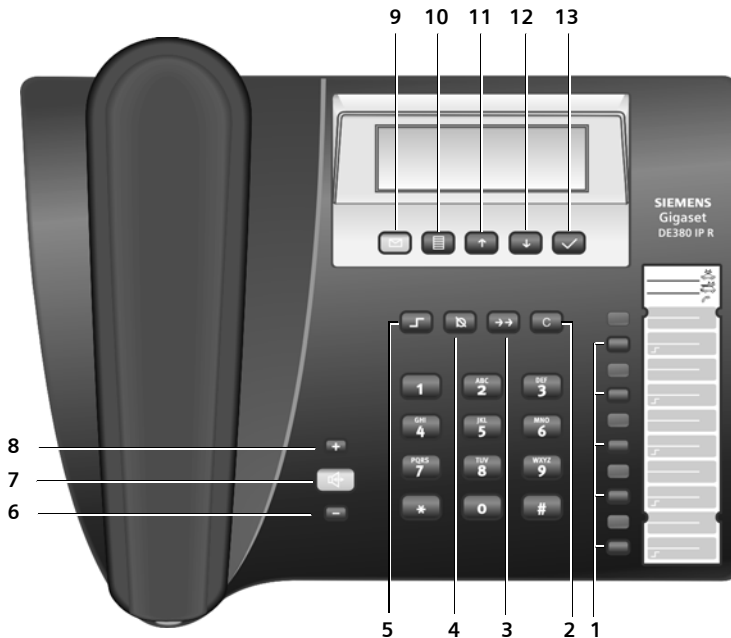# SIEMENS

Gigaset DE380 IP R

Gigaset

Brief overview Gigaset DE380 IP R

Keys

1 Memory/function keys
2 Cancel/delete key
3 Last number redial key
4 Mute key
5 Shift key
6 Volume down key
7 Handsfree: key
8 Volume up key
9 Message key
10 Menu key
11 Up key
12 Down key
13 OK key

Display symbols

✉	Messages
⌀	Microphone off
☎	Do not Disturb (DnD)
↘	Call forwarding
⌂	Call waiting
⇄	Call on hold
⌂	Alarm
12	Input mode "digits"
ab	Input mode "lowercase"
AB	Input mode "uppercase"

Contents

Contents

Safety precautions

When installing, connecting, and operating the telephone, always observe the following precautions:

◆ Only use the jacks and cables supplied.
◆ Only use the power adapter supplied.
◆ Only connect the connecting cable to the intended socket.
◆ Only connect approved accessories.
◆ Lay the connecting cable where it will not cause accidents.
◆ Position the telephone on a non-slip surface.
◆ For your safety and protection, the telephone may not be used in the bath or shower (wet locations). The telephone base unit and handset are not splash resistant.
◆ Never expose the telephone to sources of heat, direct sunlight, or other electrical devices.
◆ Do not use your phone in environments with a potential explosion hazard, e.g., paint shops.
◆ Protect your telephone from moisture, dust, corrosive liquids, and vapors.
◆ Never open up the telephone yourself.
◆ Do not touch the plug contacts with pointed or metallic objects.
◆ Do not carry the telephone by the cables.
◆ If you give your telephone to someone else, make sure you also give them the user guide.

Please note

Ask your VoIP provider if emergency numbers are supported.

The functions described in this user guide may differ or may not be available for each provider/in each country.

Power Outage:

In the event of a power outage, your cordless telephone will not operate. The cordless telephone requires electricity for operation. You should have a telephone that does not require electricity available for use during power outages.

Gigaset DE380 IP R – more than just a telephone

Your telephone offers you the option of making (cheap) calls via the Internet (VoIP) without a PC.

Your phone can do much more besides:

◆ You can configure your phone conveniently on your PC. The phone features a Web interface (Web configurator) that can be accessed via your PC's Web browser (➜ page 24).

◆ Save up to 200 phone numbers in the phonebook (➜ page 40).

◆ You can select frequently used phone numbers at the press of a single key (➜ page 39).

◆ You can view missed calls on your phone (➜ page 41).

◆ Get your phone to remind you of important appointments (➜ page 40).

◆ Make sure your phone is always up-to-date. Upload firmware updates to your phone from the Internet (➜ page 46).

Have fun using your new phone!

VoIP – making calls via the Internet

With VoIP (**V**oice **o**ver **I**nternet **P**rotocol), your calls are not made via a fixed connection as in the telephone network, but rather they are transmitted via the Internet in the form of data packets.

You can take advantage of all the benefits of VoIP with your phone:

◆ You can make cost-effective calls with high voice quality with subscribers on the Internet, the fixed line network, or the mobile phone network.

◆ VoIP provider will give you personal numbers, with which you can be reached from the Internet, the fixed line network, or any mobile phone network.

To be able to use VoIP, you need the following:

◆ A broadband Internet connection (e.g., DSL) with flat rate (recommended) or volume-based pricing.

◆ Access to the Internet
  – via a router that will connect your phone to the Internet (➜ page 8),
  – via your phone if you are operating it in router mode (➜ page 56).

You can find a list of recommended routers on the Internet at:

www.gigaset.com/customercare

From here, go to the FAQ page and select "Gigaset DE380 IP R." Search for "Router," for example.

First steps

Check the package contents

1 one Gigaset DE380 IP R phone base,
2 one handset,
3 one handset cable,
4 one power adapter,
5 one LAN cable,
6 one CD.

Setting up the phone

Please note:

◆ Use at temperatures up to +40°C.
◆ Never expose the phone to direct heat sources, direct sunlight, or other electrical devices.
◆ Protect your Gigaset from moisture, dust, corrosive liquids, and vapors.

The phone's feet do not usually leave any marks on surfaces. However, due to the multitude of different varnishes and polishes used on today's furnishings, the occurrence of marks on the surfaces cannot be completely ruled out.

Connecting the handset
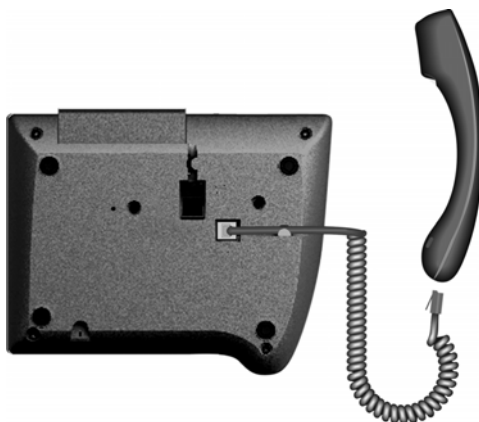
▶ Insert the **short** end of the coiled handset cord into the socket on the handset.

▶ Insert the **long** end into the socket on the underside of the device.

Establishing a connection between the phone and the router

You must first connect your phone to the Internet before you can make VoIP calls over the Internet. For Internet access you need a router connected to the Internet via a modem (this may be integrated in the router).

> **Please note**
>
> Your phone is configured by default for operation with a router (bridge mode). However, you can also operate your phone as a router; in this case please see ➡ page 56.

▶ Connect an Ethernet cable plug to the LAN socket on the rear of the phone.

▶ Then insert the second Ethernet cable plug into a LAN socket on the router.

Optional: Connecting a PC to your phone

Your phone has an integrated 2-port switch. This enables you, for example, to connect a PC to your phone without having to occupy an additional connection port on the router.

Connecting the phone to the power supply

▶ Connect the power adapter to the socket on the underside of the phone and insert the plug into the power outlet.

Your telephone is ready for use.

Please note:
◆ Keep the power adapter **plugged in at all times** for operation, as the phone does not work without a supply of electricity.
◆ Only use the power adapter **supplied**.

Connecting a PC to the Web configurator

Preconditions:

◆ A standard Web browser is installed on the PC, such as Internet Explorer version 6.0 or higher, or Firefox version 1.0.4 or higher.

◆ Your router is connected to the Internet.

The Web configurator is the Web interface for your phone. It allows you to select the settings for your phone via your PC's Web browser.

You can find a description of the Web configurator's functions on ➜ page 24.

For information on how to adjust the settings on your phone without a PC, ➜ page 48.

Please note

Your phone is preconfigured for dynamic assignment of the IP address. In order for your router to "recognize" the phone, dynamic IP address assignment must also be activated on the router, meaning that the router's DHCP server is activated.

If your network is configured with a static IP address for your router, you will also have to assign a static IP address to your phone ➜ page 53.

Connect your PC to the phone's Web configurator via the phone's (local) IP address.

▶ Establish the phone's current IP address:

The IP address will appear on the display after booting if **dynamic allocation** is activated for the IP address. The address can change with every boot sequence.

Information on creating a **static** IP address can be found on ➜ page 53.

▶ Launch the Web browser on your PC.

▶ Enter http:// and the phone's current IP address (for example: http://192.168.0.3) into the address field of the Web browser.

▶ Press the Enter key.

A connection is established to the phone's Web configurator.

Once you have successfully established the connection, the Login Web page will be displayed in the Web browser.

Defining and registering the Web configurator's language
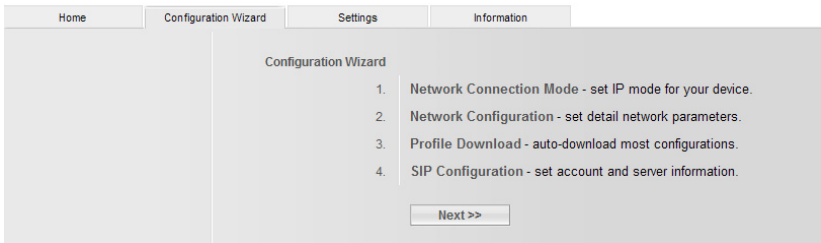
▷ Select the language.
You can select the language you want the menus and Web configurator dialogs to be displayed in.

▷ Select the access level "**Admin**" in the lower field on the Web page and enter the password "**admin**" to gain access to Web configurator functions. You can change the password at a later date, ➔ page 43.

▷ Click on the OK button.

The **Home** tab will open on successful registration.

Click on ➔ **Configuration Wizard** to run the configuration wizard.

Running the configuration wizard

The configuration wizard can help you adjust network settings and enter the details of your SIP providers quickly and easily.

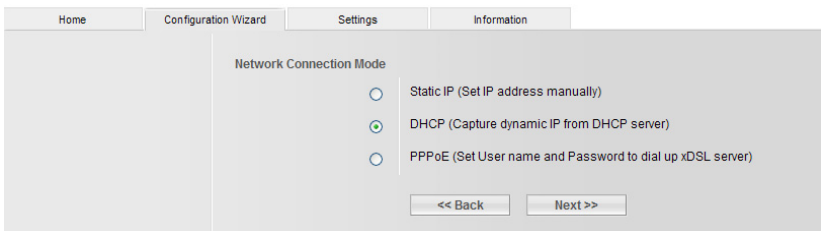| Home	Configuration Wizard	Settings	Information

Configuration Wizard

1. Network Connection Mode - set IP mode for your device.
2. Network Configuration - set detail network parameters.
3. Profile Download - auto-download most configurations.
4. SIP Configuration - set account and server information.

Next >>

▶ Click on the Next >> button.

Defining the network connection mode

Home	Configuration Wizard	Settings	Information

Network Connection Mode

○ Static IP (Set IP address manually)

⦿ DHCP (Capture dynamic IP from DHCP server)

○ PPPoE (Set User name and Password to dial up xDSL server)

<< Back   Next >>

▶ Click on the appropriate radio button:

DHCP
Your phone is preconfigured for dynamic assignment of the IP address (DHCP). Your phone will automatically acquire all the necessary settings from the router. **This setting is recommended for a simple installation.**

IP static
It may be necessary in some network configurations to assign a static IP address to the phone.

PPPoE
You can set your phone to log on to a PPPoE server.

▶ Click on the Next >> button.

Entering the settings for the network
(only for IP static or PPPoE network connection modes)

Home	Configuration Wizard	Settings	Information

Static IP Mode

IP Address	192.168.0.1
Subnet mask	255.255.255.0
Default Gateway	192.168.2.1
Preferred DNS Address	192.168.2.1
Alternate DNS Address	192.168.2.1

[<< Back]   [Next >>]

IP static:

▶ Enter the IP address, subnet mask, standard gateway, and primary and secondary DNS addresses.

▶ Click on the Next >> button.

Home	Configuration Wizard	Settings	Information

PPPoE Parameters

PPPoE Username	PPPOE_USERNAME
PPPoE Password	•••••••••••••
Confirmed password	•••••••••••••

[<< Back]   [Next >>]

PPPoE:

▶ Enter the login name and password.

▶ Click on the Next >> button.

Downloading provider specifications and selecting the SIP settings

Before you can use the Internet (VoIP) to phone any other numbers on the Internet, the fixed line network, or the mobile phone network, you need the services of a VoIP provider who supports the VoIP SIP standard.

Precondition: You have registered with such a VoIP provider (e.g., via your PC) and have set up a VoIP account.

You need to select the following settings on your phone. You will receive the following information from your VoIP provider:

◆ Your user name registered with the VoIP provider, if this is required by the VoIP provider

◆ Your registration name

◆ Your password registered with the VoIP provider

◆ General settings of your VoIP provider (can be downloaded automatically)

Downloading general VoIP provider data

Home	Configuration Wizard	Settings	Information

Provider Selection

With selection of a provider most of the configuration data (General Provider Data, Listen Ports, Network, Codecs) for this provider are loaded automatically.

There are two steps necessary to get the configuration data:

- Choose country of your VoIP provider.
- Choose your VoIP provider.

To continue, click Next.

[<< Back]   [Next >>]   [Skip >>]

▸ Click on the `Next >>` button.

▸ Select your provider and click on `Finish`.
The phone establishes a connection with the Gigaset server on the Internet. The general access data for your VoIP provider are downloaded and saved to your phone.

If the data for your VoIP provider is not available for download, you will need to select the necessary settings for the VoIP provider. Your VoIP provider will supply you with this information.

▸ Click on the `Next >>` button.

Entering VoIP account data

Home	Configuration Wizard	Settings	Information

SIP Configuration

Username	3225076
Connection Name	DE380IP R
Authentication Name	3225076
Authentication Password	••••••
Confirmed Password	••••••
Registrar Server	sipgate.de
Proxy Server	sipgate.de
Outbound Proxy	sipgate.de

[<< Back]   [OK]

▸ Enter your account data.
This can include: telephone number, user name, login name, and password.

Please note

When making these entries, please remember the VoIP user data is case sensitive.

▸ Click on `OK`.

Completing the VoIP settings

Your phone will restart (boot sequence) when data input is complete.

Once all settings are correct and the phone is able to establish a connection to the VoIP server, the following will appear on the display:

¹² 01.10.2008 11:59
DE380 IP R

You can now make calls with your phone via the Internet. Callers can reach you via your VoIP number.

> **Please note**
>
> To ensure that you can always be reached via the Internet, the router must be **permanently** connected to the Internet.

Errors and possible causes

If one of the following messages is displayed instead of the internal name after the connection wizard is closed, an error has occurred:

◆ No netw.connection

◆ Register failed

Below you will find possible causes and measures you can take.

No netw.connection

The phone has no connection to the Internet.

▸ Check the cable connections between the phone and the router and between the router and the Internet.

▸ Check whether the phone is connected to the LAN.

   – It may not have been possible to dynamically assign an IP address to the phone

   Or:

   – You have assigned a static IP address to the phone that has either already been assigned to another LAN subscriber or does not belong to the router's address block.

   ▸ Start the Web configurator with the phone's IP address.

   ▸ If no connection can be established, change the settings on the router (activate DHCP server) or the phone's IP address.

Register failed

◆ Your personal data for registering with the VoIP provider may have been entered incompletely or incorrectly.

◆ The server address for the VoIP server has not yet been entered, or has been entered incorrectly.

Check the settings and correct them where necessary:

▸ Start the Web configurator.

▸ Settings ➔ Account Settings / Server Settings tab.

▸ Correct the settings where necessary.

Connecting the headset

You can connect various headset types with a 3.5 mm jack connector.

Be careful not to confuse handset ① and microphone connection ② .
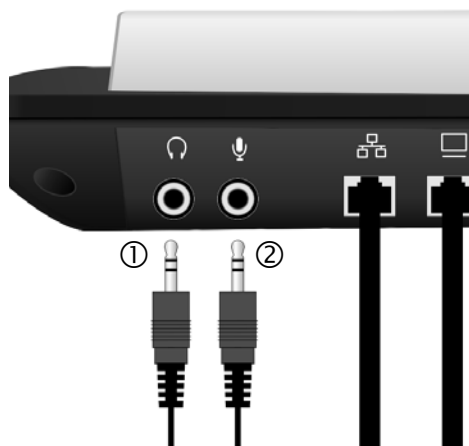
If any questions arise while using your phone, please read the tips on troubleshooting ("Questions and Answers," ➔ page 57) or contact our customer service department (Customer Care, ➔ page 59).

Using the phone

Navigating the menu

Many of your telephone's functions are accessed using a menu that is organized in several levels.

The functions of the main menu and submenus are displayed in lists.

Main menu (first menu level)
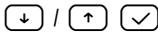
To open the main menu:

▣   Press the menu key.

To access a function in the main menu:

⬇ / ⬆ ✓
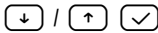
   Use the up/down keys to scroll to the function, then press the
   OK button ✓.

Submenus

To access a function in the submenu:

⬇ / ⬆ ✓

   Use the up/down keys to scroll to the function, then press the
   OK button ✓. (If necessary, you can access the next level of the
   submenu in the same way.)

The function to be set follows the last selection of a submenu. Make a selection or enter data here.

Your current position in the menu is indicated by an inverse bar.
The current setting in the selection fields is indicated by the symbol **>**.

You must press the OK button ✓ to save settings.

Returning (without saving) or exiting the menu

While you are navigating through the menu or if you are selecting settings without having confirmed them with the OK key ✓, you can go back one step at a time without changing any settings or you can leave the menu immediately.

C   Press the key as often as necessary to reach the desired menu level
   or to exit the menu (does not apply in alphanumeric input fields).

   Or:

▣   Press this key to exit the menu immediately.

### Step-by-step instructions for navigating the menus

Individual steps that you must carry out to navigate the menu appear in abbreviated form in the user guide, e.g.:

▢ ➔ Phone setting ☑ ➔ Volume ☑

The arrow ➔ means:
Scroll to the function using the up/down keys ⬇ / ⬆.

Detailed explanation of the above example:

▢	Press the menu key.
⬇	Scroll to Phone setting with the down key.
☑	Press the OK key.
⬇	Scroll to Volume with the down key.
☑	Press the OK key.

If another submenu follows, continue using ⬇ and ☑ in the same way until the desired function is selected.

Navigating fields

In selection fields

▶ Navigate to the left or right with ⬇ ⬆. The selected field is marked **>**.
▶ Confirm your selection with ☑.

> ─── Please note ───
> ◆ Press **C** to cancel editing and skip back one menu level.
> ◆ Press ▢ to cancel editing and exit the menu.

In input fields

▶ Press ☑ to enter data.
▶ Confirm the modify? query with ☑ and enter the data.
▶ Confirm with ☑.

> ─── Please note ───
> ◆ When entering data you can move the cursor to the left with the up key ⬆ and to the right with the down key ⬇.
> ◆ Press **C** to delete the next character to the left of the cursor.
> ◆ Press ▢ to cancel editing and exit the menu.

Entering characters

Letters and numbers are entered by pressing the various dialing keys a different number of times. This also applies when entering alphanumeric passwords.

Example: "+" = press the (0) key 6 times.

Key	1x	2x	3x	4x	5x	6x	7x	8x	9x	10x	11x	12x	13x	14x
1	␣¹⁾	1	€	£	$	¥	¤							
ABC 2	a	b	c	2	ä	á	à	â	ã	ç				
DEF 3	d	e	f	3	ë	é	è	ê						
GHI 4	g	h	i	4	ï	í	ì	î						
JKL 5	j	k	l	5										
MNO 6	m	n	o	6	ö	ñ	ó	ò	ô	õ				
PQRS 7	p	q	r	s	7	ß								
TUV 8	t	u	v	8	ü	ú	ù	û						
WXYZ 9	w	x	y	z	9	ÿ	ý	æ	ø	å				
0	.		?	!	0	+	-	:	¿	¡	"	'	;	_
*	*	/	(	)	<	=	>	%						
#	#²⁾	@²⁾	\	&	§									

1) Space
2) **Press and hold**: switches between uppercase, lowercase, and digits during alphanumeric input.

Whenever letters can be entered, (e.g., names in the phonebook) you can switch between various editor modes by pressing and **holding** (#) (also see the table above).

The current editing mode appears in the top left of the display. The display switches between "AB" (uppercase), "ab" (lowercase), and "12" (digits).

Making calls

Dialing a number

Entering the phone number via the keypad

You can make a call using the phone's handset, handsfree kit, or a connected headset (➔ page 16).

⌨   Enter the phone number.

✆   Lift handset. The phone number is dialed.

You can delete incorrectly entered numbers during input:

◆ Press ⟨**C**⟩ **briefly:** deletes the last number on the display
◆ Press **and hold** ⟨**C**⟩: deletes every number on the display

> ──── Please note ────
>
> ◆ Instead of picking up the handset you can also press the handsfree key ⟨◁⟩ or the **[Headset]** function key (➔ page 39) to make a call using the handsfree function or a headset.
> In this user guide, each of these variants is indicated by "✆ Lift handset".
>
> ◆ You can also pick up the handset (or press the handsfree or **[Headset]** function key) first and then enter the number. In this case the phone will dial the number automatically approximately three seconds after you enter the last digit.

Dialing with the phonebook

The phonebook can store up to 200 phone numbers.

You can enter and manage numbers in the phonebook conveniently with the Web configurator ➔ page 40 or via the phone's menu ➔ page 50.

To dial a number proceed as follows:

⟨▤⟩ ➔ Phone book ⟨✓⟩ ➔ View entry ⟨✓⟩

⟨↓⟩⟨↑⟩   Browse through the list with the up/down keys to locate the name you want to call.

✆   Lift handset. The phone number is dialed.

Or:

⟨✓⟩   Press the OK key.

⟨↓⟩   Select Dial out from the menu.

⟨✓⟩   Press the OK key. The phone number is dialed.

Dialing with memory keys

You can assign phone numbers to up to 5 memory keys; you only need to press a memory key once to call the number.

You can program memory keys conveniently with the Web configurator ➔ page 40 or via the phone's menu ➔ page 50.

☐   Press memory key (P1 to P5) …

Or:

⬚☐   Press shift key and then a memory key (P6 to P10). The stored number appears on the display.

✆   Lift handset. The phone number is dialed.

For further information see "Entering the phone number via the keypad" ➔ page 20.

Dialing from a call record

Call records contain the following information:

◆ missed calls

◆ received calls

◆ dialed calls (last number redial list)

Each call record contains the last 20 numbers in its category. The name will appear on the display if you have saved the number in the phonebook. The message key ✉ will **flash** when the missed calls record contains new entries.

You can browse through the entries and dial directly from within the record.

For information on how to save numbers in the phonebook, display the date and time of a call, delete entries, and use other functions, see "Managing call record entries" ➔ page 51.

Viewing call records and dialing phone numbers

Open the call record you wish to view with the redial button ⟶, or the **flashing** message key ✉ (confirm with ✓), or via the menu:

▤ ➔ Call records ✓ ➔ Missed calls / Received calls / Dialed calls ✓

The last (latest) call or dialed phone number is shown on the display.

↓   If necessary, press the down key to select another entry.

✆   Lift handset. The phone number is dialed.

Accepting calls

You can make a call using the phone's handset, handsfree kit, or a headset (➜ page 16).

You will hear the ringer.

➤   Lift handset. You can speak to the caller.

Please note

Instead of picking up the handset you can also press the handsfree key 🔊 or the **[Headset]** function key to make a call using the handsfree function or a headset.

Functions available when making a telephone call

Adjusting the volume

You can change the handset, handsfree, or headset volume during a call and the ringer volume while the phone is ringing.

(+)(−)   Press the volume up or volume down key.

The last value set is saved.

Mute

You can mute the microphone on the handset, handsfree kit, or headset during a call; the other party will no longer be able to hear you.

🔇   Press the mute key during the phone call.

            To turn the microphone back on: Press the mute key once again.

Activating/deactivating handsfree mode

◆ Activating via the handset during a call

🔊 ➤   Press the handsfree key and replace the handset.

◆ Switch off the handsfree function during a call to continue speaking with the handset.

➤   Lift handset.

Hold/continue

Press the **[Hold]** function key during a call. The call is placed on hold. The other party hears hold music. You can make another call. After the call has ended press the **[Hold]** function key again to reconnect to the first party.

Accepting/rejecting call waiting

You hear the call waiting tone during a phone call.

You can accept the call:

☑ ➔ Accept ☑

You are now connected to the waiting party; the first party hears hold music. After the call has ended press the **[Hold]** function key again to reconnect to the first party.

Or:

You can reject the call:

☑ ➔ Reject ☑

The caller hears the busy tone.

Toggling

You are speaking with one party while another party is on hold. Perhaps because you have accepted a waiting call, or you have put one party on hold to speak to another party.

You can toggle between the two parties by pressing the **[Hold]** function key.

Conference

You are speaking with one party while another party is on hold. Press the **[Conference]** function key to add a caller to a conference call.

Press **[Conference]** once again to disengage the conference call. You can switch back and forth between the two parties (toggling).

Call forwarding

You are speaking with one party and want to forward the call to a third party. Press the **[Hold]** function key. The call is put on hold. Dial the number of the person you want to forward the call to and press **[Transfer]**. If the person you have called answers the phone, the two parties are connected. If the person you have called does not answer the phone, press **[Hold]** to resume the call placed on hold.

When you call the third party you can wait for them to answer and speak to them, for instance to tell them you are forwarding a call. Then press the **[Transfer]** function key.

Do not Disturb

Press the **[DND]** function key if you do not want to receive any calls and do not want the phone to ring. You will still be able to make calls to others.

Press the same key again to deactivate the function.

Configuring the phone via the Web configurator

The Web configurator is the Web interface for your phone. It allows you to select the settings for your phone's base unit via your PC's Web browser.

Preconditions:

◆ A standard Web browser is installed on the PC, such as Internet Explorer version 6.0 or higher, or Firefox version 1.0.4 or higher.

◆ The phone and PC are connected to each other via a router.

> ──── Please note ────
> The phone is **not** blocked while you select your settings in the Web configurator. You can make calls with your phone at the same time.

With the Web configurator on your phone you can, for example:

◆ Configure your phone access to the local network (IP address, gateway to the Internet).

◆ Configure your phone for VoIP.

◆ Define the data server for firmware updates and load new firmware onto the phone if necessary.

◆ Copy contacts from your PC address books to your phonebook or save your phonebook onto your PC.

◆ Obtain information about your phone's status (firmware version, MAC address, etc.).

Connecting the PC to the Web configurator

▸ Launch the Web browser on your PC.
  Precondition: The settings of an available firewall installed on your PC allow the PC and phone to communicate with each other.

▸ Enter your phone's IP address, e.g., http://192.168.0.3., into the address field of the Web browser and press the Return key.

> ──── Please note ────
> ◆ The IP address will appear on the display after booting if **dynamic allocation** (DHCP) is activated for the IP address. The address can change with every boot sequence.
> ◆ If the IP address is not shown on the display, you can establish it via the phone's menu:
>   (▤) ➜ Network setting (✓) ➜ IP address (✓)

A connection is established to the phone's Web configurator.

Logging in, setting the Web configurator language

Once you have successfully established the connection, the **Login** Web page will be displayed in the Web browser.

▸ Select the language you want the menus and dialogs of the Web configurator to be displayed in.

▸ Select the access level **"Admin"** at the bottom of the Web page and enter the password **"admin"** to gain access to the Web configurator functions. You can change the password at a later date, ➜ page 43.

▸ Click on the **[OK]** button.

The **Home** tab will open on successful registration.

> ───── Please note ─────
>
> All Web configurator settings are made via radio buttons, selection fields, or alphanumeric input fields. Depending on the operating situation, confirm your input with **[Save]**, **[OK],** or **[Change]** to save it to your phone.

Logging off

In the menu bar at the top right of every Web page in the Web configurator, you will see the command **Exit**.

> ───── Please note ─────
>
> ◆ Always use the **Exit** command to end the connection to the Web configurator. If, for example, you close the Web browser without logging off beforehand, it is possible that access to the Web configurator will be blocked for a few minutes.
>
> ◆ If you do not make any entries for a longer period of time (approx. 10 minutes), you will be logged off automatically. The next time you try to make an entry or open a Web page, the **login** Web page will be displayed. You will have to log in again.
>
> ◆ Entries that were not saved on the phone before log-off are lost.

Home tab
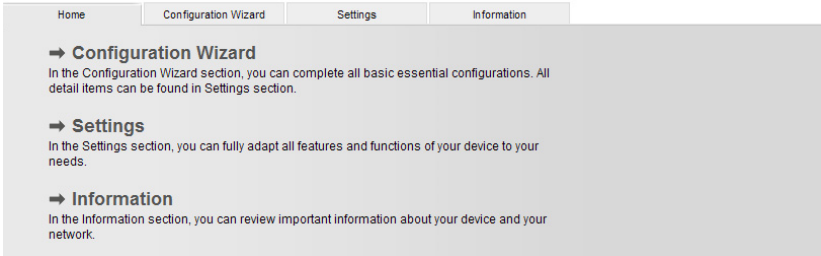
Click on ➜ **Configuration Wizard**, ➜ **Settings**, ➜ **Information**, or the corresponding tab to select the corresponding tab.

Configuration Wizard tab

The configuration wizard can help you to adjust network settings and enter the details of your SIP providers quickly and easily.

The configuration wizard is described in section "Running the configuration wizard" ➜ page 12.

Settings tab

Network Settings

IP Settings
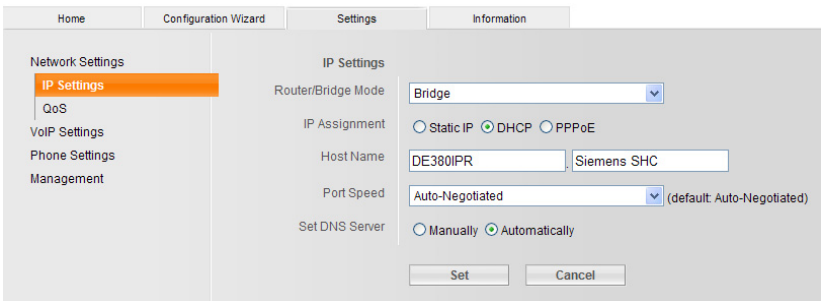
Setting the Router / Bridge mode
◆ Select **Bridge**, if you want to connect your telephone to the Internet via a router.
◆ Select **Router** if you want to connect your telephone to a VoIP server via a DSL modem.

26

IP allocation

Select the necessary settings for operating your phone in your local network and to connect it to the Internet. For more detailed explanations of the individual components/terms, see the glossary (➔ page 73).

◆ Select **DHCP** if you want your phone to be assigned a dynamic IP address by a DHCP server. No further settings are necessary for the local network.

◆ Select **Static IP** if you would like to set up a static local IP address for your phone. A static IP address is, for example, useful if port forwarding or a DMZ is set up on the router for the phone.

IP Address

Enter an IP address for your phone. This IP address allows your phone to be reached by other subscribers in your local network (e.g., PC).

The default setting is 172.23.56.253.

Please note the following:

– The IP address must be from the address block for private use that is used in the router. This is generally in the range 192.168.0.1 – 192.168.255.254 with the subnet mask 255.255.255.0. The subnet mask determines that the first three parts of the IP address must be identical for all subscribers in your LAN.

– The static IP address must not belong to the address block (IP pool range) that is reserved for the DHCP server of the router. It must also not be used by another device on the router.

If necessary, check the settings on the router.

Subnet Mask

Enter the subnet mask for your device's IP address. For addresses from the address block 192.168.0.1 – 192.168.255.254, the subnet mask 255.255.255.0 is generally used. This is preconfigured when the phone is supplied.

Default gateway

Enter the IP address for the standard gateway, by means of which the local network is connected to the Internet. This is generally the local (private) IP address for your router (e.g., 192.168.2.1). Your phone requires this information to be able to access the Internet.

The default setting is 172.23.56.254.

Preferred DNS Address

Enter the IP address for the preferred DNS server. DNS (Domain Name System) allows you to assign public IP addresses to symbolic names. The DNS server is required to convert the DNS name into the IP address when a connection is being established to a server.

You can specify your router's IP address here. The router forwards phone address requests to its DNS server.

There is no default setting for a DNS server.

Alternate DNS Address (optional)

Enter the IP address for the alternative DNS server that should be used in situations where the preferred DNS server cannot be reached.

◆ Select **PPPoE** if you want to connect your phone directly to a DSL server.

You will receive a user name and a password from your provider. Enter the appropriate data. The DNS server address will be assigned automatically, or you can enter it manually.

LAN (router mode only)

Assign the address for your phone's LAN port.

NAT (router mode only)

Adjust the settings for a NAT server.

QoS

Activating this function can improve voice quality.

In VoIP networks, voice quality is affected by various things including the "quality of service" (QoS). If the entire infrastructure demonstrates QoS, voice quality is better (fewer delays, less echoing, less crackling, etc.).

If, for example, the router does not have QoS, then the voice quality is not as good. Please see the specialist documentation for further information.

VoIP Settings

Profile Download

Profile files of the most important VoIP providers are available for download from the Gigaset Internet server. You do not normally need to make any entries under "Advanced Settings" ➔ page 30, "Server Settings" ➔ page 32 and "NAT traversal" ➔ page 33.

The download procedure has several steps:

▶ Click on the Next >> button.

▶ From the list, select the country for which the list of VoIP providers is to be loaded.

▶ Click on the Next >> button.

▸ Select your VoIP provider from the list.

┌─ **Please note** ───┐
If your provider is not in the list, click on the `Cancel` button. In this case you
will have to enter the general provider data manually under "Server Set-
tings" ➔ page 32 and "NAT traversal" ➔ page 33.
└───┘

▸ Click on the `Finish` button.
The data for the selected provider will be loaded onto your phone.

To complete configuration of your VoIP connection, enter your personal
account data under "Account Settings" ➔ page 31.

Advanced Settings

The settings on this page are preset in the factory and do not normally need to
be changed. Please note any information from your provider.

Some values may have changed if you have downloaded your provider's profile
automatically ("Profile Download" ➔ page 29).

SIP Port Number

Specifies the local communication port that the phone should use to receive
signaling data. Specify a number between 1024 and 49152. The default
port number for SIP signaling is 5060.

RTCP port

Specifies the local communication port that the phone should use to receive voice data. Enter an **even** number between 1024 and 49152. If you enter an odd number, the next lowest even number will be selected automatically (e.g., you enter 5003, then 5002 is set automatically). The default port number for voice transmission is 5001.

Please note

If port forwarding is activated on your router for the ports that have been registered as the SIP port (default 5060) and the RTP port (default 5004), it is advisable to deactivate DHCP and assign the phone a static IP address (otherwise you may not be able to hear the other party during VoIP calls). To read about how to set an IP address see ➜ page 27.

IP address and subnet mask depend on the address range of the router. You must also enter the standard gateway and DNS server. The IP address for the router is generally entered here.

Account Settings

You need to set up a VoIP account with a VoIP provider for each VoIP phone number. Enter the configuration data that is necessary for accessing your VoIP provider's SIP service. You will receive this data from the VoIP provider.

Username

Enter the caller ID for your VoIP provider account. This ID is usually identical to the first part of your SIP address (URI, your Internet phone number).

Example: If your SIP address is "987654321@provider.com," enter "987654321" as the Username.

Display Name (optional)

Enter any name that should be shown in the other caller's display when you call them via the Internet. All characters in the UTF8 character set (Unicode) are permitted. The name must not exceed 32 characters.

Auth. name

Specify the registration or authentication ID agreed to with your VoIP provider. The registration ID serves as the access ID that your phone must specify when registering with the SIP proxy/registrar server. The Auth. name is generally identical to the Username, i.e., to your Internet phone number.

Authentication Password

Enter the code word (password) you received from your VoIP provider and confirm it in the Confirm Password field. The phone needs the password when registering with the SIP proxy/registrar server.

Only enter data into the other fields if asked to do so by your VoIP provider.

Server Settings

If you have downloaded the general settings for the VoIP provider from the Gigaset configuration server ("Profile Download" ➔ page 29), then the fields in this area will be preset with the data from the download. Generally speaking, you do not need to configure any settings in this area.

Authentication Expire Time

Enter the time intervals at which the phone should repeat the registration with the VoIP server (SIP proxy) (a request will be sent to establish a session). The repeat is required so that the entry of the phone in the tables of the SIP proxy is retained and the phone can therefore be reached. The repeat will be carried out for all activated VoIP phone numbers.

If you enter 0 seconds, the registration will not be repeated periodically.

Register Server Address

Enter the DNS name or the IP address of the registrar server.

The registrar is needed when the phone is registered. It assigns your SIP address (username@domain) to the public IP address/port number your phone uses to log in. With most VoIP providers, the registrar server is identical to the SIP server.
Example: reg.myprovider.com.

Register Server Port

Enter the communication port used in the registrar. It is generally port 5060 that is used.

Proxy Address

The SIP proxy is your VoIP provider's gateway server. Enter the IP address or the DNS name of your SIP proxy server.
Example: myprovider.com.

Proxy Port

Enter the number of the communication port that the SIP proxy uses to send and receive signaling data (SIP port).

Port 5060 is used by most VoIP providers.

Use Outbound Proxy

Define whether or not the outbound proxy should be set. If this checkbox is activated, all signaling and voice data sent by the phone will be sent to the outbound proxy. Only use the outbound proxy if instructed to do so by your provider.

Outbound Proxy Address (only if Use Outbound Proxy is activated)

Enter the DNS name or the IP address of your provider's outbound proxy.

Please note

With many providers, the outbound proxy is identical to the SIP proxy.

Outbound Proxy Port (only if Use Outbound Proxy is activated)

Enter the number of the communication port used by the outbound proxy. The default port is 5060.

Call Waiting

If this function is activated you will hear a knocking tone if you receive an incoming call during another call.

NAT traversal

If your phone is connected to a router with NAT (Network Address Translation) and/or a firewall, you must select some settings in this area so that your phone can be reached from the Internet (i.e., can be addressed).

Through NAT, the IP addresses of subscribers in the LAN are concealed behind the public IP address of the router.

Please note

If you have downloaded the general settings for your VoIP provider from the Gigaset configuration server ("Profile Download" ➜ page 29), then if necessary the fields will be preset with the data from this download.

For incoming calls

If port forwarding is activated or a DMZ is set up for the phone on the router, no special settings are required for incoming calls.

If this is not the case, an entry in the NAT routing table (in the router) is necessary in order for the phone to be reached. This entry is created when the phone is registered with the SIP service.

For outgoing calls

The phone needs its public address in order to receive caller voice data.

There are two possibilities:

◆ The phone requests the public address from a STUN server on the Internet (Simple Transversal of UDP over NAT). STUN can only be used with asymmetric NATs and non-blocking firewalls.

◆ The phone does not direct the connection request to the SIP proxy but to an outbound proxy ("Server Settings" ➜ page 32) on the Internet that supplies the data packets with the public address.

The STUN server and outbound proxy are used alternately to work around the NAT/firewall in the router.

STUN

Activate the checkbox if you want your phone to use STUN as soon as it is used on a router with asymmetric NAT.

STUN Server Address (only if STUN is activated)

Enter the (fully-qualified) DNS name or the IP address of the STUN server on the Internet.

STUN server port (only if STUN is activated)

Enter the number of the communication port on the STUN server.
The default port is 3478.

Security Settings

Home	Configuration Wizard	Settings	Information

Network Settings
VoIP Settings
  Profile Download
  Advanced Settings
  Account Settings
  Server Settings
  NAT Traversal
  Security
  Voice Settings
Phone Settings
Management

Information

| Certificate | N/A |
| Private Key | N/A |

Certificate Settings

Certificate — Import a local certificate (size < 10KB)
[   ] [Browse...]
[Upload]

Private Key — Import a local private key (size < 10KB)
[   ] [Browse...]
[Upload]

Security Settings

Secure RTP — ☐ Enable

Accept Non-SRTP Call — ☑ Enable

SRTP Security Type — [Encryption and Authentication ▾]
(default: Encryption and Authentication)

SRTP Pre-Shared Key — [0000000000000000]

[Set] [Cancel]

The Secure Real-Time Transport Protocol (SRTP) allows you to encrypt voice data transmitted using the Real-Time Transport Protocol (RTP).

Secure RTP
Activate or deactivate SRTP.

Accept Non-SRTP Call
Activates and deactivates the acceptance of incoming calls from a counterpart who is not using SRTP.

SRTP Security Type
You can encrypt or authenticate data (i.e., the device must authenticate itself at the SIP gateway), or both.

SRTP Pre-Shared Key
Code word (password) for encryption/authentication via SRTP.

Voice Settings

You can set various parameters for voice transmission, e.g., the compression method (codec) to be used. These parameters should only need adjusting if so required by the SIP gateway or SIP proxy you are using. Please note the corresponding manufacturer's documentation in this regard.

The voice quality for VoIP connections is generally determined by the **voice codec** used for transferring the data and the available **bandwidth** of your DSL connection.

In the case of the voice codec, the voice data is digitalized (coded/decoded) and compressed. A "better" codec (better voice quality) means more data needs to be transferred, i.e., perfect voice data transfer requires a DSL connection with a larger bandwidth.

The following voice codecs are supported by your phone:

G.711/Alaw / G.711/Ulaw

 Excellent voice quality (comparable with ISDN). The necessary bandwidth is 64 kbit/s per voice connection.

G.729

 Average voice quality. The necessary bandwidth is less than or equal to 8 kbit/s per voice connection.

iLBC

 Average voice quality. The codec works with 30 ms or 20 ms blocks. The transmission rate is 13.33 kbit/s (30 ms blocks) or 15.2 kbit/s (20 ms blocks).

G.722

 If you register an HDSP capable handset (HDSP= High Definition Sound Performance) with your base station, the calls you make using the handset via G.722 VoIP connections will have a fantastic sound quality. Gigaset handsets S67H and SL37H, for example, are HDSP capable.

 The G.722 **broadband** voice codec works at the same bit rate as G.711 (64 kbit/s per voice connection) but with a higher sampling rate.

Both sides of a phone connection (caller/sender side and receiver side) must use the same voice codec. The voice codec is negotiated between the sender and the recipient when establishing a connection.

You can influence the voice quality by selecting (bearing in mind the bandwidth of your DSL connection) the voice codecs your phone is to use, and specifying the order in which the codecs are to be suggested when a VoIP connection is established.

Please note

Please observe the following in relation to good voice quality:

◆ When making calls using VoIP, avoid performing other Internet activities (e.g., surfing the Internet).

◆ Please note that voice delays can occur depending on the codec used and the network capacity utilization.

Phone Settings

General Settings

▶ Adjust the volume of the ringers, telephone handset, loudspeaker for hands-free talking, and the headset to one of the 8 settings.

▶ Select the language you want to appear on your phone's display and define whether the key assignments on your phone should be language-dependent.

▶ Set the ringer. You can choose from a selection of 10 ringers.
You can assign your own audio files to ringers 9 and 10 and to the on-hold tone. The files must be µ-law encoded, less than 22 kB in size, and imported from your PC. You can reset the on-hold tone to the default setting.

▶ Activate or deactivate the automatic redial function on your phone. If the number you have called is busy, your phone will automatically redial the number as often as is defined in the setting.

▶ Change the time display on your phone to the 12-hour or 24-hour format.

Forwarding Settings

You can automatically forward incoming calls to another number.

▶ Click on the appropriate radio button to define whether the call

 – is forwarded if the line is engaged (i.e., you are already making another call),

 – is forwarded if not answered (i.e., you do not answer the call),

 – or is always forwarded.

▶ Click on **[Edit]** and enter the phone number to which the calls should be forwarded.

▶ Confirm with **[Set]**.

▶ You can cancel an existing call forwarding setting with **[Delete]**.

Program keys

Assign functions or direct-dial numbers to the programmable keys on the right-hand side of your phone.

You can assign two different functions ⌐ to each key; to switch between functions, press and release the shift key ⌐ and **then** press the appropriate memory or function key. Each assignment is programmable as a direct-dial number or a function. The keys are designated from top to bottom as P1 to P5, and P6 to P10 after pressing the shift key.

The following function keys have default settings:

P1   **[Hold]**
P2   **[Transfer]**
P3   **[Conference]**
P4   **[DND]**
P5   **[Headset]**

> — Please note —
> You cannot delete default settings, but you can assign them to other keys.

For example: if you want to assign a direct-dial number to the P1 key, you must first reassign the **[Hold]** function to another key and then reprogram the P1 key.

To program a key

▸ Click on **[Add/Edit]**.

▸ Select the key type.

▸ Select the function or enter the direct-dial number.

▸ Select the key you want to program.

▸ Confirm with **[Set]** or cancel your input with **[Cancel]**.

To delete assigned functions, click on the radio button for the corresponding key and then on **[Delete]** (you cannot delete default key settings).

Alarm Settings

You can program up to three alarm settings. For each setting you can define whether the alarm should go off on a specific date or daily.

Phonebook

You can save up to 200 phone numbers (32 digits max.) and corresponding names (18 digits max.) in the phonebook.

You have the following options:

◆ Creating a new entry:
   No entry radio button is marked. **Click on [Add/Edit]**.
   Enter name and phone number.
   Click on [Set].

◆ To change an entry:
   Click on the radio button of the corresponding entry. **Click on [Add/Edit]**.
   Change the name/phone number.
   Click on [Set].

◆ To delete an entry:
   Click on the radio button of the corresponding entry.
   Click on [Delete].

◆ To delete all entries:
   Click on [Del. All].

◆ To mark an entry and dial the number:
Click on the radio button of the corresponding entry.
Click on [Dial Out].

◆ To import or export the phonebook as a CSV file:
  – Select the file and click on **[Import]**.
    The lines in the CSV file must have the following format:
    Name, phone number (e.g., John Smith, 610-752-6934)
  – **Click on [Export]**. Select storage location and save.

Missed calls

All incoming calls that were not answered are saved with the phone number and the time of the call. If the caller's name is in the phonebook you will see the name instead of the phone number.

To make a call to a number in the list of missed calls, see ➜ page 21.

Redial List

The last calls made from your phone are saved with the phone number (or name if in the phonebook), call time, and call duration.

To select a number from the last number redial list, see ➜ page 21.

Received Calls

The last calls received on your phone are saved with the phone number (or name if in the phonebook), call time, and call duration.

To make a call to a number in the list of accepted calls, see

DND

You are not available to incoming calls from these numbers and your phone will not ring.

◆ Creating a new entry:
   No entry radio button is marked. **Click on [Add/Edit]**.
   Enter name and phone number.
   Click on [Set].

◆ To change an entry:
   Select the radio button of the corresponding entry. **Click on [Add/Edit]**.
   Change the name/phone number.
   Click on [Set].

◆ To delete an entry:
   Select the radio button of the corresponding entry.
   Click on [Delete].

◆ To delete all entries:
   Click on [Del. All].

Management

Administration

Restricting access to the Web configurator.

Remote Administration

The Web configurator can only be accessed from the IP address programmed here. Access is always permitted if **0.0.0.0** is set.

Administrator Accounts

Admin: Password for administrator access. The administrator has full access to every function.

The default setting is "**admin**." You can change the password.

User: Password for user access. Users only have limited access to the configuration and cannot, for instance, make changes to the network and SIP settings.

The default setting is "**user**." You can change the password.

System Log Settings

You can log system events such as messages, warnings, and errors together with the priority and type of event on a syslog server.

Enter the IP address and port of the syslog server. Define whether or not you want to log VoIP information.

Date and Time

Define whether you want to obtain date and time information automatically from a time server (NTP server) or enter the date and time manually.

If you obtain date and time from an NTP server you must enter your time zone, update interval, and the URL or IP address of the NTP server.

A dialog box will open with input fields for the date and time if you choose to enter the information manually.

Ping Test

You can ping an IP address to check whether another device is available in your network.

Reboot
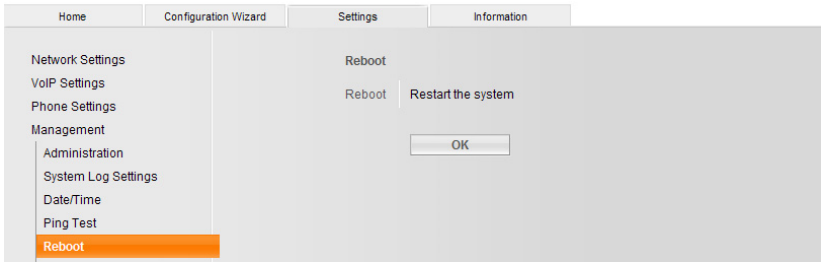
You may have to reboot your phone in certain operational situations, for instance to save changes you have made.

Click on **[OK]** to reboot your phone.

Device Configuration
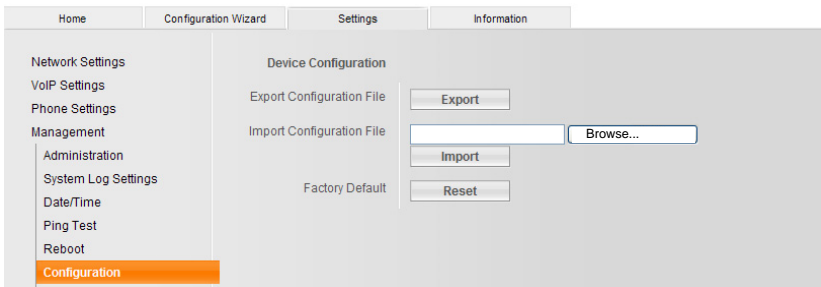
You can save or restore your phone's configuration or reset it to the default settings.

Warning

Restoring the default settings will delete all the settings and entries in lists and in the phonebook.

Firmware Update

Firmware updates are available from the Gigaset website to always keep your phone up to date. You can update your phone automatically or manually.

Network devices connected to the phone are unable to access the network during firmware updating.

Manual update

▶ Download the new firmware from the Internet to your PC.
▶ Click on **[Browse...]** and select the file you want to download.
▶ Click on **[Upload]** to start the update process.

Automatic firmware update

As an alternative to entering the firmware manually, the device can download updates via HTTP or TFTP automatically on every reboot and/or periodically. Select the following parameters to update firmware automatically:

To download firmware on every reboot:
Activates or deactivates automatic firmware updating on every reboot.

To update firmware periodically:
Activates or deactivates automatic firmware updating periodically after a defined number of days.

Distribution:
Select the protocol to be used for updating firmware automatically.

Server, directory, port:
Enter the source of the data here, separately for HTTP and TFTP.

Information tab

Home	Configuration Wizard	Settings	Information

System	
	System
Variants	IM
Model Name	DE380IP_R
Firmware Version	31.04.0396
Host Name	DE380IP_R.Siemens_SHC
System Time	2008-07-01 01:22:48
Up Time	15 min
Device Mode	Bridge
	Internet
Port Speed	Auto-Negotiated, 100baseTx-FD
IP Assignment	DHCP
DHCP Client	Active
DHCP Established Time	Tue Jul 1 01:07:38 2008
DHCP Expire Time	Wed Jul 2 01:07:38 2008
DHCP Server Address	192.168.0.1
MAC Address	00:09:01:01:01:07
IP Address	192.168.0.5
Subnet Mask	255.255.255.0
MTU	1500
Gateway Address	192.168.0.1
Preferred DNS Address	192.168.0.1
Alternate DNS Address	N/A

You will see an overview of important settings for your phone.

Adjusting settings via the phone menu

> ──── Please note ────
> You can adjust most settings using the convenient Web configurator
> ➜ page 26.
>
> For information on using the phone's keys and menu, ➜ page 17.

Setting the language

A number of languages are available for your phone's display.

⊞ ➜ Phone setting ✓ ➜ Language ✓

↓ ↑   Select language.

✓   Press the OK key

Setting call forwarding

You can forward incoming calls automatically to another number.

⊞ ➜ Phone setting ✓ ➜ Forward ✓

Select the desired function with ↓ ↑ and confirm with ✓. Then enter
the telephone number to which calls should be forwarded and confirm
with ✓.

Busy
   Call forwarding when you are already making a call.

No answer
   Call forwarding when you do not answer the phone.

Unconditional
   Forward every call immediately.

Disable all
   Delete all call forwarding settings.

Setting the date and time

⊞ ➜ Phone setting ✓ ➜ Date/Time ✓

⌨   Enter the date and time in mm.dd.yyyy hh:mm format;
      e.g., 07 23 2008 04 59 for 07/23/2008, 4:59 pm.

✓   Press the OK key.

Setting the alarm clock

You can save up to 3 entries.

(▤) ➔ Phone setting (✓) ➔ Alarm (✓)

The following functions can be selected with (↓) (↑):

Add alarm item

     ▦   Enter the date in mm.dd.yyyy format **or**
              do not enter a date: the alarm time will apply **every** day.

     (✓)   Press the OK key.

     ▦   Enter the time in hh:mm format.

     (✓)   Press the OK key.

View all

     The list of stored entries is displayed.

Delete all

     All entries are deleted.

Setting ringers

(▤) ➔ Phone setting (✓) ➔ Ringer setting (✓)

You can set:

◆ ringer volume (8 volume levels; default setting: level 2)

◆ ringer melody (10 melodies, default setting: melody 8)

(↓) (↑)   Press the up/down key to select Volume or Melody.

(↓) (↑)   Press the up/down key to set the ringer volume or ringer melody.

(✓)   Press the OK key.

Adjusting the ringer volume while the telephone is ringing:

Before lifting the handset:

(+) (−)   Press the volume up or volume down key.

The last value set is saved.

Adjusting the handset/speaker/headset volume

The volume for each of the above can be set to one of 8 levels and saved (default setting: level 5).

(▤) ➔ Phone setting (✓) ➔ Volume (✓)

(↓) (↑)   Press the up/down key to select Handset / Speaker / Headset.

(✓)   Press the OK key.

(↓) (↑)   Press the up/down key to adjust the volume.

(✓)   Press the OK key.

Adjustments during a call

(+) (−)   Press the volume up or volume down key.

The last value set is saved.

Creating and managing phonebook entries

You can save up to 200 phone numbers (32 digits max.) and corresponding names (18 digits max.) in the phonebook.

Proceed as follows using the phone's menu:

⊞ ➜ Phone book ☑

The following functions can be selected with ⬇ ⬆ :

View entry

Select an entry with ⬇ ⬆ and press ☑.

You can select other functions with ⬇ ⬆ :

Dial out: Dial the number of the entry.

Modify entry: Change the name or number of the entry.

Delete entry: Delete the current entry.

Detail: Show the name and number of the entry.

Add to DND: Add the entry to the list of blocked callers.

New entry

Enter the name and confirm with ☑; enter the number (32 digits max.) and confirm with ☑; press ⊞ to return to the idle display.

Search entry

You can search for an entry by entering the first letter of the name. If necessary, press ⬇ ⬆ to browse to the desired entry.

Memory check

The display shows the number of existing entries and how many more entries can be added.

Delete all

Delete all entries in the phonebook.

Create and manage a list of blocked callers

You are not available to callers entered into this list; your phone will not ring if they call. You can save up to 100 phone numbers (32 digits max.) and corresponding names (18 digits max.).

Proceed as follows using the phone's menu:

⊞ ➜ DND list ☑

The following functions can be selected with ⬇ ⬆ :

View entry

Select an entry with ⬇ ⬆ and press ☑.

You can select other functions with ⬇ ⬆ :

Modify entry: Change the name or number of the entry.

Delete entry: Delete the current entry.

Detail: Show the name and number of the entry.

New entry

Enter the name and confirm with ⎗; enter the number (32 digits max.) and confirm with ⎗; press ▤ to return to the idle display.

Search entry

You can search for an entry by entering the first letter of the name. If necessary, press ⎗ ⎗ to browse to the desired entry.

Memory check

The display shows the number of existing entries and how many more entries can be added.

Delete all

Delete all entries.

Managing call record entries

The call records contain the last 20 missed calls, received calls, and dialed calls (last number redial list). The name will appear on the display if you have saved the number in the phonebook.

▤ ➔ Call records ⎗ ➔ Missed calls / Received calls / Dialed calls ⎗

The last call or dialed phone number is shown on the display.

⎗ ⎗   Select the desired entry.

⎗   Press the OK key.

The following functions can be selected with ⎗ ⎗:

Dial out

Dial the number of the entry.

View entry

Display the date and time of the call.

Add to phonebook

Save the number in the phonebook.

Add to DND

Add to the "Do not Disturb" list.

Delete entry

Delete selected entry from the list.

Delete all the entries from all lists simultaneously.

▤ ➔ Call records ⎗ ➔ Delete all ⎗

Press C to skip back one menu level.

Programming function keys/memory keys

The five keys on the right of the phone are programmable. You can assign two different functions to each key; to switch between functions, press and release the shift key ⎆ and **then** press the appropriate direct dial or function key. Each assignment can be programmed as a direct dial number or a function. The keys are designated from top to bottom in the menu as P1 to P5, and P6 to P10 after pressing the shift key.

The following function keys have default settings:

P1 **[Hold]**
P2 **[Transfer]**
P3 **[Conference]**
P4 **[DND]**
P5 **[Headset]**

Please note

You cannot delete default settings, but you can assign them to other keys.

Programming function keys

▤ ➔ Program key ☑ ➔ Function key ☑

⬇⬆ Press the up/down key to select the desired function.

▢ or ⎆▢
Press the desired function key.

☑ Confirm query with OK.

Programming memory keys

▤ ➔ Program key ☑ ➔ Memory key ☑

📱 Enter the phone number to be saved (up to 32 digits). Press **C** to delete incorrectly entered digits to the left of the cursor.

☑ Press the OK key.

▢ or ⎆▢
Press the memory key under which you want to save the direct dial number.

☑ Press the OK key. The number is saved to the memory key.

Setting up the network

Call up the current network settings or select the settings necessary to operate your phone in your local network and connect it to the Internet. For more detailed explanations of the individual components/terms, see the glossary (➔ page 73).

▣ ➔ **Network setting** ☑

Select a menu item with ⬇ ⬆ and press ☑. The current setting is displayed.

To exit the menu without saving changes: press ▣.

To enter/change:

◆ Navigate to the left or right in the **selection fields** using ⬇ ⬆.
  The selected field is marked **>**. Confirm your selection with ☑.
  Press **C** to cancel editing and skip back one menu level.

◆ Press ☑ in the **input fields** to enter data. Confirm the query modify? with ☑, enter your data and confirm with ☑. Press ▣ to exit the menu without saving changes.

You can display and edit the following fields (depending on the address type):

Set IP mode

Select **DHCP**, **FIXED** or **PPPoE**.

◆ Select **DHCP** if you want your phone to be assigned a dynamic IP address by a DHCP server. No further settings are necessary for the local network.

◆ Select **FIXED** if you would like to set up a static local IP address for your phone. A static IP address is, for example, useful if port forwarding or a DMZ is set up on the router for the phone.

◆ Select **PPPoE** if you want to connect your phone directly to a VoIP server. You will receive a user name and a password from your provider.

IP address

Enter an IP address for your phone. This IP address allows your phone to be reached by other subscribers in your local network (e.g., PC).

The default setting is 172.23.56.253.

Please note the following:

– The IP address must be from the address block for private use that is used in the router. This is generally in the range 192.168.0.1 – 192.168.255.254 with the subnet mask 255.255.255.0. The subnet mask determines that the first three parts of the IP address must be identical for all subscribers in your LAN.

– The static IP address must not belong to the address block (IP pool range) that is reserved for the DHCP server of the router. It must also not be used by another device on the router.

If necessary, check the settings on the router.

Subnet mask

Enter the phone's subnet mask

Default gateway

Enter the standard gateway address (usually the router's IP address).

DNS setting

Select the primary or secondary DNS address and enter the DNS server address.

PPPoE setting

Enter the user name and password you have received from your provider.

NTP setting

Enter the address of a time server from which your phone will acquire the current time.

Setting up VoIP

⊞ ➜ SIP setting ☑

Enter the general details of your SIP provider and the user-specific details of your SIP account. Now proceed analogously to entering the network settings.

Proxy setting

Enter the general addresses and ports of your VoIP provider.

User info

Enter the user data for your SIP account that you received from your provider.

Call waiting

If this function is activated you will hear a knocking tone if you receive an incoming call during another call.

Restoring the phone's default settings

⊞ ➜ Factory default ☑

The display shows the query Factory default?

☑   Press the OK key to reset the default settings.

or

⊞   Press the menu key to cancel the process.

Rebooting the phone

⊞ ➜ Reboot ☑

The display shows the query Reboot?

☑   Press the OK key to reset the default settings.

or

⊞   Press the menu key to cancel the process.

Menu tree

With the telephone in **idle status**, press ▤ (open main menu):

▤	Phone book	View entry	➜ page 50
		New entry	➜ page 50
		Search entry	➜ page 50
		Memory check	➜ page 50
		Delete all	➜ page 50
	Call records	Missed calls	➜ page 51
		Received calls	➜ page 51
		Dialed calls	➜ page 51
		Delete all	➜ page 51
	DND list	View entry	➜ page 50
		New entry	➜ page 50
		Search entry	➜ page 50
		Memory check	➜ page 50
		Delete all	➜ page 50
	Network setting	Set IP mode	➜ page 53
		IP address	➜ page 53
		Subnet mask	➜ page 53
		Default gateway	➜ page 53
		DNS setting	➜ page 53
		PPPoE setting	➜ page 53
		NTP setting	➜ page 53
	SIP setting	Proxy setting	➜ page 54
		User info	➜ page 54
		Call waiting	➜ page 54
	Phone setting	Language	➜ page 48
		Forward	➜ page 48
		Alarm	➜ page 49
		Date/Time	➜ page 48
		Ringer setting	➜ page 49
		Volume	➜ page 49
	Program key	Function key	➜ page 52
		Memory key	➜ page 52
	Factory default?	➜ page 54	
	Reboot	➜ page 54	

Operating the phone as a router

You can also connect your phone directly to a DSL modem without the need for a router (Router Mode).

1. Connect an Ethernet cable plug to the LAN socket on the rear of the phone.
2. Then insert the second Ethernet cable plug into a LAN socket on the DSL modem. The DSL modem must be connected to the Internet.
3. Connect your phone to the PC.

To set your phone to Router Mode, please proceed as follows:

▶ Connect the phone to the mains power supply ➜ page 9.

▶ Configure your phone using the menu for the PPPoE mode (Set IP mode = PPPoE) and enter user name and password ➜ page 53.

▶ Reboot the phone ➜ page 54.

▶ Your phone will register with your provider and receive an IP address (shown on the display after rebooting).

▶ Adjust the IP address of your PC to enable communication with the phone.

▶ Start the Web configurator, go to **Network Settings** and activate the Router Mode ➜ page 26. (This setting is only adjustable via the Web interface; it cannot be adjusted via the phone's menu.) Your phone will reboot automatically.

Your phone is now working as a router. You can connect a PC or switch to your phone's second port to create a local network. You can reach your phone via the address 192.168.1.254. You can also change this address ➜ page 28.

Appendix

Care

▸ Wipe the telephone with a **damp** cloth (do not use solvent) or an antistatic cloth.

Never use a dry cloth. This can cause static.

Insert strips

Blank insert strips for the memory keys can be found on the Internet at www.gigaset.com/gigasetDE380IPR.

Questions and answers

If you have any questions about using your phone, visit us at www.gigaset.com/customercare at any time. The table below contains a list of common problems and possible solutions.

You cannot connect to the router and the phone is assigned a static IP address.
▸ Check on the router whether the IP address is already being used by another device on the LAN or belongs to the block of IP addresses that is reserved on the router for dynamic address assignment.
▸ If necessary, change the phone's IP address (➜ page 27).
You have made a call via VoIP but cannot hear the other caller.
Your phone is connected to a router with NAT or a firewall.
▸ Your STUN server (➜ page 33) or outbound proxy (➜ page 32) settings are incomplete or incorrect. Check the settings.
▸ No outbound proxy is entered or the outbound proxy mode is not activated (➜ page 32) and your phone is connected to a router with symmetric NAT or a blocking firewall.
▸ Port forwarding is activated on your router, but no permanent IP address has been assigned to your phone.

You cannot make calls via VoIP. No netw.connection is displayed.

▶ First wait a few minutes. This is often a short-term event that corrects itself after a short period of time.

If the message is still displayed, proceed as follows:

▶ Check whether your phone's Ethernet cable is correctly connected to the router.

▶ Check your router's cable connection to the Internet.

▶ Check whether the phone is connected to the LAN. Transmit a ping command to your phone, e.g., from your PC (ping <phone's local IP address>). It may be that no IP address could be assigned to the phone or a permanently set IP address is already assigned to another LAN subscriber. Check the settings on the router. You may have to activate the DHCP server.

You cannot make calls via VoIP. Register failed is displayed.

▶ First wait a few minutes. This is often a short-term event that corrects itself after a short period of time.

The message may still be displayed for the following reasons:

1. The personal VoIP access data (Username, Auth. name, and Authentication Password) you have entered may be incomplete or wrong.

   ▶ Check your information. In particular, check your use of uppercase and lowercase.

2. The general settings for your VoIP provider are incomplete or incorrect (incorrect server address).

   ▶ Start the Web configurator and check the settings.

You cannot establish a connection to the phone with your PC's Web browser.

▶ When establishing a connection, check the phone's local IP address that has been entered. You can check the IP address via the phone's menu.

▶ Check the LAN connections for the PC and the phone.

▶ Check that your phone can be reached. Transmit a ping command to your phone, e.g., from your PC (ping <phone's local IP address>).

▶ You have tried to reach the phone via a secure http (https://...). Try again with http://....

You cannot be reached for calls from the Internet.

▶ Your phone is not registered with the VoIP provider.

▶ You have entered the wrong user ID/user code (➔ page 31) or an incorrect domain (➔ page 32).

Service (Customer Care)

Customer Care Warranty for Cordless Products
To obtain Customer Care Warranty service,
product operation information, or for problem resolution, call:
Toll Free: 1-866-374-3864
9:00 a.m. – 5:00 p.m. Monday-Saturday

www.gigaset.com/customercare

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This limited, non-transferable warranty is provided to the original buyer/end-consumer ("you") for systems, handsets and accessories (collectively, "Product") manufactured, sold and/or distributed by Gigaset Communications USA LLC ("Gigaset USA"). Gigaset USA warrants to you that at the date of purchase, the product is free of defects in workmanship and materials and the software included in the Product will perform in substantial compliance to its program specifications.

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The Product Warranty Period is one (1) year from the original date of purchase by you. Proof of purchase (e.g., sales slip or invoice) must be provided with any Product returned during the Warranty Period. Batteries supplied with the Products are warranted to be free from defects at the time of purchase only.

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Gigaset USA's entire liability and your exclusive remedy, if the Product is defective in materials or workmanship during the Warranty Period and is returned, shall be that the Product will be repaired or replaced as set forth in Section 4 below. Reconditioned replacement components, parts or materials may be used in the replacement or repair. Data in the memory of the Product may be lost during repair.

3. THIS LIMITED WARRANTY DOES NOT COVER AND IS VOID WITH RESPECT TO THE FOLLOWING:

– Cosmetic damage, physical damage to the surface of the Product, including, without limitation, breakage, cracks, dents, scratches or adhesive marks on the LCD screen or outside casing of the Product.
– Products which have been repaired, maintained or modified (including the antenna) by anyone other than Gigaset USA or a Gigaset USA-approved repair facility, or that have been improperly installed.
– Cost of installation, removal or reinstallation.
– "Damage due to any telephone, electronic, hardware or software program, network, Internet or computer malfunctions, failures, or difficulties of any kind, including without limitation, server failure or incomplete, incorrect, garbled or delayed computer transmissions.
– Equipment and components not manufactured, supplied or authorized by Gigaset USA.
– Modification of the Product's components, or operation of the Product in an unsuitable environment or in a manner for which it is not intended, including but not limited to failures or defects caused by misuse, abuse, accidents, physical damage, abnormal operation, improper handling or storage, neglect, alterations, unauthorized installation, removal or repairs, failure to follow instructions, problems caused by the carrier's network coverage, exposure to fire, water or excessive moisture or dampness, floods, or extreme changes in climate or temperature, acts of God, riots, acts of terrorism, spills of food or liquids, viruses or other software flaws introduced into the Product, or other acts which are not the fault of Gigaset USA and which the Product is not specified to tolerate, including damage caused by mishandling or blown fuses.

- Products which have had warranty stickers, electronic serial number and/or serial number label removed, altered, rendered illegible or fraudulently applied to other equipment.
- Signal reception problems (unless caused by defect in material or workmanship in the Product).
- Products operated outside published maximum ratings.
- Performance of the Products when used in combination with other products or equipment not manufactured, supplied or authorized by Gigaset USA.
- Consumables (such as batteries and fuses).
- Payments for labor or service to representatives or service centers not authorized by Gigaset USA to perform product maintenance.
- Loss of data.
- Testing and examination discloses that the alleged defect or malfunction in the Product does not exist.

This warranty does not cover customer education, instruction, installation or removal, set up adjustments, problems related to service(s) provided by a carrier or other service provider, and/or signal reception problems. Gigaset USA shall not be responsible for software, firmware, information, or memory data contained in, stored on, or integrated with any Products returned for repair, whether under warranty or not.

This warranty is valid only in the United States.

USE WITH ACCESSORIES NOT SUPPLIED BY GIGASET USA OR NOT OTHERWISE EXPRESSLY AUTHORIZED BY GIGASET USA MAY VOID WARRANTY.

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All warranty claims must be made by notifying Gigaset USA prior to the expiration of the Warranty Period. Gigaset USA's obligation to provide warranty support shall not extend past the end of the Warranty Period, except that any product repaired or replaced during the Warranty Period shall continue to be warranted for the balance of such Warranty Period or thirty (30) days, whichever is greater.

Throughout the Warranty Period, Gigaset USA will provide support service Monday through Saturday from 9:00 a.m. to 5:00 p.m. Central Time, excluding National holidays. Support service will be provided for you by accessing Gigaset USA's toll free customer service number:

1-866-247-8758

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired

operation.

Modifications

You are cautioned that charges or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Radio Frequency Interference Statement

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.

2. Increase the separation between the equipment and receiver.

3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

4. Consult the dealer or an experienced radio/TV technician for help.

Environment

Our environmental mission statement

We at Gigaset Communications GmbH carry social responsibility and are actively engaged in the interests of a better world. Our ideas, technologies, and actions serve people, society, and the environment. The aim of our global activity is to secure sustainable life resources for humanity. We are committed to responsibility for our products across their entire life cycle. The environmental impact of products, including their manufacture, procurement, distribution, use, service, and disposal, are already evaluated during product and process design.

Further information on environmentally friendly products and processes is available on the Internet at www.gigaset.com.

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Gigaset Communications GmbH is certified pursuant to international standards EN 14001 and ISO 9001.

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All electrical and electronic equipment must be disposed of separately from general household waste using the sites designated by local authorities.

The appropriate disposal of used electronic equipment serves to prevent potential harm to the environment and to health.

For further information on disposing of your used equipment, please contact your local authority, your refuse collection service or the original supplier of the product..

Specifications

Interface	Ethernet
Power supply	100-240 V ~50/60 Hz
Power consumption (standby)	3.2 W
Environmental conditions in operation	-10°C to +40°C, 10% to 95% relative humidity
Language codecs	G.711 µ-law/a-law, G.722, G.729AB, ILBc
Quality of Service (QoS)	802.1P/Q and Layer 3 ToS
Protocols	SRTP, RTP, UDP, TCP/IP, TLS, HTTP, TFTP, SIP, DHCP, PPPoE, STUN

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Glossary

A

ADSL

Asymmetric Digital Subscriber Line
> Special form of **DSL**.

ALG

Application Layer Gateway
> NAT control mechanism of a router.

> Many routers with integrated NAT use ALG. ALG lets the data packets in a VoIP connection pass and adds the public IP address of the secure private network.

> The router's ALG should be deactivated if the VoIP provider offers a STUN server or an outbound proxy.

> See also: **Firewall**, **NAT**, **Outbound proxy**, **STUN**.

Authentication
> Restriction of access to a network/service by use of an ID and password to log in.

Automatic redial
> Several attempts to call are made automatically when the line is busy. The number is adjustable.

B

Block dialing
> Enter the complete phone number, and correct it if necessary. Then pick up the handset or press the handsfree key to dial the phone number.

Broadband Internet access
> See **DSL**.

Buddy
> Subscriber with whom you exchange brief messages on the Internet in real time (chatting).

> See also: **Instant messaging**.

C

Call forwarding
> = CF. Automatic forwarding (CF) of a call to a different telephone number. There are three kinds of call forwarding:
> – CFU, Call Forwarding Unconditional
> – CFB, Call Forwarding Busy
> – CFNR, Call Forwarding No Reply

Call waiting
> = CW. VoIP provider feature. A beep during a call indicates that another caller is waiting. You can accept or reject the second call. You can activate/deactivate the feature.

Chatting

Form of communication on the Internet. During a chat, brief messages are exchanged between the communicating parties in real time. Chatting in this sense is understood to be a written form of communication.

Client

Application that requests a service from a server.

Codec

Coder/decoder

Codec is a procedure that digitizes and compresses analog voice before it is sent via the Internet, and decodes – i.e., translates into analog voice – digital data when voice packets are received. There are different codecs, with differing degrees of compression, for instance.

Both parties involved in the telephone connection (caller/sender and recipient) must use the same codec. This is negotiated between the sender and the recipient when establishing a connection.

The choice of codec is a compromise between voice quality, transmission speed and the necessary bandwidth. A high level of compression, for example, means that the bandwidth required for each voice connection is low. However, it also means that the time needed to compress/decompress the data is greater, which increases execution time for data in the network and thus impairs voice quality. The time required increases the delay between the sender speaking and the recipient hearing what has been said.

COLP/COLR

Connected Line Identification Presentation/Restriction

Service characteristic of a VoIP connection for outgoing calls.

COLP displays the phone number accepting the call on the calling party's display unit.

The number of the party accepting the call is different from the dialed number, e.g., if the call is forwarded or transferred.

The called party can use COLR (Connected Line Identification Restriction) to prevent the number from appearing on the calling party's display.

Consultation call

You are on a call. With a consultation call, you interrupt the conversation briefly to establish a second connection to another participant. If you terminate the connection to this participant immediately, then this was a consultation call. If you switch between the first and second participant, it is called **Toggling**.

D

DHCP

Dynamic Host Configuration Protocol

Internet protocol that handles the automatic assignment of **IP addresses** to **Network subscribers**. The protocol is made available in the network by a server. A DHCP server can, for example, be a router.

The phone contains a DHCP client. A router that contains a DHCP server can assign the IP addresses for the phone automatically from a defined address block. The dynamic assignment means that several **Network subscribers** can share one IP address, although they use it alternately and not simultaneously.

With some routers you can specify that the IP address for the phone is never changed.

Displayed name

VoIP provider feature. You can specify any name that is to be shown to the other party during a call instead of your phone number.

DMZ (Demilitarized Zone)

DMZ describes a part of a network that is outside the firewall.

A DMZ is set up, as it were, between a network you want to protect (e.g., a LAN) and a non-secure network (e.g., the Internet). A DMZ permits unrestricted access from the Internet to only one or a few network components, while the other network components remain secure behind the firewall.

DNS

Domain Name System

Hierarchical system that permits the assignment of **IP addresses** to **Domain names** that are easier to note. This assignment has to be managed by a local DNS server in each (W)LAN. The local DNS server determines the IP address, if necessary by inquiring about superordinate DNS servers and other local DNS servers on the Internet.

You can specify the IP address of the primary/secondary DNS server.

See also: **DynDNS**.

Domain name

Name of one (of several) Web server(s) on the Internet (e.g., www.gigaset.com). The domain name is assigned to the relevant IP address by DNS.

DSCP

Differentiated Service Code Point

See **Quality of Service (QoS)**.

DSL

Digital Subscriber Line

Data transfer technology that allows Internet access with, for e.g., **1.5 Mbps** over a conventional telephone line. Preconditions: DSL modem and the appropriate service offered by the Internet provider.

DSLAM

Digital Subscriber Line Access Multiplexer
> The DSLAM is a switch cabinet in an exchange at which all subscriber connectors converge.

DTMF

Dual Tone Multi-Frequency
> Another description for dual tone multi-frequency dialing (DTMF).

Dynamic IP Address
> A dynamic IP address is assigned to a network component automatically via **DHCP**. The dynamic IP address for a network component can change every time it registers or at certain time intervals.

> See also: **Static IP address**

DynDNS

Dynamic DNS
> Domain names and IP addresses are realized via **DNS**. For **Dynamic IP Addresses** this service is now enhanced with "Dynamic DNS". This permits the use of a network component with a dynamic IP address as a **Server** on the **Internet**. DynDNS ensures that a service can always be addressed on the Internet under the same **Domain name** irrespective of the current IP address.

E

ECT

Explicit Call Transfer
> Participant A calls participant B. He puts the connection on hold and calls participant C. Rather than connect everyone in a three-party conference, A now transfers participant B to C and hangs up.

EEPROM

Electrically Erasable Programmable Read Only Memory
> Memory building block in your phone with fixed data (e.g., default and customized settings) and data saved automatically (e.g., entries to the list of callers).

Ethernet network
> Wired **LAN**.

F

Firewall

You can use a firewall to protect your network against unauthorized external access. This involves combining various measures and technologies (hard and/or software) to control the flow of data between a private network you wish to protect and an unprotected network (e.g., the Internet).

See also: **NAT**.

Firmware

Device software in which basic information is saved for the functioning of a device. A new version of the firmware can be loaded into the device's memory (firmware update) to correct errors or update the device software.

Flat rate

Billing system for an **Internet** connection. The Internet provider charges a set monthly fee. There are no additional charges for the duration of the connection or number of connections.

Fragmentation

Data packets that are too big are split into smaller packets (fragments) before they are transferred. They are put together again when they reach the recipient (defragmented).

Full duplex

Data transmission mode in which data can be sent and received at the same time.

G

G.711 a law, G.711 μ law

Standard for a **Codec**.

G.711 delivers very good voice quality that corresponds to that in the ISDN fixed line. As there is little compression, the necessary bandwidth is around 64 kbit/s per voice connection, but the delay caused by coding/decoding is only 0.125 ms.

"a law" describes the European standard and "μ law" describes the North American/Japanese equivalent.

G.722

Standard for a **Codec**.

G.722 is a **broadband** language codec with a bandwidth of 50 Hz to 7 kHz, a net transfer rate of 64 kbit/s per language connection and integrated speech pause recognition and comfort noise generation (silence suppression).

G.722 delivers very good voice quality. A higher sampling rate provides clearer and better voice quality than other codecs and enables a speech tone in High Definition Sound Performance (HDSP).

G.726

Standard for a **Codec**.

G.726 delivers good voice quality. It is inferior to the quality with codec **G.711** but better than with **G.729**.

G.729A/B

Standard for a **Codec**.

The voice quality is rather low with G.729A/B. As a result of the high level of compression, the necessary bandwidth is only around 8 kbit/s per voice connection, but the delay is around 15 ms.

Gateway

Connects two different **Networks**, e.g., a router as an Internet gateway.

For phone calls from **VoIP** to the telephone network, a gateway has to be connected to the IP network and the telephone network (gateway/VoIP provider). It forwards calls from VoIP to the telephone network as required.

Gateway provider

See **SIP provider**.

Global IP address

See **IP address**.

GSM

Global System for Mobile Communication

Originally, European standard for mobile networks. GSM can now be described as a worldwide standard. In the USA and Japan, national standards are now more frequently supported than in the past.

H

Headset

Combination of microphone and headphone. A headset makes handsfree talking more convenient. Headsets that can be connected to the telephone via a cable are available.

HTTP Proxy

Server via which the **Network subscribers** can process their Internet traffic.

Hub

Uses one **Infrastructure network** to connect several **Network subscribers**. All data sent to the hub by one network subscriber is forwarded to all network subscribers.

See also: **Gateway**, **Router**.

I

IEEE

Institute of Electrical and Electronics Engineers

International body that defines standards in electronics and electrotechnology, concerned in particular with the standardization of LAN technology, transmission protocols, data transfer rate, and wiring.

Infrastructure network

Network with central structure: all **Network subscribers** communicate via a central **Router**.

Instant messaging

Service that uses a client program to allow chatting in real time, i.e., to send brief messages to other subscribers on the Internet.

Internet

Global **WAN**. A series of protocols have been defined for exchanging data, known by the name TCP/IP.

All **Network subscribers** are identifiable via their **IP address**. **DNS** assigns a **Domain name** to the **IP address**.

Important services on the Internet include the World Wide Web (WWW), e-mail, file transfer, and discussion forums.

Internet Service Provider

Enables access to the Internet for a fee.

IP (Internet Protocol)

TCP/IP protocol on the **Internet**. IP is responsible for addressing subscribers in a **Network** using **IP addresses** and routes data from the sender to the recipient. IP determines the paths (routing) along which the data packets travel.

IP address

A unique address for a network component within a network based on the TCP/IP protocols (e.g., LAN, Internet). On the **Internet**, domain names are usually assigned instead of IP addresses. **DNS** assigns the corresponding IP address to the domain name.

The IP address has four parts (decimal numbers between 0 and 255) separated by dots (e.g., 230.94.233.2).

The IP address is made up of the network number and the number of the **Network subscribers** (e.g., phone). Depending on the **Subnet mask**, the front one, two or three parts make up the network number and the rest of the IP address addresses the network component. The network number of all the components in any one network must be identical.

IP addresses can be assigned automatically with DHCP (dynamic IP addresses) or manually (static IP addresses).

See also: **DHCP**.

IP pool range

Range of IP addresses that the DHCP server can use to assign dynamic IP addresses.

L

LAN

Local Area Network

Network with a restricted physical range. A LAN can be wireless (WLAN) and/or wired.

Local IP address

The local or private IP address is the address for a network component in the local network (LAN). The network operator can assign any address he or she wants. Devices that act as a link from a local network to the Internet (gateway or router) have a public and a private IP address.

See also **IP address**.

Local SIP Port

See **SIP port/Local SIP port**.

M

MAC address

Media Access Control Address

Hardware address by means of which each network device
(e.g., network card, switch, phone) can be uniquely identified worldwide.
It consists of 6 parts (hexadecimal numbers) separated by a "-"
(e.g., 00-90-65-44-00-3A).

The MAC address is assigned by the manufacturer and cannot be changed.

Mbps

Million bits per second

Unit of the transmission speed in a network.

MRU

Maximum Receive Unit

Defines the maximum user data volume within a data packet.

MTU

Maximum Transmission Unit

Defines the maximum length of a data packet that can be carried over the network at a time.

Music on hold

Music that is played while you are on a **Consultation call** or **Toggling**.
The waiting party hears music while on hold.

N

NAT

Network Address Translation

Method for converting (private) **IP address** to one or more (public) IP addresses. NAT enables the IP addresses of **Network subscribers** (e.g., VoIP telephones) in a **LAN** to be concealed behind a shared IP address for the **Router** on the **Internet**.

VoIP telephones behind a NAT router cannot be reached by VoIP servers (because of the private IP address). In order to "get around" NAT, it is possible to use (alternatively) **ALG** in the router, **STUN** in the VoIP telephone, or for the VoIP provider to use an **Outbound proxy**.

If an outbound proxy is made available you must allow for this in the VoIP settings for your phone.

Network

Group of devices. Devices can be connected in either wired or wireless mode.

Networks can also differ in range and structure:

– Range: local networks (**LAN**) or wide area networks (**WAN**)

– Structure: **Infrastructure network** or ad-hoc network

Network subscribers

Devices and PCs that are connected to each other in a network, e.g., servers, PCs and phones.

O

Outbound proxy

Alternative NAT control mechanism to STUN and ALG.

Outbound proxies are implemented by the VoIP provider in firewall/NAT environments as an alternative to **SIP proxy server**. They control data traffic through the firewall.

Outbound proxy and STUN servers should not be used simultaneously.

See also: **STUN**and **NAT**.

P

PIN

Personal Identification Number

Protects against unauthorized use. When the PIN is activated, a number combination has to be entered in order to access a protected area.

Port

Data is exchanged between two applications in a **Network** via a port.

Port Forwarding

The Internet gateway (e.g., your router) forwards data packets from the **Internet** that are directed to a certain **Port** to the port concerned. This allows servers in the **LAN** to offer services on the Internet without you needing a public IP address.

Port number

> Indicates a specific application of **Network subscribers**. Depending on the setting in the **LAN**, the port number is permanently assigned or else it is newly assigned with each access.
>
> The combination of **IP address**/**Port** number uniquely identifies the recipient or sender of a data packet within a network.

Pre-dialing

> See **Block dialing**.

Private IP address

> See **Public IP address**.

Protocol

> Describes the agreements for communicating within a **Network**. It contains rules for opening, administering, and closing a connection, about data formats, time frames and possible error handling.

Proxy/Proxy server

> Computer program that controls the exchange of data between **Client** and **Server** in computer networks. If the phone sends a query to the VoIP server, the proxy acts as a server towards the phone and as a client towards the server. A proxy is addressed via **IP address**/**Domain name** and **Port**.

Public IP address

> The public IP address is the address for a network component on the Internet. It is assigned by the Internet Service Provider. Devices that act as a link from a local network to the Internet (gateway, router) have a public and a local IP address.
>
> See also: **IP address**, **NAT**

Q

Quality of Service (QoS)

> Describes the Quality of Service in communications networks. Differentiations are made between various Quality of Service classes.
>
> QoS influences the flow of data packets on the Internet, e.g., by prioritizing data packets, reserving bandwidth and data packet optimization.
>
> In VoIP networks, QoS influences voice quality. If the whole infrastructure (router, network server, etc.) has QoS, the voice quality is better, i.e., fewer delays, less echoing, less crackling.

R

RAM

Random Access Memory

Memory in which you have reading and storage rights. Items such as melodies and screen pictures are saved in the RAM after you have loaded them onto the phone via the Web configurator.

Registrar

The registrar manages the **Network subscribers** current IP addresses. When you register with your VoIP provider, your current IP address is saved on the registrar. This means you can also be reached when on the move.

ROM

Read Only Memory

A type of memory that can only be read.

Router

Routes data packets within a network and between different networks via the quickest route. Can connect **Ethernet networks** and WLAN. Can be a **Gateway** to the Internet.

Routing

Routing is the transfer of data packets to another subscriber in your network. On their way to the recipient, the data packets are sent from one router to the next until they reach their destination.

If data packets were not forwarded in this way, a network like the Internet would not be possible. Routing connects the individual networks to this global system.

A router is a part of this system; it sends data packets both within a local network and from one network to the next. Transmission of data from one network to another is performed on the basis of a common protocol.

RTCP

Real-time Control Protocol

Is used to control the RTP protocol. The RTCP protocol is a control protocol and therefore knows which transferred RTP sessions belong together.

RTP

Real-time Transport Protocol

Global standard for sending audio and video data. Often used in conjunction with UDP. In this case, RTP packets are embedded in UDP packets.

RTCP Port

(Local) **Port** that is used to send and receive voice data packets for VoIP.

S

Server

> Provides a service to other **Network subscribers** (**Clients**). The term can indicate a computer/PC or an application. A server is addressed via **IP address**/**Domain name** and **Port**.

SIP (Session Initiation Protocol)

> Signaling protocol independent of voice communication. Used for establishing and ending a call. It is also possible to define parameters for voice transmission.

SIP address

> See **URI**.

SIP port/Local SIP port

> (Local) **Port** that is used to send and receive SIP signaling data for VoIP.

SIP provider

> See **VoIP provider**.

SIP proxy server

> IP address of your VoIP provider's gateway server.

Static IP address

> A static IP address is assigned to a network component manually during network configuration. Unlike a **Dynamic IP Address**, a static IP address never changes.

STUN

Simple Transversal of UDP over NAT

> NAT control mechanism.

> STUN is a data protocol for VoIP telephones. STUN replaces the private IP address in the data packets of the VoIP telephone with the public address of the secure private network. To control data transfer, a STUN server is also required on the Internet. STUN cannot be implemented with symmetric NATs.

> See also: **ALG**, **Firewall**, **NAT**, **Outbound proxy**.

Subnet

> Segment of a **Network**.

Subnet mask

> **IP addresses** consist of a fixed network number and a variable subscriber number. The network number is identical for all **Network subscribers**. The size of the network number part is determined in the subnet mask. In the subnet mask 255.255.255.0, for example, the first three parts of the IP address are the network number and the last part the subscriber number.

Symmetric NAT

> A symmetric NAT assigns different external IP addresses and port numbers to the same internal IP addresses and port numbers – depending on the external target address.

T

TCP

Transmission Control Protocol

Transport protocol. Session-based transmission protocol: it sets up, monitors, and terminates a connection between sender and recipient for transporting data.

TLS

Transport Layer Security

Protocol for encrypting data transmissions on the Internet. TLS is a superordinated **Transport protocol**.

Toggling

Toggling allows you to switch between two callers or between a conference call and an individual caller without allowing the waiting caller to listen to the call.

Transmission rate

Speed at which data is transmitted in the **WAN** or **LAN**. The transfer rate is measured in data units per unit of time (Mbit/s).

Transport protocol

Controls data transport between two communications partners (applications).

See also: **UDP**, **TCP**, **TLS**.

U

UDP

User Datagram Protocol

Transport protocol. Unlike **TCP**, **UDP** is a non session-based protocol. UDP does not establish a fixed connection. The data packets ("datagrams") are sent as a broadcast. The recipient is solely responsible for making sure the data is received. The sender is not notified about whether it is received or not.

URI

Uniform Resource Identifier

Character sequence for identifying resources (e.g., e-mail recipient, www.gigaset.com, files).

On the **Internet**, URIs are used as a uniform identification for resources. URIs are also described as SIP addresses.

URIs can be entered in the phone as a number. By dialing a URI you can call an Internet subscriber with VoIP equipment.

URL

Universal Resource Locator

Globally unique address of a domain on the **Internet**.

A URL is a subtype of **URI**. URLs identify a resource by its location on the **Internet**. For historical reasons the term is often used as a synonym for URI.

User identification

User ID

    Name/number combination for access, e.g., to your VoIP account.

V

Voice codec

    See **Codec**.

VoIP

Voice over Internet Protocol

    Telephone calls are no longer placed and transmitted over the telephone
    network but over the **Internet** (or other IP networks).

VoIP provider

    A VoIP, SIP, or **Gateway provider** is an Internet service provider that provides
    a **Gateway** for Internet telephony. As the phone works with the SIP stand-
    ard, your provider must support the SIP standard.

    The provider routes calls from VoIP to the telephone network (analog, ISDN,
    or mobile) and vice versa.

W

WAN

Wide Area Network

    Wide area network that is unrestricted in terms of area (e.g., **Internet**).

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