

Configuration Manual Web Interface

VIPCOS 900 4x Up0 Gateway



L. No. 10158 (old: 704100)

Vonamic GmbH
Im Lipperfeld 27
46047 Oberhausen
Germany

Phone: +49 (0) 208 / 30 99 06 - 0
Fax: +49 (0) 208 / 30 99 06 - 99

Web: <http://www.vonamic.com>
Mail: info@vonamic.com

Translation of the German original

Subject to technical modifications

Content

Content.....	2
1. Introducing the VIPCOS Web Interface.....	3
1.1 Overview.....	3
1.2 How to get access to the web interface.....	4
2. Distribution of the web interface.....	7
2.1 Network Settings	7
2.2 Web / SIP Settings	8
2.3 Device Settings	9
2.4 Time Synchronization	10
2.5 Port 1 - 4 Configuration	11
2.6 Group Selection	14
2.7 Store / Restore of Config Files.....	14
3. Configuration Description	15
3.1 IP address and device ID.....	15
3.1.1 Preparation.....	15
3.1.2 Set and adjust IP	16
3.1.3 Setup and adjust ID	17
3.1.4 Determine device IP-Address (Troubleshooting)	18
3.2 Volume adjustment.....	18
3.3 Direct call connection.....	19
3.4 Group call connection	20
3.4.1 Define group membership	20
3.4.2 Set up a group call	21
3.5 SIP connection	22
3.5.1 SIP server Registration.....	23
3.5.2 Set up an outgoing SIP connection.....	24
3.5.3 Set up an incoming SIP connection	25
3.6 Party line connection.....	26
3.7 Set up 10W / 40W amplifier	27
3.8 Keypad	28
3.8.1 how to use the keypad	29
3.9 Set up Relais	30
3.10 Time synchronization (NTP)	31
3.11 Store and restore of configuration files	32

1. Introducing the VIPCOS Web Interface

1.1 Overview

This document describes the detailed configuration of the VIPCOS 900 4x Up0 Gateway using the internal web interface. The web interface is divided into six segments **Network Settings, Web / SIP settings, Device Settings, Time Synchronization, Key Configuration** and **Group selection**.

Chapter 2 explains the functions of the individual areas in detail. Chapter 3 gives specific configuration examples of the individual functions. After reading this document carefully, you will be able to fully configure the V900 4x Up0 Gateway.

VIPCOS V900
UP0 Gateway
Configuration


Vonamic
 Voice & Dynamic
support@vonamic.com | [Support](#)

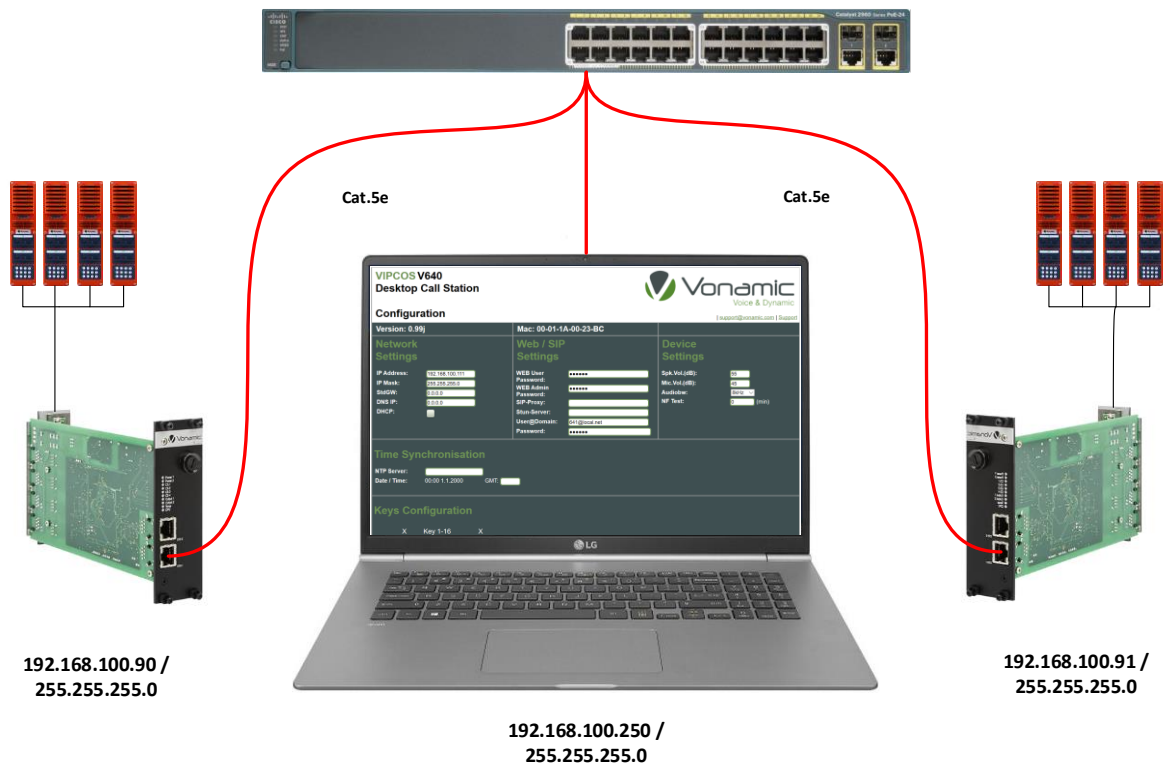
Version: 0.99f	Mac: 00-01-1A-00-23-1E	
Network Settings IP Address: 192.168.100.90 IP Mask: 255.255.255.0 StdGW: 0.0.0.0 DNS IP: 0.0.0.0 DHCP: ☐	Web / SIP Settings WEB User Password: WEB Admin Password: SIP-Proxy: Stun-Server:	Device Settings NF Test: 0 (min)
Time Synchronisation NTP Server: Date / Time: 00:17 1.1.2000 GMT:		
Port 1 Config		User@Domain: 9001@local.net Sip Password:
Port 2 Config		User@Domain: 9002@local.net Sip Password:
Port 3 Config		User@Domain: 9003@local.net Sip Password:
Port 4 Config		User@Domain: 9004@local.net Sip Password:
Save		

Please select a config file: Keine Datei ausgewählt.

 Configuration:

The figure above shows the web interface of the V900 4x Up0 Gateway.

1.2 How to get access to the web interface



To view and edit the web interface you need a PC with RJ45 network connection, a PoE switch (IEEE 802.3af) and a browser (Internet Explorer, Firefox, Chrome etc.) To begin with the initial configuration stage, you need to reconfigure your PC's IP address and subnet mask so as to make sure the PC can communicate with the V900. After changing PC's IP address (for example, 192.168.100.250) you can access the Web interface of the device using the V900 default IP address.

The factory default configurations of the V900 are as follows:

<u>IP address:</u>	192.168.100.10
<u>Subnet mask:</u>	255.255.255.0
<u>Login:</u>	User (limited write) / admin / superadmin
<u>Password:</u>	Vonamic / Vonamic / Vonamic

Note: If you are using a system that has already been configured, please use the IP address range of your system. The examples in this manual use the IP address range of the factory default.

1. Power up the PC that you will use for the initial configuration. Please make sure the PC has the Ethernet RJ45 connector to be connected to the switch via standard Ethernet LAN cable.
2. Reconfigure the PC's IP address and subnet mask as below, so that it can communicate with the switch. The method to change the PC's IP address, for example, for a PC running Windows® 7/8.x/10, is as follows:

Step 1: Type “network and sharing” into the **Search box** in the **Start Menu**

Step 2: Select **Network and Sharing Center**

Step 3: Click on **Change adapter settings** on the left of PC screen

Note: Users can also skip step 1 to 3, by pressing **WinKey+R** and type “ncpa.cpl” command to get to step 4 directly.

Step 4: Right-click on your local adapter and select **Properties**

Step 5: In the **Local Area Connection Properties** window highlight **Internet Protocol Version 4 (TCP/IPv4)** then click the Properties button.

Note: Be sure to record all your PC’s current IP settings to be able to restore them later.

Step 6: Select the radio button **Use the following IP address** and enter in the IP for the PC (e.g. any IP address not in use, and in between 192.168.100.1 and 192.168.100.254), Subnet mask (e.g. 255.255.255.0), and Default gateway that corresponds with your network setup. Then enter your preferred and Alternate DNS server addresses.

Step 7: Click **OK** to change the PC’s IP address.

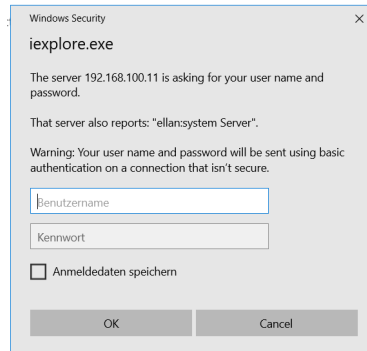
3. Turn on the switch that will be used for configuration and as the voltage source of the V900. Wait until the start-up process is completed.
4. Make sure that PoE is activated on the switch. Connect the V900 to an PoE Port using a standard network cable, and check the port LED on the switch to make sure the link status of the V900 is OK.
5. Connect the PC to any port on the switch using a standard Ethernet cable, and check the port LED on the switch to make sure the link status of the PC is OK.
6. Run your Web browser on the PC; enter the factory default IP address, to access the V900 Web interface.

If your PC is configured correctly, you will see the login page of V900 as shown below.

If you do not see the above login page, please perform the following steps:

- Refresh the web page.
- Check to see if there is an IP conflict issue.
- Clean browser cookies and temporary internet files.
- Check your PC settings again and repeat step 2.

7. Enter the factory default username and password in login page.
Click "OK" to log into the V900.



Username: User, Admin or Superadmin

Password: Use the set password for each user level.
(Default: **Vonamic**)

The VIPCOS system has a three-level password protection.

User	Read / limited Write
Admin	Read / Write
Superadmin	Read / Write / Password Control

To get the full access, login as administrator by entering Username: **Admin** and Password: **Vonamic**.

Note: If you are using a pre-configured system, please use the current passwords. If you are not sure, ask your system administrator.

2. Distribution of the web interface

2.1 Network Settings



VIPCOS V900
UP0 Gateway
Configuration

Version: 0.99f Mac: 00-01-1A-00-23-1E

Network Settings

IP Address: 192.168.100.90
 IP Mask: 255.255.255.0
 StdGW: 0.0.0.0
 DNS IP: 0.0.0.0
 DHCP: ☐

Web / SIP Settings

WEB User Password:
 WEB Admin Password:
 SIP-Proxy:
 Stun-Server:

Device Settings

NF Test: 0 (min)

Time Synchronisation

NTP Server:
 Date / Time: 00:17 1.1.2000 GMT:

IP address: Changes the IP address of the end device. Enter a valid IP address and click on "Save" to initiate a restart. The new IP address was adopted after the restart and the device website must be called again using the new address.

IP mask: Changes the subnet mask of the end device. Enter a valid subnet mask and click on "Save" to initiate a restart. The new subnet mask was adopted after the restart.

StdGW: Setting a standard gateway for routing connections e.g. to other subnets. Changes are applied after saving.

DNS IP: Setting a DNS server.

DHCP: Setting a DHCP server. For automatic IP address assignment.

Note: After saving, please wait with further settings until the browser has loaded the page completely. Some settings require a restart of the device so that the charging process can be delayed.

2.2 Web / SIP Settings



VIPCOS V900
UP0 Gateway
Configuration

Version: 0.99f Mac: 00-01-1A-00-23-1E

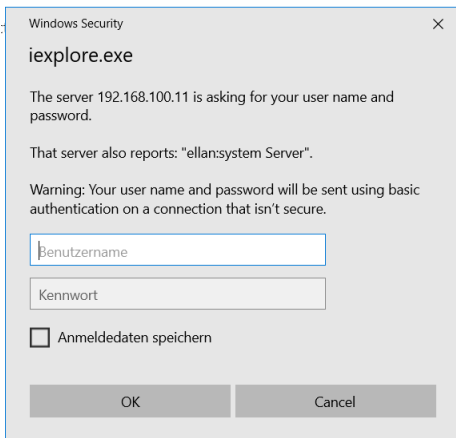
Network Settings
 IP Address: 192.168.100.90
 IP Mask: 255.255.255.0
 StdGW: 0.0.0.0
 DNS IP: 0.0.0.0
 DHCP: ☐

Web / SIP Settings
 WEB User Password:
 WEB Admin Password:
 SIP-Proxy:
 Stun-Server:

Device Settings
 NF Test: 0 (min)

Time Synchronisation
 NTP Server:
 Date / Time: 00:17 1.1.2000 GMT:

WEB password: Password for website access. Insert the desired password in the field provided and confirm your entry with the "save" button in the lower part of the screen. You get the following picture:



Windows Security

iexplore.exe

The server 192.168.100.11 is asking for your user name and password.

That server also reports: "ellan:system Server".

Warning: Your user name and password will be sent using basic authentication on a connection that isn't secure.

Benutzername

Kennwort

☐ Anmeldedaten speichern

OK Cancel

Username: User, Admin or Superadmin
Password: Use the set password for each user level.
 (Default: **Vonamic**)

SIP Proxy: IP address of the SIP server.

Stun Server: IP address of the stun server.

2.3 Device Settings

VIPCOS V900
UP0 Gateway
Configuration


Vonamic
 Voice & Dynamic
support@vonamic.com | [Support](#)

Version: 0.99f	Mac: 00-01-1A-00-23-1E	
Network Settings IP Address: 192.168.100.90 IP Mask: 255.255.255.0 StdGW: 0.0.0.0 DNS IP: 0.0.0.0 DHCP: ☐	Web / SIP Settings WEB User Password: WEB Admin Password: SIP-Proxy: Stun-Server:	Device Settings NF Test: 0 (min)
Time Synchronisation NTP Server: Date / Time: 00:17 1.1.2000 GMT:		

NF Test:

Setting the time for the recurring self-test of the audio peripherals.
 Possible settings between 1 and 1440 minutes (24 hours)

2.4 Time Synchronization

VIPCOS V900
UP0 Gateway
Configuration


support@vonamic.com | [Support](#)

Version: 0.99f	Mac: 00-01-1A-00-23-1E	
Network Settings IP Address: 192.168.100.90 IP Mask: 255.255.255.0 StdGW: 0.0.0.0 DNS IP: 0.0.0.0 DHCP: ☐	Web / SIP Settings WEB User Password: WEB Admin Password: SIP-Proxy: Stun-Server:	Device Settings NF Test: 0 (min)
Time Synchronisation NTP Server: Date / Time: 00:17 1.1.2000 GMT:		

NTP Server: IP address of the NTP server.

Date / Time: current date and time display. (no automatic refresh)

GMT: Time Zone.

2.5 Port 1 - 4 Configuration

The 4 channels of the gateway can be individually accessed and set via the web interface. To do this, move the mouse cursor over, for example, "Port 1 Config" so that the setting options for the corresponding port are accessible. The destination / function keys are divided into segments of 6 keys per segment. If you use the Enddevice version with keypad, buttons 1 and 2 can be freely configured. Buttons 3 and 4 take over the functions 3 = Dial and 4 = Cancel / Hangup. In this case, keys 5 and 6 have been replaced by the keypad.



Port 1 Config

User@Domain: Sip Password:

Amp.Vol.: Mic.Vol.:
 Amp. Mode: Spk.Vol.:
 Amp. PW: Relais Mode:

Multicast Group [Groups 1 - 64](#) | [Groups 65 - 128](#) | [Groups 129 - 192](#) | [Groups 193 - 250](#)

Keys Configuration

Key	Function	Destination	Prio.
1	Direct Call	640	50
2	Direct Call	9002	100
3	Direct Call	9003	100
4	Direct Call	9004	100
5	Group Call	1	150
6	Partyline		0
Unknown Dest.:		0	

User@Domain: own phone number of the terminal. Input from 1000 - 9999. In local networks we recommend the extension @ local.net after the phone number. When registering with a SIP server, the ending is different. (e.g. for Call number 1001: 1001@local.net)

SIP Password: Password for registration on the SIP server. (The login status is shown behind the input field. No automatic refresh.)

Amp. Vol.: Volume settings of the 10W / 40W Amplifier in 3dB steps. (0 - 33)

Amp. Mode: Setting the operational mode of the amplifier. (On, Off, Session)

Amp. PW: Setting the gain factor from 10W to 40W.

Please note: 40W operation Mode assumes external 24VDC power supply.

Mic.Vol.(dB): Volume setting of the internal microphone in dB. (Max. 74)

Spk.Vol.(dB): Volume setting of the internal loudspeaker in dB. (Max. 63)

RelaisMode: Setting the operating mode of the internal 230VAC / 10A relay. (On, Off, Answer, Online)

key function:	Setting the connection type or the call function. (Individual call, group call, telephone call, dynamic group call, party line, volume +/-, alarm etc.)
Destination:	Enter the call destination. (1000 - 9999 neuronal)
Prio.:	Enter the call priority. (1-255)
Unknown Dest:	As soon as this function has been set to an unassigned key, the device accepts unknown SIP calls. The last incoming unknown number is stored in the assigned key and can therefore be answered and called back. (Requires SIP server registration)

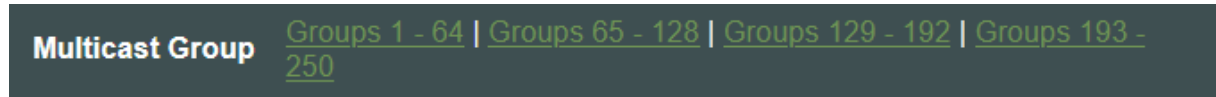
Call function Description:

Key Call Function	
1	Direct Call
2	Group Call
3	Telephone Call
4	Partyline
5	Hangup
6	Group Call
	Partyline

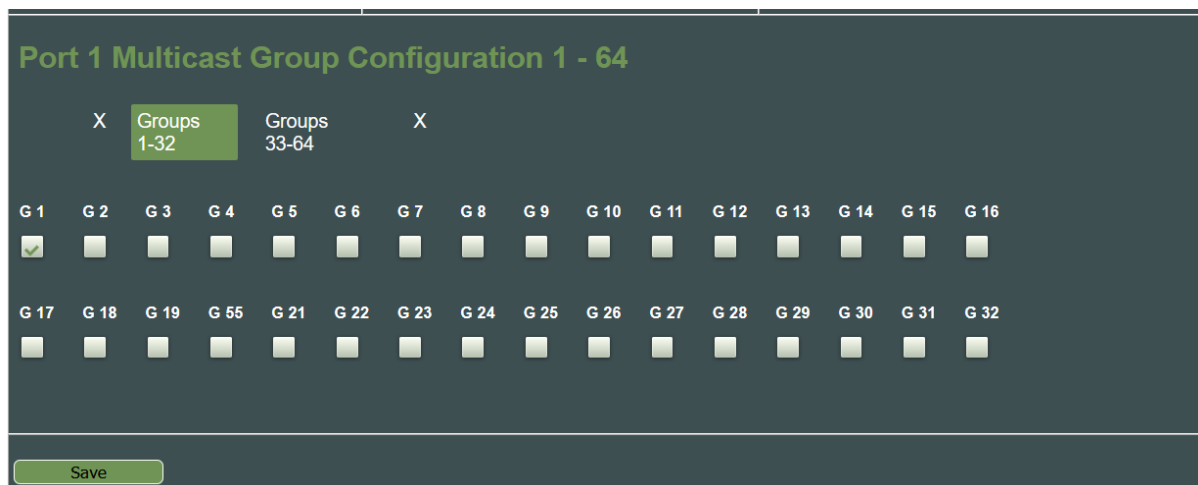
- Direct call:** Individual connection to a terminal. Enter the destination number here. For a VIPCOS device, enter the number you have assigned to the destination under "**User @ Domain**".
- Group call:** Connection to all participants in the corresponding group. Enter the group number you want to announce here. 1 - 255
- Sip call:** telephone connection. Enter the phone number of the phone you want to reach here.
- Hang up:** Terminate a telephone connection. Press to end a phone call.
- Partyline:** Live announcement to a dynamic group or party Line.

2.6 Group Selection

The group selection is divided into four segments of 64 groups per segment (Up to 250 groups).



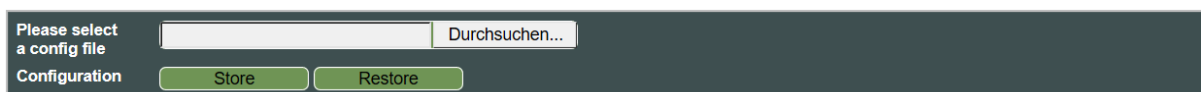
Clicking on a segment opens the two subsegments of this area which are divided into 32 groups. selection of a segment opens it up and the respective group checkboxes are accessible. Clicking on another segment will switch. To close, press X.



A total of 250 groups are available in the VIPCOS system. Each VIPCOS device can be a participant in all groups, including several at the same time. To determine the group membership, it is sufficient to activate the corresponding checkbox of the group with a click of the mouse. As soon as you have finished selecting the affiliation, confirm your entry with the Submit button.

2.7 Store / Restore of Config Files

After you have completed the configuration and saved it with **Submit**, you can load the configuration as an encrypted file from the device. You can save this file externally and use it for your archiving. This means that different configurations can be restored quickly and easily, different configuration statuses can be archived and failed devices can be easily replaced.



the corresponding setting area is located in the lower part of the web interface. Chapter 3 contains a description of this function.

3. Configuration Description

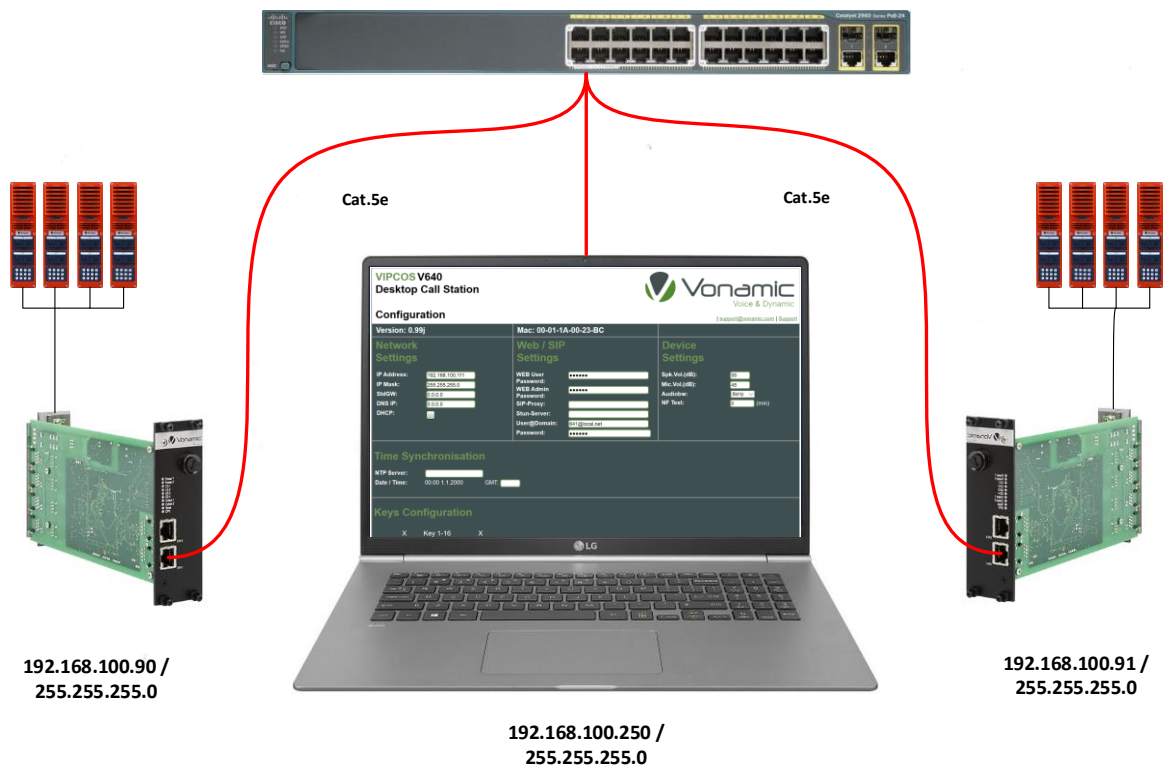
3.1 IP address and device ID

3.1.1 Preparation

In order to establish communication in the VIPCOS system, it is necessary to assign an individual IP address in the same IP address range and a device ID between **1000** and **9999** to each device. First, you should adjust the V900's IP address. By default, the IP address is **192.168.100.10 / 255.255.255.0**. Next, the call station needs an individual ID in order to be able to make an assignment for direct and SIP calls.

In our example, we will adjust the IP and ID of **two** V900 4x Up0 Gateways and thus create the first requirement for communication in VIPCOS System.

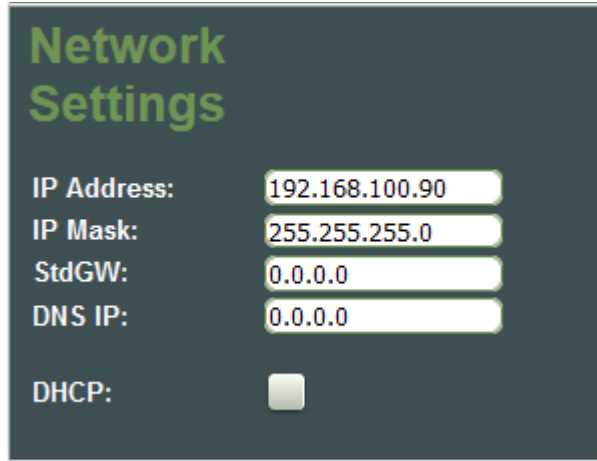
First create an environment as described in **chapter 1.2** and get access to the web interface of first V900:



Subject to technical modifications

3.1.2 Set and adjust IP

Adjust the IP address of the device by double-clicking in the **"IP Address:"** field. This marks the entire content. Now enter a valid IP address in the usual format. In our example, we set the first V900 to IP address **192.168.100.64**. You can adjust the subnet mask by double-clicking in the **"IP Mask:"** field and entering a valid subnet mask. In our example **255.255.255.0**.



Network Settings

IP Address: 192.168.100.90

IP Mask: 255.255.255.0

StdGW: 0.0.0.0

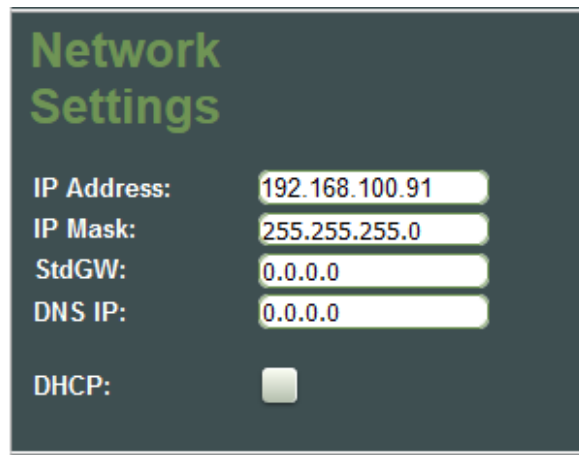
DNS IP: 0.0.0.0

DHCP: ☐

After you have made the entries, confirm and accept them by clicking the "Submit" button at the bottom of the website. The device will now restart and apply the changes. The restart takes <10s and the device can then be reached via its new IP address.

 <http://192.168.100.64/>

A second device is required for later examples. Please repeat the previous steps and set the IP address / subnet mask of a second V900 to **192.168.100.65 / 255.255.255.0**.



Network Settings

IP Address: 192.168.100.91

IP Mask: 255.255.255.0

StdGW: 0.0.0.0

DNS IP: 0.0.0.0

DHCP: ☐

3.1.3 Setup and adjust ID

The device ID is an alphanumeric string per Port. It is used to assign calls in the VIPCOS system. The IDs must be between **1000** and **9999** and may only exist once within a system.

Adjust the ID of the device by double-clicking in the **"User@Domain:"** field of the specific port 1 - 4. This marks the entire content. Now enter a valid device ID, between **1000** and **9999**. In our example we set the first V900 Port to ID **9001@local.net**.

Port 1 Config	User@Domain: 9001@local.net	Sip Password:
----------------------	--	------------------------------------

After you have made the entries, confirm and accept them by clicking the **"Submit"** button at the bottom of the website. The device will restart and apply the changes. The restart takes <10s.

A second device is required for later examples. Please repeat the previous step and set the device ID of the second V900 Port to **9002@local.net**.

Port 2 Config	User@Domain: 9002@local.net	Sip Password:
----------------------	--	------------------------------------

3.1.4 Determine device IP-Address (Troubleshooting)

If you do not know the IP address of your device, we will show you three ways to determine the address in this section.

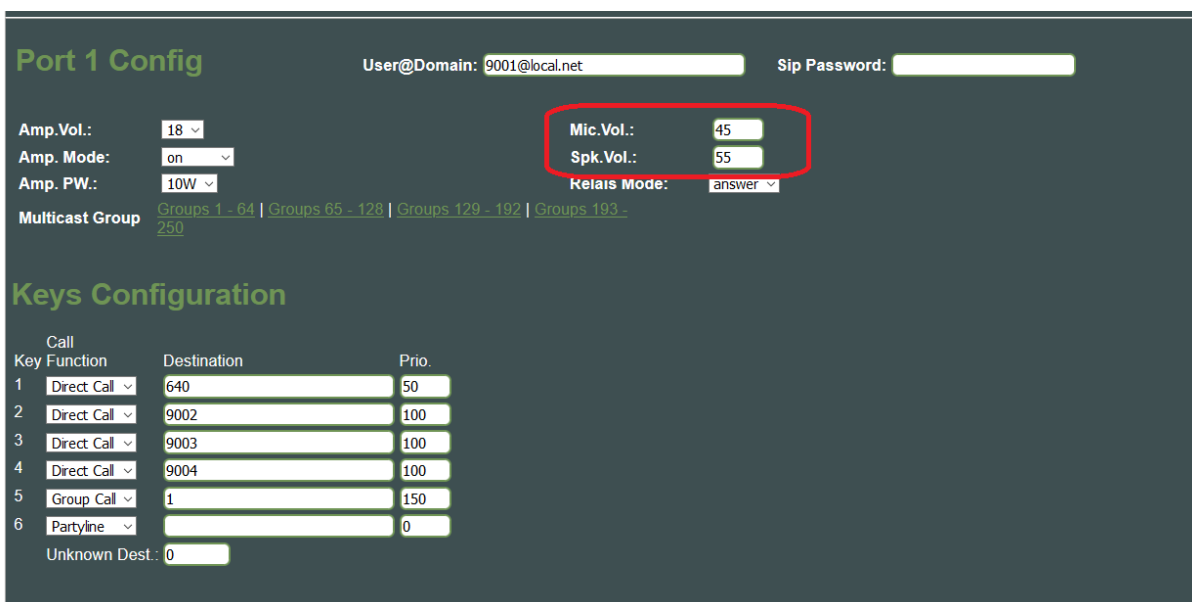
1. **Gratuitous ARP:** denotes a special use of **ARP**. A host sends an **ARP** request broadcast, in which it enters its own IP address as the source and destination IP address. This procedure is used by all VIPCOS devices and is output when the devices boot. With a network protocol analyzer such as Wireshark can be used to determine the IP address.
2. **Keep Alive:** the VIPCOS devices will output this package every 10 seconds. These show the operational readiness and, if necessary, output error messages. The package includes the IP address of the device as the source. You can use a network protocol analyzer such as Wireshark to determine the IP address.
3. **Debug:** The VIPCOS devices have a debug interface which also outputs the device's IP address. A TTL-USB cable is required to use this interface. Training is required to complete this step. Please contact us under support@vonamic.com to get your individual offer.

3.2 Volume adjustment

By setting the IP address and device ID, the basic requirements for communication exist. We would already be able to establish communication channels between the devices. However, to prevent an error, we start by adjusting the volume of the device. The settings for loudspeaker and microphone can be set separately on the device website. If the volume values for loudspeaker and microphone are set to 0 or a very low value, it can give the impression that the connection has not been established.

We therefore recommend setting a volume of:

Mic. Vol(dB): 45 (max. 72)
Spk. Vol(dB): 55 (max. 63)



Port 1 Config

User@Domain: 9001@local.net Sip Password:

Amp. Vol.: 18
 Amp. Mode: on
 Amp. PW.: 10W
 Multicast Group: Groups 1 - 64 | Groups 65 - 128 | Groups 129 - 192 | Groups 193 - 250

Mic. Vol.: 45
 Spk. Vol.: 55
 Relais Mode: answer

Keys Configuration

Call Key Function	Destination	Prio.
1 Direct Cal	640	50
2 Direct Cal	9002	100
3 Direct Cal	9003	100
4 Direct Cal	9004	100
5 Group Cal	1	150
6 Partyline		0

Unknown Dest.: 0

Subject to technical modifications

3.3 Direct call connection

To set up a direct call, use the **"Key Configuration"** area. In our example, we will set up a direct call from Port 1 to Port 2 on key 2 of the respective Port. In the left area of the web interface you will find the key number and from left to right the respective configuration options for the key.



Call	Key Function	Destination	Prio.
1	Direct Call	640	50
2	Direct Call	9002	100
3	Direct Call	9003	100
4	Direct Call	9004	100
5	Group Call	1	150
6	Partyline		0

Unknown Dest.: 0

1. Select the **"Direct Call"** function from the **"Call Function"** drop-down list for button 2.
2. Enter the device ID of the extension you want to reach in the **"Destination"** field. In our example we use the **ID 9001** (192.168.100.90) for Port 1 and **ID 9001** (192.168.100.65) for Port 2.

So, we enter **"9002"** in the field **"Destination"** of Port 1 with the ID 9001. In Port 2 with ID 9002, we enter **"9001"** inside the **"Destination"** field. Confirm your entry with the **"Submit"** button.

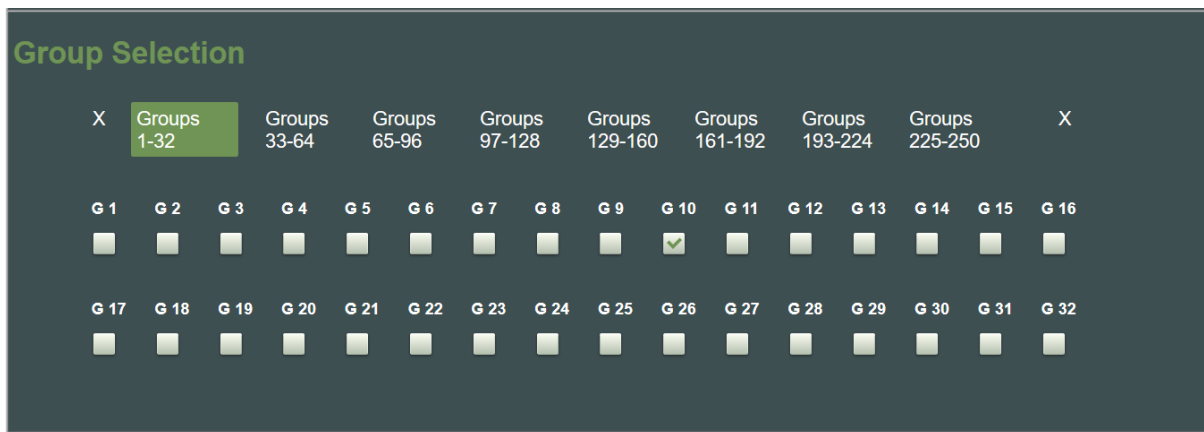
If you now hold down the button 1 on the device of Port 1, the device establishes a unicast connection to the device with ID 9002 (Port 2) and maintains the connection for the duration of the button press.

3.4 Group call connection

A group call denotes a connection to all participants in the corresponding group. First, the group membership should be determined and then the group call should be set up.

3.4.1 Define group membership

A total of 250 groups are available in the VIPCOS system. Each VIPCOS device can be a participant in all groups, including several at the same time. The group selection is divided into segments of 32 groups per segment. Clicking on a segment opens it up and the respective group checkboxes are accessible. Clicking on another segment will switch. To close, press the X.



In our example, we will configure both V900 4x Up0 Gateways for participants in group 10.

1. Select the **"Groups 1-32"** segment with a mouse click. A total of 32 check boxes are now displayed under the segments, the respective groups of the corresponding segment.
2. By clicking on a check box, the affiliation of the corresponding group is determined and confirmed with a check mark. Check "G 10" and accept your entry by clicking the "Submit" button.

A total of 250 groups are available in the VIPCOS system. Each VIPCOS device can be a participant in all groups, including several at the same time.

3.4.2 Set up a group call

To set up a group call, use the **"Key Configuration"** area. In our example, we will configure a group call in group 10 on key 5 of both V900 4x Up0 Gateways Port 1 and 2. In the left area of the web interface you will find the key number and from left to right the respective configuration options for the key.



Key	Call Function	Destination	Prio.
1	Direct Cal	640	50
2	Direct Cal	9002	100
3	Direct Cal	9003	100
4	Direct Cal	9004	100
5	Group Call	1	150
6	Partyline		0

Unknown Dest.: 0

1. Select the **"Group Call"** function from the **"Call Function"** drop-down list for key 5.
2. Enter group number **10** in the **"Destination"** field.
3. Confirm your entry by pressing the **"Submit"** button.
4. Perform steps 1-3 for both **ID 9001** and **ID 9002**.

If you now hold down button 5 of the respective V900 Port device, the device will establish a multicast connection to group 10 and hold the connection for the duration of the button press. All devices that are participants in group 10 are now addressed.

3.5 SIP connection

The V900 4x Up0 Gateway can be integrated as a subscriber / terminal in a SIP (Session Internet Protocol) environment. The following RFCs are supported:

- RFC3261 compliant (SIP 2.0) without redirection and ringing mode, for which there is currently no application in the VIPCOS system.
- RFC4566 compliant SDP (Session Description Protocol)
- „Loose routing” and „strict routing”
- „Early Media support”
- „Offer/Answer” (RFC3264)
- STUN Client (NAT traversal)

3.5.1 SIP server Registration

You need the following information to log on to a SIP server:

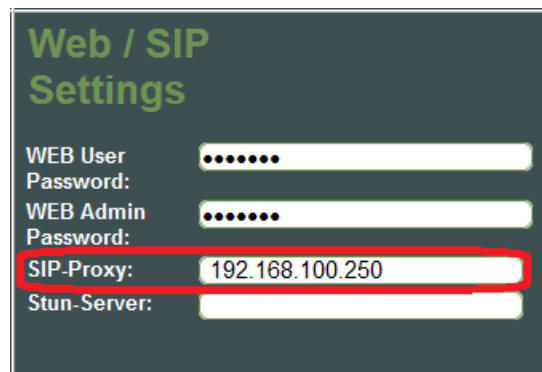
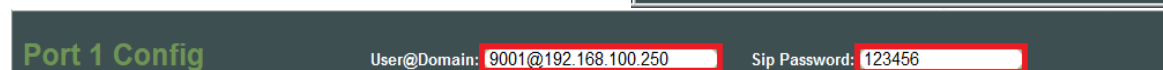
- IP address of the SIP server *
- SIP extension number *
- SIP extension password *

* This information can be obtained from your system administrator.

In our example, we use the following SIP server information:

- | | |
|--------------------------------|---|
| - IP address of the SIP server | 192.168.100.250 |
| - SIP registration number | 9001@192.168.100.250 |
| - SIP registration password | 123456 |

1. Enter the IP address of the SIP server in the "**Web / SIP Settings**" segment in the "**SIP Proxy**" field.
2. Enter the SIP extension number in the "**User@Domain**" field of the specific Gateway Port. In some SIP environments it is necessary to enter an @ and the IP address of the SIP server after the extension number. (**[9001@192.168.100.250](#)**).

3. Enter the SIP registration password in the "**Password**" field.
4. Save your entry with "**Submit**".

The device will reboot and try to register on the SIP server. The current status of the registration is displayed under the Password field. The status "**Login**" is displayed first. This means that the registration attempt was started.

Note: After entering and saving SIP configuration, the website should be opened once by entering the address manually. You can then use the Refresh button or the F5 key to refresh the website to see the current SIP status.

Next you get either the status "**Active**" or "**Error**".

Active means that the registration on the SIP server was successfully completed.

Error means that the registration at the SIP server could not be completed successfully. In this case, check your entries, compatibility of the RFCs and repeat steps 1 - 4 or contact us at support@vonamic.com.

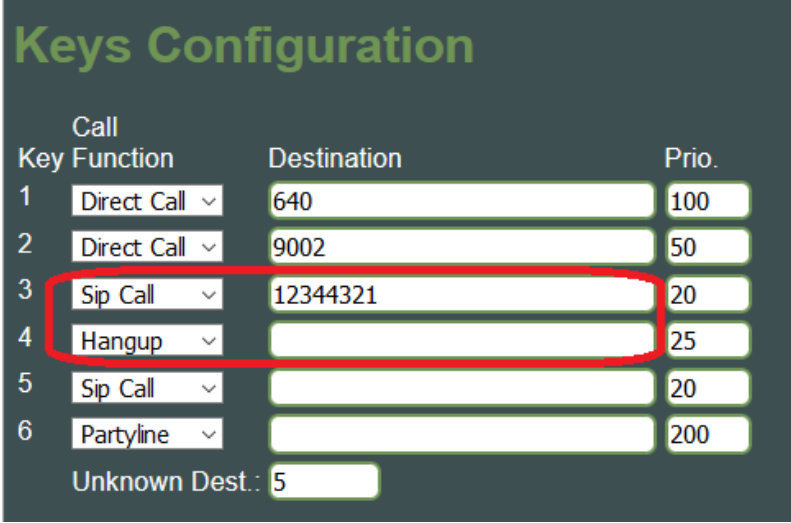
When registration is successfully completed, you can configure SIP calls.

Subject to technical modifications

3.5.2 Set up an outgoing SIP connection

To configure an outgoing telephone connection (SIP), use the "Button configuration" area of one of the Up0 ports 1-4 of the web interface. Set the "**Sip Call**" function in the "**Call Function**" drop-down menu. Enter the telephone number of the SIP extension you want to reach in the "**Destination**" field. In order to be able to actively end the connection, you need another button on which you configure the call function "**Hangup**".

In our example, we configure an outgoing SIP call to an already registered SIP extension with the telephone number **12344321**.



Key	Call Function	Destination	Prio.
1	Direct Call	640	100
2	Direct Call	9002	50
3	Sip Call	12344321	20
4	Hangup		25
5	Sip Call		20
6	Partyline		200

Unknown Dest.: 5

1. In the "**Key Configuration**" segment of the web interface, select the "**Call Function**" function "**Sip Call**" in the drop-down menu for key 3.
2. Enter the number **12344321** in the "**Destination**" field. (25 Characters maximum.)
3. Select the "**Call Function**" "**Hangup**" in the dropdown menu for key 4.
4. Save your entry with "**Submit**".

By pressing key 3 on device **ID 9001**, a SIP call to the extension **12344321** is requested via the server **192.168.100.250**. If a corresponding SIP device is registered on the server, a connection to this extension will be established. If no corresponding extension is registered, you will receive an acoustic busy signal in the internal loudspeaker.

If the connection has been successfully established and the extension has answered the call, activate the microphone of the V900 by pressing and holding button 3. If the connection is terminated by the destination, you will receive an acoustic message in the V900 loudspeaker and the connection will be terminated. You can actively end the call by executing the "**Hangup**" function on key 4.

3.5.3 Set up an incoming SIP connection

There are two ways to answer an incoming telephone connection (SIP):

1. Whitelist for recurring known phone numbers:

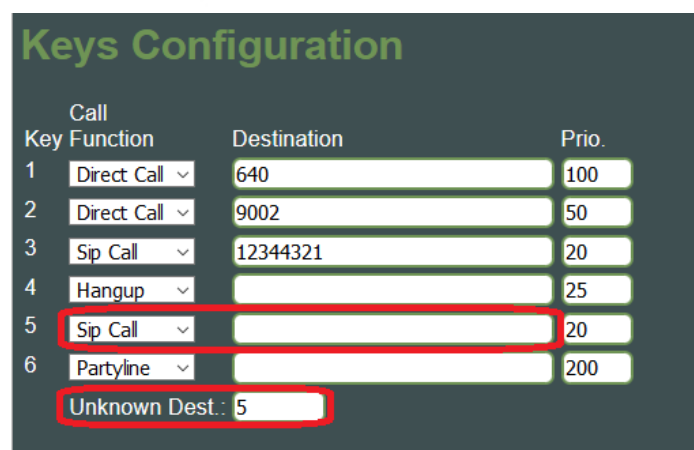
For recurring incoming SIP calls from known telephone numbers, it is recommended to assign these numbers to certain keys. The V900 4x Up0 Gateway generally accepts all calls from the registered SIP server and plays the caller in the internal loudspeaker. If the call is not accepted by pressing the corresponding key on the V900, the "Missed call" is displayed by the corresponding key flashing. This status is reset after 60 seconds.

For recurring incoming SIP calls from known telephone numbers, it is recommended to assign these numbers to certain keys. This automatically assigns these numbers to the whitelist. All unassigned phone numbers receive a busy signal if the "**Unknown Destination**" function is not activated. Answer an incoming call by pressing and holding the corresponding key (signaling by flashing).

If the call is not accepted, the "Missed call" is indicated by the corresponding key flashing quickly. This Status is reset after 60 seconds.

2. Unknown Destination Function

If it is desired that phone numbers are accepted that are not on the whitelist, you can use the "**Unknown Destination**" function. As soon as you have assigned this function to an unassigned key, the V900 Desktop Callstation accepts all incoming calls. You can then use the predefined key to answer the last incoming unknown call. If you miss the call, the station saves the last number on the Unknown destination key so that you can call it back.



Call Key	Function	Destination	Prio.
1	Direct Call	640	100
2	Direct Call	9002	50
3	Sip Call	12344321	20
4	Hangup		25
5	Sip Call		20
6	Partyline		200

Unknown Dest.: 5

The "**Unknown Destination**" field is located under the last key of the "**Key Configuration**" segment. The key number you enter in this field must be unconfigured and is then used to store the last unknown number. The call function of the corresponding key is automatically switched to "SIP Call".

3.6 Party line connection

Party Line describes a function in which a master call station creates a **"Party"** connection. The advantage of the Party Line is that slave end devices can use just one button to be participants in all parties that the master call station creates. In the destination devices serves the **"Partyline"** button as speech button as soon as it is party participant.

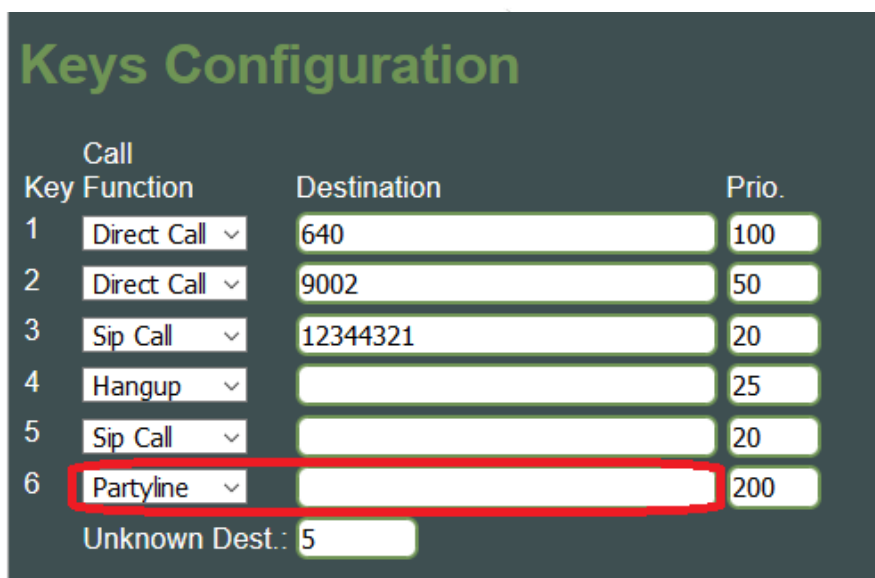
Note: The V615 Industrial Callstation can only be used as a slave in a party line connection.

Master

Use the **"Key Configuration"** segment to set up the Partyline function of the master call station and select the **"Call Function"** **"PL Mode"** from the drop-down menu of an unassigned key. Set up the **"Call Function"** **"DG PL"** on another unconfigured key. This serves as a speech button in the currently formed party. **"PL Mode"** starts the party building function by pressing the button once. The start of the function is indicated by flashing of **"PL Mode"** button. You can now add preconfigured direct call participants to your party by pressing the corresponding buttons once. The party recording is indicated by the respective direct call key flashing. As soon as you have added all the desired participants to your party, you can address the group with the **"DG PL"** button. Pressing the **"PL Mode"** button again ends the function and the buttons return to their idle state.

Slave

The **"Call Function"** **"Partyline"** must be configured on an unassigned button in the respective target device. The button becomes active as soon as the corresponding device has been added to the party by the master. Holding the button starts a group call to the current party.



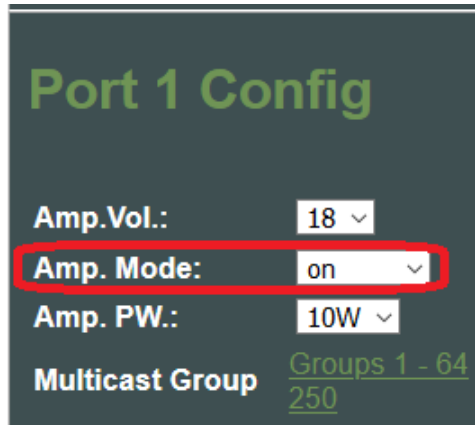
Call	Key Function	Destination	Prio.
1	Direct Call ▾	640	100
2	Direct Call ▾	9002	50
3	Sip Call ▾	12344321	20
4	Hangup ▾		25
5	Sip Call ▾		20
6	Partyline ▾		200

Unknown Dest.: 5

3.7 Set up 10W / 40W amplifier

The V900 4x Up0 Gateway can use the built-in additional amplifier of the Up0 Enddevice. This amplifier works in two power levels 10 watts and 40 watts with 8-ohm speaker load. An external power supply of 24VDC is required so that the device can achieve the power of 40 watts.

The amplifier works in three modes:



On: This function activates the additional amplifier so that audio signals are available at the amplifier output. The announcement is made at the preset volume under “**Amp.Vol.:**” and in the “**Amp.PW**” selected power level.

Off: Deactivation of the additional amplifier.

Session: Deactivation on answer. This function activates the additional amplifier so that audio signals are made available at the amplifier output. As soon as a response is received and it is signaled that the user is in close proximity to the device, the additional amplifier is switched off. At the same time, a 60 second timer starts which activates the additional amplifier after it has expired. Every further answer resets the activation timer. After the timer has expired, the additional amplifier is automatically activated again.

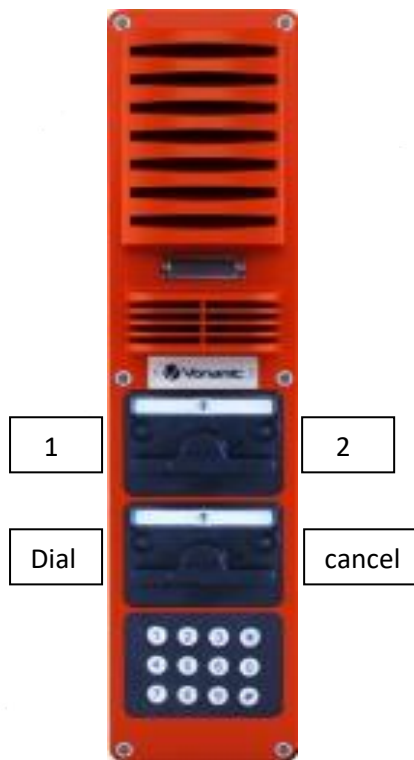
3.8 Keypad

General

So that the V900 Up0 gateway can use the keypad of the end device, the keypad must be activated in the end device during the initialization of the gateway.

If you have purchased a V615 industrial call station with keypad from Vonamic GmbH, the hardware and software modification has already been done by the manufacturer. If you have carried out the conversion yourself, make sure that the connector to the keypad is correctly inserted and that the keypad is screwed in securely. Furthermore, it is necessary to update the V615 website to the version "**V615 Keypad** (<http://tsk>)" and the keypad is activated on the website.

The keypad is exchanged for the lower double toggle of the device. This will replace the direct selection buttons 5 + 6 with the keypad. By activating the keypad, the keys 3 + 4 are assigned fixed functions which are required for using the keypad:



Call Station V615 with Keypad

Dial: Press and hold Establishes a connection to the previously dialed number. The connection type can be selected by entering a prefix.

Cancel: This key clears the input memory so that all selected digits are deleted. With an existing SIP connection, this key is used to end the call.

3.8.1 how to use the keypad

direct Call

In order to establish a voice connection, a specific sequence of digits assigned to the desired subscriber must be entered (e.g. "**1616**"). If no prefix is selected, a neuronal direct call connection to VIPCOS participants is established. You can speak to the selected subscriber by pressing and holding the "**Dial**" button. The last dialed number is saved until you press the "**Cancel**" button and is available for further connections.

If you want to use the keypad to connect to a call station that is already assigned a connection to another call station, this status is signaled by a permanent light on the "**Dial**" button (assigned message).

Group Call (*)

In order to establish a group call connection, a specific sequence of digits assigned to the desired group must be entered (e.g. "***10**"). Use the "*****" prefix to select the "**Group Call**" call function. You can speak to the selected group by pressing and holding the "**Dial**" button. The last dialed number is saved until you press the "**Cancel**" button and is available for further connections.

SIP Call (#)

In order to establish a SIP voice connection, a specific sequence of digits assigned to the desired SIP subscriber must be entered (e.g. "**# 12344321**"). Use the "**#**" sign to select the "**Telephone Call**" call function. A SIP connection to the selected subscriber is established by pressing and holding the "**Dial**" button. The last dialed number is saved until you press the "**Cancel**" button and is available for further connections.

If you want to use the keypad to connect to a call station that is already assigned a connection to another call station, this status is signaled by a permanent light on the "**Dial**" button (assigned message).

3.10 Time synchronization (NTP)

The V900 4x Up0 Gateway supports synchronization of the system time using an NTP (Network Time Protocol) server. To do this, enter the IP address of the NTP server in the "**Time Synchronization**" segment in the "**NTP Server**" field (e.g. 192.168.100.251). Then enter the time deviation, your time zone, from the GMT (Greenwich Mean Time) in the "**GMT**" field (e.g. for Germany +1). Confirm your entry with "**Submit**".

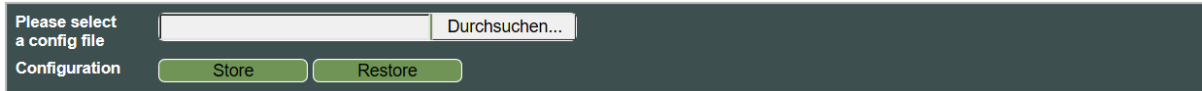


The screenshot shows a configuration window titled "Time Synchronisation" with a dark background. It contains three input fields: "NTP Server:" with the value "192.168.100.251", "Date / Time:" with the value "13:33 25.2.2020", and "GMT:" with the value "+1".

Now the current date and time is displayed next to "**Date / Time**":

3.11 Store and restore of configuration files

The V900 Desktop Callstation offers the possibility to save your configuration as a file externally. When your configuration is complete, save your entries with "Submit". At the bottom of the web interface you will find the "Store" and "Restore" buttons. With these buttons you can upload and download encrypted configuration files (Config.bin).



The screenshot shows a dark-themed web interface. At the top, it says "Please select a config file". Below this is a text input field and a button labeled "Durchsuchen...". Below the input field, the word "Configuration" is displayed. At the bottom, there are two green buttons: "Store" and "Restore".

Store

If you click the "**Store**" button, a request is sent to download the configuration file. Your browser will ask you to choose a storage location. Once the storage location has been determined, the download starts automatically. The internal operating system assumes to keep the file name "**Config.bin**". We recommend archiving in subfolders.

Restore

The "**Restore**" button starts the upload of a previously defined configuration file to your device. The file selection field is located above the buttons for store and restore. First you have to choose a correct configuration file. To do this, click the "**search**" button next to the "**Please select a config file**" field. This opens the file explorer of your PC. Select a suitable **config.bin** and confirm your entry with "**Open**". You have now prepared a file for the upload. By using the "**Restore**" button, the upload to the device is started. After a successful upload, the device restarts and loads the settings from the uploaded configuration file.

Please note: this could also mean a change in the IP address. In this case you have to enter the new address in your browser line in order to be able to call up the device website.