



# Handset Service Menu Manual

**IQ8630**

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## 1 About This Document

This document describes the features available through the Service Menu in the SME VoIP DECT Handset. We describe how to operate the handset without going into details of its operations features. Complete description of operations features is addressed in a separate document.

### Audience

**This guide is intended for system administrators only.**

### Abbreviations

For the purpose of this document, the following abbreviations hold:

DHCP:	Dynamic Host Configuration Protocol
DLC:	Data Link Control (Layer)
DNS:	Domain Name Server
HTTP:	Hyper Text Transfer Protocol
IOS:	Internetworking Operating System
IPEI:	International Portable Equipment Identity
NAT:	Network Address Translator
PARI:	Primary Access Rights Identity
PCMA:	A-law Pulse Code Modulation
PCMU:	mu-law Pulse Code Modulation
RPN:	Radio fixed Part Number (Physical channel number useful in handover procedures)
SME:	Small and Medium scale Enterprise
STUN:	Session Traversal Utilities for NAT

### References/Related Documentations

[1]:	IQ8630 Handset Operations Manual V0.3
[2]:	-

### Document History

Revision	Author	Issue Date	Comments
0.1	JMG	30-Nov-2011	Initial Version
0.2	JMG	27-Mar-2012	Handover Description Added


## 2 Handset - Service Menu Management

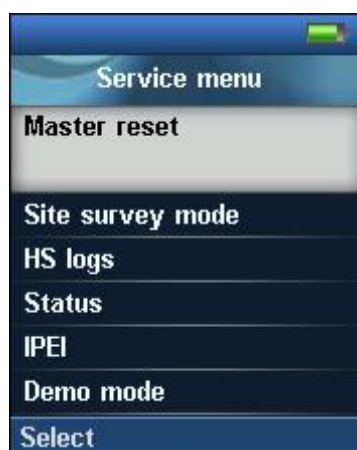
This section describes how to use the feature “Service Menu” available only to vendors and developers of the handset.

The document will also describe some options available in the Service Menu.

### Service Menu

This menu is normally used to reveal features not used/seen by the end-user. By means of a special key sequence a special service menu can be accessed. This service menu enables some special feature like Master reset, Site survey mode, Handset logs, Status, IPEI, Demo mode, Wideband and Test Tone. To access the service menu, do as following step:

**STEP 1** Click on Menu  in idle mode > Type **\*SERVICE\*** or **\*7378423\*** from the keypad to display the **Service Menu**



### Service Menu Parameter Definitions

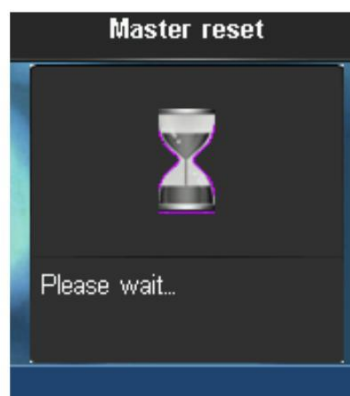
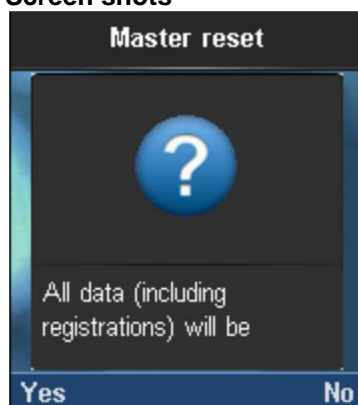
The Service Menu is not for end users – only installers and suppliers.

#### **Master Reset**

This feature allows the user to clear all settings to default, including registration and bring Handset to normal condition and initial state.

**Valid inputs:** Yes or No

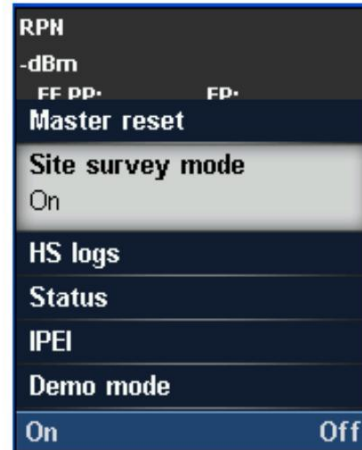
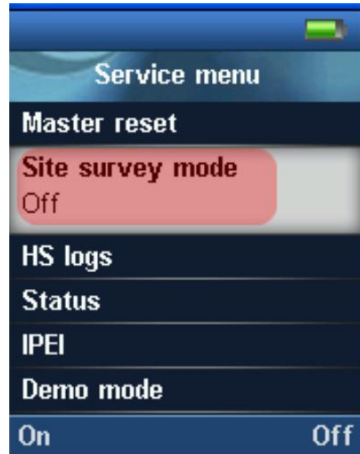
#### Screen shots



## Site Survey Mode

To enable Site Survey Mode, do as following step:

- STEP 1** On the **Service Menu** (or **Debug mode**) scroll down to the **Site survey mode**  
 > Enable the **Site survey mode** to switch from **Off** to **On**.



This sets the handset in a state to list all visible bases around it and/or chained to the same base station(s). Handsets in site survey mode can display up to 5 other handsets with the strongest signal strength.

In Site Survey Mode the handset MMI shows the RFP (including slave RFP) to which the handset is locked to and the corresponding signal strength (RSSI).

**Valid Inputs:** On or Off

```
Line1: RPN      28 20 03
Line2: -dBm    56 84 78
Line3: FE PP: 1  FP: 4
```

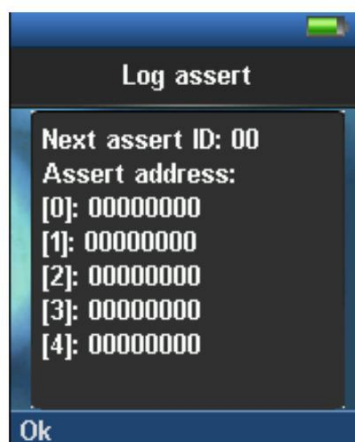
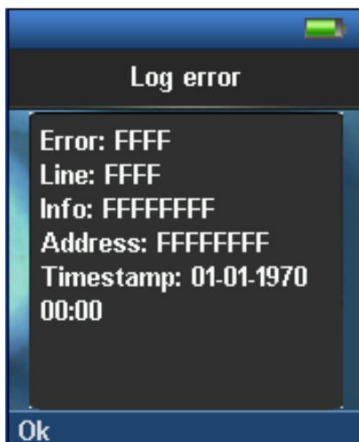
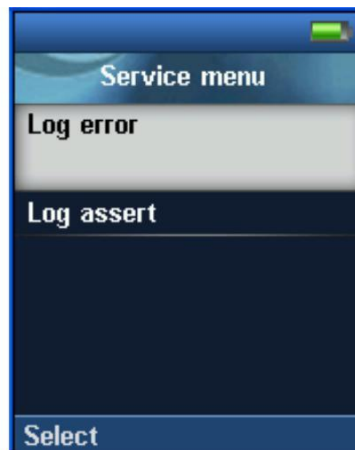
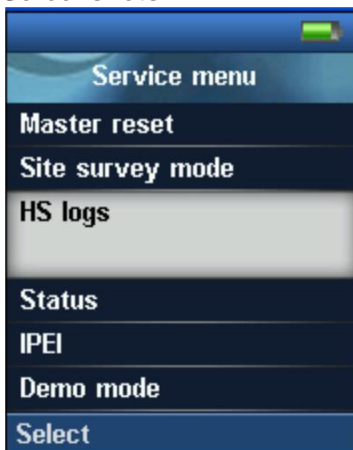
Parameter/Line	Description
<b>RPN</b>	The line contains the list of base stations identified by the handset as RPNs of the bases in respect to the signal strength values below. Up to 5 RPNs can be displayed.
<b>-dBm (Signal Strength)</b>	This indicates the actual signal strength information (RSSI) to the base station the current handset is locked to and additional RFPs visible. RSSI unit is -dBm. The RSSI value increases the closer the base is to the handset. If the base could not be detected, the RSSI value will decrease and after a while the entry will be deleted, if e.g. the dummy-bearer position has changed or the RFP is unreachable.
<b>FE PP:XX FP:XX</b>	Indicates the number of sync/CRC errors (Frame-Errors) within the last update cycle. This information is only valid for the actual link to the relevant base station. The PP value is the number of detected Sync/CRC error(s) within the last 100 receiving frames (per sec.). The FP value is the number of received bit information within the last 100 receiving frames (per sec.). This information is interpreted as Sync and CRC errors on the base station receiving side.

## HS Logs

The HS log is a debugging feature that allows the user to retrieve low level interesting messages from the handset.

HS Logs	Description
<b>Log error</b>	<p>These are debug error logs retrieved from the PP log file. The last log retrieved is formatted into:</p> <p><b>Error:</b> Log event error code. Valid value is 0000 to FFFF (in Hex).</p> <p><b>Line:</b> Location within the software code which triggered this error. Valid value is 0000 to FFFF (in Hex).</p> <p><b>Address:</b> Register bank and/address from which error occurred. Valid value is 00000000 to FFFFFFFF (in Hex.)</p> <p><b>Timestamp:</b> Date and Time when the log error event occurred.</p>
<b>Log Assert</b>	<p>This reports of the function/exception handler that run after an erroneous state in handset operation.</p> <p><b>Next assert ID:</b> Immediate exception handler ID to be run when a specific error occurs. Valid value is 00 to FF (in Hex).</p> <p><b>Assert address:</b> Register bank and/address where an exception handler is executed as a result of the error which occurred. Valid value is 00000000 to FFFFFFFF (in Hex.)</p>

### Screenshots



## Status

This provides the present condition of the handset and the base station it is location registered to. Some of the information available in this mode is described in the table below (this information is updated during location request update from the DECT system).

Parameter	Description
<b>SW Version</b>	<b>Base station:</b> Current firmware installed on the current Base station the Handset is location registered to. <b>Handset:</b> firmware presently installed in the handset. <b>Nomenclature:</b> Version Date Stamp (for e.g.: 00.21 01-07-2010 00:00).
<b>HW Version</b>	Current hardware module used in base station and handset.
<b>DECT Band</b>	Operating frequency of system. DECT band includes US, EU, LTAM, SA, N/A options.
<b>IP Address</b>	IP address of base station.
<b>MAC Address</b>	HW address of base station.
<b>System Name</b>	Name describing the SME network. Usually a string of 16 bytes.
<b>Battery Level</b>	Current handset battery energy position (in %).
<b>IPEI:</b>	HW address of the handset - see description below.



## IPEI

The IPEI (International Portable Equipment Identity) is a unique identification of portable part (handset) and DECT Repeater. The IPEI is formatted and displayed in HEX, OCT, and OCT nomenclatures.





## ***Demo mode***

The demo mode enables constantly backlighting, so be aware of that when this mode is enabled backlight saving is disabled and therefore battery consumption will increase.

## ***Wideband***

When Wideband mode is enabled (On) the handset support G722 codec, but to ensure Wideband audio remember to enable the codec in base station as well. When Wideband is disabled (Off) Narrowband codec are used, the option Prefer is not supported at the moment.

## ***Test Tone on OK key***

When this feature is enabled (On) a 1 kHz test tone can be put into the audio streaming, e.g. when a call has been established press the centre key of the handset (where this feature is enabled) and the test tone is streamed through to the counterpart handset.

## ***Handover***

The Handover menu contains Handover, Auto, Fail, and External. When Handover is enabled (On) and a call has been established, a handover can be forced by pressing arrow key up, (enable Site Survey Mode to verify this).

When Auto is enabled and a call has been established, handover is automatically made (approx. with one second interval). Enabling Fail and establishing a call make the handover fail purposely. The External feature is for internal test only.