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Maxwell 10 online manual



Maxwell 10 Administration

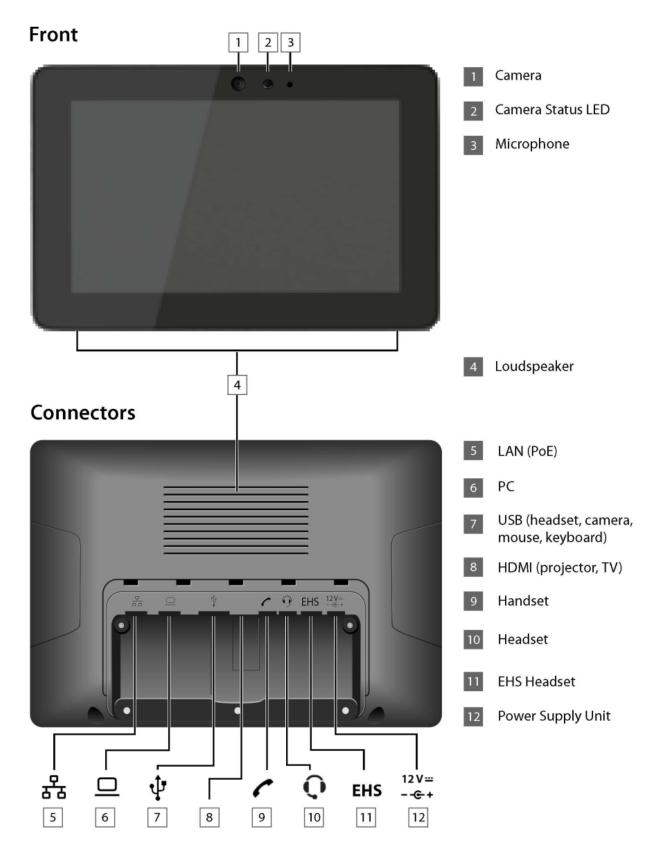


INSPIRING CONVERSATION.

Maxwell 10 admin guide export 11052015.pdf

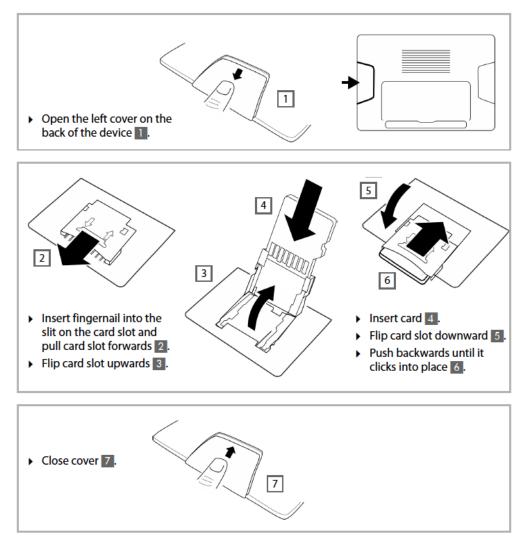
Overview

- SD card
- Display key



SD card

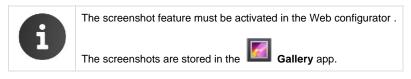
In order to extend the internal memory and store personal data, images, videos or music, you can insert a microSD card (not included) into your phone.



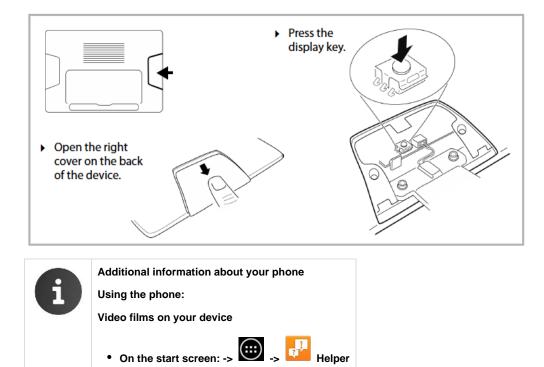
Display key

You can use the display key to switch the display on or off, or to capture a screenshot of the display currently shown.

- If the screenshot feature is activated: A screenshot of the display currently shown is captured.
- If the screenshot feature is not activated: The display is switched on/off.



The display key is located behind the right cover on the back of the device.



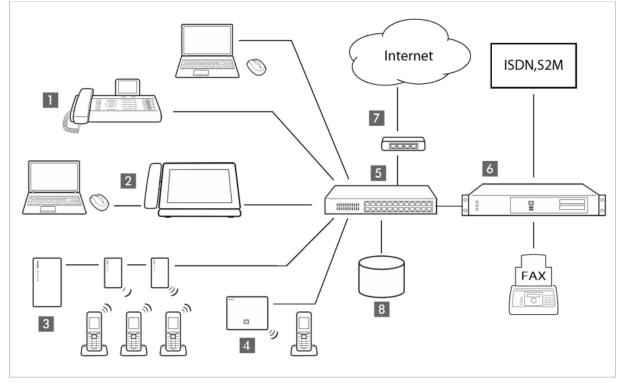
Using the phone in different scenarios

- Using your phone in a professional environment with phone system and server structure
- Using your phone in a simplified environment without a phone system
- Using your phone in a meeting room
- Using your phone as an executive desk solution

Using your phone in a professional environment with phone system and server structure

If you use your Maxwell 10 in a corporate network with a telephone infrastructure, your phone incor porates functions and data from the phone system and servers.

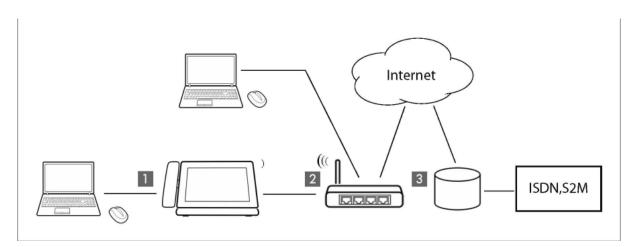
In a corporate environment, the VoIP accounts and most of the settings are configured centrally by the phone system.



- 1. Gigaset IP telephone
- 2. Gigaset IP telephone with integrated gigabit switch (Maxwell 10). Your PC is connected directly to the phone, providing you with an additional LAN connection in your network.
- 3. DECT Multicell System for connetion to up to 100 DECT handsets.
- 4. DECT base for connection to DECT handsets.
- 5. Ethernet switchSupports Quality of Service (QoS), Gigabit Ethernet and PoE (Power over Ethernet).
- Phone system (e.g., Gigaset T500 PRO)Forms Internet telephony, ISDN or S2M connections. Analogue devices can be connected. A net work connection is established using Ethernet.
- 7. Gateway to the Internet for all connected devices. Routes VoIP calls from the phone system to the Internet.
- 8. File, e-mail and workgroup servers, or NAS systems, can be wirelessly integrated into the phone system architecture. As a result: Invitations to conference calls can be organised via the phone system
 - The phone system can be backed up to a server or the system can be started via the network
 - Online directories (LDAP) can be managed centrally

Using your phone in a simplified environment without a phone system

You can also use your Maxwell 10 without a phone system.



- 1. Gigaset IP telephone with integrated gigabit switch (Maxwell 10). Your PC is connected directly to the phone, providing you with an additional LAN connection in your network.
- 2. Gateway to the Internet for the connected devices. Routes VoIP calls from the phone to the Inter net. You establish the connection to the gateway via cable or wirelessly via WI-Fi.
- 3. The SIP provider transfers calls from the Internet and establishes a connection with the standard telephone network.

In this scenario, you must manually configure the VoIP accounts for your phone. You can create up to 12 VoIP accounts on your phone.

Using your phone in a meeting room

Using your phone as an executive desk solution

First steps

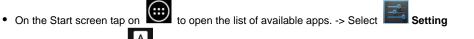
- Setting the language
- Registering the handset (DECT)
- Establishing a connection to the local network
 - Connecting via Ethernet
 - · Connecting via Wi-Fi
 - Configuring Internet telephony



For information on unpacking and installing the device please refer to the Maxwell 10 Installation Guide and/or the How To install videos

Your device will start **automatically** as soon as it is connected to the mains power supply. Please be aware that if the device is powered by PoE (Power over Ethernet) it is supplied with power as soon as it is connected to an Ethernet switch with PoE-functionality.

Setting the language

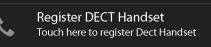


Scroll down and select
 Language & input ->Tap on Language -> Select your desired language.

Registering the handset (DECT)

If you use a DECT handset you need to register it on the phone. Install the handset as described in the Installation Guide and place it in the cradle in order to charge the battery. On the Start screen tap on the list of queilable cares of Schutz and Sc





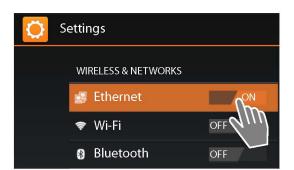
The registration process may take some time. If the registration is successful a message is output.

Establishing a connection to the local network

Your phone must be connected to the local network before it can connect to a phone system or the Internet and before you can operate it from a PC. You can connect the phone to the local network via Ethernet or Wi-Fi.

Connecting via Ethernet

- Make sure that the phone's LAN port **b** is connected to an Ethernet switch/router by an Ethernet cable.
- On the Start screen tap on to open the list of available apps. -> Select Settings.
- Select Ethernet -> Drag switch by Ethernet to the right to switch on Ethernet function.



The network connection is established if the phone has automatically been assigned an IP address from a DHCP server in the network. If your device is assigned a static IP address, your net work administrator must tell you the IP address of your device. You then assign this address to your phone manually.

Ethernet configuration

Configure Ether	net devi	ice	
Network Type IPV4			
O IPV6			
Connection Type DHCP 			
O Static IP			
IP address 192.168.250.139			
Netmask 255.255.255.0			
DNS address 192.168.250.53			
Gateway address 192.168.250.53			
Sav	e C	ancel	

• Tap on Ethernet configuration.

If the network connection is established, the configu ration information, e.g. the IP address, is displayed. If the network connection has not been established automatically, you can enter the configuration data manually.

Proxy configuration

When a connection to internal or external network resources is made via a proxy server, you must enter the proxy server data. Proxy settings are used by the browser but may not be used by other apps.

Tap on Proxy Configuration.

• Enter the data of your proxy server.

Connecting via Wi-Fi

• On the Start screen tap on to open the list of available apps. -> Select



- Select Wi-Fi -> Drag switch by Wi-Fi to the right to switch on Wi-Fi function.
- Please be sure to switch off Ethernet to be able to get a WiFi connection!



The phone attempts to connect with a Wi-Fi in range. Once a connection has been established, you will see the Wi-Fi icon in the toolbar. It displays the signal strength.

A list of Wi-Fis in range of your phone is displayed. An icon indicates the signal strength. Secure networks are identified with a lock icon.

WiFi 100			
Signal strength	Fair		
Security	WPA/WPA2 P	PSK	
Password	1		
	🗌 .Show p	bassword	
🔲 Show adva	nced options	5	
Cance	əl	Connect	
 If necess 	sary, tap on	context menu -> Sca	an to update the list.

- Tap on the desired Wi-Fi. -> Enter password/net work key.
- Tap on Connect.

Adding another Wi-Fi

Wi-Fis that are not in range or that withhold the SSID and are therefore not displayed in the list can be entered manually. You will require the network name (SSID), the security protocol used and the network key. Once the tablet is in range of one of these Wi-Fis, the connection is established.

- Select Wi-Fi -> Tap on -> Enter Network SSID.
- Select security protocol (None, WEP, WPA/WPA2 PSK, 802.1x EAP).
- Enter password/network key. ->Save.

Configuring Internet telephony

Before you can use the device to phone anyone you need the services of a VoIP provider. **Prerequisite:**

- · You have a phone system in your network that provides VoIP accounts for your device, or
- You have registered with a VoIP provider (e.g., via your PC) and set up a VoIP account.

The device searches the network for a provisioning file and checks whether VoIP accounts already exist. If the telephone has existing VoIP accounts, these accounts are configured automatically. You can now make calls with your phone via the Internet. If the telephone has no existing VoIP accounts, you must configure them manually. The Web config urator will help you with this.

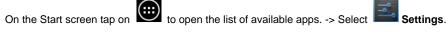
Web configurator - configuring the phone on a PC

• Starting the Web configurator

The Web configurator provides you with a user interface that you can use to configure your Maxwell 10 on the PC. **Prerequisites:**

- Your phone is connected to the local network.
- The Web server is enabled.

Enabling the web server



Select WebUI -> Drag switch by WebUI to the right to switch on the Web server function.



Starting the Web configurator

To start the Web configurator you will need the IP address for your phone. You will find this via the phone display, in the Ethernet or WLAN settings for the device:

If connected via Ethernet:

			Ethernet -> Ethernet configuration.
 On the Start screen tap on 	🗢 -> Select 📰	Settings ->	Ethernet -> Ethernet configuration.

If connected via Wi-Fi:



> Settings -> WebUI.

The IP address can sometimes change, depending on the settings of the DHCP server in your network.

Accessing the Web configurator:

- Launch the Webbrowser on your PC.
- Enter the IP address in the browser's address field. Example:

http://192.168.250.10

You can access the web-interface of the device directly via the Chrome Browser on Maxwell 10 using: http://IPADDRESS:8080 or http://localhost: 8080

The login screen appears.

- · Select the appropriate language from the drop-down list.
- Enter the password. Default: admin
- Click on Login.

The Web configurator will now start.

- Select the function that you wish to use.
- Use the **Settings** tab to set or change individual functions on your phone.

• Open the Status tab to obtain information about the status of your phone

For your security, you should change the default passwords



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Network and connectors

All of the settings for connecting your phone to the local network must be correct to enable commu nication with other devices in the network and phone calls via the Internet.

If you use the Web configurator, your phone is already connected to the local network. You can use the **Network and Connections** menu to change and extend these settings. You can also create set tings for phone connections:

- LAN settings
 - VLAN tagging
 - Prioritising VLANs
 - Own HTTP server settings
- Phone Systems
 - Call Manager
- QoS settings (Quality of Service)
- VoIP settings
- Security settings
 - Remote management
 - Security settings

LAN settings



If an error occurs when you are changing the LAN settings, the PC connection to the phone may be cancelled and you will no longer have access to the Web configurator.

If this happens, you must re-establish phone access to the local network via the display

Settings -> Network and Connections -> Local Area Network (LAN)

VLAN tagging

A local network can be divided into logical subnetworks known as VLANs (VLAN = Virtual Local Area Network, Standard IEEE 802.1Q). Multiple VLANs share a physical network and its components, e.g., switches. Data packets from a VLAN are not forwarded to another VLAN. VLANs are often used to sep arate the data traffic of different services (Internet telephony, Internet TV etc.) and to define different priorities for the data traffic.

You can operate your phone and a PC connected to the PC port on your phone in two different VLANs. In this case, you enter the VLAN identifiers (VLAN tags) for your VLAN. Your network operator will supply you with this data.



If you operate the PC in a different VLAN from the phone, you will no longer have direct access to the Web configurator of the phone from the PC.

 Select one of the following options for Use VLAN tagging: No If you are not using a VLAN (default) LAN Port only If you are operating the phone and PC in the same VLAN. LAN and PC Port

If you are operating the phone and PC in dif ferent VLANs.

Enter the VLAN identifier for your virtual network in the VLAN Identifier (1..4094) field.
 When selecting LAN and PC Port, enter the different VLAN identifiers under VLAN LAN Port and VLAN PC Port.
 Value range: 1 – 4094

VLAN Tagging				
You should receive the tagging values of a virtual LAN from your provider. Wrong settings will require hardware reset.				
Use VLAN Tagging	LAN and PC Port	-		
VLAN LAN Port				
VLAN Identifier (14094)				
Voice Priority	1	•		
Data Priority	0	-		
VLAN PC Port				
VLAN Identifier (14094)				
VLAN Priority	1	•		



If you enter the wrong value for VLAN Identifier (1..4094), you will need to restore the phone to the default settings:



- Select the required priorities for voice and data transmission for the LAN port from the Voice Priority and Data Priority menus.
- If you selected LAN and PC Port, select the VLAN Priority for the transmission of PC data as well.

Prioritising VLANs

Data packets from VLANs can be prioritised. The priority determines whether the data traffic from a VLAN is given preferential treatment by the network components. You can define the priority for voice and data separately. In the case of a local network with a lot of data traffic, you can achieve bet ter quality phone connections by giving a high priority to voice data. Using a high priority for data services you can achieve better quality for displaying info services such as webcam images or maps.

Range of values and assignment of values to service classes (according to IEEE 802.1p):

0	No priority (Best Effort)
1	Background services, e.g., news ticker (Background)
2	Not defined
3	General data services (Excellent Effort)

- 4 Control services, e.g., routing (Controlled Load)
- 5 Video
- 6 Voice data (Voice)
- 7 Top priority for network control software (Network Control)



Further options for optimising the voice quality are available under QoS settings (Quality of Service)

Own HTTP server settings

If you operate your own HTTP server, enter the communication data.

HTTP port

Enter the number for the port to be used for communication by the HTTP server. The default setting is 80.

HTTPS port

Enter the number for the port to be used for secure connections by the HTTP server. The default setting is 443.

HTTP connection type

Select which connections can be established:

HTTP	Unsecured connection
HTTPS	Secure connection
HTTP + HTTPS	Both secure and unsecured connections

Automatically logout (min.)

Enter the time (in minutes) after which an HTTP connection should automatically end if no entries are made.

Saving settings

Click on Save to save your settings on the Local Area Network (LAN) screen.

Phone Systems

If you operate a phone system in your local network, use this screen to configure access to your phone.

Settings -> Network and Connections -> Phone Systems

If your phone is connected to a phone system, select what type of phone system it is, e.g.

Gigaset T500/300 The phone is connected to a Gigaset T500 PRO or Gigaset T300 PRO.

Call Manager

If your phone is connected to a phone system, you can decide how to handle incoming and outgoing calls for different situations. The availability of the following options depends on the selected phone system. For the following situations:

Incoming calls that are transferred by the phone system's call manager (Accept call directly),

- Incoming calls that are not transferred by the call manager (Incoming Calls without Call Manager),
- Calls that you initiate via a function key (Outgoing Calls via function key)
- Other outgoing calls (Execute call),

you have the following options to accept/execute the call:

- via headset
- via handsfree or

• not at all (No) (incoming calls)

BLF list IP address (URI) (only for Broadsoft)

Busy Lamp Field (BLF) features allow users to view the status of phone lines that are associated with specific phone features. Using BLF pickup, it is possible to answer an incoming call for all lines on the Maxwell 10 that the phone is allowed to monitor. Which BLF features are configured for the phone is defined on the phone system.

 In the BLF list user field, enter the IP address (URI) of the server providing the list of devices for which the phone is able to accept incoming calls.

This function is only available if supported by the phone system.

Extended service platform PBX of service provider

• If your provider provides extended PBX services, enter the **Server Address** and the phone sytem account data, e.g. **UCI Login-ID** and the **UCI Password**. The necessary data to be entered depend on the selected phone system.

Saving settings

• Click on Save to save your settings on the Phone Systems screen.

QoS settings (Quality of Service)

On this screen you can optimise the voice quality of your IP telephone.

The voice quality depends on the priority of the voice data in the IP network. Prioritising the VoIP data packets is done using the QoS protocol DiffServ (Differentiated Services). DiffServ defines a number of classes for the quality of service and, within these classes, various priority levels for which specific prioritisation procedures are defined.

You can specify different QoS values for SIP and RTP packets. SIP packets (Session InitiationProtocol) contain the signalling data, while RTP (Real-time Transport Protocol) is used for the voice transfer.

Settings -> Network and Connections -> Quality of Service (QoS)

Enter your chosen QoS values in the SIP ToS/Diffserv (Range: 0 - 63) and RTP ToS/Diffserv (Range: 0 - 63) fields.

Value range: 0 - 63.

Common values for VoIP (default setting):

SIP	34	High service class for fast switching of the data flow (Expedited Flow)
RTP	46	Highest service class for fast forwarding of data packets (Expedited Forwarding)

VoIP Quality of Service (QoS)	
Type of services / Differentiated servic	es
SIP To5/Diffserv (Range: 0 - 63)	34
Audio Quality of Service (Qos)	
RTP ToS/Diffserv (Range: 0 - 63)	46
Video Quality of Service (Qos)	
RTP ToS/Diffserv (Range: 0 - 63)	
	Save Cancel



Do not change these values without consulting your network operator first. A higher value does not necessarily mean a higher priority. The value determines the service class, not the priority. The prioritisation procedure used in each case meets the requirements of this class and is not necessarily suitable for transferring voice data. Detailed information on the Diffserv protocol can be found in <u>RFC 2474</u> and <u>RFC 3168</u>.

Saving settings

• Click on Save to save your settings on the Quality of Service (QoS) screen.

VoIP settings

On this screen you configure the ports for establishing VoIP connections.

Settings -> Network and Connections -> VoIP

"Listen ports" for VoIP connections

Select the ports on which your phone expects incoming VoIP connections.

"Listen ports" for VoIP connections				
Use random ports	• Yes	• No		
SIP port	5060			
RTP port	8000			
ICE enabled	• Yes	• No		

Use random ports

- Select **Yes** if the phone should use any available ports for the SIP port and RTP port instead of fixed ports. The use of random ports is advisable if you want multiple phones to be operated on the same router/gateway with NAT. The phones must then use different ports so that the NAT for the router/gateway is only able to forward incoming calls and voice data to one (the intended) phone.
- If you click on No, the phone uses the ports specified in SIP port and RTP port.

SIP port

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

RTP port

Specify the local communication port that the phone should use to receive voice data. Enter an even number between 1024 and 49152. The port number must not be the same as the port num ber in the SIP port field. If you enter an odd number, the next lowest even number will be selected automatically (e.g., if you enter 5003, then 5002 is set automatically). The default port number for voice transmission is 5004.

ICE enabled

Choose whether or not to use ICE (Interactive Connectivity Establishment). ICE is similar to STUN (a Session Initiation Protocol (SIP) method for overcoming NAT firewalls.

Saving settings

• Click on Save to save your settings on the VoIP Settings screen.

Security settings

This screen is where you create security settings for your phone.

```
Settings -> Network and Connections -> Security Settings
```

Remote management

• Select whether you want to Allow access from other networks to the web configurator (Yes) or not (No).

If you permit Remote Management, this increases the risk of unauthorised access to yourdevice settings.

- Select the network protocol to be used for the communication:
 - TLS (Transport Level Security)

- UDP (User Datagram Protocol
- UDP (Transmission Control Protocol)

Security settings

On this screen you can download server certificates onto your phone, delete downloadedcertificates and specify how invalid certificates should be handled.

Server certificates allow a server to be digitally identified via SSL (Secure Sockets Layer). Operating a server with SSL requires a server certificate both for one-way authentication (server to the client) and for two-way authentication (between client and server). A server certificate has to be downloaded onto your device so that the device can carry out authentication.

The Server certificates and CA certificates lists contain all downloaded certificates.

- · Select a certificate from one of the lists.
- Click on **Remove** to delete the certificate from the list.
- Click on **Details** to display information about the certificate.
- Click on **Disable/Enable** to temporarily deactivate/activate the certificate.

Import a local certificate

In order for a certificate to be downloaded to your phone, it must be available in your network.

- Click on Browse to search for the file on your PC or in your network. Select the required file.
- Click on Upload to download the file onto the device.



The connection to the handset may be interrupted when transferring or removing a certificate.

Secure Real Time Protocol (SRTP)

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

- Activate or deactivate the Secure Real Time Protocol (SRTP).
- Select whether you want to Accept non-SRTP calls or not. If this function is activated, you also accept incoming calls from a number that does not use SRTP.

Saving settings

• Click on Save to save your settings on the Security Settings screen.

Telephony

- Connections
 - Connections
 - Configuring a VoIP account
 - DTMF in VoIP connections
- Audio settings
 - Time interval for RTP packets
 - Voice quality
 - Silence suppression
- Video settings
- Call divert
- Local settings
- Dialling plans
- Do Not Disturb (DND)
- Call records
- Voice mail services

Connections

You can establish up to 12 telephony connections (VoIP accounts) for your phone. **Settings ->Telephony -> Connections**

- On this screen you can
- See the status of the configured connections
- Activate or deactivate individual connections
- Define which of the connections are used by default for outgoing calls
- Change the configuration of connections or establish new connections
- Delete existing connections

Connections

The following information is shown for each configured connection:

Name/provider	Name or number of the VoIP connection / Name of the VoIP provider	
Status	Status of the connection. The following statuses are possible:	
	Registered	The connection is registered with the provider.
	Not Registered	The connection is not registered with the provider.
	Registration Failed	An error occurred during registration.
	Server Not Accessible	The registrar server specified during configuration is not available.
	Disabled	The connection is disabled.

Activating/deactivating connections

Only activated connections can be used for Internet telephony.

• To use a configured connection, select Active.

Specifying a default line for outgoing calls

• Select Default send account for the connection that you want to use as the default line for your phone calls. Only one can be selected.

Establishing new connections or editing existing ones

- Click on Edit in the row of a configured connection to change its configuration.
- Click on **Edit** in a row without a configured connection to establish a new connection.

Configuring a VoIP account

To configure VoIP accounts you need the relevant information about your provider for Internet telephony. Provider profiles with the general provider data are available to download from the Gigaset configuration server for the main VoIP providers.

In the Connection name or number field enter a name of your choice or the phone number for this connection.

Personal provider data

In both cases of manual configuration, with and without a provider profile, you now enter the per sonal registration data that you have received from your VoIP provider.

- · Enter the following data:
 - Authentication name
 - Authentication password
 - User name
 - Display name

Depending on phone system further authentication data may be requested.

Advanced settings

You can find further parameters for configuring your VoIP connection under Advanced settings.

• Click on Show next to Advanced settings.

Domain

Specify the last part of your SIP address (URI). Example: Example: For the SIP address **987654321@provider.de** you would enter **provider.de**.

Proxy server 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.co m.

Proxy server port

Enter the number of the communication port that the SIP proxy uses to send and receive signal ling data (SIP port). Port 5060 is used by most VoIP providers.

Registration server

Enter the IP address or the DNS name of your 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.de.

Registration server port

Enter the communication port used on the registrar. Port 5060 is used in most cases.

Registration refresh time (sec.)

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 phone's entry 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. The default is 180 seconds. If you enter 0 seconds, the registration will not be repeated periodically.

Network provider data

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

The SIP protocol recognises the following options:

• 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 on the Internet that supplies the data
packets along with the public address.

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

• Enter the required data for the STUN server or outbound proxy:

STUN enabled

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

STUN server address

Enter the DNS name or the IP address of the STUN server on the Internet. If you have selected Yes in the STUN enabled field, then you must complete this field.

STUN server port

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

STUN refresh time (sec.)

Enter the time intervals (seconds) at which the phone should repeat the registration with the STUN server. The repeat is required so that the phone's entry in the tables of the STUN server is retained. The repeat will be carried out for all activated VoIP phone numbers. Ask your VoIP pro vider for the STUN refresh time if necessary. Default setting: 240 seconds.

NAT refresh time (sec.)

Specify the intervals at which you want the phone to update its entry in the NAT routing table. Specify an interval in seconds that is a little shorter than the NAT session timeout. As a rule you should not change the default value for the NAT update. Default setting: 20 seconds.

Outbound proxy mode

Specify when the outbound proxy should be used.

Always	All signalling and voice data sent by the phone is sent to the outbound proxy.	
Never	The outbound proxy is not used.	

If you leave the **Outbound server address** field empty, the phone does not respond to the selected mode and operates as if **Never** were selected.

Outbound server address

Enter the DNS name or the IP address of your provider's outbound proxy. With many providers, the outbound proxy is identical to the SIP proxy.

Outbound proxy port

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

DTMF in VoIP connections

To send DTMF signals via VoIP, you must first define how key codes are to be converted into and sent as DTMF signals: as audible information via the speech channel or as a "SIP Info" message.

Ask your provider which type of DTMF transmission is supported.

Automatic negotiation of DTMF transmission

You have the following options:

- If you activate the Yes option, the phone automatically attempts to set the appropriate DTMF sig nalling type for the current codec for each call.
- If you activate the **No** option, you can use the other options to specify the DTMF signalling type.

Send settings for DTMF transmission

	Audio	As audible information in the voice channel, i.e., it is not known which key has been pressed.
RFC 2833As a value (= key pressed) in an RTP packet.SIP InfoAs an "SIP Info" message. The value (= key pressed) is sent as an SIP data packet.		As a value (= key pressed) in an RTP packet.
		As an "SIP Info" message. The value (= key pressed) is sent as an SIP data packet.

Counting missed and accepted calls

Missed and accepted calls for this VoIP account are recorded in the call lists for the phone if this func tion is activated.

• Select Yes for Missed/accepted calls count, if you wish to activate this function.

Allowing or blocking call waiting

If you receive another incoming call during a call, this is indicated by Call Waiting by default. For each connection, it is possible to set whether or not Call Waiting is permitted.

• If you want to deactivate the function, select No.

Setting ring tones

You can set ring tones for each configured VoIP account. You can specify different ring tones for exter nal and internal calls as well as for group calls, if this information is available for incoming calls (depending on the telephone system).

- Choose a Ring tone for all call types or different ring tones for specific call types.
- Click Test to play your chosen melody.

Saving settings

• Click on Save to save your settings for this connection.

Deleting a connection

• Click on Delete Connection to delete the displayed connection.

Audio settings

The voice quality of your VoIP calls is determined by the codec used for the transmission. To increase the quality, more data must be transmitted. Depending on the bandwidth of your DSL connection, this can then lead to problems with the volume of data – especially if two VoIP calls are made simul taneously – so that the transmission no longer takes place smoothly. The following settings allow you to adjust your Gigaset to your individual DSL connection.

Settings -> Telephony -> Audio

You can set the following parameters for the voice quality for each connection:



Time interval for RTP packets

 Select the interval for sending RTP packets (20 or 30 ms). RTP (RTP = Real-Time Transport Protocol) is a protocol for the continuous transmission of audio visual data (streams) via IP-based networks.

Voice quality

Both parties involved in a phone connection (caller/sender and recipient) must use the same voice codec. The voice codec is negotiated between the sender and the recipient when establishing a con nection. You can influence the voice quality by selecting (bearing in mind the bandwidth of your Internet 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.

ÛSelect the required codecs and define the sequence in which they should be used. The following voice codecs are supported by your phone:

G.722 The broadband voice codec G.722 works at the same bit rate as G.711 (64 kbit/s per voice connection) but at a higher sampling rate (16 kHz) and therefore provides excellent sound quality.

Silence suppression

Silence suppression means that no data packets are sent during a pause in speaking. This means a lower data volume but call participants may interpret it as an interruption to the connection.

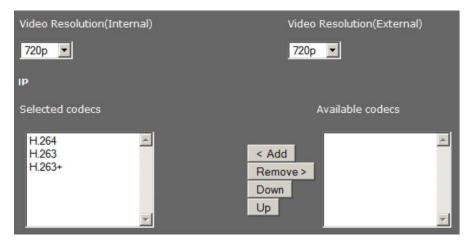
• Select No if you do not want silence suppression. Default setting: Yes

Saving settings

• Click on Save to save your settings on the screen.

Video settings

The video quality of your phone is determined by the resolution and the codec used for the transmission. **Settings -> Telephony -> Video**



- Select the resolution to be used for video transmission: internal for the integrated camera on the front panel, external for a camera connected to the device's USB port
- Select the required codecs and define the sequence in which they should be used.

The following video codecs are supported by your phone:

H.264	Video compression format for streaming internet sources, such as videos from Vimeo, YouTube, and the iTunes Store, web software such as the Adobe Flash Player and Microsoft Silverlight, and also various HDTV broadcasts.
H.263 / H.263+	Video compression standard originally designed as a low-bitrate compressed format for videoconferencing.

Saving settings

• Click on Save to save your settings on the screen.

Call divert

For each configured VoIP account you can automatically forward incoming calls to another phone number. **Settings -> Telephony -> Call Divert**

Connection	Active	When	After x sec	Phone Number
		All Calls		
Gigaset Pro		When Busy		
		No Answer		

• Specify for the VoIP account when a call should be diverted.

All calls	Call divert for all incoming calls.			
When busy	Call divert if you are currently speaking to another participant.			
No answer	Call divert if you do not answer the call. In the After x sec. field enter the time in seconds after which call divert is to be activated.			

• Enter the **Phone number** to which calls are to be forwarded.

• Click on Save to activate the call divert.

Local settings

On this screen, you provide details about the location of your phone. These are used to determine the international and local area dialling codes as well as country-specific tones (e.g., dialling tone or ring back tone).

Settings -> Telephony -> Local Settings

Selecting the country

The time zone is determined automatically based on the country you select.

ÛSelect the **Country** in which you are using your phone from the list.

Setting dialling codes

Depending on your country selection, the interna tional and (if relevant for that country) national dial ling codes are entered in the **Prefix** and **Co de Number** fields automatically.

If your country is not offered in the list of countries enter the dialling code yourself. Save the complete area code (with international code) for the area in which you are using the phone. In general, you must always dial the area code for VoIP calls – even for local calls. To avoid having to dial the area code for local calls, your phone prefixes all VoIP calls in the local area with the area code entered, i.e., all numbers that do not begin with 0 – even when dial ling numbers from the directory and other lists.

Area Codes	
Country	Germany
International	
Prefix	00
Code Number	49
Local	
Prefix	0
Code Number	

Exceptions: Numbers for which you have set dialling plans.

- Select Other Country from the end of the Country list.
- Enter the full prefix for the country in which you use your phone. Otherwise errors may occur with phone connections or during data exchange (e.g., between a fixed line network and a mobile net work).
 The prefix consists of the international prefix (International: Prefix and Code Number, e.g. 00 49 for Germany) and, if applicable, the prefix used for calls within the country (Local: Prefix and Code Number, e.g. 0 for national long-distance calls in Germany).

Setting country-specific ringback and dialling tones

Tones, e.g. dialling tone, ringback tone, busy tone or call waiting tone, vary from one country or region to another. You can choose from various tone groups for your phone.

The Tone scheme is automatically determined on the basis of the country selected above. You can change the setting.

• Select the country or region whose tone scheme should be used for your phone.

Saving settings

• Click on Save to save your settings on the screen.

Dialling plans

You can use dialling plans to define which phone numbers should be called using which configured VoIP account and whether an area code should be dialled first.

Settings -> Telephony -> Dialling Plans



- Enter the **Phone number** that the dialling plan is to apply to.
- Select Use area codes if you want to call this number with an area code.
- · Select the connection that should be used to call this phone number from the drop-dow list.
- Enter a name for this dialling plan in the **Comment** field.

- Click on Add to add the rule to the list.
- Click on **Delete** to delete a rule from the list.
- Select **Active** to activate the rule.

Access Code

The access code you enter is automatically added as prefix to numbers during dialling.

- · Define when it should be used. The prefix can be added if a call is initiated via
 - Outgoing calls list
 - Incoming calls list
 - LDAP
 - Local directory
 - Public net directory
 - Dial editor

Saving settings

• Click on Save to save your settings on the Dialling Plans screen.

Do Not Disturb (DND)

Block individual phone numbers and/or all anonymous calls. You will then be unavailable for these calls; your phone will not ring. **Settings -> Telephony -> Do Not Disturb**

- Select Yes to activate the Do Not Disturb function.
- Enter the Name and Phone num ber for the call.
- Click on Add to save the entry to the do not disturb list.
- Click on **Delete** to delete an entry.
- Click on Delete all to delete all entries.
- Activate the Block anonymous caller option to block all anonymous calls.
- Click on Save to save your settings on this screen.

Activate DND list	♥Yes ♥ No	
Name	Phone Number	
		Add
		Delete all
	Block anonymous caller	

Call records

On this screen you define where call records should be saved.

You can start and replay call records within the CALL RECORDS area of the

Settings -> Telephony -> Call Live Recording

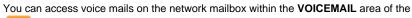
- Select where recorded calls should be saved:
 - on USB stick
 - on server: The recording is saved on the SIP server.
 - on phone
- Click on Save to save the settings.

Call Record	at Server		
Server Address			



Voice mail services

Some VoIP providers offer answer machines on the network – network mailboxes. These accept incoming calls on the corresponding VoIP phone number.





To record all calls, set up a network mailbox for each of your VoIP accounts. Settings -> Telephony -> Voicemail Services

- Enter the **Mailbox number** for the VoIP connection and activate the network mailbox.
- Click on **Save** to save the settings.

Connection	Mailbox Number	Active
IP1		

Services

- Door interphone
 - Supported formats
 - Example
- LDAP directory
 - Access to the LDAP data base
 - Filter
- Function keys
 - Park + Orbit
 - Speed Dial
 - BLF
 - Call Divert
 - DTMF
 - None

Door interphone

You can operate one or more door interphones with video surveillance using the phone. Enter the data for the door interphone on this page.



The door interphone can also be set up for your phone using the Gigaset phone sys tem. If automatic configuration is permitted, configuration is carried out automatically on your phone.

Settings ->Services ->Door Interphone

Name	SIP ID	DTMF code	Camera (URL)	Reload Rate	
Camera 1			http://	500	Add

- Enter a name and the SIP ID for the camera.
- Enter the code for the door opener in the DTMF code field. This DMFV code is required to operate the door opener from the phone. The DMFV code can be found in the description of your door interphone.
- Enter the URL of the camera in the Camera(URL) field.
- Set how often the image should be refreshed in ms in the Reload rate field. Minimum time: 200 ms.
- Click on Add to add a camera to the list.
- Click on **Delete** if you want to remove a camera from the list.
- Click on Save to save your settings.

Next to real IP based video door intercoms you could also run pure audio devices with an external IP video camera.

Maxwell 10 simply shows the video stream configured under "Camera (URL)" whenever a call comes in from the participant with the configured SIP ID.

Supported formats

The table below describes the media format support built into the Maxwell Android platform:

Format / Codec	Supported File Type(s) / Container Formats
For Video (rtsp link)	
H.263	• 3GPP (.3gp)
	• MPEG-4 (.mp4)

H.264 AVC	• 3GPP (.3gp)	
	• MPEG-4 (.mp4)	
	• MPEG-TS (.ts, AAC audio only, not seekable, Android 3.0+)	
MPEG-4 SP	• 3GPP (.3gp)	
For Image (http link)		
JPEG	• JPEG (.jpg)	

Supported video encoding parameters for the H.264 Baseline Profile codec

	SD (Low quality)	SD (High quality)	HD 720p (N/A on all devices)
Video resolution	176 x 144 px	480 x 360 px	1280 x 720 px
Video frame rate	12 fps	30 fps	30 fps
Video bitrate	56 Kbps	500 Kbps	2 Mbps

Example

This video shows how easy it is to connect Baudisch SIP Door Station Video and Gigaset Maxwell 10. By incoming call the video image is displayed directly on the Full-Touch HD video phone - open the door or turn on the light by touch.

Online directory

If you want to use an online directory, select the provider on this screen which supplies the directory on the Internet. Also specify which service you want to use.

Settings -> Services -> Online Directories

• To use the online services of a provider, enter the access data:

• Provider name, Server address, Authentication

name, Authentication password

Provider Name	Gigaset Pro
Server Address	http://10.212.6.114:8001/xmll
Authentication Name	
Authentication Password	

- Activate the service(s) you wish to use:
 - White Pages: A public directory supplied on the Internet by the provider entered above.
 - Yellow Pages: Yellow pages supplied on the Internet by the provider entered above.
 - Private NetDirectory: A private directory supplied on the Internet by the provider entered above.

You can activate one or more services.

- Enter a name for each of the selected services in the **Name of directory** field. This is the name under which the directory will be dis played on your device.
- · Click the checkbox to activate the service.

Name of directory	
Enable "White Pages"	

Saving settings

• Click on Save to save your settings on the Online Directories screen.

LDAP directory

If your corporate network provides a directory via an LDAP server, you can access this on your phone (LDAP = Lightweight Directory Access Protocol). You can set up the function on this screen. You will need information about the configuration of the LDAP server to do this. **Settings -> Services -> LDAP**

- Enter a name in the Name of directory. This is the name under which the directory will be dis played on your device.
- Enter all the data for your LDAP server and the directory.

Max. hits

Maximum number of search results to be displayed. Default setting: 50

Access to the LDAP data base

Server address

IP address for the LDAP server in your network.

Server port

Port number that is used to provide the LDAP service. Default setting: 10389

LDAP search base (BaseDN)

Range in the hierarchical LDAP database where the search begins. All areas have defined designations.

User name

Access ID for the LDAP server.

Password

Password for the access ID to the LDAP server.

Filter

Using the filter, you can define criteria against which specific entries can be searched in the LDAP database. One filter consists of one or more search criteria. A search criterion contains the query for an LDAP attribute, e. g. sn=%. The percent symbol (%) is a placeholder for the user entry.

LDAP name filter

The name filter decides which attribute is used for the search.

Example: (sn=%)

The percent symbol (%) is replaced by the name or part of the name entered by the user. If a user enters the letter "A" for example, all entries in which the attribute **sn** begins with "A" are searched for in the LDAP database. If the user then enters a "b", entries are searched in which the **sn** a ttrib ute begins with "Ab".

LDAP number filter

The number filter stipulates the criteria for the automatic completion of telephone numbers.

Example: (|(telephoneNumber=%)(mobile=%))

The percent symbol (%) is then replaced by the part of the telephone number entered by the user. When dialling, if a user enters the numbers "123" for example, all telephone numbers (office and mobile) that begin with "123" are searched for in the LDAP database. The telephone number is completed with the addition of information from the database.

Multiple criteria can be connected using logical AND (&) and/or OR (|) operators. The logical operators "&" and "|" are placed before the search criteria. The search criterion must be placed in brackets and the whole expression must be terminated with a bracket again. AND and OR operations can also be combined.

Examples:

AND operation:	(& (givenName=%) (mail=%))
	Searches for entries in which the first name and mail address begin with the letters entered by the user.

OR operation:	((cn=%) (sn=%))
	Searches for entries in which the common name or surname begin with the letters entered by the user.
Combined operation:	((& (givenName=%) (mail=%))(& (sn=%) (mail=%)))
	Searches for entries in which the first name and mail address or the surname and mail address begin with the letters entered by the user.

Configuration of directory entries

A range of attributes are defined in the LDAP database for a directory entry, e.g. surname, first name, telephone number, address, company, etc. The quantity of all attributes, which can be saved in one entry, is saved in the relevant LDAP server scheme. In order to be able to access attributes or define search filters, you must know the attributes and their designation in the LADP server. The majority of attribute designations are standardised, however specific attributes can also be defined.

The Maxwell 10 supports the following attributes:

Attribute name	In the directory	Meaning
givenName	First name	Name
sn / cn / displayName	Surname	Name with which the entry is listed (cn = common name, sn = surname)
homePhone / telephoneNumber	Phone Home	Private number
telephoneNumber	Phone Work	Office number
mobile	Phone Mobile	Mobile number
mail	Email	E-mail address
facsimileTelephoneNumber	Fax	Facsimile numer
company / o / ou	Company	Company name
street	Street	Street
postalAddress	City	City or town
postalCode	Postcode	Post code
friendlyCountryName / c	Country	Country

Saving settings

• Click on **Save** to save your settings on this screen.

Function keys

On this screen you can programme the function keys. **Settings -> Function Keys ->**

Your Maxwell 10 allows you to assign frequently used functions or phone numbers to up to 100 keys so that you can access them with one key press.

All available function keys are shown below **Programmable Keys**.

- Click on Add to add a new function key configuration or on Edit to change an existing.
- The window for programming the selected key will open.
- Select the required function from the Key function list.



Park + Orbit

This function key is used to "park" a call. The participant hears the hold music. This function key allows you to transfer calls within a group, which share a common line. It will be configured on all extensions for the group. The "Park + Orbit" keys on all extensions flash if a call has been "parked" on an extension. The call can be picked up on any extension by pressing the key.

This function is only available if your telephone is connected to a Gigaset phone system and the number has been assigned to a group. The function key can also be assigned using the phone system.

- Select the required connection and enter the **Phone number** of the shared line.
- Enter a name for the key.

Speed Dial

Assigns the speed dial for a phone number to the function key.

- Select the required connection and enter the Phone number that should be selected using this function key.
- Enter a name for the key.

BLF

A function key that is configured as BLF (Busy Lamp Field) indicates the status of a shared line. It will be configured on all extensions for the group. The keys will flash on all extensions if a call comes in and light up if the line on any extension is busy.

You can accept an incoming call if you have set the Directed call pickup code.

This function is only available if your telephone is connected to a Gigaset phone system and the number has been assigned to a group. The function key can also be assigned using the phone system.

- Enter the **Phone number** for the shared line.
- If you wish you accept calls with the key, enter the Directed call pickup code. For a Gigaset phone system this code is *8.
- Enter a name for the key.

Call Divert

Assigns a call divert to the function key.

ÚSelect the connection for which the call divert should apply and enter the **Phone number** to which the calls should be diverted. The call divert set up here applies to all calls. To configure different call divert rules, use the screen **Settings** -> **Telephony** -> **Call Divert**

• Enter a name for the key.

DTMF

Assigns a number to the function key that is dialled using DTMF. This is required, for example, for querying and controlling certain network mailboxes via digit codes or for remote operation of the local answering machine.

- Enter the **Phone number** that should be dialled using DTMF signalling.
- Enter a name for the key.

None

Nothing assigned.

• Click on **Save** to accept the key assignment.

You will now be returned to the Function Keys screen, where you can programme more keys.

Saving settings

• Click on Save to save the settings on this screen.

System settings

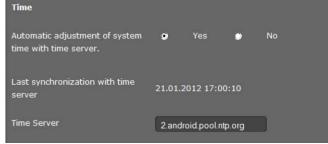
- Date and time
 - Entering the date and time manually
 - Setting the time zone
- Security
- · Rebooting the system and restoring factory settings
 - Reboot
 - Automatic reboot (available with V1.2.4 and higher)
 - Reset
- Auto Provisioning
 Saving and restor
 - Saving and restoring telephone data
 - Transferring data from phone to PC
 - Transferring data from PC to phone
 deting firmwore
- Updating firmware
 Updating firmware automatically
- Screenshot
- System log

Date and time

On this screen you can specify a time server or enter the date and time manually. Settings -> System -> Date and Time Defining the time server

- ning the time server
- Select Yes for Automatic adjustment of system time with time server.
- Enter the IP address of the required server in the **Time server** fi eld.

The most recent synchronisation carried out with the time server is shown.



Entering the date and time manually

- Select No for Automatic adjustment of system time with time server.
 - Enter the date and time:

•

- Time format: ss:mm
- Date format: dd.mm.yyyy



Setting the time zone

- Select your **Time zone** from the list.
- Activate the Automatically adjust clock to summer time option if necessary.

Time Zone	(GMT) GMT, Dublin, London			•	
Automatically adjust clock to summer time changes	٥	Yes	۲	No	

Saving settings

• Click on Save to save the settings on this screen.

Security

Access to the Web configurator or the Broadsoft configurator functions on the phone is password-protected for security purposes. Default setting for the web configuration password: **admin**

Settings -> System -> Security

For security reasons, you should always change the password after getting started with your device and then again at regular intervals.

- Enter a new password for web configurator access.
- For Broadsoft configuration, enter the user name and the assigned password.
- For security reasons, the passwords are not displayed. To display them in plain text, select the option Password visible.

Saving settings

• Click on Save to save the settings on this screen.

Rebooting the system and restoring factory settings

You may have to reboot your phone in certain operational situations or reset the system to factory settings. Settings -> System -> Reboot and Reset

Reboot

• Click on OK next to Reboot to reboot the system.

Automatic reboot (available with V1.2.4 and

higher)

Maxwell 10 can be configured with an automatic daily reboot.

- Activate the automatic reboot option
- · Set the time when the reboot should be done

Reset

All phone settings can be reset to the **Factory Settings**. This deletes all individual settings, lists and directory entries!

• Click on **OK** next to **Start factory reset** to reset the phone to factory condition.





You can save the individual settings as well as the directory entries of the phone before resetting the device using the **Save and Restore** function. (only valid for versions below 1.2.4)

Auto Provisioning

Phone settings can also be set via automatic provisioning by a provisioning server in the network. **Settings ->System ->Auto Provisioning**

• Click on **OK** to start auto provisioning.

The device searches the network for a provisioning file providing configuration data for the phone. **Or:**

• Enter the URL of a provisioning server and click on Start.

Saving and restoring telephone data

You can save data from your phone onto your computer and, if necessary, restore it back onto the phone. Settings -> System -> Save and Restore

Transferring data from phone to PC

- Select which data you want to save: Click Save to save the
 - selected data to the PC and choose a storage location.
 - Directory
 - Ring tones
 - · Phone settings (Configfile) or
 - All

Save and Restore	
You can backup and restore the o PC.	device data with your
Resource to backup / restore	Phone settings (Configfile)
Backup device data on PC	Save

Transferring data from PC to phone

- Use the **Browse** button to select the file you want from your PC's file sys tem.
- Click on Restore.

The data transfer overwrites existing files.				
Restore device data from PC	Browse	provisioningDataBackup.xml		
	Restore),		

Updating firmware

Firmware updates are available from the Gigaset server <u>profile.gigaset.net/device</u> so you can ensure your phone is always up to date. You can find the current version of your firmware on the **Device** status screen. You can update your phone automatically or manually. Your provider for Internet telephony can also deliver updates for the phone firmware and/or for the profile of your VoIP account.

The latest Firmware can be found here.



Settings -> System -> Firmware Update

Updating firmware automatically

Data server	profile.gigas	set.net/device	Upd	ate Firmware	
Automatic check for software updates	٠	Yes	9	No	
	Save	Reset			

- · Select Yes for Automatic check for software updates to search for new firmware updates.
- If you use another update server enter the Web address for the automatic update search in the Data server field.
- Click on **Update firmware** to start the search and to load the new firmware.

Saving settings

• Click on Save to save your settings.

Updating manually

• Download the new firmware from the Internet onto your PC and then open the firmware update screen.



- Click on Browse and select the file from the file system on your PC.Click on
- Load to start the update process.

When the firmware update is started, the device first checks whether the prerequisites are in place for successfully downloading the firmware. A successful update is indicated by an advisory message.

Screenshot

You can use the display key to capture a screenshot of the device display. The display key is located behind the right cradle cover on the back of the device.

Settings -> System -> Screenshot

- Select Yes to enable the display key to be used to capture a screenshot.
- Click on **Save** to save your settings.

If the function is disabled, pressing the display key will turn the display on/off.

System log

You can define that specific events are to be logged on an external syslog server. This information may be useful in the event of problems involving service personnel or Customer Care.

Settings -> System -> System Log

- Enter the IP address and the Server port of the syslog server.
- · Click on Activate syslog to activate logging.

The events are logged with the date, time and message.

Set filter for system log

- Define the events you want to be logged:Click on Save to save your settings.
 - System processes, e.g. system start, assigning an IP address etc.
 - SIP events, e.g. connection requests, connection establishment.
 - Phone application, e.g. incoming calls, new entry in call log app.
 - Provisioning application
 - All events

Checking the status of the phone

- Device
 - IP configuration
 - Software
 - VoIP status
 - Date and time
- PCAP logging

You will find information about the status of the phone and diagnostic information in the Status menu.

Device

Status -> Device

This screen shows general information about your phone.

IP configuration

IP address	The phone's current IP address within the local network.
MAC address LAN, MAC address WLAN, MAC address bluetooth	The phone's device addresses for LAN, WLAN and Bluetooth interfaces.
WLAN, WLAN encryption, Bluetooth	For each of these functions is shown whether it is activated or not.

Software

Firmware version	Version of the firmware currently loaded on the phone. You can download updates of the firmware to your phone (
	-> p. 36).	

VoIP status

List of all configured VoIP connections with the Name, Status and which connection is configured as the Default send account.

Date and time

Current Time and Date in the device and the date of the most recent synchronisation with the time server.

PCAP logging

Status ->PCAP Logging

You can create a PCAP log file and save it for analysis at a later stage. PCAP (Packet Capture) analyses the data traffic in the network at the phone-Ethernet interface. This recording is carried out for diag nostic purposes and should only be made if requested by service personnel.

- Click on Start. Every incoming or outgoing data packet to or from your phone is recorded and stored on the internal device storage.
- Click on Stop to stop recording.
- To save the PCAP file on your computer, click on **Download** and select a directory in the file system on your computer where the file should be stored.
- To delete the recorded log file from the internal device storage, click on Clear.



- The information is recorded in a ring buffer that has limited storage capacity. If the buffer is full, the first packets will be overwritten and lost. You should therefore attempt to record scenarios that are as short as possible.
- This logging uses a lot of memory and CPU power and can negatively affect how the phone behaves (e.g. slowing the display screen, distorting the ring tone etc.)