

## SwyxDECT 500

Installation and Configuration

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## 1 SwyxDECT 500 System

#### **Operation of a SwyxDECT 500 with SwyxWare**

This documentation describes the SwyxDECT 500 base station.

SwyxDECT 500 supports the following functions:

- LAN connection to the Server
- Up to eight (G.711 eight, G.729 eight, G.722 five) simultaneous phone calls per base station.
- Up to 1000 users per multi-cell system, and up to 30 users per single-cell
- Up to 3 repeaters are possible on one base station
- Configuration via web interface
- DECT GAP/CAP radio interface
- Air synchronization between several base stations
- Power over Ethernet (PoE 802.3af)
- External LED status display

For the maximum scope of installation the following configuration options are available:

Base stations	Repeaters per base station	Handsets
254	-	1000
127	1	1000
50	3	1000

## **1.1** Scope of supply

- One base station
- One stand
- Two screws with wall plugs

## 1.2 Installation

The SwyxDECT 500 can be operated as a stand-mounted or wallmounted system. Before mounting the station to a wall, the stand has to be disassembled.

#### How to mount the SwyxDECT 500 base station to a wall

- 1 Mark two bore holes horizontally at a distance of 60mm.
- 2 Drill the holes and insert the dowels.
- **3** Turn in two screws until the screw head is at a distance of 4mm to the wall.
- 4 Attach the base station to the screws and push it downwards.

## **1.3 General Information on SwyxDECT 500**



A SwyxDECT 500 has two internal antennas.

#### **Power Supply**

A PoE (Power-Over Ethernet) supply, class 2 (3.84 to 6,49 watt at 48 volt DC) is required.

#### Network

• RJ45 jack for LAN/PoE

#### State signaling by LEDs

The SwyxDECT 500 has an LED, which indicates the states of the system.



As of v. 5.11, the LEDs also display the RSSI values of the Air Sync function. The RSSI (Received Signal Strength Indicator) is a ratio value that shows the received field strength of the base station.

LED Signal	State
solid green	<ul> <li>The base station is active, the network registration has been successful</li> <li>Operation with good RSSI, better than -75 dBm</li> </ul>
solid orange	<ul> <li>Operation with RSSI between -75 dBm and -90 dBm</li> </ul>
unlid/ solid red	<ul> <li>Impermissible RSSI below -90 dBm</li> <li>Warning of factory reset or long press of reset button</li> <li>Error/ Critical error</li> </ul>
blinking green	<ul><li>Initialization</li><li>Scanning for base stations</li></ul>
blinking orange	<ul><li>Initialization</li><li>Search by IP</li></ul>
blinking red	<ul> <li>Factory reset is carried out</li> <li>Firmware upgrade/ downgrade is carried out</li> <li>No Internet connection available or SIP handset registration failed</li> </ul>
unlid	• Base station is inactive.

## **1.4** Starting the SwyxDECT 500 base station

The SwyxDECT 500 is preset for the use of a DHCP server. When first switched on, it automatically obtains an IP address of a DHCP server.

#### SwyxDECT 500 in a network with DHCP

- Make a note of the MAC address, which is given on the back of the base station.
- In the DHCP server, check the IP address of SwyxDECT 500 by using the MAC address.

• Enter http://xxx.xxx.xxx (whereas xxx.xxx.xxx is the identified IP address) in the address field of the web browser.

The home page of the SwyxDECT 500 web interface appears. Here you can configure the base station.

Alternatively, you can identify an existing IP address via the DECT handset, even when the handset is not registered on the base station.

#### How to identify the IP address of the base station via the DECT handset

- 1 Press the menu button of the DECT handset.
- 2 Enter "\*47".
- 3 The IP search starts. Wait up to 30 seconds.
- 4 The MAC and the IP address of the base station are displayed. By comparing the displayed MAC address with the MAC address on the SwyxDECT 500 type label, you can verify that the handset has found the desired base station.
- 5 If several base stations exist, their MAC and IP addresses are also displayed. Use the navigation key to scroll through the base station information.

# 1.5 Configuration of a SwyxDECT 500 base station

A SwyxDECT 500 must be configured so that it can be reached by Swyx-Server. Then, you can connect the DECT handsets with the SwyxDECT 500 base station and make calls via SwyxServer.

SwyxDECT 500 can be operated in a multi-cell system as well as a single-cell system.

## **1.5.1** Configuration as a single-cell system

#### How to configure a SwyxDECT 500 base station as a single cell

1 Define the IP address of the SwyxDECT 500 and gain access to SwyxDECT 500 via the web interface (*Starting the SwyxDECT 500 base station*, page 5).

2 Enter the IP address of the base station in the address bar of a browser.

A login window will open.

**3** Enter the user name and password. By default the user name and password is "admin" and "admin".

The home page of the web interface to configure the SwyxDECT 500 base station opens.

DECT500	+								^
		⊽ C	8 - Google		٩	☆ 自	÷	â	≡
su?x	DECT500								^
Home/Status Statistik Benutzer Server Repeater Netzwerk Management Firmware Aktualisierung Zeiteinstellungen Länder Einstellungen Konfiguration Syslog SIP Log	me/Status Statistik Systeminformationen: nutzer Server Systemtyp: Repeater Frequenzband: tzwerk Aktuelle Lokalzeit: Betriebszeit: Firmware Firmware KAPT Nummer: Firmware KAtualisierung Zeiteinstellungen IP Adresse: Länder Firmware VRL: Systog StP Loo Basisstationen Status:			Elle Deaktivier SIP (RFC 3261 2016 09:24:09 56 (H:M:S) HD2; RPN:00 009febc 8.100.250 /03.55/B0011/ des Firmwareu reverzeichnis: a	r <b>t</b> ) 17-De Ipdate	2-2015 12 Servers:	:08	30	
Netzwerk Sicherheit	SIP Identitätsstatus auf dieser Bas 510@192.168.100.214 (CPE-Astra0)	isstation:	Status:	ОК					
Globales Telefonbuch Notfall	Schaltfläche für Neustart drücken .								
Mehrzelle	Neustart	Erzwungener Net	ustart	]					
Abmelden									

- Go to the menu bar and click on "Management | Country setting" and select the country and the desired language. Confirm your selection by clicking on "Save and Reboot". The system restarts.
- 5 Select the "Management | Time settings" option, and enter the IP address of your Windows server or a public time server (e.g. ptbtime1.ptb.de) in the field "Time Server". This synchronizes the time being displayed on the DECT handsets.
- 6 Click on "Save and Reboot". The system restarts.

- 7 Select the "Management" option.
- 8 Give the base station a name.
- 9 Confirm the entry by clicking on "save".
- **10** Select the "User | Server" option.
- 11 Click on "Add server".
- **12** Deactivate the NAT adaption.
- 13 Enter the SwyxServer's IP address in the "Registrar" field.
- **14** Please enter in the field "Secondary Registrar-Address:" the IP-addres of the Standby Server.
- 15 Activate "SIP Session Timers."
- 16 Enter the value "90" in the "SessionTimer Value" field.
- 17 In the field "DTMF signaling", select "SIP-INFO".

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In order to support Codec G.729, an optional module for the base station is required (one module per base station). The codec G.729 should be placed after codec G.711U in the priority list.

18 Click on "Save."

**19** Add a new user. See *How to add a new user*, page 10.

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In general: You can save configuration changes by clicking on "save." If there is no "Save" button available on the respective site, changes have to be confirmed by restarting the base station.

## 1.5.2 Configuration of a multi-cell system

A multi-cell system is an aligned and synchronized system of base stations, covering larger radio ranges. Up to 254 base stations can be used. They can be set up in chains (up to 24 base stations per chain).

Before installing a multi-cell system, all requirements regarding radio coverage, number of DECT users, their movements, as well as the installation site (building information) have to be met. Verify if any interference factors are present that may have a negative impact on the DECT installation. Please adhere to the following sequence of steps to configure a multi-cell system.

- Setup first base station (step (1) to (9))
- Add server (Step (10) to (18))
- Add at least one user (step (19))
- Set first base station to "multi-cell" (step (20))
- Add second base station (repeat step (1) to (9) followed by (20) to (22))

#### How to configure a multi-cell system

- 1 Enter the IP address of the base station in the address bar of a browser.
  - A login window will open.
- 2 Enter the user name and password. By default the user name and password is "admin" and "admin".
- **3** The home page of the web interface to configure the SwyxDECT 500 base station opens.
- 4 Go to the menu bar and click on "Management | Country setting" and select the country and the desired language. Confirm your selection by clicking on "Save and Reboot". The system restarts.
- 5 Select the "Management | Time settings" option, and enter the IP address of your Windows server or a public time server (e.g. ptbtime1.ptb.de) in the field "Time Server". This synchronizes the time being displayed on the DECT handsets.
- 6 Click on "Save and Reboot". The system restarts.
- 7 Select the "Management" option.
- 8 Give the base station a name.
- 9 Confirm the entry by clicking on "save".
- **10** Select the "Extensions | Server" option.
- **11** Click on "Add server".
- 12 Deactivate the NAT adaption.
- **13** Enter the SwyxServer's IP address in the "Registrar" field.

- **14** Please enter in the field "Secondary Registrar-Address:" the IP-addres of the Standby Server.
- 15 Activate "SIP Session Timers."

16 Enter the value "90" into the "Session Timer Value" field.

17 In the field "DTMF signaling", select "SIP-INFO".

In order to support Codec G.729, an optional module for the base station is required (one module per base station). The codec G.729 should be placed after codec G.711U in the priority list.

- 18 Click on "Save."
- **19** Add a new user. See *How to add a new user*, page 10.
- 20 Select the "Multi-cell" option.
- **21** Select "Activated" in the field "Multi-cell system". Within the "Home/Status" menu item, the base station will be marked as primary cell in the "System information" field.
- 22 Click on "Save and Reboot".
  - The system restarts.
- 23 Configure further base stations by repeating step (1) to (9), followed by step (20) to (22).
- 24 After a few minutes, the configured base stations will be displayed in the "Base station group" table. The base station added first will automatically be defined as the primary base station.
- **25** The synchronization will be defined automatically. For a manual synchronization, the field "Configure synchronization of DECT tree automatically" must be set to "Deactivated". Afterwards, you can set the order manually in the "DECT synchronization source" column.
- **26** Click on "Save" to activate the settings.



Please note that the multi-cell ID for several base stations must be identical.

### **1.5.3** Settings at the webinterface

Function	Description
Home/Status	General overview of the current operating status and settings on the base station and the handsets. <b>Statistics</b> Overview of the functionality of the base station(s). The logs can help the administrator in cases of error analysis and system optimization.
Users	Managing all users. See User, page 9. Servers Setting the server to which the base station connects. See Servers, page 11. Repeaters Option to configure repeaters. See Repeaters, page 12.
Network	IP Settings Here, select whether you would like to configure a DHCP-assigned IP address or a static address. When selecting a static IP address, you can save the respective parameters. NAT settings Option to configure the function for NAT resolu- tion. These functions facilitate interoperability with most types of routers. SIR/RTP Settings Facilitates configuration of SIP parameters. DHCP Options Facilitates activating/deactivating plug-n-play. Sao Natwork, page 12

Function	Description	•
Management	Option to configure the base station for special functions, such as web interface language, log management, etc.) See Management, page 13. Firmware update Option to configure how base stations and handsets are updated. See Firmware update, page 14. Time Option to configure a time server. See Time, page 15. Country Option to configure location. See Country, page 15. Configuration Display of detailed and complete SME network settings for base stations, HTTP/DNS/DHCP/TFTP servers, SIP servers, etc. See Log out, page 17. Syslog Display of events and logs respective to the whole network (live feed only). See Syslog, page 16. SIP Log Display of SIP-related logs	Benutzer IPEI: Zugangs Code SIP Benutzer: SIP Benutzer: SIP Benutzer: Displayinforma MWI Nummer Fernabfragenu P-Preferred-Id Server: Anklopfen Fun BroadWorks F BroadWorks F Sofortige Umle Verzögerte Um Umleitung bei
Security	Option to assign a user name and password on the base station. See <i>Security</i> , page 16.	Lokales To Dateiname:
Global Phonebook	Option to load a global telephone book saved on the server. See <i>Global Phonebook</i> , page 16.	Laden Lokales T
Multicell	Option to enter the parameters for configuring a multi-cell system. See <i>Multicell</i> , page 17.	Export
Log off	Log-off	F

#### 1.5.3.1 User

Under the menu item "Extensions", the following settings are possible:

- Add and edit users.
- Display all of the system's registered users
- Set the base station to log-on mode to log on handsets. See *To connect the SwyxPhone D510/ D565 to SwyxDECT 500*, page 18.

• Select registered users to delete or deregister handsets

#### Benutzer bearbeiten (D510)

IDE1.	0188709012				
	0100703012				
Zugangs Code:	0000				
SIP Benutzer:	510				
SIP Benutzername:	510				
Kennwort:	•••••				
Displayinformation:	D510				
MWI Nummer:	510				
Fernabfragenummer:	##10				
P-Preferred-Identity:	510				
Server:	Server: 192.188.100.214				
Anklopfen Funktion:		Aktiviert •			
BroadWorks Busy Lamp Field List URI:					
BroadWorks Feature Event Package:		Deaktiviert •			
Sofortige Umleitung:		Deaktiviert •			
Verzögerte Umleitung:		Deaktiviert •	90	s	
Umleitung bei Besetzt:		Deaktiviert •			
Speichern Abbrechen					
Lokales Telefonbuch importion Dateiname: Datei auswählen Keine ausg	e <b>ren:</b> ewählt				
Lokales Telefonbuch exportieren:					

Parameter	Description
IPEI	(International Portable Equipment Identifier) Serial number of the DECT handset. The IPEI number is set for every handset by the manufacturer and can be seen in the menu of the SwyxPhone D510 under "Settings   Status".
Authorization Code	a number with 4 digits, which you assign to the user's handset for the registration at a base station.

	Description
SIP User:	SIP user ID you entered into the user's properties on the SwyxWare Administration.
SIP User name	SIP user name you entered in the user's properties on the SwyxWare Administration.
Password	Password you entered in the user's properties on the SwyxWare Administration.
Display Name	Additional designation appearing on the handset's display.
Mail box Name	Numbers of User
Mail box number	Here you can e.g. enter the function code for remote query (##10).
P-preferred-iden- tity (Sender number):	Here you can enter further numbers additionally to the own number of the user (e.g. "234;220;478" for an internal number, a group number and an alter- native number). Subsequently the user can decide for every external call with the selection of the desired line, which number he wants to signal.
Servers	SwyxServer IP address; various servers can be selected.
BroadWorks Feature Event Package	If activated (recommended), call forwarding is performed via the telephone system. Calls can then be handled by SwyxWare and, for example, correctly rejected as "busy" with DND (do not disturb). Default setting: Deactivated.

#### Add user

Before registration of the new user please keep at hand the serial number (IPEI) of the concerning handset ready. The serial number can be displayed in the menu of SwyxPhone D510 under "Settings | Status".

#### How to add a new user

**1** Select the "Extensions" option in the menu bar.

- 2 Click on "Add user".
- 3 Enter in the field "IPEI" the serial number of the handset.
- 4 Enter in the field "AC" the 4 digits number, which is used to identify the user (handset) for the registration at the base station.
- 5 Enter the phone number in the "SIP user" field and the SIP user name in the "SIP user name" field, which you also assigned in SwyxServer within the SIP registration. See also the SwyxWare documentation for administrators, chapter SIP Registration" tab.
- **6** Under "Authentication Password" enter the SIP password that you also assigned in SwyxServer during SIP registration.
- 7 In the "display information" field, enter the name that should appear on the user's SwyxPhone D510 display.
- 8 Enter the phone number in the field "Mailbox Name".
- **9** You can use the "Mailbox Number" field, e.g. to enter the function code for remote query (##10).
- **10** In the "Server" field, select the SwyxServer on which the user is configured.
- 11 Select "Enabled" for "BroadWorks Feature Event Package".
- 12 Click on "Save."
- **13** Select the desired user.
- 14 Click on "Log-on handsets". The log-on mode for the base station is enabled.
- **15** Log the SwyxPhone D510 of the user just added onto the base station while the base station is still in log-on mode. See SwyxPhone D510/ SwyxPhone D565 on the SwyxDECT 500, page 18.

#### Servers

erver Allas:	Server 1		
AT Unterstützung:	Aktiviert	•	
egistrar:	192,168,100,214		
weite Registrar Adresse:			
IP Server Wiederholungsinterv, der Prüfung:	60		
all Log Convert			
an Eug Server.	120		
eregischerungszeit (s):	120	- 1	
P Session Timers:	Aktivien	•	
ession Timer Wert (s):	90		
IP Transport:	UDP	*	
Ignal TCP Source Port:	Aktiviert	•	
se One TCP Connection per SIP Extension:	Deaktiviert	-	
IP der eigenen Basisstation:	Deaktiviert	•	
utomatische Verbindungsprüfung: urchwahl auf Mobilteil Display anzeigen (im Idle	Aktivien	•	
ustand):	Aktiviert	•	
erhalten beibehalten:	RFC 3264	•	
ocal Ring Back tone:	Aktiviert	•	
ttended Transfer Behaviour:	Hold 2nd Call	•	
irected Call Pickup:	Deaktiviert	Ŧ	
irected Call Pickup Code:			
roup Call Pickup:	Deaktiviert	•	
roup Call Pickup Code:			
igene Codec Priorität verwenden:	Deaktiviert	•	
TMF Signalisierung:	SIP INFO	•	
TMF Payload Type:	101		
uswertung Caller ID (Datenfeld):	PAI - FROM	•	
odec Priorität:	G722 G711A G711U	*	
	Hoch	Runter	Codecs zurücksetzer
	Entfernen		
TP Paketgröße:	20 ms	•	
icheres RTP:	Deaktiviert	•	
icheres RTP Auth:	Deaktiviert AES_CM_128_HMAC AES_CM_128_HMAC	_SHA1_32	
PTD Cousto Suitory			
KTP Crypto Builes:	llesh	T	Denot Court O 1
	Hoch Entformen	Runter	Reset Crypto Suites

Function	Description
Server Alias	You can enter a name for the server which consists of 10 characters max.
NAT Adaption	When this option is activated, all SIP messages are forwarded directly to the NAT gateway on the SIP aware router. The standard setting for this option is activated.
Registrar	SwyxServer IP-adress
Secondary Registrar Address	IP address of the standby server
SIP Server Retry Check Time	The interval (in seconds) for identifying the active server on a standby system.
Registration time (s)	The time frame (in seconds) for renewed SIP registration of the base station on SwyxServer.
RTP from own bases- tation	If activated, only the base station, on which the User is logged on, will be used for data transfer to the outside. (This options will only make sense in case of an not optimal use to capacity of the network).
Keep Alive	This option defines the time frame for opening ports on relevant NAT aware routers.
Display extension on handset (in idle state)	Show own extension on the headset.
Use Own Codec Prior- ity	If activated, the codec priority of the base station will be preferred to the code priority of the servers.
DTMF Signalling	Method for signaling keys being pressed during a conversation.
Codec priority	Selection of the codec priority that the base station should use for audio compression and transmission. You set the order using the buttons "up" and "down."

Function	Description
RTP Packet Size	The setting schoud be changed only after consulting the support service.

#### How to add a new server

- 1 In the menu bar, click on "Extensions | Servers".
- 2 Choose "add server."
- 3 Enter the SwyxServer's IP address in the "Registrar" field.
- 4 If you are using a standby server, enter the standby server's IP address in the "secondary registrar address:" field.
- 5 Activate "SIP Session Timers."
- 6 Enter the value "90" in the "SessionTimer Value" field.
- 7 Select "SIP INFO" in the "DTMF signalization" field.

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In order to support Codec G.729, an optional module for the base station is required (one module per base station). The codec G.729 should be placed after codec G.711U in the priority list.

8 Confirm the entry by clicking on "save".

#### Repeaters

The "repeater" area can be used to extend the range of your base stations by installing additional repeaters (up to 100 repeaters per system). Up to three repeaters per base station and up to three repeaters on one chain can be used. Up to five (with G.711 five, with G.729 five, with G.722 two) simultaneous calls per repeater possible.

#### How to add a repeater

- 1 Select the "Extensions | Repeaters" option.
- 2 Select "Add Repeater".
- 3 In the field "DECT snyc mode", select "Manually".
- **4** Establish the DECT synchronization source.
- 5 Click on "Save."
- 6 The repeater is listed.

- 7 Select the repeater being registered by setting a check mark.
- 8 Click on "register repeater."
- 9 Connect the repeater to a power socket.
- **10** Press the button located on the repeater.
- **11** After a few seconds, the repeater's light will be light up in green.
- **12** Update the base station's web page, and the repeater will be displayed in the list.



Avoid registering repeaters and headsets simultaneously, for this may result in interference effects.

#### 1.5.3.2 Network

The network settings consist of the following parts: "IP settings", "SIP/RTP settings", "DHCP options" and "NAT settings".

TP Emstenungen			NAT Einstellungen		
DHCP/Statische IP Adresse:	Statisch	۲	STUN Server nutzen:	Deaktiviert	
IP Adresse:	192.188.100.52		STUN Server:		
Subnetz Maske:	255.255.252.0		STUN Bindungszeit	Aktiviert	,
Standard Gateway:	192.188.100.1		STUN Bindungszeit		
DNS (Primär):	192.188.100.205		schützen:	80	
DNS (Sekundär):	192.188.100.202		RPORT einschalten:	Deaktiviert	
			Automat. Verbindungsprüfung:	90	
ID:	0		Einstellungen	Deaktiviert	
ID:	0		Einstellungen		
	0		Andere SIP Ports wählen:	Deaktiviert	,
Benutzerpriorität:	U			D Guilling (	
Benutzerpriorität: Synchronisation:	Aktiviert	T	RTP Collision Detection:	Aktiviert	
Benutzerpriorität: Synchronisation:	Aktiviert	T	RTP Collision Detection: Always reboot on check- sync:	Aktiviert Deaktiviert	,
Benutzerpriorität: Synchronisation: DHCP Optionen	Aktiviert	T	RTP Collision Detection: Always reboot on check- sync: Lokaler SIP Port:	Aktiviert Deaktiviert 5060	,
Benutzerpriorität: Synchronisation: DHCP Optionen Plug-n-Play:	Aktiviert	•	RTP Collision Detection: Always reboot on check- sync: Lokaler SIP Port: SIP ToS/QoS:	Aktiviert Deaktiviert 5060 0x68	,
Benutzerpriorität: Synchronisation: DHCP Optionen Plug-n-Play:	Aktiviert Aktiviert	•	RTP Collision Detection: Always reboot on check- sync: Lokaler SIP Port: SIP ToS/QoS: RTP Port:	Aktiviert Deaktiviert 5060 0x68 50004	,
Benutzerpriorität: Synchronisation: DHCP Optionen Plug-n-Play:	Aktiviert	<b>v</b>	RTP Collision Detection: Always reboot on check- sync: Lokaler SIP Port: SIP ToS/QoS: RTP Port: Umfang der RTP Ports:	Aktiviert           Deaktiviert           5060           0x68           50004           40	,

#### **IP Settings**

Function	Description
Static IP address	If the DHCP server is active, then the base station will procure the TCP/IP parameters automatically.
IP-adress	Base station IP address
Subnet mask	Base station subnet mask.
Default gateway	IP address of the standard network gateway
DNS (Primary)	Main server to which a base station directs DNS queries.
DNS (Secondary)	Alternative DNS server.

#### **DHCP Options**

The value "plug-n-play" should be set to "activated."

#### **NAT** settings

The "NAT settings" area is used to make various settings regarding the use of a STUN server. A STUN server makes it possible for NAT clients to communicate behind a firewall with a VoIP provider outside of the local network.

#### SIP/RTP settings

Function	Description
Local SIP port	Standard port number value: 5060
SIP ToS/QoS	Priority of call trigger signal transmission based on the ToS byte's two IP layers.
RTP port	The port used for RTP audio streaming. Standard port number value: 50004.
RTP port range	Number of ports that can be used for RTP audio streaming. Default value: 40

Function	Description
RTP-ToS/QoS	RTP transmission priority based on ToS byte IP layer.

#### 1.5.3.3 Management

The management settings are subdivided into the following areas: "Settings", "Configuration" and "Syslog/SIP Log".

Name der Basisstation:	DECT500				
Einstellungen					
Management Transferprotokol	l:	HTTP		۲	
HTTP Management Uploadskrij	ot:	/CfgUpload			
HTTP Management Benutzern	ame:	510			
HTTP Management Kennwort:		•••••			
Automatisches Präfix aktiviere	n:	Deaktiviert		۲	
Maximale Anzahl Ziffern für in Nummern festlegen:	terne	0			
Präfix für ausgehende Rufe fes	tlegen :				
herunterladen: Basisstationspezifische Datei: Mehrzellenspezifische Datei: DHCP Controlled Config Server	: Deaktivier	rt	- 		
DHCP Custom Option:					
DHCP Custom Option Type:					
Syslog/SIP Log					
Upload der SIP Logdatei:	Deaktiviert		•		
SIP Log Serveradresse:					
Syslog Level:	Standardbet	rieb	•		
Syslog Server IP Adresse:					

Function	Description
Base Station	Option to enter a name for the base station.
Management Transfer Protocol	The protocol that should be used for uploading/downloading the configuration file / firmware file.
HTTP management upload script	The server folder or the path where the configuration file is located.
HTTP management user- name	Username for accessing the configuration server
HTTP management pass- word	Password for accessing the configuration server.
Configuration Server Address	Option to enter the configuration server's IP address.
SIP Log Server Address	Option to enter the IP address of the server on which the SIP log file should be saved.
Upload of SIP log	Select "activate" if SIP debug notifications should be saved to the configuration server.
Syslog server IP Address	IP address of the server on which the DECT IP system's log file should be saved.
Syslog Server Port	Entry of released server port.
Syslog Level	Selection of various logging levels.

#### **Firmware update**

In this area, you can configure updates on base stations.

Function	Description
Firmware update server address	IP address of the server on which firmware update files have been saved.
Firmware path	Memory location for the firmware update files .

Function	Description
Required Version	The "Required Version" field is used to indicate the firmware version that should be loaded onto the device (handsets) indicated under "type".

#### Firmwareupdate Einstellungen

Adresse des Firmwareupdate Servers: Firmwareverzeichnis: Picture path:	192.188.101	1.11		
Тур	Benötigte version	Benötigte branch	Startup picture	Background picture
D510	0	0		
D565	0	0		
Basisstationen aktualisiere	n			
Nur diese Basisstation aktualisieren				
Alle Basisstationen aktualisieren				
	Benötigte version	Benötigte branch		
Speichern/Aktualisierung starten				

#### How to update software of base stations and/or headsets

1 In the field "Firmware Update Server Address", enter the IP address of the TFTP server, on which the update files for base stations and handsets are stored.



You can find a TFTP server for free download here: TFTP-Server

solarwinds.com/products/freetools/free\_tftp\_server.aspx

2 In the "firmware path" field, enter the root path for the sub-paths in which update files are located. Paths have to be created with the following designations for the update files of the base stations and the handsets:

- Path "8660" ("\rtx\fw\8660\"): this is where the update files are stored for the base stations.
- Path "DECT4024" ("\rtx\fw\4024\"): this is where the update files are stored for the repeater.
- Path "8630"("\rtx\fw\8630\"): this is where the update files are stored for SwyxPhone D510.
- Path "8830"("\rtx\fw\8830\"): this is where the update files are stored for SwyxPhone D565.
- 3 Enter the version number of the software that should be used to update the handset software. All types of handsets are listed.



During the update, all handsets must be placed in the charging station!

- 4 Save the data for updating handsets by clicking on "Save".
- 5 For base station update, select whether you would like to update only this base station or all of them.
- 6 In the field "Required version," enter the firmware version that should be used to update the base station(s).
- 7 To launch the update with the settings that have been made, click on "start update."

Base stations and handsets will be updated.

#### Time

Save any time server settings under "Time Settings". The time server is used to synchronize a multi-cell system. It also stipulates the time displayed in logs and on SIP trace information pages, as well as on handset displays.

Function	Description
Time server	IP address of the NTP server.
Refresh time (h)	Time frame in hours for updating the time server.
Time zone	Local time in GMT format.

To apply settings, click on "Save and Reboot."

Should you not reach a time server on the network, you can click on "PC time" to apply the time on your PC for one time. When restarting the base station, however, that time information will be deleted.

#### Country

Here, you can select the system's location and the language of the web interface in order to configure standard values specific to the region. Per default the time zone and the summertime settings of your country will be used.

After selecting the country and the language, click on "Save and Reboot".

#### Configuration

In the "configuration" area, you'll find a view of the configuration made in text form. Here, settings can be saved in a file (\*.cfg) for later use. Additionally, a configuration file that has already been created can be loaded.



Passwords are not stored in configuration data when saving. They will have to be set again!

#### How to save configuration settings in a file (\*.cfg)

- 1 Select the option "Management | Configuration". Current settings will be displayed in text form.
- 2 Click on "Save."

The "save as..." dialog will open, and you can determine a location for saving.

3 The file "settings.cfg" is loaded for further use in your download path.

#### How to load a configuration file

- 1 Select the option "Management | Configuration".
- 2 Click on "Browse..." and select the desired configuration file (\*.cfg).
- 3 Click on "Load."
- 4 The settings will be applied.

#### Syslog

In the "Syslog" area, system log files can viewed.

#### SIP Log

In the "SIP log" area, SIP log files can be viewed.

#### 1.5.3.4 Security

Under "Security", enter username and password of the web interface for the configuration of the base station and/or the system.

#### 1.5.3.5 Global Phonebook

Here, you can set the storage location for telephone book files being imported. Clicking on "load" imports telephone book files.



The import file may contain a maximum of 3000 entries.

Import files are allowed in the formats .csv, .tvt, and .xml.

#### Import Requirements for .csv and .tvt

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•	7	

Names must not be longer than 23 characters, phone numbers must not be longer than 21 characters (all other characters are truncated or the entry is not saved).

Names must have the following	Names must have the following
format:	format:
First name Last name	First name Last name

Example: John Jones

Example: "Jones, John"

Phone numbers must be in canonical format and must not contain spaces (SIP-URI are not permitted).

Example with area code: +49023134567 Example extension: 567

#### .txt

Name and phone number must have the following format: Name, phone number

Example with area code: John Jones,+49023134567 Example extension: John Jones,567

#### .csv

Name and phone number must have the following format: "Name",Home number,Mobile number,Office number (all three commas must be present for each entry, even if not all phone numbers are present)

Example with all phone numbers: "John Jones",+49023134567,+01520123 4567,123 Example with missing numbers: "John Jones",,+015201234567,123



When importing telephone numbers, the entire telephone book is rewritten. It is not possible to attach contacts. The imported contacts are not displayed on the base station's configuration interface.

## How to import contacts from an HTTP or TFTP server via a telephone book file

- 1 Click on "Management."
- 2 In the field "Management Transfer Protocol," select "HTTP" or "TFTP" as needed.
- 3 Click on "Save."
- 4 Click on "Global phonebook".
- 5 Enter the HTTP or TFTP server's IP address in the "server" field.
- 6 Add a path on the HTTP or TFTP server with the name "Directory" and save the CSV file to be imported there.
- 7 Go back to the option "Global phonebook" and enter the file name in the "file name" field.
- 8 Click on "Save."
- 9 Restart the base station.

## How to import contacts from an LDAP server via a telephone book file

- 1 Click on "Global phonebook".
- 2 Select "LDAP server" in the "location:" field.
- 3 Enter the LDAP server's IP address in the "server" field.
- 4 Enter the LDAP server's port in the "port" field.
- 5 Enter the desired data base (e.g. dc=meta) in the "Sbase" field.
- 6 In the "bind" field, enter the user name for authentication on the LDAP server.
- 7 Enter password, as applicable.
- 8 Click on "Save."

#### How to import contacts by selecting a phonebook file

- 1 Click on "Global phonebook".
- 2 In the "file name:" field, select the CSV file with the contact information by clicking on "Browse..."
- 3 Click on "load" to load the file.
- 4 Restart the base station.



The CSV file's name is limited to 31 characters.

### 1.5.3.6 Multicell

In the "multi-cell settings" area, you can make the multi-cell configuration for using specific base stations.

#### **Multicell status**

Function	Description
System Information	Status of the multi-cell system.
Last package received from IP	IP address of the last base station synchro- nized or of the repeater + time of synchro- nization.

#### Settings for this base

Function	Description
Multi-cell system	This option has to be activated in order to activate the SwyxDECT 500's multi-cell modus.
System chain ID	ID that is unique for a specific multi-cell
Synchronization time (s)	The duration in seconds after which links from base stations are synchronized with each other.
Data Synch	DECT base stations are synchronized among each other over the network. There are two types of synchronization that can be chosen: <b>Multi-cast:</b> Simultaneous distribution of synchronization data to all connected base stations. This function must be supported by network hardware (switches). If this is not the case, then use "peer-to-peer." <b>Peer-to-peer:</b> In "peer-to-peer," another base station is indicated as a synchronization target for each base station. All base stations are synchronized on the system.

#### 1.5.3.7 Log out

Clicking on "logout" will log you out of the web interface.

## 1.5.4 Reset to factory settings

You can perform the factory reset on the base station or in the web interface.



Note that the configuration of the base station is lost when resetting.

#### To reset the SwyxDECT 500 via the base station

Press and hold the reset button on the base station with a pointed object for at least 10 seconds until the LED lights up solid red.
 ✓ The base station is reset to the default setting.

#### To reset the SwyxDECT 500 via the web interface

- 1 In the web interface, select "Management | Default Base Station".
- **2** Confirm this with "OK".
  - $\checkmark$  The base station is reset to the default setting.

## 1.6 SwyxPhone D510/SwyxPhone D565 on the SwyxDECT 500

### 1.6.1 Register SwyxPhone

You can log the SwyxPhone D510 onto the base station while the base station is in log-on mode. Have ready the 4-digit number (access code) entered in the menu under "Extensions | Add (or edit) extension" in the "AC" field.

#### To connect the SwyxPhone D510/ D565 to SwyxDECT 500

If the base station is already in log-on mode, then proceed to step (4); otherwise, start with step (1).

- 1 Select the "Extensions" option within the web interface.
- 2 Select an extension by setting a check mark.
- 3 Then click on "Register handset(s)". The log-on mode is enabled.
- 4 Press the SwyxPhone D510's menu key.
- 5 Select "Connections" with the navigation key and confirm with "Selection".
- 6 Select "registration" and confirm with "selection."
- 7 Enter the 4-digits number (AC) and confirm with "OK". The telephone is logged-on to the base station.



The log-on mode will not be deactivated automatically. To avoid unauthorized access, deactivate the mode. In the web interface, click on the link "Extensions | Stop log-on".

## 1.6.2 Reset SwyxPhone D510/ D565

How to reset the SwyxPhone D510/ D565 to factory settings (Factory Reset)



Note that the handsets must be recommissioned after a factory reset and local files are deleted.

- 1 Press the menu key (3 horizontal lines).
- 2 Enter the following combination: [star key], 7, 3, 7, 8, 4, 2, 3, [star key].
   ✓ The service menu opens.
- 3 Select the "Master reset" menu item and confirm the reset with "OK" or the Select key.



As an indication, you can remember that the letters of the key combination make the word "service".