# \*Zennio

# Video Intercom Configuration Guide with Predefined Profiles and Indoor Units

Guide version: [1.1]\_a

## **CONTENTS**

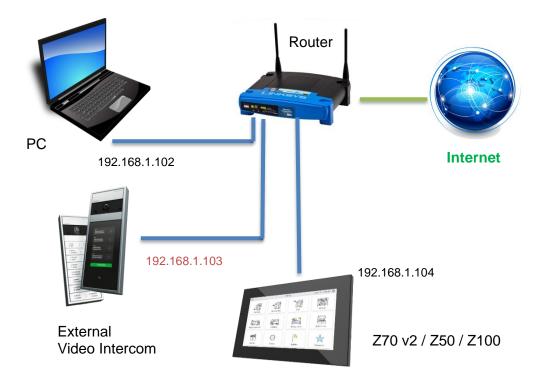
Co	ontents		2
D	ocumer	nt updates	3
1	Intro	oduction	4
2	Gen	eral configuration of indoor unit	5
3	Com	elit	7
	3.1	ETS Configuration for Comelit Video Intercom	7
	3.2	Comelit Ultra (Gateway 1456)	8
	3.3	Comelit Ultra (Gateway 1456G)	. 11
4	Fern	nax	. 12
	4.1	ETS Configuration for Fermax Video Intercom	. 12
	4.2	MILO VIDEO DIGITAL MEET Video Intercom	. 14
	4.3	MILO VIDEO 1L MEET Video Intercom	. 15
5	Doo	rbird	. 16
	5.1	ETS Configuration for Doorbird Video Intercom	. 16
	5.2	Doorbird D2101V Video Intercom	. 17
6	Aku	/ox	. 21
	6.1	ETS Configuration for Akuvox Video Intercom	. 21
	6.2	Akuvox R20A Video Intercom	. 23
	6.3	Akuvox R29S Video Intercom	. 26
7	Axis	(without predefined profile)	. 28
	7.1	ETS Configuration for Axis Video Intercom	. 28
	7.2	Axis I8016-I VF Video Intercom	30

## **DOCUMENT UPDATES**

Version	Changes	Page(s)
[1.1]_a	<ul><li>Bug fixes</li><li>Added Axis configuration</li><li>New model for Akuvox: R29S</li></ul>	-
[1.0]_b	Added Akuvox profile	-

## 1 INTRODUCTION

This document presents an example of basic configuration of the video intercom together with the **indoor unit (Z50 / Z70 v2 / Z100)** in a simple installation of a private home when **both devices are in the same network**.



For a video intercom to be compatible with an indoor unit, it must have at least the following requirements:

- SIP protocol compatibility.
- Use of G722 or PCMU (G711u) audio codecs.
- Use of H264 video codecs.

In the case of video intercoms that are not compatible with http protocol:

- In order to be able to view the camera from the control unit, the video intercom must support the automatic answer functionality.
- In order to be able to view the camera during an incoming call, the video intercommust support the EARLY MEDIA method.

#### 2 GENERAL CONFIGURATION OF INDOOR UNIT

Irrespective of the video intercom to be used, the following configuration is required in ETS for the indoor unit.

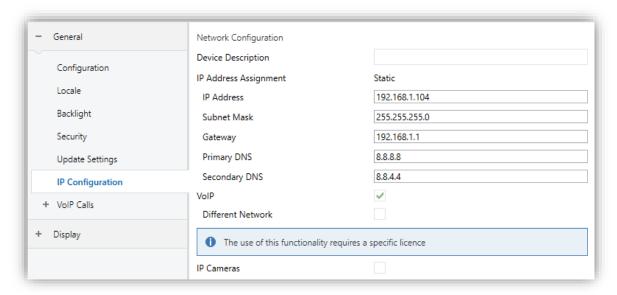


Figure 1. "IP Configuration" Tab of the indoor unit

First, the IP configuration of the device must be set by configuring a **static IP** within the network range and enabling **VoIP** functionality from the "IP Configuration" tab.

Then, within the "VoIP Calls" tab, the following actions are performed:

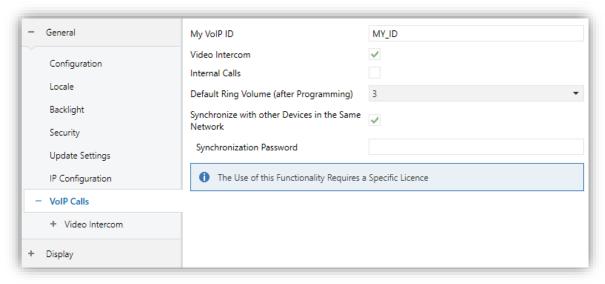


Figure 2. "VoIP Calls" tab

Set an identifier in the My VolP ID parameter.

• Enable the Video Intercom entry functionality, then setting the Outdoor Units Number to be installed from the tab "Video Intercom".

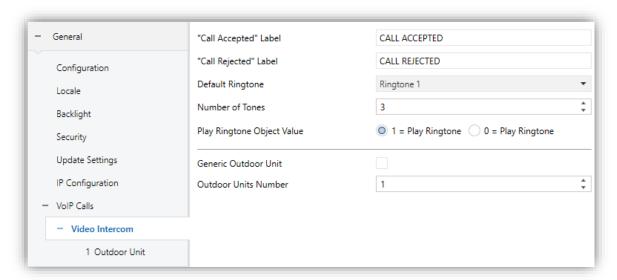


Figure 3. "Video Intercom" tab

#### 3 COMELIT

This section shows the basic configuration required in an installation with a Zennio indoor unit and a Comelit video intercom.

It is also necessary to have a computer connected to the same network with **ViP Manager** software to configure the video intercom.

#### 3.1 ETS CONFIGURATION FOR COMELIT VIDEO INTERCOM

To enable communication between an indoor unit and a Comelit video intercom, the following parameters must be configured in the "N Outdoor Unit" tab:

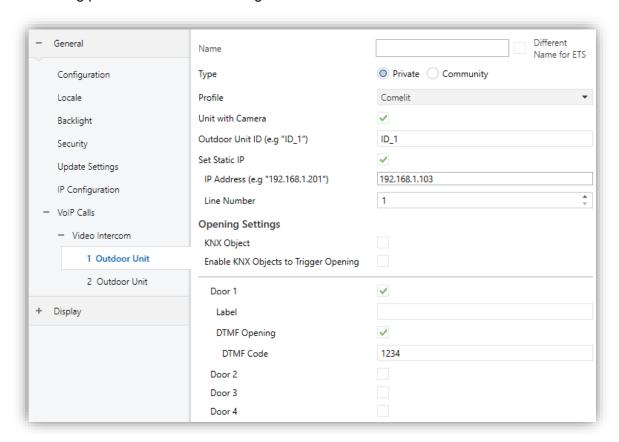


Figure 4. ETS configuration of Comelit outdoor unit

- Profile: <u>Comelit</u>.
- Outdoor Unit ID: <u>ID defined in the video intercom.</u>

**Note:** for more information about the configuration of this ID, please read the specific section of the gateway used (1456, 1456G...).

Set Static IP: <u>Enabled.</u> This parameter sets the IP of the gateway that converts from ViP protocol to SIP protocol.

Important: Comelit video intercoms work with their own communication protocol. It is important that the IP configured in this ETS parameter is that of the gateway used (1456, 1456B or 1456G).

#### Notes:

- > This parameter is only mandatory in case the video intercom is in a different network than the indoor unit, but it is recommended to enable it whenever the video intercom has a static IP.
- If the video intercom gets the IP via DHCP, this parameter must be disabled.
- Line number: 1. This parameter corresponds to the line where the video intercom has been configured in the "VIP to Sip lines" section of the Comelit gateway.

#### 3.2 COMELIT ULTRA (GATEWAY 1456)

This section details the basic configuration so that the gateway can communicate with the indoor unit correctly.

#### 3.2.1 ADDRESSING / IP ADDRESS

Tab where the network configuration of the gateway is performed. The IP configured in this tab must correspond to the one set in the **IP Address** parameter of the ETS "N Outdoor Unit" tab.

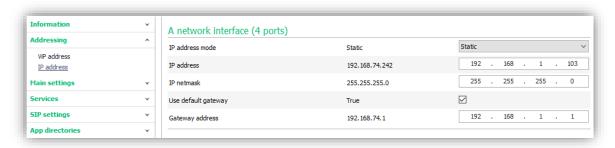


Figure 5. "IP Address" tab

It is recommended to set a static IP within the network range. This IP will be the same as set in the IP Address ETS parameter, available in the "N Outdoor Unit" tab.

#### 3.2.2 MAIN SETTINGS / USERS

In the "Users" tab, the user to be called and the apartment address are configured. To be compatible with the indoor unit, the user must be configured as:

- Device type: <u>Phone</u>.
- ▶ Phone number: the ID and IP of the indoor unit must be set with the format ID\_indoor\_unit@ IP\_indoor\_unit. These values are the ones configured in ETS in the "IP Configuration" and "VoIP Calls" tabs.

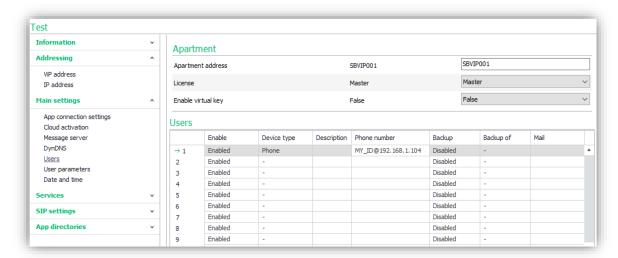


Figure 6. "Users" tab

#### 3.2.3 SIP SETTINGS

#### 3.2.3.1 VIP TO SIP SETTINGS

The following parameters will be configured in this tab:

ViP to Sip call mode: <u>Direct.</u>

SIP server port: <u>5060</u>.

• SIP over TCP: Disabled.

- DTMF open relay n: this parameter sets the DTMF code to open the door. This code must match the code set in the DTMF code parameter in the "N Outdoor Unit" tab of ETS.
- Codec preference: PCMU.
- Stream video via RTSP: Disabled.

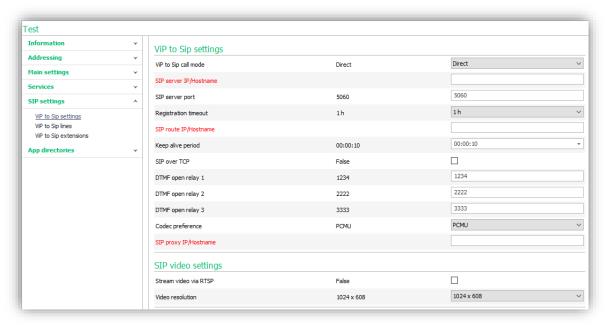


Figure 7. "ViP to Sip settings" tab

#### 3.2.3.2 VIP TO SIP LINES

This tab will be configured for each line:

- ViP address: ViP address of the video intercom or gateway with which the gateway 1456 communicates directly.
- User: this field defines the ID of the outdoor unit. This value must correspond to the Outdoor Unit ID parameter of the "N Outdoor Unit" tab in ETS.
- Access code: this field has to contain a space for it to work properly.

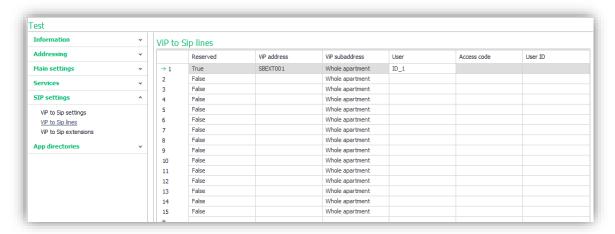


Figure 8. "ViP to Sip lines" tab

<u>Note</u>: the line where the user is included will define the value of the parameter **Line Number** of the Comelit profile in the "External unit n" tab of ETS. In the example of the Figure 8, line 1 must have the value 1 in ETS.

### 3.3 COMELIT ULTRA (GATEWAY 1456G)

The configuration of this gateway is done in a similar way to the gateway 1456, with some small differences:

♣ The SIP number to call in this case is configured in the "ViP to Sip Extensions" tab. In this tab, the Sip recipient to is configured, which must correspond to the ID and IP of the indoor unit.

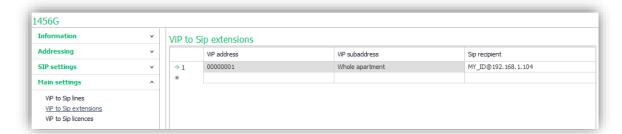


Figure 9. "ViP to Sip Extensions" tab

#### 4 FERMAX

This section shows the basic configuration required in an installation with a Zennio indoor unit and a Fermax video intercom.

It is also necessary to have a computer connected to the same network to configure the video intercom via their IP.

#### 4.1 ETS CONFIGURATION FOR FERMAX VIDEO INTERCOM

To enable communication between an indoor unit and a Fermax video intercom, the following parameters must be configured in the "N Outdoor Unit" tab:

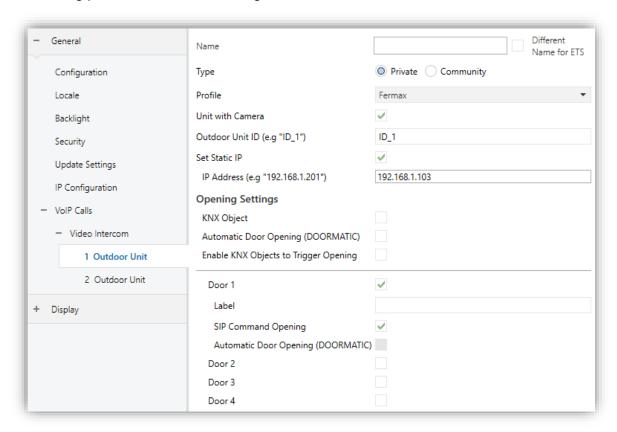


Figure 10. ETS configuration of Fermax outdoor unit

- Profile: <u>Fermax</u>.
- Outdoor Unit ID: this ID will depend on the configuration of the general tab in the video intercom, as indicated below:

#### Block panel: BBB0099XX, where:

- ➤ BBB= Block number (0's on the left are omitted)
- > XX= Device number (01...99)
- 0099 is fixed.

#### • General entrance panel: 200XX, where:

- > XX= Device number (01..99)
- > 200 is fixed.

#### • 1-way panel: X0BBB00UUUU, where:

- > X= Device number (0..9)
- ➤ BBB= Block number (000..999)
- UUUU= Apartment number(0001..9899)
- > 0's are fixed

For example, if the video intercom is configured as a 1-way panel with the following parameters: Device number=2, Block number=50 and Apartment number=204. In this case, the Outdoor Unit ID will be 20050000204.

• Set Static IP: <u>Enabled.</u> This parameter sets the IP of the video intercom.

#### Notes:

- > This parameter is only mandatory in case the video intercom is in a different network than the indoor unit, but it is recommended to enable it whenever the video intercom has a static IP.
- If the video intercom gets the IP via DHCP, this parameter must be disabled.

#### 4.2 MILO VIDEO DIGITAL MEET VIDEO INTERCOM

This section details the basic configuration so that the video intercom can communicate with the indoor unit correctly. To do this, it is necessary to configure the following tabs in the video intercom configuration interface.

#### 4.2.1 GENERAL

This tab is used to configure the type of video intercom, the block, device number and apartment. These parameters will define the video intercom ID (see section 4.1 to know how to calculate the **Outdoor Unit ID**).



Figure 11. "General" tab Fermax configuration

#### 4.2.2 NETWORK

This tab sets the IP configuration of the video intercom. This IP will be the one configured in the IP Address ETS parameter, available in the "N Outdoor Unit" tab.

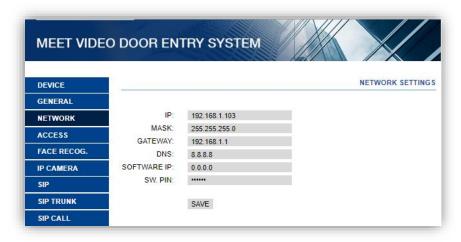


Figure 12. "Network" tab Fermax configuration

#### **4.2.3 SIP CALL**

In this tab, the contacts to be called by the video intercom are added. For each apartment a number will be assigned to call, which will have the format *sip:*  $ID\_indoor\_unit@IP\_indoor\_unit$ . This IP and ID correspond to those configured for the internal unit in the "IP Configuration" and "VoIP Calls" tabs of ETS.



Figure 13. "SIP CALL" tab Fermax configuration

#### 4.3 MILO VIDEO 1L MEET VIDEO INTERCOM

The configuration of this model is very similar to the MILO VIDEO DIGITAL MEET Video Intercom. The main difference is that it only has one button to make the call, so the apartment number configured in the "General" tab must match the apartment number configured in the "SIP Call" tab.

#### 5 DOORBIRD

This section shows the basic configuration required in an installation with a Zennio indoor unit and a Doorbird video intercom.

It is also necessary to have a mobile device with the Doorbird application to configure the video intercom.

#### 5.1 ETS CONFIGURATION FOR DOORBIRD VIDEO INTERCOM

To enable communication between an indoor unit and a Doorbird video intercom, the following parameters must be configured in the "N Outdoor Unit" tab:

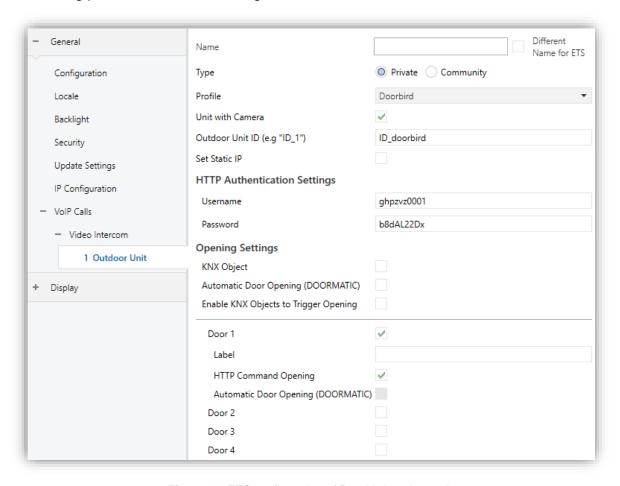


Figure 14. ETS configuration of Doorbird outdoor unit

Profile: Doorbird.

- Outdoor Unit ID: this ID corresponds to the SIP User field which can be found in the Doorbird application when accessing the configuration under "Settings" → "Administration" → Accessing the device to be configured → "SIP Configuration".
- Set Static IP: Disabled. This parameter sets the IP of the video intercom.

#### Notes:

- This parameter is only mandatory in case the video intercom is in a different network than the indoor unit, but it is recommended to enable it whenever the video intercom has a static IP.
- If the video intercom gets the IP via DHCP, this parameter must be disabled.
- HTTP Authentication Settings:
  - Username
  - Password

**Note:** both the username and password can be found in the video intercom documentation included with the device. They are the same as those used in the application to add the video intercom for the first time (user credentials).

#### 5.2 DOORBIRD D2101V VIDEO INTERCOM

This section details the basic configuration so that the video intercom can communicate with the indoor unit correctly. Inside the application it is necessary to configure some parameters in the administration tab. To access this tab, it is necessary:

1. Access to settings:



Figure 15. Settings tab

2. In the settings, access to the "Administration" tab and enter the administrator name and password included in the video intercom documentation.



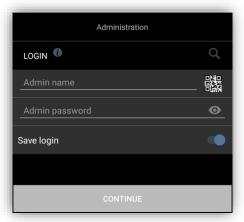
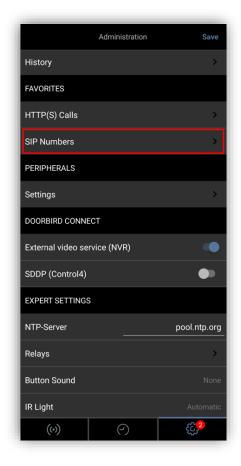


Figure 16. Administration access

#### **5.2.1 SIP NUMBERS**

In this tab, the indoor unit to which the video intercom is going to call is added. By clicking on the add button, the following information is requested:



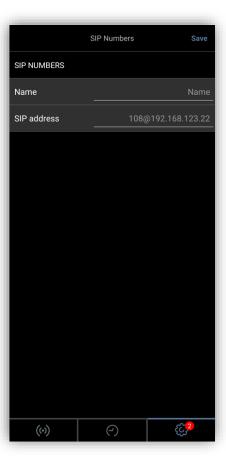


Figure 17. "SIP Numers" tab

- Name of the indoor unit: informative parameter only.
- SIP address: this parameter contains the ID and IP of the indoor unit to be called with the following format: ID\_indoor\_unit@IP\_indoor\_unit. This IP and ID correspond to those configured for the internal unit in the "IP Configuration" and "VoIP Calls" tabs of ETS.

**Note**: It is possible to include the SIP address by configuring only the IP of the indoor unit.

#### 5.2.2 SIP SETTINGS

Within this tab the SIP functionality is enabled and the SIP User is set, which must correspond to the Outdoor Unit ID configured in the "N Outdoor unit" tab in ETS.



Figure 18. "SIP Settings" tab

#### **5.2.3 SCHEDULE FOR DOORBELL**

This tab is used to configure the SIP user to be called from the video intercom according to the time of day. To do this configuration:

- 1. Select the SIP Call option from the drop-down menu in the upper-left corner.
- 2. Select the user to which the call will be made.
- Configure the timetable in which the call is made to that user. To select or deselect the entire timetable, click on the button in the upper-right corner.

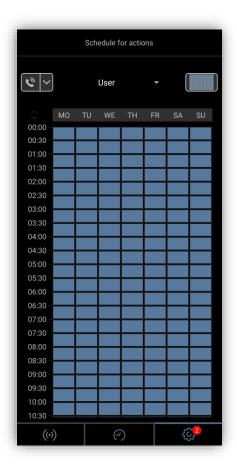


Figure 19. "Schedule for doorbell" tab

#### 6 AKUVOX

This section shows the basic configuration required in an installation with a Zennio indoor unit and a Akuvox video intercom.

It is also necessary to have a computer connected to the same network to configure the video intercom via their IP.

<u>Important</u>: new Akuvox firmware versions incorporate **High Secutiry Mode** functionality. This must be disabled to be compatible with the Akuvox profile. To enable this functionality, it is necessary to configure the video intercom with a custom profile, completing all the parameters with the URLs indicated by the manufacturer of the video intercom.

#### 6.1 ETS CONFIGURATION FOR AKUVOX VIDEO INTERCOM

To enable communication between an indoor unit and a Akuvox video intercom, the following parameters must be configured in the "N Outdoor Unit" tab:

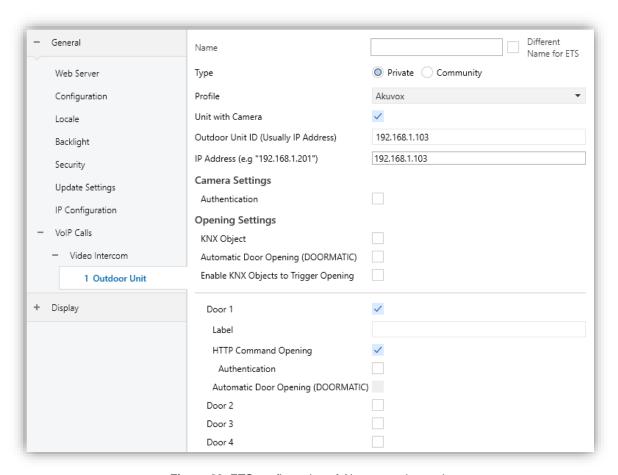


Figure 20. ETS configuration of Akuvox outdoor unit

Profile: <u>Akuvox</u>.

Outdoor Unit ID: <u>Video intercom ID</u>.

<u>Note</u>: in the case of the R20A model, the ID of the video intercom is the IP. In case of using another model, if the ID is not the IP, consult directly with the manufacturer.

• IP Address: this parameter sets the IP of the video intercom.

#### **HTTP Authentication Settings:**

- Username
- Password

**Note:** these two parameters are only displayed if the **Authentication** parameter of the camera settings or any of the doors has been enabled.

#### **Camera Settings:**

• Authentication: <u>Disabled</u>. It allows to enter a user and password in case the video intercom has authentication enabled for camera viewing. This username and password will be configured in this same tab above, under HTTP Authentication Settings.

#### **Opening Settings:**

- Door N: <u>Enabled.</u> In case the relay has a user and password configured, it is necessary to enable the door authentication parameter.
  - ➤ **Authentication:** Disabled. It allows to enter a user and password in case the video intercom has authentication enabled for door opening. This username and password will be configured in this same tab above, under **HTTP Authentication Settings**.

<u>Note</u>: the user and password used for door opening have to be the same as the one used for video intercom preview authentication.

#### 6.2 AKUVOX R20A VIDEO INTERCOM

This section details the basic configuration so that the video intercom can communicate with the indoor unit correctly. To do this, it is necessary to configure the following tabs in the video intercom configuration interface.

#### 6.2.1 NETWORK

In the "Network/Basic" tab, set a **Static IP** for the video intercom in the range of the network where it will be installed.

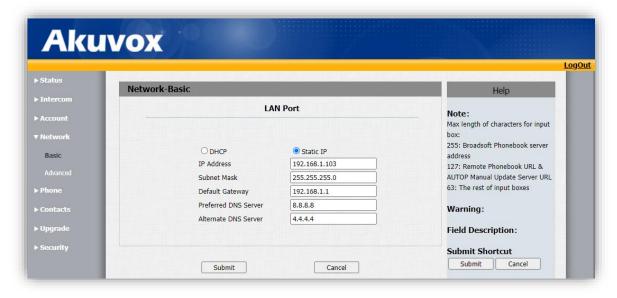


Figure 21. "Network/Basic" tab Akuvox configuration

#### 6.2.2 INTERCOM

In the "Intercom" tab, different tabs to be configured will appear.

#### 6.2.2.1 BASIC

In the "Intercom/Basic" tab, set the IP of the indoor unit(s) to be called.

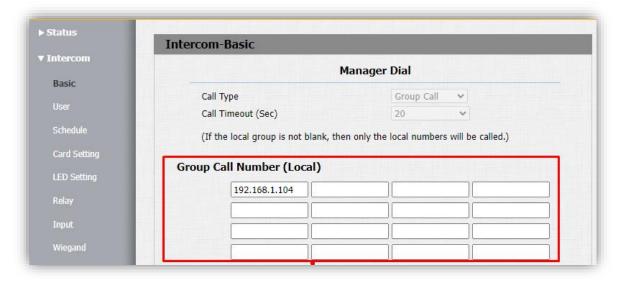


Figure 22. "Intercom/Basic" tab Akuvox configuration

#### 6.2.2.2 RELAY

This tab is used to configure the relay that opens the door. To be able to open the door, it is necessary to enable the opening via HTTP.



Figure 23. "Intercom/Relay" tab Akuvox configuration

In case a user and password are configured, it is necessary to enable in ETS the authentication parameter of the doors, entering as **Username** and **Password** the same ones that have been configured in this tab.

#### 6.2.2.3 RTSP

In this tab, settings related to video are established. If configuring video authentication is desired, it is necessary to enable the MJPEG Authorization Enabled checkbox and also specify an User Name and an Password. These same configurations must also be applied in ETS within the camera configuration section.

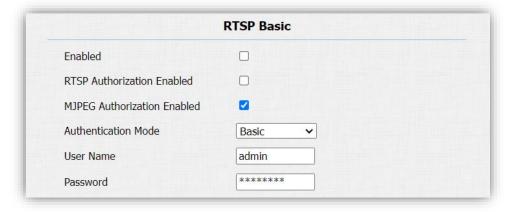


Figure 24. "Intercom/RSTP/RTSP Basic" tab Akuvox configuration

To be able to view the camera, it is necessary to ensure that the "Activated" field is enabled within the MJPEG Video Parameters.



Figure 25. "Intercom/RSTP/MJPEG Video Parametes" tab Akuvox configuration

This enables the video stream from the video intercom camera at http://<device-ip>:8080/video.cgi, and the screen will be able to access this stream.

#### 6.3 AKUVOX R29S VIDEO INTERCOM

The configuration of this model is slightly different from the R20A model. The configuration is done by setting up an account as if logging into a server. This is done to ensure that the call is made by identifying itself with an ID in addition to the IP.

Below are the tabs to be configured that differ from the previous model.ç

#### 6.3.1 ACCOUNT -> BASIC

The SIP account is configured in this tab. The data used will be those defined by the manufacturer and the ID of the video intercom corresponds to the Register Name field. This ID will be the one to be configured in the outdoor unit tab in ETS.

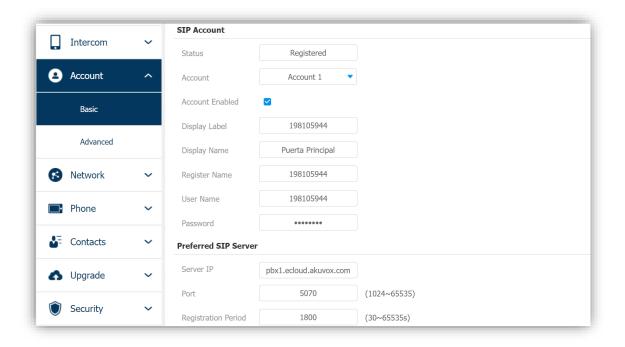


Figure 26. "Account / Basic" tab configuration

#### 6.3.2 CONTACTS -> CONTACTS LIST

This tab is used to add the contacts that will later appear on the video intercom to call. To add it, the contact name that will be shown in the video intercom and the address to be called with the format "sip:ID@IP" must be entered.

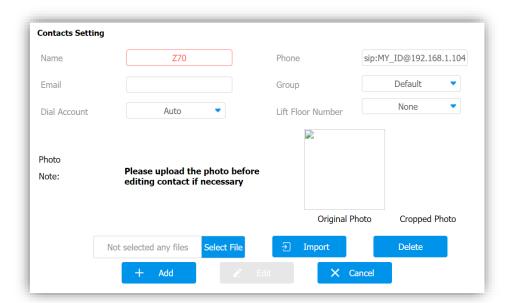


Figure 27. Contacts configuration

## 7 AXIS (WITHOUT PREDEFINED PROFILE)

The following is how to configure an Axis video intercom to be compatible with a Zennio indoor unit. Although this video intercom does not have a predefined profile, it is possible to configure it using a custom profile.

#### 7.1 ETS CONFIGURATION FOR AXIS VIDEO INTERCOM

To enable communication between an indoor unit and an Axis video intercom, the following parameters must be configured in the "N Outdoor Unit" tab:

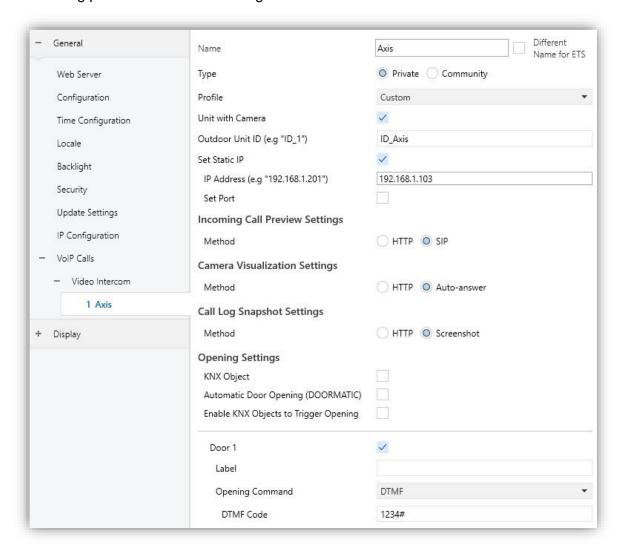


Figure 28. ETS configuration of Axis outdoor unit

- Profile: <u>Custom</u>.
- Outdoor Unit ID: <u>Video intercom ID</u> (for more information about how to configure this ID in the video intercom, see section 7.2.1.2).
- IP Address: this parameter sets the IP of the video intercom.
- Incoming Call Preview Settings: <u>SIP</u>.
- Camera Visualization Settings: <u>Auto-answer</u>.
- Call Log Snapshot Settings: <u>Screenshot</u>.
- ▶ Door N: Enabled. Opening Command by DTMF. It is necessary to add "#" symbol at the end of the numerical code set in ETS.

#### 7.1.1 PREVIEW VIA HTTP

It is also possible to configure the camera preview display via HTTP. In this case, the configuration will be similar to the previous one, changing the following parameters:

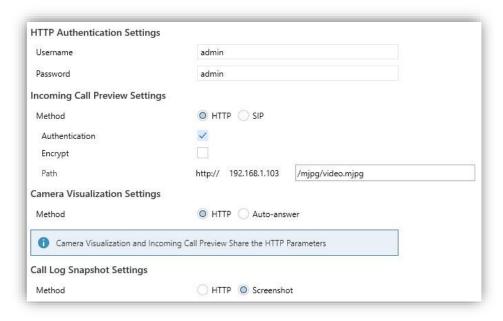


Figure 29. ETS Configuration of Axis outdoor unit with HTTP

Incoming Call Preview Settings: <u>HTTP with Authentication and without Encryption.</u>

- ➤ **Authentication**: Enabled. Allows to enter a user and password that corresponds to the video intercom access credentials. The following parameters are displayed:
  - Username.
  - Password.
- > Path: <u>/mjpg/video.mjpg.</u>
- Camera Visualization Settings: <u>HTTP</u>.
- Call Log Snapshot Settings: <u>Screenshot</u>.

#### 7.2 AXIS I8016-LVE VIDEO INTERCOM

This section details the basic configuration so that the video intercom can communicate with the indoor unit correctly. To do this, it is necessary to configure the following tabs in the video intercom configuration interface.

**Note**: it is recommended to configure the video intercom with a static IP to ensure communication.

#### 7.2.1 COMMUNICATION -> SIP

Within the "SIP" tab there are several sub-tabs that need to be configured as shown below:

#### 7.2.1.1 SETTINGS

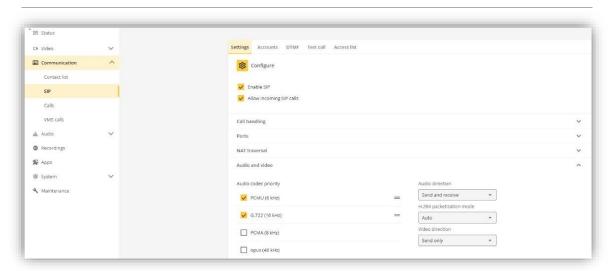


Figure 30. Communication -> SIP -> Settings (General)

- Enable SIP: Enabled.
- Allow incoming SIP calls: Enabled.

Under "Audio and Video" it is important to configure the codecs compatible with the indoor unit, which in this case will be PCMU and G.722.

In the "Additional" section, the following must be configured:

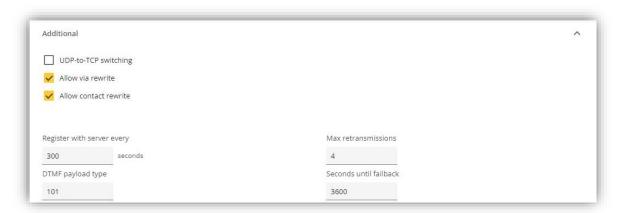
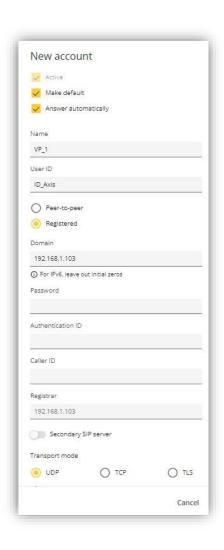


Figure 31. Communication -> SIP -> Settings (Additional)

- UDP-to-TCP switching: Disabled.
- DTMF payload type: <u>101</u>.

#### **7.2.1.2 ACCOUNTS**

In this tab, the account to be used by the video intercom when making the call is added. To do this, it is necessary to create an account with the following characteristics:



- Active: Enabled.
- Answer automatically: Enabled.
- Name: name assigned to the account
- User ID: ID with which the video intercom will be identified. It must correspond to the ID configured in the outdoor unit tab in ETS.
- Registered: Enabled.
- Domain: this field must be filled in, although it will not be used in the call. The content does not matter.
- Registrar: will be automatically filled in with the same as in domain.
- Transport mode: UDP.

**Note**: when generating the account, it will appear with the status as not implemented or inactive. This is not a problem, as it does not need to connect to any server to make the call.

#### 7.2.1.3 DTMF

This tab is used to configure the tone dialling for door opening. To do this, it is necessary to add a new sequence indicating the numerical sequence, a description and the account from which the opening is made, which will correspond to the one configured in section 7.2.1.2.

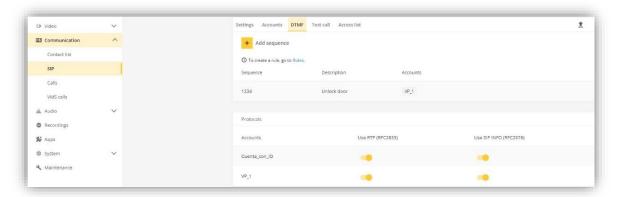
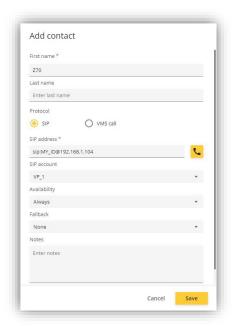


Figure 32. DTMF configuration (tone dialling)

**Note:** in order to perform DTMF opening, in addition to configuring a sequence, it is necessary to configure a specific rule that allows opening. To do this, consult the <u>specific video intercom manual</u> on the manufacturer's website where it is indicated how to configure this rule.

#### 7.2.2 COMMUNICATION -> CONTACT LIST

This tab is used to add the contact of the Zennio indoor unit that will be called.



- First name: name of the contact to add.
- Protocol: <u>SIP.</u>
- SIP address: contact address which shall contain the ID and IP of the indoor unit in the format "sip:ID@IP".
- SIP account: this account shall be the account created in section 7.2.1.2.

#### 7.2.3 COMMUNICATION -> CALLS

This tab is used to configure the call button, where it is set to which contacts will be called when the button is clicked. To do this, the contact to be called is added under recipients.

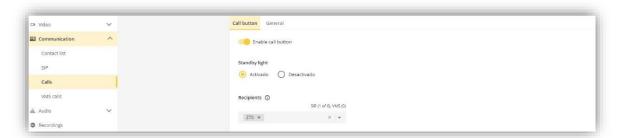


Figure 33. Calls -> Call button

**Note**: it is possible to call several indoor units simultaneously.

# \*Zennio

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