

Technical Bulletin DECT5000/001				
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Subject: DECT5000 Q-SIG IWU Procedure	Number of pages: 10			

DECT5000 Q-SIG SETUP

Samsung Business Communications are pleased to announce the release of the DECT5000 system with Q-SIG connectivity to the award winning OfficeServ100 and OfficeServ500.

D5000 Supported Features

Feature	DECT500 (Analogue only)	DECT1500 Analogue	DECT1500 Q-SIG
Analogue Connectivity	•	•	
Digital Connectivity			•
DDI routing to handset	•	•	•
CLI to handset			•
CLI Alpha Tagging (local handset)			•
Call Hold (local handset)	•	•	•
Call Hold (System)	•	•	
Call diversion - Busy	•	•	
Call diversion – No-Answer	•	•	
Call diversion - All	•	•	
Extension to Extension Dialling	•	•	•
Station Pairing	•	•	
Member of Station Group	•	•	
Voice Mail	•	٠	
Call Back	•	•	
Camp-on	•	•	
65 number personal directory	•	•	•
Access to system Speed Dials	•	•	
Access to system paging	•	•	
Samsung Business Communications		www.samsi	ungbusiness.com

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Vibration Alert	•	•	•
Redial function (DECT handset feature)	•	•	•
Account Code	•	•	
Authorisation code	•	•	
Visibility to BLF button	•	•	
System DND	•	•	
9 different ring tones	•	•	•
Call transfer	•	•	•
Mute	•	•	•
Headset connection	•	•	•
Auto Answer	•	•	•
SMS (Handset to handset)		•	•
Maximum number of handsets	8	128	250
Maximum number of base stations	1	32	32
Maximum number of repeaters	6	96	96

Description

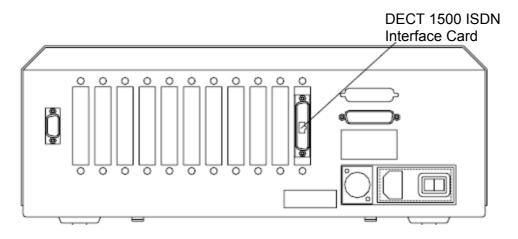
The Samsung DECT1500 ISDN QSIG Interface Card contains the following features:

- 2 MB ISDN Interface Card performs a digital 32 channel interface
- Up to 30 simultaneous conversations
- An Ethernet LAN connection
- · Local RS232 for configuration, maintenance and debugging
- Transparency for the ISDN CLIP function
- Display (call info)
- Call Hold
- Call Waiting (not set in default, see page 9 on how to enable this feature)
- Call Transfer



Installation

- 1. Power down the Samsung DECT 1500 Wireless Server.
- 2. Remove the top cover by unscrewing the screws on both sides of the Samsung DECT 1500 Wireless Server and the screws at the rear panel.



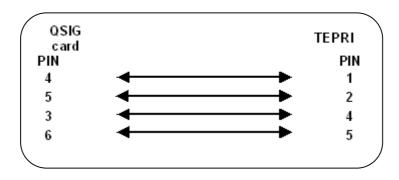
- 3. Remove the blanking plate in front of the slot closest to the power supply (see figure above).
- 4. Insert the Samsung DECT 1500 ISDN Interface Card in the slot and secure with the two screws from the blanking plate.
- 5. Replace the top cover.
- Connect an RJ45 cable (not included) between the Samsung DECT 1500 ISDN Interface Card on the rear of the Samsung DECT 1500 Wireless Server and the switch.
- 7. Power up the Samsung DECT 1500 Wireless Server again.

Software and help files are available at www.kirktelecom.com

Software

- QSIG protocol (1410 9800) for use with SAMSUNG PBX
- Wireless Server Flash Code (1330 0180). KTB
- Downloader (KirkISDNDownLoad.exe)
- Administration Software for Wireless Server 1500 version 8.04 or higher

The DECT1500 ISDN Interface Card is connected to the Samsung System with a RJ45 plug. The connection is as follows:





The Samsung System must be set to Master with Layer2 CRC check turned on. (MMC417)

The default impedance of the DECT1500 ISDN Interface Card is: 120 $\Omega.$

JP1, JP2 and JP3 is used to select receive line impedance = 120/100/75 ohms.

Impedance	npedance JP1		JP3
120	No jumper	No jumper	No jumper
100	2 – 3	1 - 2	2 - 3
75	1 – 2	2 - 3	1 - 2

Upgrading the Flash and Preparing the DECT1500 Wireless Server for Use

When preparing the DECT1500 Wireless Server for use, it is necessary to use the Administration Program. In the Administration Program you change the flash software, register users, allow subscription of handsets and type the required pin code.

1. Open the Administration Program version 8.04 or higher to change the flash software.

_	Eile Options Status Message Level Help					
Nu	imber of Allowed Users:	64				
	Serial No.	AC No.	Local No.	Standby text	PPID	CCFP 🔺
1	00077 0190256		300	ISDN 300	0	Solo/Master
2	00077 0624582		301	ISDN 301	1	Solo/Master
3	00077 0191287		302	test	2	Solo/Master
4						
5	_					
6						
7						_
		Read All	Users Creat	e All Users Delete All Users		
	Get User					
-	Serial No. AC No. Local No. Standby text PPID CCFP Part number PCS					
	Create Delete Edit					

The Administration Program window appears.





2. Under Options, click Preferences.

Preferences	×
Advanced Options IWU Versions Base Station Status	PC/CCFP Versions System Statistics Call Sta
Allow Subscription	Backup EEPROM Data to PC
Block New Calls Allow New Calls Retreive Default IWU Settings IWU Card © Default Codes All	Clear Master EEprom Transfer Flash Code to CCFP Change Password Restart System
Set IWU Card to Default settings	Enter Pin Code Pin Code Status
	Close

- In the <u>Advanced Options</u> tab, click <u>Transfer Flash Code to CCFP</u>. Open dialog box appears.
- 4. Select the flash code in question ((1330 0180.KTB), and then click **Open**. The flash software will be loaded to the system. Loading the flash can take a while.
- 5. In the Advanced Options tab, select the Allow Subscription checkbox.

Note: After registration of users, you subscribe the handsets to the system. To make subscription, this option must be allowed.

 In the Advanced Options tab, click Enter Pin Code to enter the 28-digit pin code. To get the pin code, please contact KIRK telecom Sales Support.



Enter Pin Code when dialog box appears.



Type the pin code, and then click **OK**.

- 7. Click **OK** to accept the code.
- 8. In the Advanced Options tab, click Restart System.
- 9. Click Close to return to the main window.
- 10. From the main window, click the ISDN Registration to register users.

Eil	CCFP Administration Program Image: Comparison of the status for status for the status for the status for the s						
	Numb	per of Allowed Users:					
		Serial No.	AC No.	Local No.	Standby text	PPID	CCFP 🔺
	1	00077 0190256		300	ISDN 300	0	Solo/Master
	2	00077 0624582		301	ISDN 301	1	Solo/Master
	3	00077 0191287		302	test	2	Solo/Master
L P	4						
L P	5						
L P	6						
	7						
			Read All	Users Creat	e All Users Delete All Users		
	т Ge	t User					
		.ocal No 💌		Liet	User		
Г	- Curre	ent User Data					
	Seria	I No. AC No	. Local No.	Standby tex	t PPID CCFP Part	numbe [.]	PCS
	Solo (0) 💌						
	Create Delete Edit						

- 11. Under **Current User Data**, type the serial No., AC No., and Local No. And Standby text, and then click **Create**
- 12. Close the Administration Program. The DECT 1500 Wireless Server is now ready for use.
- 13. Subscribe each handset.



Samsung OfficeServ Programming required

- MMC724: NLCR, set a network LCR Code
- MMC821: Q-SIG Trunk, set the TEPRI Card to Q-Signalling.
- MMC820: Set Node ID
- MMC824: NTWK LCR DGT, Assign the Node ID (MMC820) to the NLCR.
- MMC710: LCR Digit, Route the Node ID + NLCR to a separate Route.
- MMC603: Assign the Q-Signalling Trunks into a new group.
- MMC712: Assign the Route to the Q-Signaling trunk group (MMC603).
- MMC210: Enable LCR.

Please refer to OfficeServ Installation & Commissioning Q-SIG Setup.

Changing or Upgrading the Protocol Software

To change or upgrade the protocol software you use the Downloader program (KirkISDNDownLoad.exe). If not already installed, download the software from www.kirktelecom.com.

Setup for DECT1500 Interface Card Download

1. Connect the PC to the DECT Interface Card (J5), and start the Downloader program.

Kirk ISDN PRA DownLoad V2.0R	
Files Setup	
Progress	
DownLoad	
Initializing Communication CCM1: Opened	<u>^</u>
CCM1:BAUD=38400 PARITY=N DATA=8 STOP=1	
Binary download mode	
	~

2. Click Setup.

A Com Setup dialog box appears.

🥖 Com Setup	þ			
-Communication	Setup			
port COM1: 💌	baud pari 38400 V	ty databit • 8 •	stopbit	ASCII Download Binary Download
[<u>C</u> ancel		<u>0</u> k	





- 3. Click Binary Download.
- 4. Select comport.
- 5. Select baud: 38400
- 6. Select parity: N
- 7. Select databit: 8
- 8. Select stopbit: 1
- 9. Click OK.

The following window appears

ŝ	Kirk ISDN PRA DownLoad V2.0R
Ē	iles <u>S</u> etup
[
	File C:\DECT-WIN\SIO ISDN\14102500-QSIG-013j.a37
	Progress
	DownLoad
	Initializing Communication
	COM1:BAUD=38400 PARITY=N DATA=8 STOP=1
	Binary download mode

10. Click Files.

Open dialog box appears.

Open		? 🔀
Look in:	🔁 SIO ISDN 💽 🔶 🖻 📸	
My Recent Documents Ocsktop	14056500_06A.a37 14056500_06c.a37 14056505_008.a37 14056505_07A.a37 14056510_04A.a37 14056515-009.a37 1402500-04.a37	
My Documents	14102500-QSIG-013g.a37 14102500-QSIG-013j.a37 isidn.a37 isidn.a37 isidn.a37_no Nortel_new.a37	
My Computer	로 QSIG 13i.a37	
My Network Places		<u>O</u> pen Cancel



11. Select the flash file to be downloaded, and then click **Open**.

The following window appears.

💐 Kirk ISDN PRA DownLoad V2.0R	
<u>Files</u> <u>S</u> etup	
File C:\DECT-WIN\SIO ISDN\14102500-QSIG-013j.a37	
Progress	
DownLoad	
Initializing Communication COM1: Opened COM1:BAUD=38400 PARITY=N DATA=8 STOP=1 Binary download mode	
	~

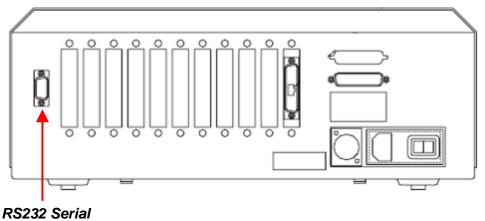
- 12. Click Download. The flash file is loaded to the system.
- 13. After loading the flash, restart the DECT Wireless Server 1500.

Setting 'Call Waiting' Indication

Call Waiting indication is a system wide parameter, once this feature has been enabled it will affect all handsets on the system.

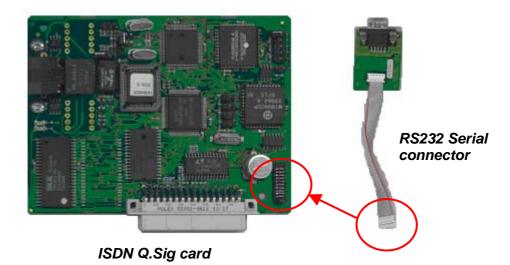
Call Waiting is enabled via the serial link on the ISDN Q.Sig Card. To enable Call Waiting:

- 1. Switch the system OFF
- 2. Connect the CCFP cable from your laptop/PC to the ISDN Q.Sig card via the RS232 serial connector, if a second RS232 connector has not been supplied, the one currently on the back of the cabinet can be disconnected and used for this (remember to put it back afterwards!).



connector





- 3. Connect the RS232 Serial Connector to the ISDN Q.Sig card. Ensure that the 'D' connector will not 'short out' anything on the power supply once the power is restored.
- 4. Switch the system ON
- 5. Using HyperTerminal (or similar), open a session with the parameters set as:

38400, 8, N, 1, No Flow Control

- 6. Once connected, press ? [ENTER] to see a list of available commands.
- 7. To see the current status of the Call Waiting feature, press CW? [ENTER].
- 8. To change this parameter, press CW [SPACE] ON (or OFF).
- 9. To check the setting has been accepted, press CW? [ENTER].
- 10. Once all the settings are as required, switch the system OFF
- 11. Remove the Serial connector and restore the system back to it original state.
- 12. Switch the system ON
- 13. Call Waiting will now be enabled.