

SWYXDECT 500 INSTALLATION AND CONFIGURATION

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CONTENTS

| | |
|---|----------|
| SwyxDECT 500 System | 4 |
| 1.1 Scope of supply | 4 |
| 1.2 Installation | 4 |
| 1.3 General Information on SwyxDECT 500 | 5 |
| 1.4 Starting the SwyxDECT 500 base station | 5 |
| 1.5 Configuration of a SwyxDECT 500 base station | 6 |
| 1.5.1 Configuration as a single-cell system | 6 |
| 1.5.2 Configuration of a multi-cell system | 7 |
| 1.5.3 Settings at the webinterface | 8 |
| 1.5.3.1 User | 9 |
| 1.5.3.2 Network | 12 |
| 1.5.3.3 Management | 13 |
| 1.5.3.4 Security | 16 |
| 1.5.3.5 Global Phonebook | 16 |
| 1.5.3.6 Multicell | 17 |
| 1.5.3.7 Log out | 17 |
| 1.5.4 Reset to factory settings | 17 |
| 1.6 SwyxPhone D510/SwyxPhone D565 on the SwyxDECT 500 | 18 |
| 1.6.1 Register SwyxPhone | 18 |
| 1.6.2 Reset SwyxPhone D510/ D565 | 18 |

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 wall-mounted 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 style="list-style-type: none">• The base station is active, the network registration has been successful• Operation with good RSSI, better than -75 dBm |
| solid orange | <ul style="list-style-type: none">• Operation with RSSI between -75 dBm and -90 dBm |
| unlid/ solid red | <ul style="list-style-type: none">• Impermissible RSSI below -90 dBm• Warning of factory reset or long press of reset button• Error/ Critical error |
| blinking green | <ul style="list-style-type: none">• Initialization• Scanning for base stations |
| blinking orange | <ul style="list-style-type: none">• Initialization• Search by IP |
| blinking red | <ul style="list-style-type: none">• Factory reset is carried out• Firmware upgrade/ downgrade is carried out• No Internet connection available or SIP handset registration failed |
| unlid | <ul style="list-style-type: none">• 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.xxx (whereas xxx.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

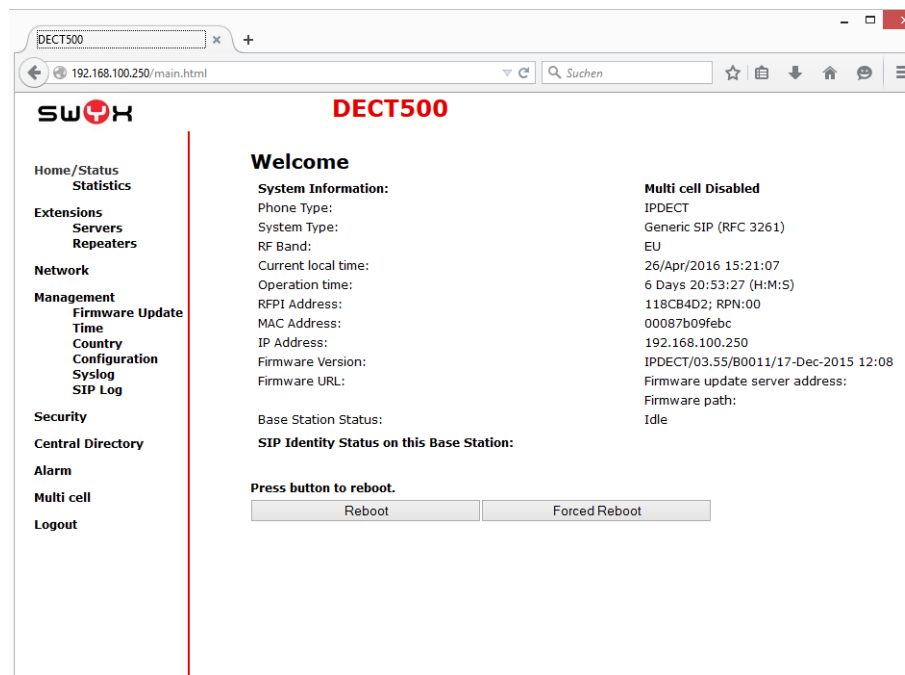
A SwyxDECT 500 must be configured so that it can be reached by Swyx-Server. Then, you can connect the DECT handsets with the SwyxDECT 500 base station and make calls via SwyxServer.

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 (*1.4 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.



- 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 "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-address 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".



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.



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-address 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. Statistics 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 <i>1.5.3.1 User</i> , page 9. Servers Setting the server to which the base station connects. See <i>Servers</i> , page 11. Repeaters Option to configure repeaters. See <i>Repeaters</i> , 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 resolution. 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. See <i>1.5.3.2 Network</i> , page 12. |

| Function | Description |
|------------------|--|
| Management | <p>Option to configure the base station for special functions, such as web interface language, log management, etc.) See <i>1.5.3.3 Management</i>, page 13.</p> <p>Firmware update Option to configure how base stations and handsets are updated. See <i>Firmware update</i>, page 14.</p> <p>Time Option to configure a time server. See <i>Time</i>, page 15.</p> <p>Country Option to configure location. See <i>Country</i>, page 15.</p> <p>Configuration Display of detailed and complete SME network settings for base stations, HTTP/DNS/DHCP/TFTP servers, SIP servers, etc. See <i>1.5.3.7 Log out</i>, page 17.</p> <p>Syslog Display of events and logs respective to the whole network (live feed only). See <i>Syslog</i>, page 16.</p> <p>SIP Log Display of SIP-related logs</p> |
| Security | Option to assign a user name and password on the base station. See <i>1.5.3.4 Security</i> , page 16. |
| Global Phonebook | Option to load a global telephone book saved on the server. See <i>1.5.3.5 Global Phonebook</i> , page 16. |
| Multicell | Option to enter the parameters for configuring a multi-cell system. See <i>1.5.3.6 Multicell</i> , page 17. |
| Log off | Log-off |

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

Edit extension (D510)

| | |
|--------------------------------------|---|
| IPEI: | <input type="text" value="0188709C12"/> |
| AC: | <input type="text" value="0000"/> |
| Extension: | <input type="text" value="510"/> |
| Authentication User Name: | <input type="text" value="510"/> |
| Authentication Password: | <input type="password" value="•••••"/> |
| Display Name: | <input type="text" value="D510"/> |
| Mailbox Name: | <input type="text" value="510"/> |
| Mailbox Number: | <input type="text" value="##10"/> |
| P-Preferred-Identity: | <input type="text" value="510"/> |
| Server: | <input type="text" value="CPE-Astra0: 192.168.100.197"/> |
| Call waiting feature: | <input type="text" value="Enabled"/> |
| BroadWorks Busy Lamp Field List URI: | <input type="text"/> |
| BroadWorks Feature Event Package: | <input type="text" value="Disabled"/> |
| Forwarding Unconditional Number: | <input type="text" value="Disabled"/> |
| Forwarding No Answer Number: | <input type="text" value="Disabled"/> <input type="text" value="90"/> s |
| Forwarding on Busy Number: | <input type="text" value="Disabled"/> |

Import Local Phonebook:

Filename: Keine Datei ausgewählt

Export Local Phonebook:

| 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. |
| SIP User: | SIP user ID you entered into the user's properties on the SwyxWare Administration. |

| Parameter | Description |
|---------------------------------------|--|
| 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-identity (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 alternative 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 1.6 *SwyxPhone D510/SwyxPhone D565 on the SwyxDECT 500*, page 18.

Servers

Server1

Server Alias:

Server 1

NAT Adaption:

Enabled

Registrar:

192.168.100.197

Secondary Registrar Address:

SIP Server Retry Check Time:

60

Call Log Server:

Registration time (s):

120

SIP Session Timers:

Enabled

Session Timer Value (s):

90

SIP Transport:

UDP

Signal TCP Source Port:

Enabled

Use One TCP Connection per SIP Extension:

Disabled

RTP from own base station:

Disabled

Keep Alive:

Enabled

Show Extension on Handset Idle Screen:

Enabled

Hold Behaviour:

RFC 3264

Local Ring Back tone:

Enabled

Attended Transfer Behaviour:

Hold 2nd Call

Directed Call Pickup:

Disabled

Directed Call Pickup Code:

Group Call Pickup:

Disabled

Group Call Pickup Code:

Use Own Codec Priority:

Disabled

DTMF Signalling:

SIP INFO

DTMF Payload Type:

101

Remote Caller ID Source Priority:

PAI - FROM

Codec Priority:

G722

G711A

G711U

Up

Down

Reset Codecs

Remove

RTP Packet Size:

20 ms

Secure RTP:

Disabled

Secure RTP Auth:

Disabled

SRTP Crypto Suites:

AES_CM_128_HMAC_SHA1_32

AES_CM_128_HMAC_SHA1_80

Up

Down

Reset Crypto Suites

Remove

Save

Cancel

| Function | Description |
|--|---|
| 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 basestation | 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 Priority | 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." |
| 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.

| Function | Description |
|--------------|--|
| Server Alias | You can enter a name for the server which consists of 10 characters max. |

- 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.



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".

Network Settings

| | |
|---|--|
| IP settings DHCP/Static IP: <input type="text" value="DHCP"/> IP Address: <input type="text" value="192.168.100.250"/> Subnet Mask: <input type="text" value="255.255.252.0"/> Default Gateway: <input type="text" value="192.168.100.1"/> DNS (Primary): <input type="text" value="192.168.100.216"/> DNS (Secondary): <input type="text" value="192.168.100.205"/> | NAT Settings Enable STUN: <input type="text" value="Disabled"/> STUN Server: <input type="text"/> STUN Bindtime Determine: <input type="text" value="Enabled"/> STUN Bindtime Guard: <input type="text" value="80"/> Enable RPORT: <input type="text" value="Disabled"/> Keep alive time: <input type="text" value="90"/> |
| VLAN Settings ID: <input type="text" value="0"/> User Priority: <input type="text" value="0"/> Synchronization: <input type="text" value="Enabled"/> | SIP/RTP Settings Use Different SIP Ports: <input type="text" value="Disabled"/> RTP Collision Detection: <input type="text" value="Enabled"/> Always reboot on check-sync: <input type="text" value="Disabled"/> Local SIP port: <input type="text" value="5060"/> SIP ToS/QoS: <input type="text" value="0x88"/> RTP port: <input type="text" value="50004"/> RTP port range: <input type="text" value="40"/> RTP ToS/QoS: <input type="text" value="0x88"/> |
| DHCP Options Plug-n-Play: <input type="text" value="Enabled"/> | |
| <input type="button" value="Save and Reboot"/> <input type="button" value="Save"/> <input type="button" value="Cancel"/> | |

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-address | Base station IP address |
| Subnet mask | Base station subnet mask. |

| Function | Description |
|-----------------|--|
| 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 |
| 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".

Management Settings

Base Station Name:

Settings

Management Transfer Protocol:

HTTP Management upload script:

HTTP Management username:

HTTP Management password:

Enable Automatic Prefix:

Set Maximum Digits of Internal Numbers:

Set Prefix for Outgoing Calls:

Syslog/SIP Log

Upload of SIP Log:

SIP Log Server Address:

Syslog Level:

Syslog Server IP Address:

Syslog Server Port:

Configuration

Configuration Server Address:

Configuration File Download:

Base Specific File:

Multi Cell Specific File:

DHCP Controlled Config Server:

DHCP Custom Option:

DHCP Custom Option Type:

Save and Reboot Save Cancel Default Base Station

| 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 username | Username for accessing the configuration server |
| HTTP management password | Password for accessing the configuration server. |

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

Firmware Update Settings

Firmware update server address:

Firmware path:

Picture path:

| Type | Required version | Required branch | Startup picture | Background picture |
|------|--------------------------------|--------------------------------|----------------------|----------------------|
| D510 | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text"/> | <input type="text"/> |
| D565 | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text"/> | <input type="text"/> |

Update Base Stations

☒ Update this Base Station only
☐ Update all Base Stations

| Required version | Required branch |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |

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 be 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, .txt, and .xml.

Import Requirements for .csv and .txt

| .txt | .csv |
|--|---|
| 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 format: First name Last name | Names must have the following format: First name Last name |
| <i>Example: John Jones</i> | <i>Example: "Jones, John"</i> |
| Phone numbers must be in canonical format and must not contain spaces (SIP-URI are not permitted). | |
| <i>Example with area code: +49023134567</i> <i>Example extension: 567</i> | |

| .txt | .csv |
|--|---|
| Name and phone number must have the following format: Name, phone number | 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) |
| <i>Example with area code: John Jones,+49023134567</i> <i>Example extension: John Jones,567</i> | <i>Example with all phone numbers: "John Jones",+49023134567,+015201234567,123</i> <i>Example with missing numbers: "John Jones",,+015201234567,123</i> |



When importing telephone numbers, the entire telephone book is re-written. 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. |

| Function | Description |
|-------------------------------|--|
| Last package received from IP | IP address of the last base station synchronized or of the repeater + time of synchronization. |

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: Multi-cast: 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." Peer-to-peer: 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

- 1 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".
✓ 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".