

Configuring
Polycom
KWS300 version PCS03
for use with
KIRK Dect 2010 handset

Quick Reference Guide

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Polycom KWS300

Overview

The Polycom KWS300 is a SIP user agent application that provides VoIP capabilities through an Internet telephony server.

The purpose of this brief guide is to familiarize the reader with the Polycom KWS300, and to guide the reader through the process of configuring the KWS300 and how to subscribe the KIRK 2010 handset.

For comprehensive information on features and functionalities beyond initial configuration please refer to the KWS300 product description on the Polycom website www.polycom.com.



Polycom KIRK DECT 2010 Handset



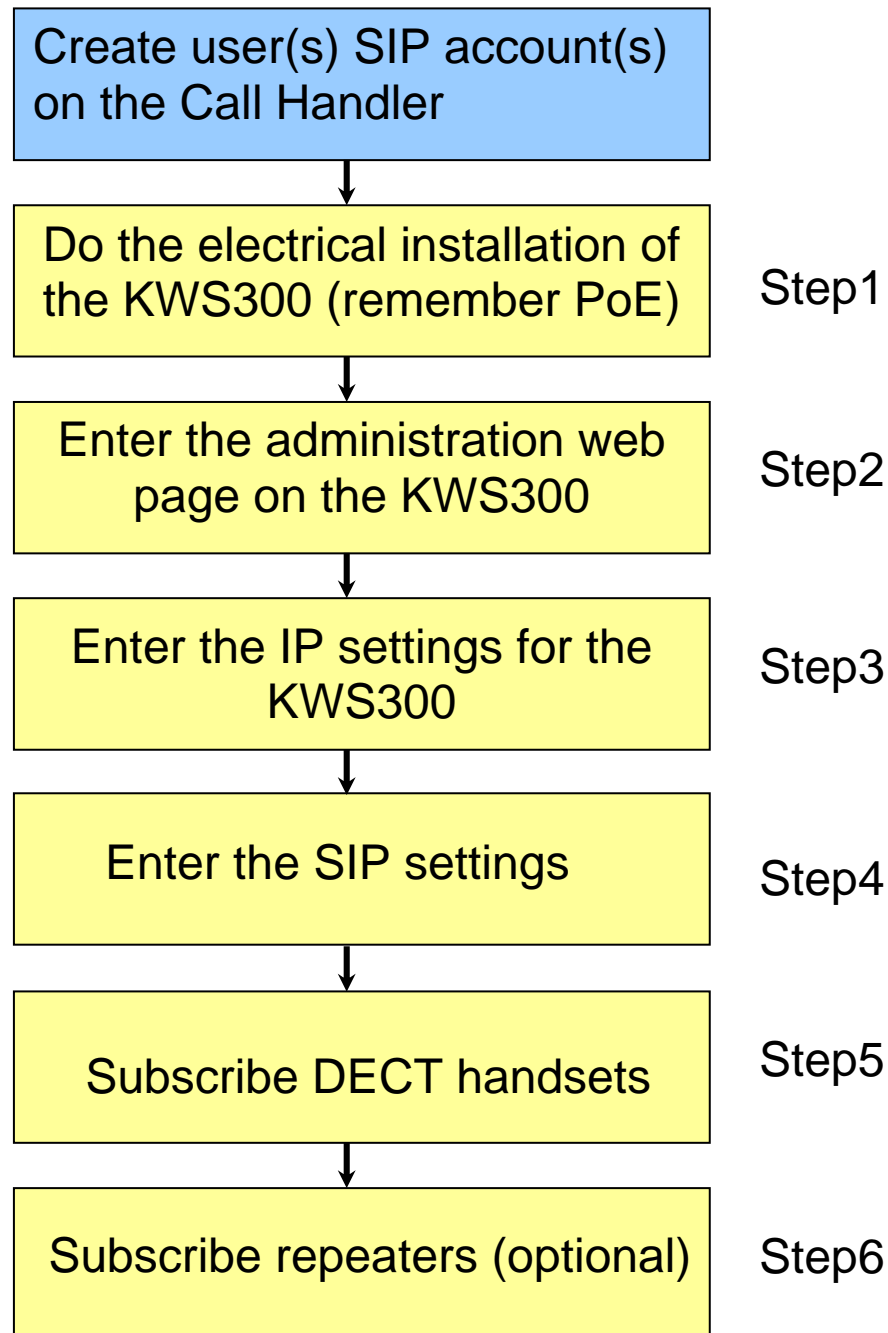
KWS300

Requirements

The following are the minimum requirements to successfully install and run the Polycom KWS300

- KWS300 with firmware version PCS03 or later
- Polycom DECT handset type 2010

Installing flow Chart



Activation (step by step installation)

Steps

The configuration of the KWS300 contains several steps as presented below:

1. Installing KWS300
2. Enter Administration Page on KWS300
3. IP setup for KWS300
4. SIP setup for KWS300
5. DECT Subscribing
6. Repeater (optional - if extended coverage is needed)

Step 1 Installing KWS300

We assumed that KWS300 was already installed and powered up, according to the installation guides.

Step 2 Enter Administration Page on KWS300

Access the Administration Page through the standard web browser using the default credentials in case the server was accessed for the first time (IP Address: 192.168.0.1; user name “admin”; password “kws300”) or with your customized credentials in case the system was already configured in your local network.

Main page of the KWS300 Administration Page



The screenshot shows the main page of the KWS300 Administration interface. At the top, there is a header bar with the Polycom logo and the text 'POLYCOM | KIRK Wireless Server 300'. Below this is a navigation menu with tabs for Status, Configuration, Users, Administration, Firmware, and Statistics. The 'General' tab is selected, and the 'General Status' section is displayed. This section contains a table with system information categorized into General, Hardware, and Firmware.

General Status	
General	
IP-addr	172.29.194.89
NTP-Server	172.29.129.31
Time	30-04-2008 14:29:25
Serial	8389065
MAC address	00:13:d1:00:01:c9
Hardware	
PartNo	14135720
PCS	PCS09C
Firmware	
PartNo	14188000
PCS	PCS00A
Build	15711M-ksorensen

Step 3 IP Setup

This step is required in case the server was not configured to your local network settings.

1) For the IP settings, click on Configuration -> General Tab

General Configuration page for KWS300



POLYCOM | KIRK Wireless Server 300

Navigation: Status | **Configuration** | Users | Administration | Firmware | Statistics

Sub-tabs: **General** | Wireless Server | Security | SIP | Provisioning | Import/Export

General Configuration

IP

DHCP assigned ☐

Use static IP address ☒

IP addr* **

Netmask **

Gateway **

MTU **

DNS

Domain

Primary Server

Secondary Server

NTP

Server **

Time zone

Posix timezone string

Buttons:

*) Required field **) Require restart

2) Enter the private local IP settings in the corresponding fields. Please get this information from your IT - administrator.

Step 4 SIP

To configure the KWS300 SIP settings, click on Configuration -> SIP tab

Adm. Page KWS300: Configuration -> SIP page

POLYCOM | KIRK Wireless Server 300

Status Configuration Users Administration Firmware Statistics

General Wireless Server Security SIP Provisioning Import/Export

SIP Configuration

General

Local port *** 5060

Transport *** UDP only

Default domain *** example.com

Proxy **

Register each endpoint on separate port ☐

Send all messages to current registrar ☐

Registration expire(sec) * 3600

Max forwards * 70

SIP type of service (TOS/Diffserv) *** 96

Authentication

Default user * someone

Default password

DTMF signalling

Send as RTP (rfc2833) ☒

Offered rfc2833 payload type 96

Send as SIP INFO ☐

Tone duration(msec) * 270

Message waiting indication

Enable indication ☒

Enable subscription ** ☒

Subscription expire(sec) * 3600

Media

Packet duration(msec) * 20

Media type of service (TOS/Diffserv) *** 184

Port range start *** 58000

Codecpriority * 1: PCMU/8000 2: PCMA/8000

Require symmetric RTP ** ☐

Call status

Play on-hold tone ☒

Display status messages ☒

key ends overlap dialing ☐

Save Cancel

*) Required field **) Require restart
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General

- **Default domain** – enter the name of the domain

Note: If no user specific domain is configured, the handsets registered on the KWS 300 will use the default domain as the domain part of the SIP URI; e.g. John Doe <sip:1234@somecompany.com>

- **Proxy** – enter SIP proxy

Note: The proxy is the SIP URI of the SIP-proxy. The KWS 300 will route all outgoing SIP signalling to the proxy, e.g. SIP registrations and outgoing calls.

- **Enable indication** – Enable the check box, if you want to display MWI in the handset

Note: The above description refers to minimal SIP configuration. For full SIP configuration details, see Appendix

Step 5 DECT Subscribing

There are two possibilities for subscribing handsets to KWS300: by auto creating users and manually.

A) Subscription by Auto create users

1) Prepare the KWS300 to “allow subscription” and “autocreate users”. Click on Configuration -> Wireless server and check the corresponding boxes. You should also provide a password for security – the System Access Code (if one is provided it should be entered also on the DECT 2010 handset. See below at step 2 action 5). You may also enable the date and time on the phones. The “Application Interface” part should be ignored as it is not relevant for auto creating users.

Configuration -> Wireless Server tab

POLYCOM | KIRK Wireless Server 300

Status Configuration Users Administration Firmware Statistics

General **Wireless Server** Security SIP Provisioning Import/Export

Wireless Server Configuration

DECT

Subscription allowed ☒

Autocreate users ☒

System access code

Send date and time ☒

Application interface

Username *

New password

New password again

Enable MSF ** ☒

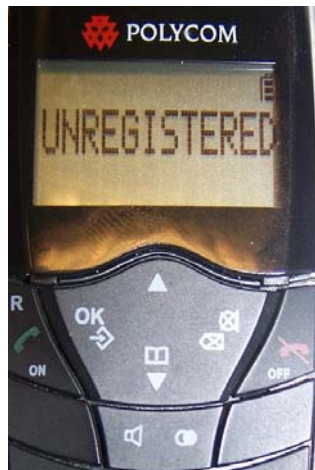
*) Required field **) Require restart

2) Subscribe the KIRK DECT 2010 handsets

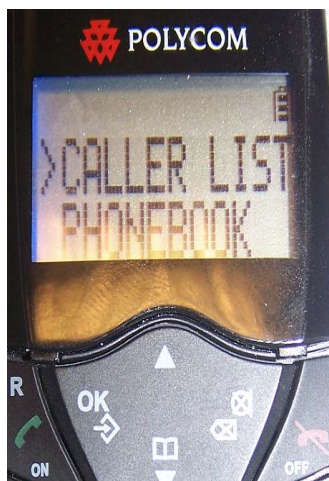
2010 handset series

For creating a subscription on a handset, follow the sequence below:

1. Power On the KIRK 2010 handset by holding down the R button.



2. Press the OK button to enter the menu.



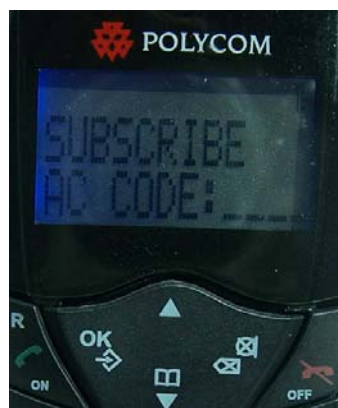
3. Navigate into Menu (press the Down arrow key) until the “REG. MENU” selection is displayed.



4. Press OK to enter the Registration Menu.



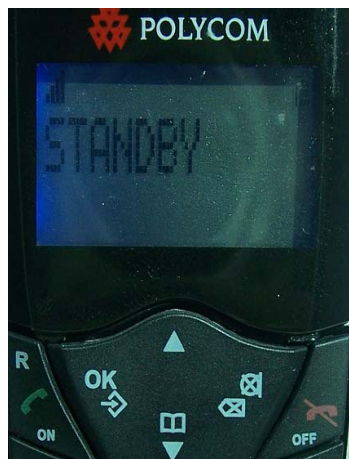
5. Press Ok to enter the “SUBSCRIBE” menu. Here you have to enter the Access code if one is provided on the KWS 300 server (see page 11). If not, press OK.



6. Check that the handset display shows "SUBSCRIBE SEARCHING". At this point the handset will be searching for the wireless server on which is assigned.



7. If the subscription was successful the handset display shows "STANDBY"



For more information about the handset, please refer to the handset user guide on Polycom website:

http://www.polycom.com/global/documents/support/setup_maintenance/products/voice/KIRK_2010_User_Guide_English.pdf

- 3) Finalize the DECT subscription to the KWS300 server in the administration page. Click Users -> List Users. The handset which has subscribed will appear in the list, showing the first 12 digits of the 13 digits IPEI number.

Adm. Page KWS300: Users/List Users page

Enabled	User	Displayname	IPEI	Sw PartNo - Pcs	Subscription	Registration
<input checked="" type="checkbox"/>	IPEI000770544146		00077 0544146	14141201 - 06M	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

4) Click on the IPEI number in the User column and the administration page for the selected handset will be opened.

Adm. Page KWS300: Users/List Users/User page

User IPEI000770544146

DECT

IPEI: 00077 0544146

Access code:

Standby text: 000770544146

SIP

Username / Extension *: IPEI000770544146

Domain:

Displayname:

Authentication user:

Authentication password:

Disabled: ☒

Save Delete Cancel

* Required field

5) Fill the fields with the values below:

DECT Part:

- **IPEI** – Already filled in by KWS300 (this is the unique IPEI number of the handset). Please note that only the first 12 digits of the IPEI are shown.
- **Access code** – OPTIONAL - 4 digit code which you choose (eg. 1111), may be left blank. Use this field if you want to increase the security for the system. Handset must be subscribed again if you change this setting.
- **Standby text** –Text shown on the display of the DECT handset.

SIP Part (these parameters must be similar to corresponding settings for the account at SIP provider).

- **Username/Extension** – Enter the user part of a SIP URI, e.g. 1234 in John Doe<sip: 1234@somecompany.com

- **Domain** – Enter the domain part of a SIP URI, e.g. somecompany.com in John Doe<sip:1234@somecompany.com.
- **Displayname** – Enter the name to be displayed (caller ID), e.g. John Doe in *John Doe* <sip:1234@somecompany.com
- **Authentication user** - Enter user name. The user name will override the *Default User* field under SIP Configuration.
- **Authentication password** - Enter a password. The password will override the *Default Password* field under SIP Configuration

Other settings

- **Disabled checkbox** – If checked, the handset will be inactive (can not receive and/or transmit calls). Remove this checkmark for getting the handset operating.

Below is an example with minimum parameter settings, for the user extension 2413331353.

Adm. Page KWS300: Users/List Users/User page

POLYCOM | KIRK Wireless Server 300

Status Configuration **Users** Administration Firmware Statistics

List Users Import/Export

User IPEI000770544146

DECT

IPEI 00077 0544146

Access code

Standby text 1353

SIP

Username / Extension * 2413331353

Domain

Displayname 2413331353

Authentication user Polycom_KWSUser3

Authentication password

Disabled ☐

Save Delete Cancel

* Required field

6) To subscribe additional handsets repeat steps 2 – 6

Note: Before attempting to configure account settings on the KWS300, ensure that a valid user profile exists on the Call Handler.

Important: To obtain a higher level of security for DECT, remove the checkmarks in Configuration – Wireless Server according to the screen dump below:

Adm. Page KWS300: Configuration/Wireless Server page


Wireless Server Configuration

DECT

Subscription allowed ☐

Autocreate users ☐

System access code

Send date and time ☒

Application interface

Username *

New password

New password again

Enable MSF ** ☒


*) Required field **) Require restart

B) Manually create users

Follow the procedure described below in order to add users manually into the system:

Note: assume that Autocreate users checkbox from Configuration -> Wireless server page is unchecked.

- 1) From the Web interface of KWS 300 click on *Users* -> *List users* tab.

Adm. Page KWS300: Users/List Users page


User List

Users overview

	Users	Subscribed	Registered
Total	0	0	0
Listed	0	0	0

<< < 1 > >>

Enabled	User	Displayname	IPEI	Sw PartNo - Pcs	Subscription	Registration
---------	------	-------------	------	-----------------	--------------	--------------

- 2) Press *New* and the user configuration window will open:

Adm. Page KWS300: Users/List Users/User page

User

DECT

IPEI

Access code

Standby text

SIP

Username / Extension *

Domain

Displayname

Authentication user

Authentication password

Disabled ☐

*) Required field

3) Fill the fields with the values below and when finish, press Save button:

DECT Part:

- **IPEI** – The first 12 digit serial Number of the Kirk handset. The 13th digit of the IPEI may be typed in but will be further ignored when displaying the registered user.
- **Access code** – OPTIONAL - 4 digit code which you choose (eg. 1111), may be left blank. Use this field if you want to increase the security for the system. Handset must be subscribed again if you change this setting.
- **Standby text** –Text shown on the display of the DECT handset.

SIP Part (these parameters must be similar to corresponding settings for the account at SIP provider).

- **Username/Extension** – Enter the user part of a SIP URI, e.g. 1234 in John Doe<sip:1234@somecompany.com
- **Domain** – Enter the domain part of a SIP URI, e.g. somecompany.com in John Doe<sip:1234@somecompany.com.
- **Displayname** – Enter the name to be displayed (caller ID), e.g. John Doe in John Doe <sip:1234@somecompany.com
- **Authentication user** - Enter user name. The user name will override the *Default User* field under SIP Configuration.
- **Authentication password** - Enter a password. The password will override the *Default Password* field under SIP Configuration

Other settings

- **Disabled checkbox** – If checked, the handset will be inactive (can not receive and/or transmit calls). Remove this checkmark for getting the handset operating.

- 4) Now you have to subscribe the handset. To do so you must follow the steps 1 -> 7 described on pages 9 -11 (2010 handset subscription)
- 5) When subscription was achieved, you should have something similar to the picture below.

Adm. Page KWS300: Users/List Users page

User List

Users overview

	Users	Subscribed	Registered
Total	1	1	1
Listed	1	1	1

New Search << < 1 > >>

Enabled	User	Displayname	IPEI	Sw PartNo - Pcs	Subscription	Registration
✓	1234	John Doe	00905 0341666	00000000 - 000	✓	✓

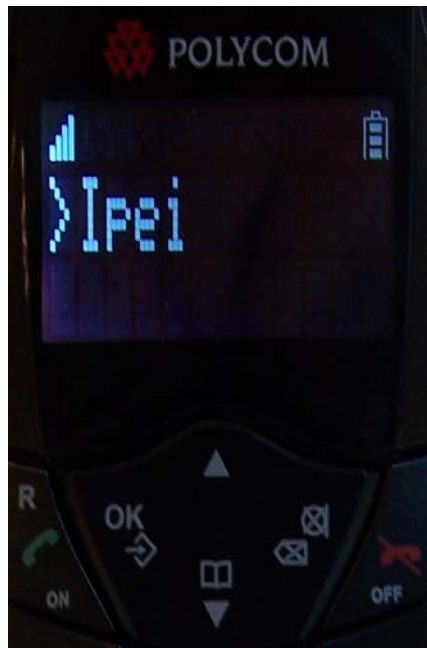
Note: How to find the IPEI Number of the handset?

In case that the user does not know the IPEI Number of the handset or for some reason the number was lost, there is a procedure to retrieve this information from the handset. Please follow the steps below:

- 1) To find the IPEI of a 2010 DECT handset you press **Ok632*** sequence when the phone is on idle mode and "SW Version" menu will display:



- 2) Press the down arrow key twice and the IPEI menu will display :



- 3) Press the Ok key and the IPEI number will display. You have to note the first 12 digits (from the 13 in total) as you will need them for subscribing the handset .In this case the IPEI is 0090503416642 but relevant are only 009050341664.



Step 6 Extending coverage by repeater (optional)

For extending the coverage by repeater, refer to KWS300 user guide.

Appendix

Full KWS300 SIP Configuration

To configure the KWS300 SIP settings, click on Configuration -> SIP. The page will show information similar to the picture below.

Configuration -> SIP page

POLYCOM | KWS300 Wireless Server 300

Navigation: Status | Configuration | Users | Administration | Firmware | Statistics

Configuration Sub-tabs: General | Wireless Server | Security | SIP | Provisioning | Import/Export

SIP Configuration

General

Local port ***: 5060

Transport **: UDP only

Default domain ***: example.com

Proxy **:

Register each endpoint on separate port: ☐

Send all messages to current registrar: ☐

Registration expire(sec) *: 3600

Max forwards *: 70

SIP type of service (TOS/Diffserv) ***: 96

Authentication

Default user *: someone

Default password:

DTMF signalling

Send as RTP (rfc2833): ☒

Offered rfc2833 payload type: 96

Send as SIP INFO: ☐

Tone duration(msec) *: 270

Message waiting indication

Enable indication: ☒

Enable subscription **: ☒

Subscription expire(sec) *: 3600

Media

Packet duration(msec) *: 20

Media type of service (TOS/Diffserv) ***: 184

Port range start ***: 58000

Code priority *: 1: PCMU/8000, 2: PCMA/8000

Require symmetric RTP **: ☐

Call status

Play on-hold tone: ☒

Display status messages: ☒

key ends overlap dialing: ☐

Buttons: Save, Cancel

General

- **Local port** – Default 5060
- **Transport** – Default UDP only, alternative is DNS SRV.
- **Default domain** – Enter the name of the domain
- **Proxy** – Address on your proxy server (optional)
- **Register each endpoint on separate port** – Option for users registration
- **Send all messages to current registrar** – Optional, useful for signal tracing
- **Registration expire** – Max. time between renewing the SIP registration
- **Max forwards** – Max. numbers of proxies or gateways jumps
- **SIP type of service** – Network Type of Service (priority)

Authentication

- **Default user** – Default SIP user (overruled if setting is given under the users account)
- **Default password** – Default SIP password (overruled if setting is given under the users account)

DTMF signalling

- **Send as RTP (rfc2833)** – Enable the check box (Real-Time Transport Protocol), if you want the keypad signalling sent as RTP packets with DTMF code.
- **Offered rfc2833 payload type** – Use default 96
- **Send as SIP INFO** – Enable the check box, if you want the keypad signalling sent as SIP INFO
- **Tone duration (msec)** – Duration for the DTMF tones, use default 270 msec

Message waiting indication

- **Enable indication** – MWI is not implemented in 2010 handset therefore this setting has no effect.
- **Enable subscription** – MWI is not implemented in 2010 handset therefore this setting has no effect.
- **Subscription Expire (sec)** – MWI is not implemented in 2010 handset therefore this setting has no effect.

Media

- **Packet duration(msec)** – Defines the duration of the RTP media stream packets
- **Media type of service (TOS/Diffserv)** – Network Type of Service (priority)
- **Port range start** – Port start range for the RTP stream

- **Codec priority** – Priority for the G.711Ulaw and G.711Alaw Codecs;
- **Require symmetric RTP** – Defines whether the in and out RTP stream is symmetric or asymmetric

Call status

- **Play on-hold tone** – Enable check box to receive on-hold tone when placed on hold
- **Display status messages** – Enable check box to receive status messages in the handset display.
- **'#' key ends overlap dialling** - Optional