



## xxter 2N Intercom configuration

### Setup / settings for VoIP

The Helios IP intercom systems of 2N can be integrated into xxter as an audio/video door system. The configuration as described in this document has been tested. This is not the only configuration option, an extensive knowledge of SIP and TCP/IP is required to use other configurations.

This document lists not all the settings, only the settings which are different than the default settings and required for using the 2N intercom with xxter. This document has several screenshots to clarify the description and text and images are based on the firmware version 2.6. We have tested the configuration on firmware version 1.2 as well and expect this configuration to work with other versions as well.

First you need to setup the IP address and other network settings for your intercom system. This is explained in the manual of 2N. In this manual we use the IP address **192.168.72.6** as an example.

Enter this IP address into a web browser and login to the web interface.  
(default login is: "Admin" and the password "2n")



First select “Phone book” and position 1.

Give the user a name and enter the phone number, in this example “sip:150@192.168.73.135”

The IP-address should be the IP-address of the xxter-unit, so change this accordingly.

The screenshot shows the 'Directory' management page. The top right corner displays '2N Helios IP Vario', 'CZ | EN', and 'Logout'. A navigation bar at the top contains a list of numbers from 1 to 10, with '1' selected. A search box labeled 'Number' is also present. The left sidebar includes icons for various functions: a bar chart, a group of people, a wrench and screwdriver, a gear, and a grid. The main content area is titled 'Directory' and contains a 'Phone Book' dropdown menu. Below it, the 'User Basic Information' section is expanded, showing fields for 'Name' (filled with 'call') and 'E-Mail'. The 'User Phone Numbers' section is also expanded, showing 'Number 1' with fields for 'Phone Number' (filled with 'sip:150@192.168.73.135'), 'Time Profile' (set to '[not used]'), and 'Helios IP Eye Address'. A checkbox for 'Parallel call to following number' is also visible.

Choose “Phone” under the “Services” settings.

Enter the IP-address of the intercom system as the Domain.

The screenshot shows the 'Services' configuration page. The top right corner displays '2N Helios IP Vario', 'CZ | EN', and 'Logout'. A navigation bar at the top contains tabs for 'SIP', 'Calls', 'Audio', and 'Video', with 'SIP' selected. The left sidebar includes icons for various functions: a bar chart, a group of people, a wrench and screwdriver, a gear, and a grid. The main content area is titled 'Services' and contains a 'Phone' dropdown menu. Below it, the 'Intercom Identity' section is expanded, showing fields for 'Display Name' (filled with '2N Helios IP Vario'), 'Phone Number (ID)' (filled with 'Admin'), and 'Domain' (filled with '192.168.72.6'). The 'Authentication' section is also expanded, showing a checkbox for 'Use Authentication ID' (unchecked), an 'Authentication ID' field (filled with '101'), and a 'Password' field (filled with '\*\*\*\*\*').



Select the “Calls” tab.

Make sure the “Automatic Answer” is checked and choose “By activation Code” as method and enter an access code, in this example we use 765.

Set the Ring time limit to 5 seconds when you use this with the xxter unit. The xxter app will call the intercom door system, so the unit should not be “busy”. (5 seconds is the minimum)

2N Helios IP Vario CZ | EN Logout

Services

SIP Calls Audio Video

Incoming Calls

Automatic Answer

Call Activation By Activation Code

Activation Code 765

Outgoing Calls

Ring Time Limit 5 [s]

Call Time Limit 120 [s]

Dial Cycles Limit 1

Select the tab “Audio”, here the following settings are important:

Codec order, this depends on your network configuration. Some codec might work better than others on your network. L16, PCMA and PCMU are all supported by xxter.

Make sure all the DTMF receiving methods are checked.

2N Helios IP Vario CZ | EN Logout

Services

SIP Calls Audio Video

Preferred Audio Codecs

Codec 1 PCMU

Codec 2 PCMA

Codec 3 L16/8kHz

Codec 4 None

DTMF Sending

Sending Mode Do not Send

In-Band (Audio)

RTP (RFC-2833)

SIP INFO (RFC-2976)

DTMF Receiving

In-Band (Audio)

RTP (RFC-2833)

SIP INFO (RFC-2976)



On the “Video” tab, do not set a too high bitrate and frame rate. This requires more bandwidth and can block a proper audio connection.

2N Helios IP Vario CZ | EN Logout

Services

- Phone
- Streaming
- E-Mail
- Automation
- User Sounds
- Web Server
- Audio Test

SIP Calls Audio **Video**

Video Parameters

- Video Resolution: CIF (352x288)
- Video Framerate: 10 fps
- Video Bitrate: 256 kbps

Preferred Video Codecs

- Codec 1: H.264
- Codec 2: H.263+
- Codec 3: H.263
- Codec 4: None

Select “Hardware” -> Switches to setup the door relay. In our example we use code 00 to open the door.

2N Helios IP Vario CZ | EN Logout

Hardware

- Switches
- Speaker
- Microphone
- Camera
- Keyboard

Switch 1 **Switch 2** Switch 3 Switch 4 Advanced

Switch Enabled

Basic Settings

- Switch Mode: Monostable
- Switch-On Duration: 5 [s]
- Time Profile: [not used]

Output Settings

- Controlled Output: Relay 1
- Output Type: Normal

Switch Codes

	CODE	ACCESSIBILITY	TIME PROFILE
1	00	Keypad + DTMF	[not used]



After setting up the 2N intercom, go to your xxter project and add a camera/intercom. Use the following settings:

Name	<input type="text" value="2n intercom"/>
Type	<input type="text" value="2N intercom"/>
URL	<input type="text" value="http://192.168.72.6/"/>
URL external	<input type="text" value="http://192.168.72.6/"/>
Width	<input type="text" value="352"/>
Height	<input type="text" value="288"/>
RTSP URL:	<input type="text"/>
RTSP URL external	<input type="text"/>
<input checked="" type="radio"/> Always get videostream	
<input type="radio"/> Only get videostream with wifi, single image for other connections	
<input type="radio"/> Only get videostram with wifi, no image for other connections	
Username	<input type="text" value="Admin"/>
Password	<input type="password" value="••"/>
<input type="checkbox"/> Display no warnings for this camera.	
xxter SIP address	<input type="text" value="sip:102@192.168.72.6"/>
xxter SIP password	<input type="password" value="••••"/>
SIP address to call	<input type="text" value="sip:101@192.168.72.6"/>
Use STUN server	<input type="text"/>
Audio bandwidth	<input type="text" value="0"/> kbit/s
Video bandwidth	<input type="text" value="0"/> kbit/s
DTMF access code	<input type="text" value="765"/>
Door opener button	<input type="text" value="Use DTMF code:"/>
DTMF door code	<input type="text" value="00*"/>
<input type="button" value="Change"/> <input type="button" value="Delete"/>	

Make sure to use the IP-address of the intercom on the URL and SIP address fields. After the door code add an additional \* (this is required to be able to open the door).



Add this camera/intercom to a page of a profile (end-user section) to be able to use it.

Also add an alert service (on the general settings page of the profile) to be alerted when someone is at the door.

**Alert service** Text message credits: 335

Name:	<input type="text" value="Intercom"/>
Message:	<input type="text" value="Intercom bell"/> [x] = value, [d]/[D] = date, [t]/[T] = time
Max. 1 message every:	<input type="text" value="1 minute"/>
<b>Receivers</b>	
Type	To
<input type="text" value="Push notification"/>	<input type="text" value="iPhone"/>
	<input type="text" value="Front door"/>
	<input type="text" value="Activate intercom (if present)"/>
	<input type="text" value="Default sound"/>
<b>Conditions (any will trigger the alert)</b>	
Condition:	<input type="text" value="SIP trigger"/>
Trigger number:	<input type="text" value="150"/>

Choose push notification as type and select a mobile device. Then, select the page on which you previously added the intercom as a camera. You can select “Activate intercom” here, if you want to automatically connect to the intercom when receiving the alert.

As the condition select SIP trigger and enter 150 as the trigger number. This corresponds with the first part of the phone number you have set up, as described on page 2 of this manual (“sip:150@192.168.73.135”).

Save the alert service by clicking “Change and return”.

**Important:** To activate the alert service, it has to be loaded onto the xxter device. Do this by reloading the configuration in the app or directly from the xxter box.