the station.
2. When the station LED starts flashing, release the call button **after exactly 1 flash**.
3. Let the LED flash for **exactly 2 more times**, then press the button again.
4. Keep the button pressed until the LED **flashes fast 2 times** indicating a successful reset with static IP.
5. Release the button and the station will restart with the factory default settings.

Factory default values

Station IP address: **169.254.1.100**

Username: **admin**

Password: **alphaadmin**

3.2.9.2 Restore Default Settings with DHCP

1. While pressing the call button, power up the station.
2. When the station LED starts flashing, release the call button **after exactly 2 flashes**.
3. Let the LED flash for **exactly 4 more times**, then press the button again.
4. Keep the button pressed until the LED **flashes fast 4 times** indicating a successful reset with activated DHCP.
5. Release the button and the station will restart with the factory default settings.

Factory default values

Station IP address: (determined by DHCP server)

Username: **admin**

Password: **alphaadmin**

IP Camera Configuration

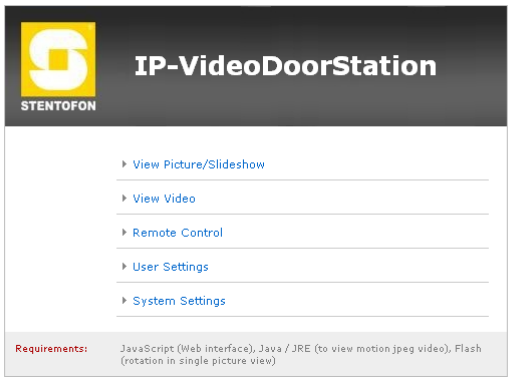
3.2.10 Log into the Web Interface

In order to log into an IP Camera for the first time with its default settings, proceed as follows:

- Connect the PC to the PoE or network switch
- Connect the LAN port (P1) on the IP station to the switch

The factory default IP address of the IP Camera is **169.254.1.101**. In order for your PC to communicate with the station it is necessary to change its **Internet Protocol Properties** to use an IP address that is in the same range as 169.254.1.101, e.g. 169.254.1.1 with subnet mask 255.255.255.0.

- Open a web browser
- Enter the default IP **169.254.1.101** in the address bar



3.2.11 IP Settings

- Click **System Settings**
  - User name: admin
  - Password: 1234
- Click **Network** in the left menu.

Common

- FTP-Access: Activation/deactivation of remote access via FTP on the file system of the IP Camera.
- Allowed Tools: Activation/deactivation of access of the displayed tools (all are active by default).

IP-Setup

- Manual / DHCP: Manual configuration of the IP settings or automatic configuration via DHCP server.
- IP address: IP address of the camera
- Netmask: Subnet mask of the camera
- Gateway: IP address of the router
- DNS : IP address of the name server

Hardware

- Ethernet Mode: Default setting is auto.
- MAC address: The MAC address of the camera

Ports

- Tools: 4000 (default)
- UDP – Automatic Cam Detection: 4005 (default)
- UDP – Status Messages: 5000 (default)

System

- Authentication required for Picture/Video: Activates/deactivates user control for accessing the image/video transmission
- Automatic Cam Detection: Must be activated in case several cameras in a network should be identified automatically. It is recommended to turn off this function after setup.
- UDP Status Messages: Activates/deactivates the automatic sending of status messages.

- Click **Save Changes** to apply the settings. The IP Camera will restart and is available again after about 60 seconds.

3.2.12 Camera Settings

- Click **System Settings**
  - User name: admin
  - Password: 1234
- Click **Camera** in the left menu.

Settings

- Configuration Presets: Choice of configuration templates for the camera settings. Default Preset is 0.
- Mode: Setting of the camera resolution. QVGA is recommended for an image transmission to IP telephone.
- Frames per Second: Number of images per second received by the sensor.
- Shown Frames (video): Indicates how many of the captured images are transmitted as video. Not every image will be transmitted but only every nth frame.
- Zoom: Zooming is only possible with a resolution lower than VGA. The zoom factor can only be as large as the factor by which the frame was reduced.
- Displacement on X-/Y-Axis: It is possible to move the cut image. To display a certain part of a cut image, move the cut image to be displayed so far on the X and Y axis until the desired image is visible. Erroneous values are automatically corrected. Only possible with resolution lower than VGA.
- Quality (JPEG compression): It is recommended to select a low quality unless adequate network bandwidth is available.

- Click **Save Changes** to apply the settings. The IP Camera will restart and is available again after about 60 seconds.

3.2.13 User Management

- Click **User Settings**
  - User name: admin
  - Password: 1234

To create a new user, proceed as follows:

- Select **Add User**
- Enter a user name.
- Select the authorization level.
- Enter a password.
- Click **Add New User**

To change the parameters of a user, proceed as follows:

- Select **Change User Settings**
- Select the user you want to change.
- To change the authorization level, select a new one.
- To change the user password, check the **Set New Password** box and assign the new password.
- Click **Change User Settings**

To delete a user, proceed as follows:

- Select **Delete User**
- Select the user you want to delete.
- Click **Delete User**

3.2.14 Image / Video Display

In the web interface, it is possible to display the images of the camera as a slideshow or a video.

To display a slideshow, proceed as follows:

- Click **View Picture/Slideshow**
  - User: admin
  - Password: 1234
- Click **Start Slideshow**

To view a video, proceed as follows:

- Click **View Video**
  - User: admin
  - Password: 1234

Please note that Java must be installed on your PC to display images and video.

3.2.15 Example Configuration of CP-CAM Viewer

The software, CP-CAM Viewer, is a computer program for the Microsoft Windows operating system.

This software enables you to display the video image of the IP Camera on the PC screen.

The software supports:

- 16 cameras
  - technically, the software is able to manage up to 50 cameras, depending on the screen resolution and processing power.
- Storage of images and videos

In combination with the STENTOFON IP Video Station, the software is only suitable for use in an AlphaCom IP system.

The system is ideal for monitoring and managing large facilities with many entrances.

3.2.15.1 Installing & Configuring the CP-CAM Viewer Software

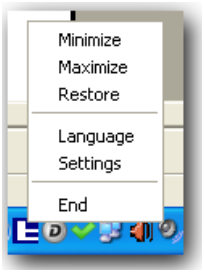
The software *Baudisch.CP-CAM Viewer* is contained in a ZIP file.

This includes the installation file and a PDF document with the corresponding number of ordered camera licenses. Unzip this file on your computer and run the program **setup.exe**.

- Follow the instructions shown in the installation wizard.

After installation, start the software by clicking the program in the Start menu or the desktop shortcut.

- After starting the software, the program icon will appear in the system tray.



- Right-click the program icon to open the configuration menu.

Minimize

The displayed video images are minimized. When the configuration is set to All Auto-Pop-Up, the video window reopens when there's a call.

Maximize

The video images are displayed in full-screen size.

Restore

The video images are displayed with the configured size.

Language

The displayed language of the software (German/English) can be changed.

Settings

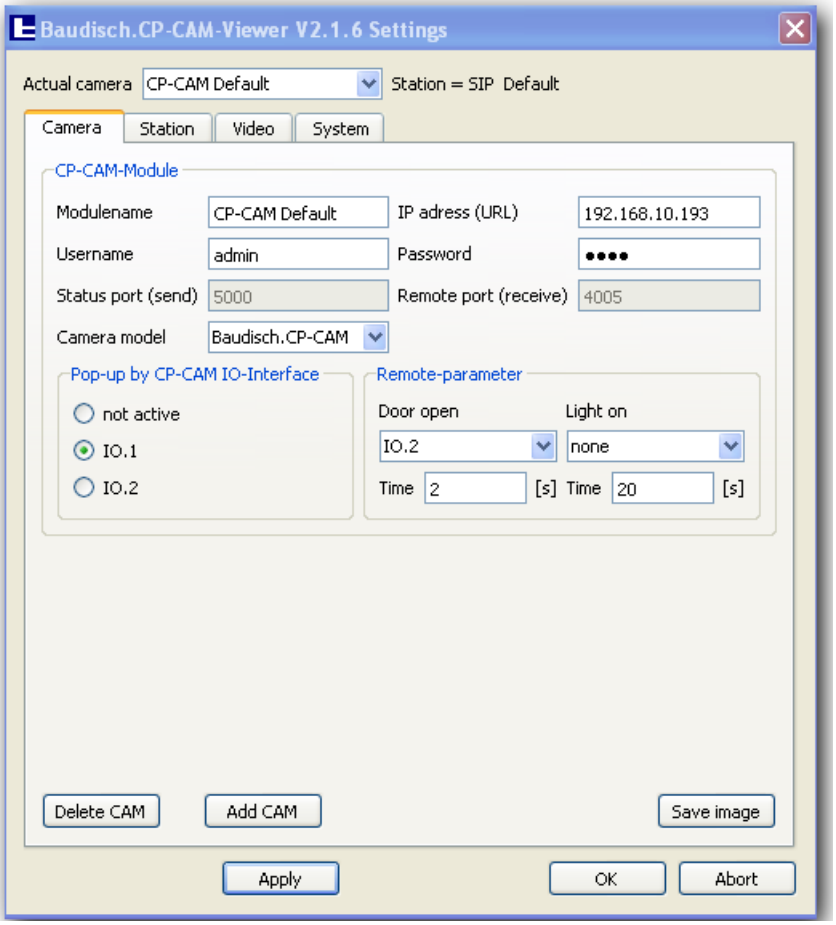
Configuration settings of the software.

End

The Baudisch.CP-CAM Viewer is terminated and will be no longer active.

ⓘ *The settings are saved by clicking Apply or OK. By clicking Apply, the settings menu remains open and by clicking OK, the settings are saved and the settings menu closes. In case the settings changes are not active, please restart the program.*

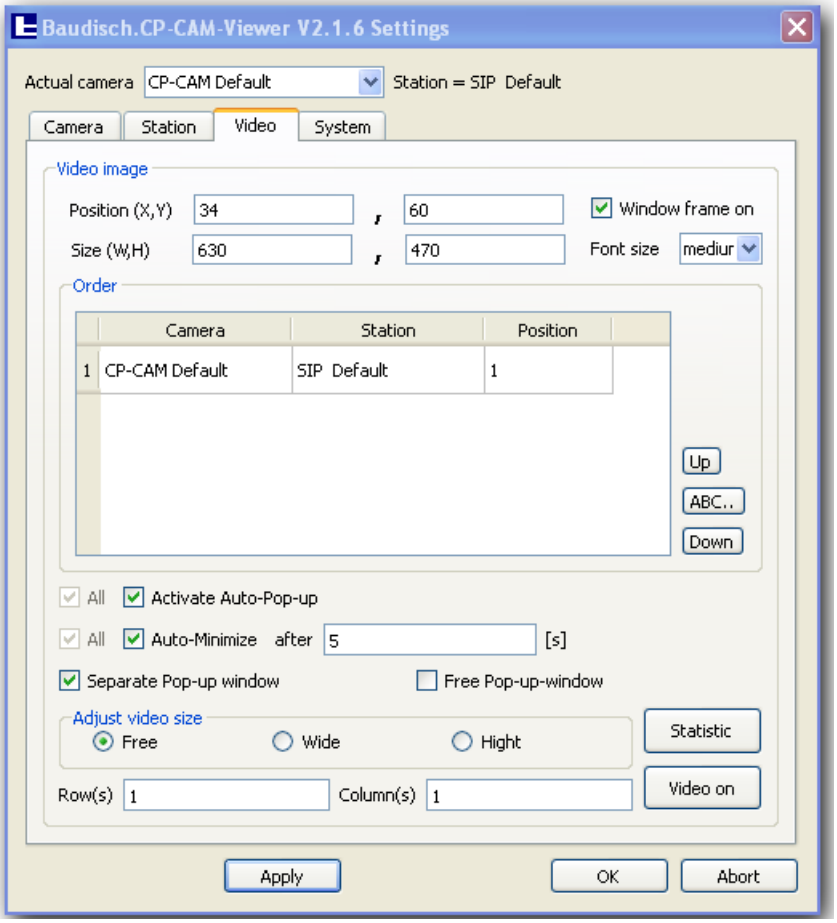
- Right-click the program icon and select **Settings**
- Select the **Camera** tab



Enter the following information under the **Camera** tab:

- Modulename: Assign a name for the camera (e.g. main entrance)
- IP address (URL): The IP address of the camera
- Username: Default username is **admin**
- Password: Default password is **1234**
- Camera model: **Baudisch.CP-CAM**
- Pop-up by CP-CAM IO-Interface: Select **IO.1**
- Remote-parameter: The remote parameters are not applicable for the IP Video Station.
- Click **Apply** to save the settings.

- Select the **Video** tab



Enter the following information under the **Video** tab:

- Position (X,Y): Enter the position of the video image on the screen
- Size (W,H): Enter the size of the video image
- Window frame on: Yes (set a check mark)
- Activate Auto-Pop-up: Yes (set a check mark)
- Auto-Minimize: Yes (set a check mark) after: in seconds
- Separate Pop-up window: Yes (set a check mark)
- Row(s): 1 Column(s): 1
- Click **Apply** to save the settings.

This completes the configuration of the CP-CAM Viewer software.
In case a firewall is active on your PC, make sure the software can communicate over the UDP ports 4005 and 5000.

3.2.15.2 Configuring the IP Camera

- Log into the web interface of the IP Camera
- Click **System Settings**
  - User: admin
  - Password: 1234
- Click **Network**

Under **Ports** the following parameters should be set:

- UDP – Automatic Cam Detection: **4005**
- UDP – Status Messages: **5000**

Under **System** the following parameters should be set:

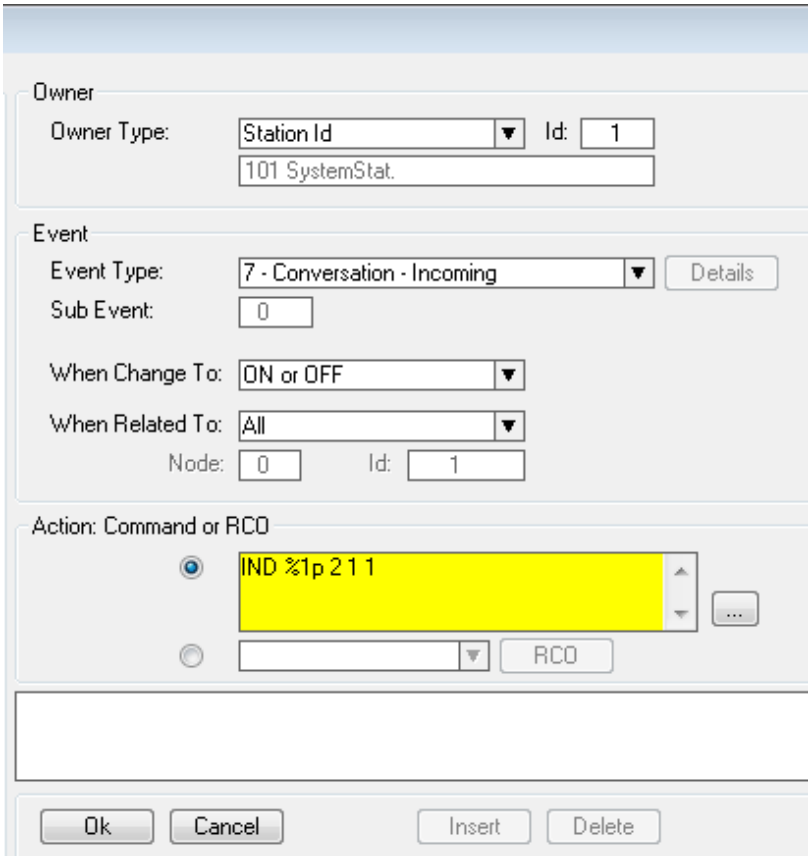
- UDP Status Messages: **Message after status change**
- Destination Address – UDP Status: **255.255.255.255**
- Click **Save Changes**.
  - The IP Camera restarts and is available again after about 30 seconds.

This completes the configuration of the IP Camera.

3.2.15.3 Configuring the Event on AlphaCom Server

To trigger the relay of the IP Station when there are incoming calls and during a conversation, and subsequently have the camera image pop up on the display, create the following two events in AlphaPro:

- Event Type: **7 - Conversation - Incoming**
- When Change To: **ON or OFF**
- Action: Command or RCO: **IND %1p 2 1 1**



- Event Type: **8 - Conversation - Outgoing**
- When Change To: **ON or OFF**
- Action: Command or RCO: **IND %1p 2 1 1**

3.2.16 Example Configuration of snom IP Telephone with Image Transmission

The image of the IP Camera can be shown on the display of a snom IP telephone.

Requirements for displaying the camera image with incoming call:

- Compatible snom telephone (820, 821, 760) with firmware version 8.7.4.5t-SIP-r

snom firmware download:

- http://www.stentofonbaudisch.com/download/firmware/snom820-8.7.4.5t-SIP-r.bin
- http://www.stentofonbaudisch.com/download/firmware/snom821-8.7.4.5t-SIP-r.bin
- http://www.stentofonbaudisch.com/download/firmware/snom760-8.7.4.5t-SIP-r.bin

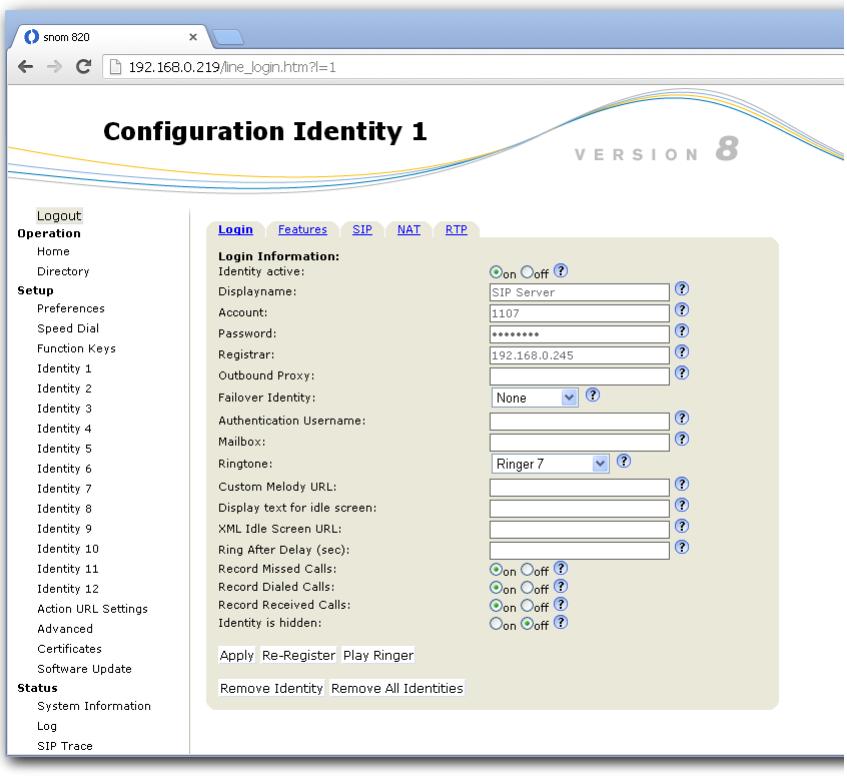
For additional information see Snom Update Guide: http://wiki.snom.com/Category:Firmware

- IP Camera with firmware V3.7 or higher

3.2.16.1 Configuring the snom IP Telephone

Configuration Identity 1

- Select **Setup** > **Identity 1** on the web interface of the snom



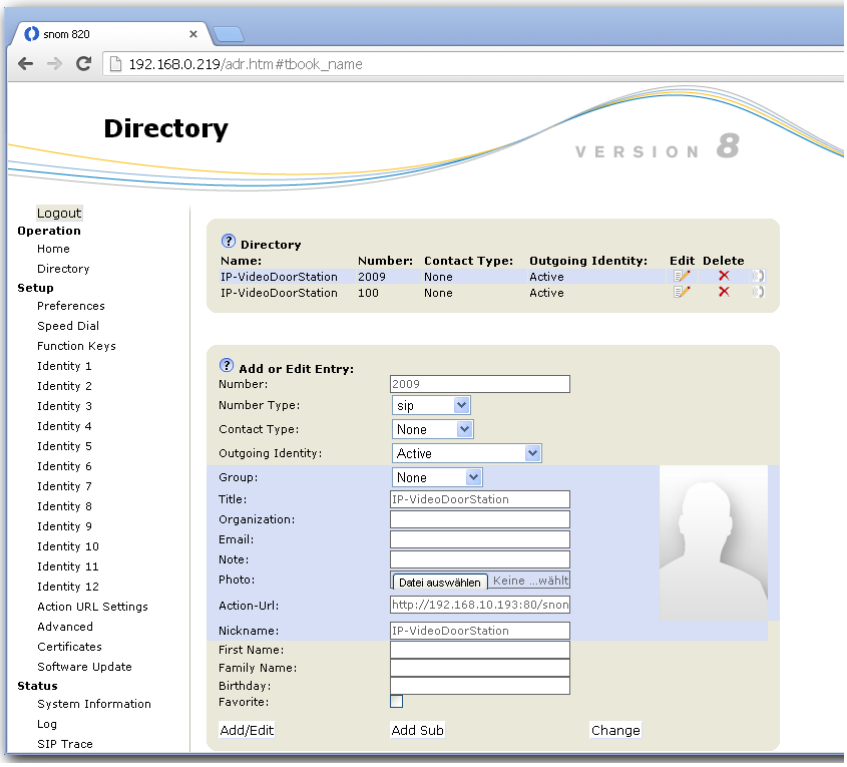
The following settings are required:

- Identity active: on
- Displayname: any name of the SIP server (e.g. Pulse Server)
- Account: SIP ID / Login name (e.g. 101)
- Password: Login password (e.g. 1234)
- Registrar: IP address of the SIP server (e.g. 192.168.10.197)

- Click **Apply** to save the configuration identity.

Directory

- Select **Operation** > **Directory**



The settings for automatic image transmission from the integrated IP Camera are as follows:

Number: SIP ID of the Video Station (e.g. 100)

Title: Any name (e.g. IP-VideoDoorStation)

Action-Url: IP address of the CP-CAM in the following format:

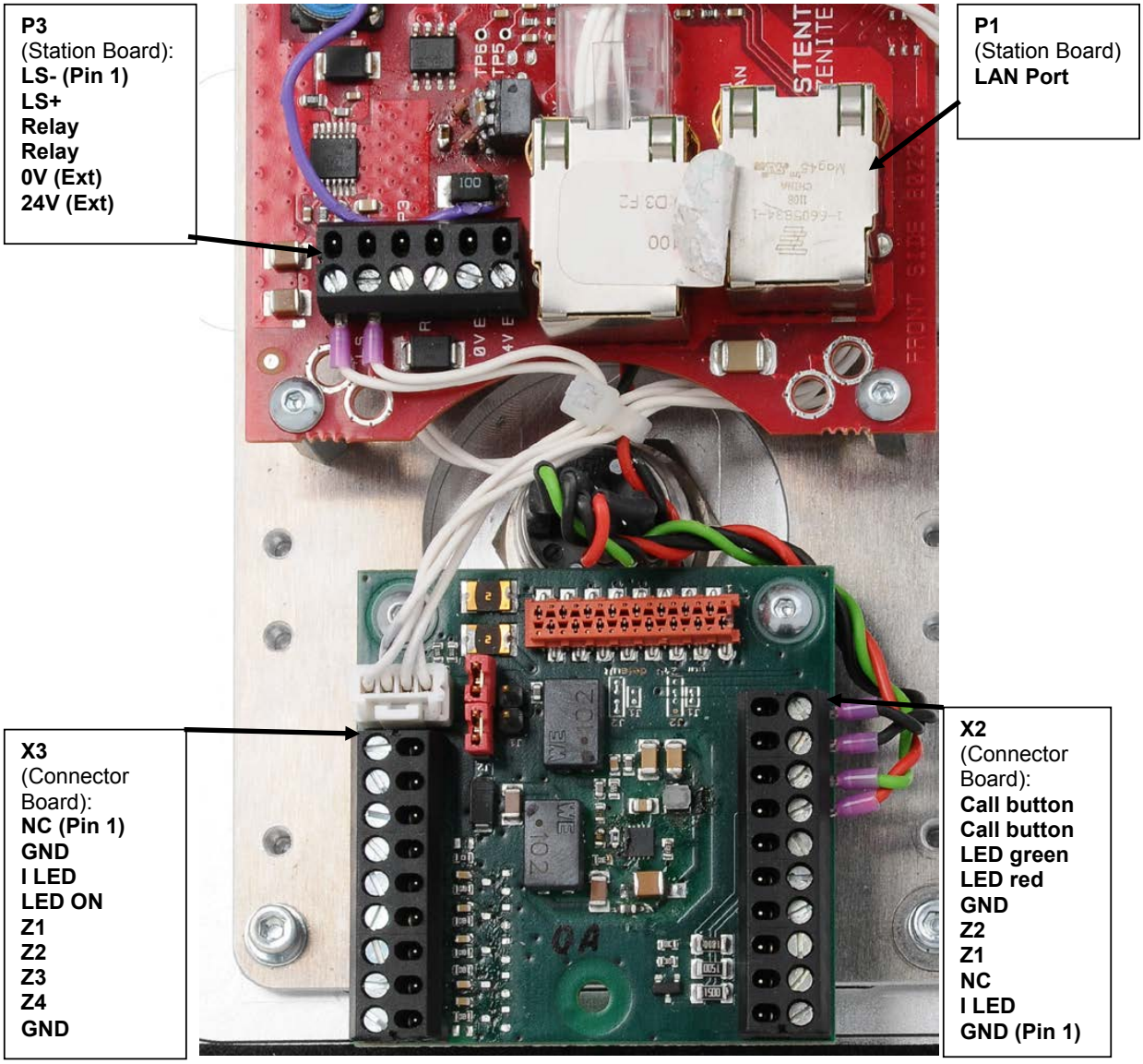
- With deactivated authentication:
  - http://<IP address of the camera>/snoma.cgi (e.g. http://192.168.10.193/snoma.cgi)
- With activated authentication:
  - http://viewer:1234@<IP address of the camera>/snoma.cgi (e.g. http://viewer:1234@192.168.10.193/snoma.cgi)
- **Nickname:** any name (e.g. IP-VideoDoorStation)

- Click **Add/Edit** to save the entries

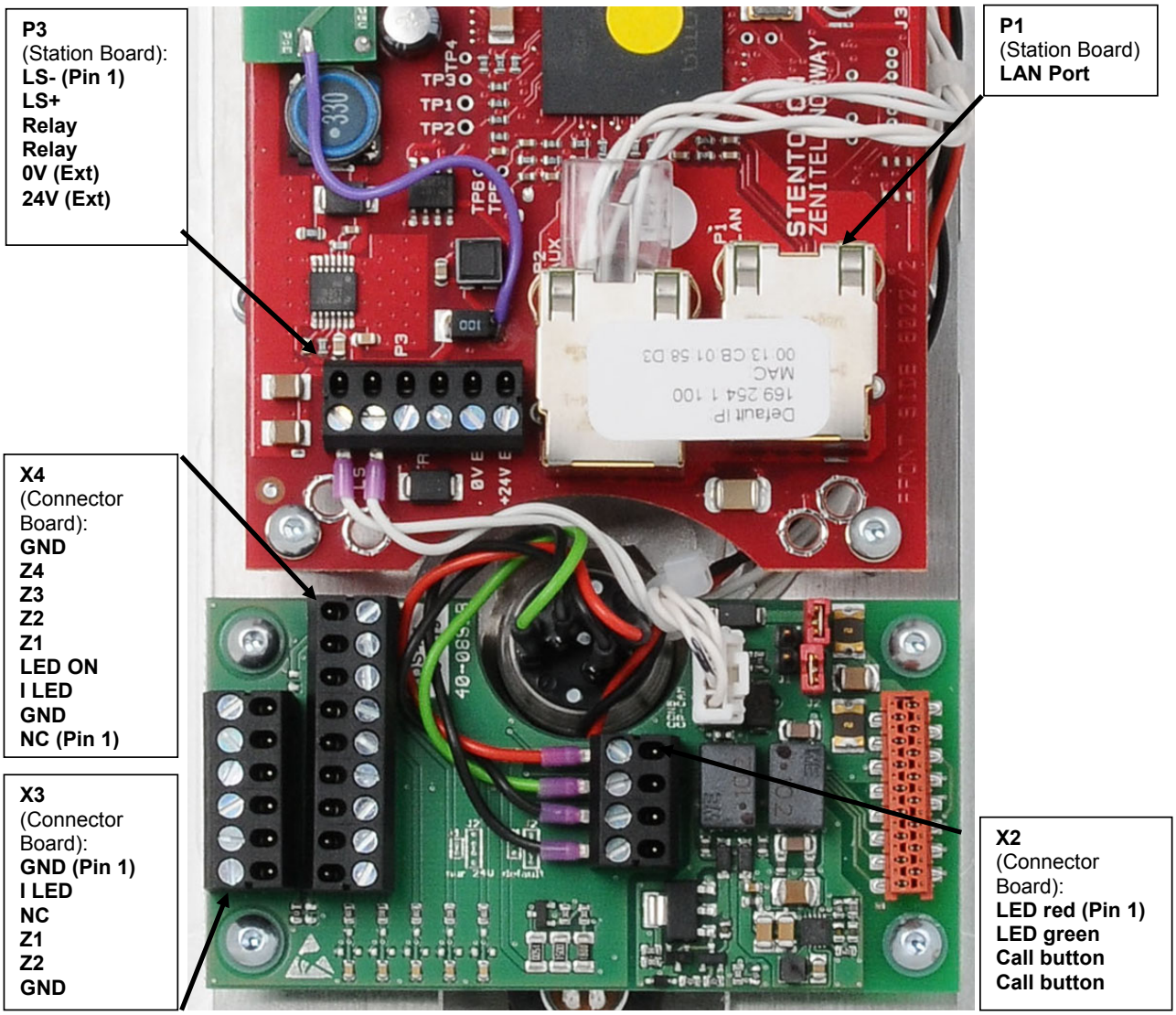
4 Board Connections

The IP Video Station should not be operated with power supply voltages of ~230VAC. If this is not complied with, and there is no grounding, the station may be damaged, and electrical power on the housing may be a danger to life.

4.1 Connections for Hardware Version 0.1



4.2 Connections for Hardware Version 0.2/0.3/1.0



4.3 Connections On Boards

Connection	Pin	Name	Description
P3 **(Station Board)**	1	LS	Speaker 4Ω/2W (already connected)
	2		
	3	RELAY	Potential free relay contact max. 1A/24V Closer
	4		
	5	0V EXT	External voltage supply 21-27V/0,5A Attention: not simultaneously with PoE supply!
	6	+24V EXT	

X2 **(Connector-Board V0.1)**	**Button module-2B**	1	GND	Grounding for illumination
		2	I_LED	Background illumination (+5V)
		3		NC
		4	Z1	1st button
		5	Z2	2nd button
		6	GND	Reference point buttons
	Central call button (already connected)	7	RT	for red LED (red cable)
		8	GR	for green LED (green cable)
		9	SW	Closer (button)
		10	SW	

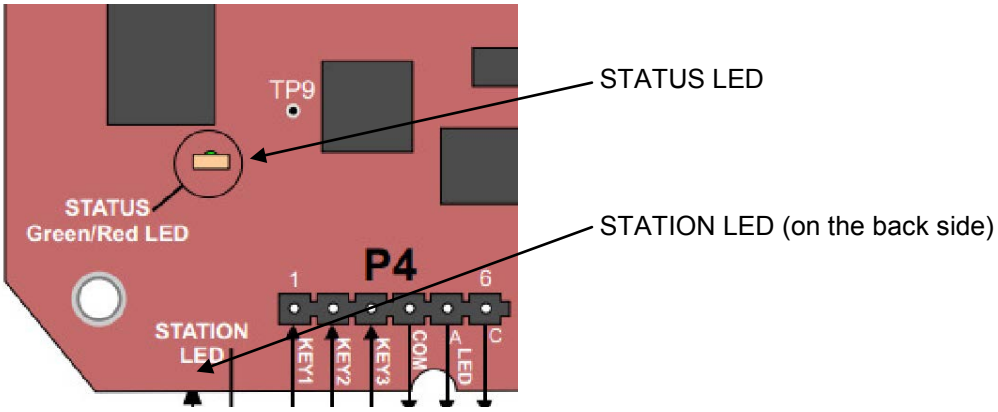
X2 **(Connector Board V0.2)**	**Central call button (already connected)**	1	RT	for red LED (red cable)
		2	GR	for green LED (green cable)
		3	SW	Closer (button)
		4	SW	

Connection		Pin	Name	Description
X3 (Connector Board V0.2)	**Button module-2T**	1	GND	Grounding for illumination
		2	I_LED	Background illumination (+5V)
		3		NC
		4	Z1	1st button
		5	Z2	2nd button
		6	GND	Reference point buttons

X3 (Connector Board V0.1) **X4 (Connector Board V0.2)**	**Button module-4T**	1		NC
		2	(GND)	NC
		3	I_LED	Background illumination (+5V)
		4	LED_ON	Grounding for illumination
		5	Z1	1st button
		6	Z2	2nd button
		7	Z3	3th button
		8	Z4	4th button
		9	"GND"	Reference point buttons

5 Operating States Indication LEDs

The Video Station indicates different states on several LEDs on the Station board.



The STATUS LED is a bicolored SMD LED and displays the following states:

Flashing 2x red and 1x green

The Video Station has no connection to the AlphaCom XE Audio Server.

Flashing 1x red and 2x green

The Video Station is connected to the AlphaCom XE Audio Server, but is not registered.

Flashing 3x green

The Video Station is connected and registered to the AlphaCom XE Audio Server.

The STATION LED is on the back side and displays the following states:

Flashing 1x per second

The Video Station has no connection to the AlphaCom XE Audio Server.

Possible reasons:

- no connection to Ethernet
- incorrect or invalid IP address
- no or incorrect Gateway to the AlphaCom XE Audio Server

Flashing 1x per 5 seconds

The Video Station is connected to the AlphaCom XE Audio Server, but is not registered.

Possible reasons:

- Station is not programmed in the AlphaCom
- IP station license is missing on the AlphaCom XE Audio Server

No flashing

The Video Station is connected and registered to the AlphaCom XE Audio Server or the Video Station is out of service (no operating voltage) when no other LEDs are lit.

LAN LEDs on RJ45 ports

Left LED

Steady light:	Ethernet connection OK
Flashing:	Ethernet traffic
No light:	No Ethernet connection

Right LED

Steady Light:	100 Mbit Ethernet connection
No light:	10 Mbit Ethernet connection

6 Product Specifications

6.1 Station Technical Data

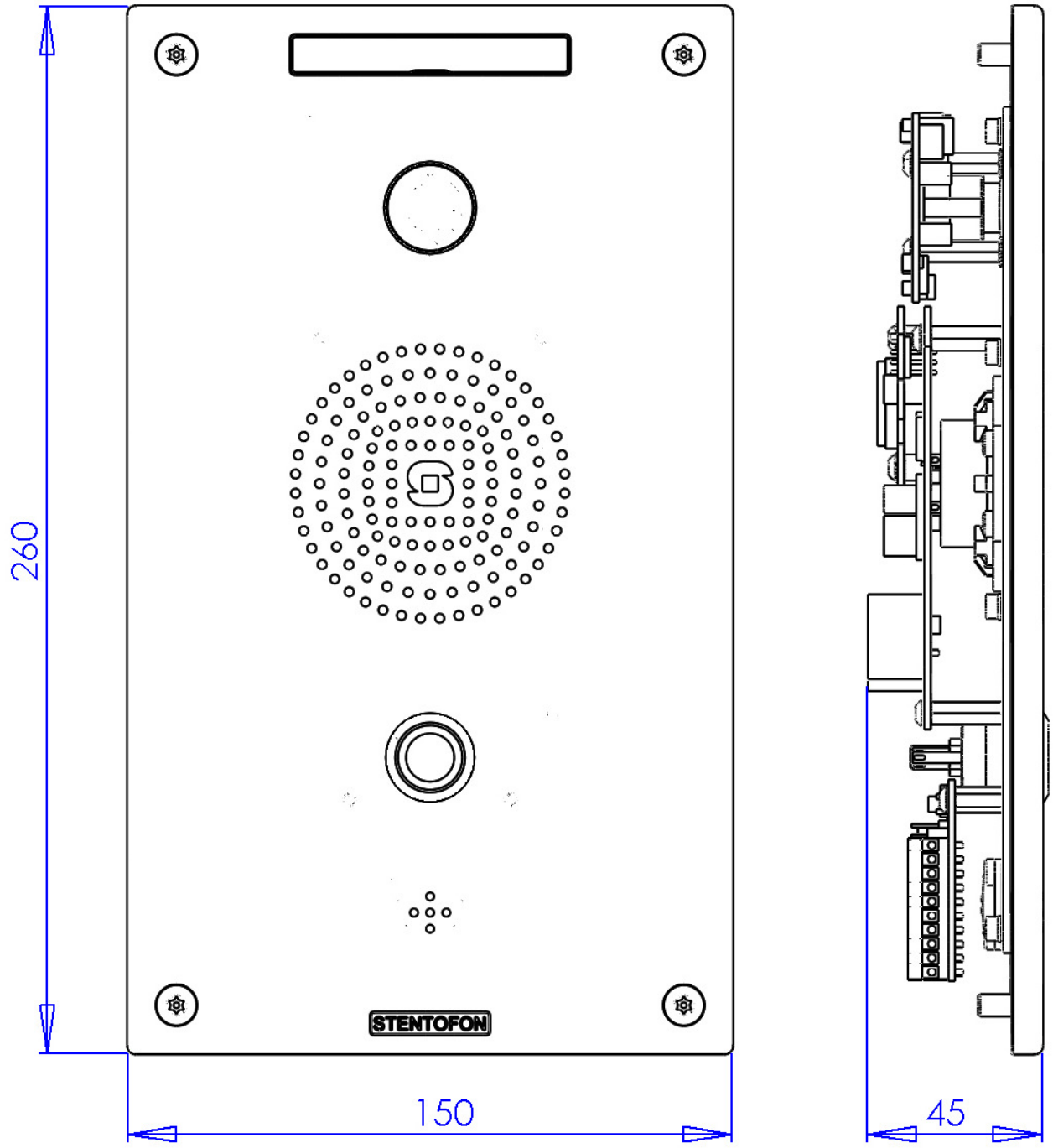
On wall box dimensions (HxWXD)	260 x 150 x 41 mm
Flush mount box dimensions (HxWXD)	248 x 138 x 41 mm
Mounted station dimensions (HxWXD)	260 x 150 x 8 mm
Material	V4A stainless Steel, Aluminium
IP rating	IP 65 to front
Temperature	-20°C to +55°C
Moisture	5% - 85% noncondensing
Programming	Web interface
Image Sensor	1/3" Day/Night
Video Resolution	VGA 640 x 480 PIxel color
Video Format	JPG, MJPEG
Camera Lens	2.5 mm, F=2,0, Focus 20 mm - infinite
Connector	RJ45 (Ethernet) 10/100 Mbps Plugable screw terminals (audio and IO)
Remote control	1 Relay output
IP protocols	IP v4 - TCP - UDP - HTTPS – TFTP - RTP - RTCP -DHCP - SNMP - DiffServ - TOS – STENTOFON CColP® - SIP
LAN protocols	Power over Ethernet (IEEE 802.3 a-f), VLAN (IEEE 802.1pq)*, Network Access Control (IEEE 802.1x)*, STP (IEEE 802.1d), RSTP (IEEE 802.1d-2004)
Audio technology	Wideband 200 Hz - 7 kHz (G.722) Telephony 3.4kHz (G.711) Acoustic echo cancellation Open duplex Adaptive jitter filter 1.5 Watt audio output 8 ohm loudspeaker impedance External audio output (0 dB, 600 ohm)
Management and operation	HTTPS (Web configuration) DHCP and static IP Remote automatic software upgrade Centralized monitoring Status LED

6.2 Station Dimensions

H = 260 mm

W = 150 mm

D = 45 mm



6.3 Back Boxes / Protective Roof

Flush Mount Back Box
248 x 138 x 41 mm

Surface Mount Back Box
260 x 150 x 48.5 mm

Protective Roof
262 x 154 x 75 mm

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