



Avaya Solution & Interoperability Test Lab

Application Notes for Configuring JPL X400 Cordless DECT Headset with Handset Lifter from JPL Limited with Avaya 1100 Series IP Telephones – Issue 1.0

Abstract

These Application Notes describe the configuration steps for provisioning JPL X400 Cordless DECT Headset with Handset Lifter from JPL Limited with Avaya 1100 Series IP Telephones using both UNISim and SIP protocols to ensure full interoperability.

Readers should pay attention to Section 2, in particular the scope of testing as outlined in Section 2.1 as well as the observations noted in Section 2.2, to ensure that their own use cases are adequately covered by this scope and results.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab

1. Introduction

These Application Notes describe the configuration steps required to integrate JPL X400 Cordless DECT Headset with Handset Lifter (JPL-X400) from JPL Limited with Avaya 1100 Series IP Telephones using both UNISTim and SIP protocols.

The JPL-X400 is a wireless DECT headset; ideal for use at home, in a call centre and in any sized office. The noise cancelling microphone produces quality sound and digital volume control allows the adjustment of noise levels with ease. With 9 hours of talk time and 150 metre range, the JPL-X400 gives freedom and flexibility around a working environment.

This solution does not provide call control features directly from the headset, such as answering or terminating a call from the headset. This is done mechanically using the handset lifter provided with the JPL-X400 wireless DECT headset. The headsets do not offer volume control or mute functionality.

JPL Limited design and develop professional headsets for the Corporate, Financial, Health, Government, Educational, Industrial, Hotel & Hospitality and Contact Centre market sectors.

2. General Test Approach and Test Results

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls to and from the Avaya 1100 Series IP Telephones with each JPL-X400 headset attached and verifying two-way audio. The call types included calls to voicemail, to local extensions, and to the PSTN. The Avaya telephone user should be clearly heard and observed without any distortions or audio issues. The serviceability testing focused on verifying the usability of the JPL headset after restarting the Avaya 1100 Series IP Telephones and re-connecting the JPL headset.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

Avaya's formal testing and Declaration of Conformity is provided only on the headsets/handsets that carry the Avaya brand or logo. Avaya may conduct testing of non-Avaya headset/handset to determine interoperability with Avaya phones. However, Avaya does not conduct the testing of non-Avaya headsets/handsets for: Acoustic Pressure, Safety, Hearing Aid Compliance, EMC regulations, or any other tests to ensure conformity with safety, audio quality, long-term reliability or any regulation requirements. As a result, Avaya makes no representations whether a particular non-Avaya headset will work with Avaya's telephones or with a different generation of the same Avaya telephone.

Since there is no industry standard for handset interfaces, different manufacturers utilize different handset/headset interfaces with their telephones. Therefore, any claim made by a headset vendor that its product is compatible with Avaya telephones does not equate to a guarantee that the headset will provide adequate safety protection or audio quality.

2.1. Interoperability Compliance Testing

The interoperability compliance testing was carried out on the latest SIP and UNISTim firmware for Avaya 1100 Series IP Telephones. All test cases were performed manually. The following features were verified:

- Placing calls to the voicemail system. Voice messages were recorded and played back to verify that the playback volume and recording level were good.
- Placing calls from/to internal extensions to verify two-way audio.
- Placing calls from/to the PSTN to verify two-way audio.
- Hearing ring back tone for outgoing calls.
- Using the volume control buttons on the Avaya Telephone to adjust the audio volume.

2.2. Test Results

All compliance test cases passed successfully. The following observation was noted.

- No configuration changes were made on the individual telephone. Whatever default settings for the headset were in place was used to test with.
- The positioning of the handset lifter is crucial for the 1100 Series telephones because of a hook catch on the handset which makes it difficult for the lifter to lift the handset when it's not placed correctly.

2.3. Support

Support from Avaya is available by visiting the website <http://support.avaya.com>. Support from JPL-Limited is available at:

JPL Limited
Unit 1, Church Close Business Park
Church Close, Todber
Sturminster Newton
Dorset DT10 1JH
England
Phone: +44(0)1258 820100
E-Mail: sales@jpl.uk.com

3. Reference Configuration

Figure 1 shows the network topology during compliance testing. The JPL-X400 headset is connected to the telephone via an RJ9 cord from the DECT base station and a lifter is used to lift the handset of the telephone to answer a call.

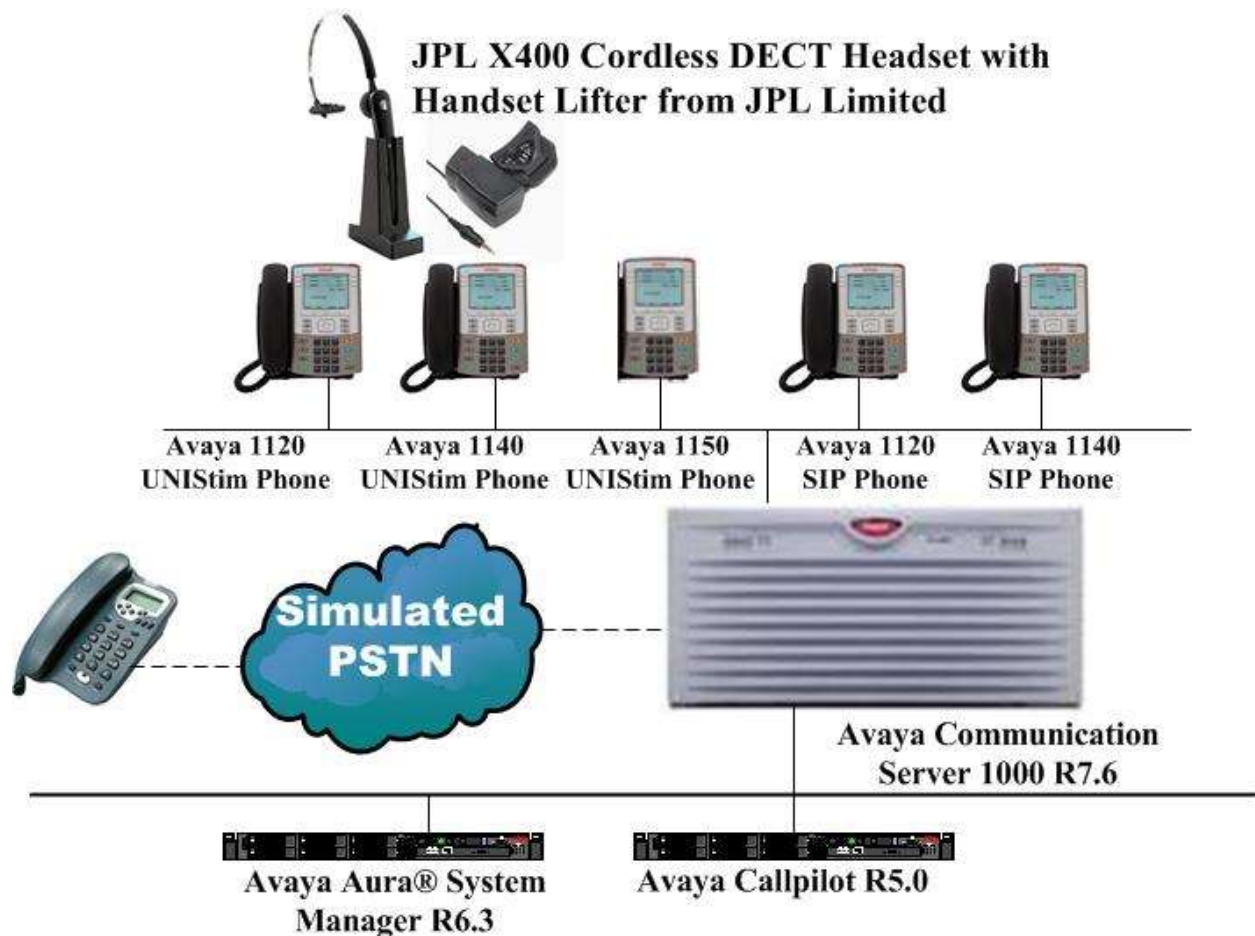


Figure 1: Network Solution of the JPL X400 Cordless DECT Headset with Handset Lifter connecting to Avaya 1100 Series IP Telephones

4. Equipment and Software Validated

The following equipment and software was used for the compliance test.

Equipment Description	Software Release
Avaya Aura® System Manager running on a virtual server	6.3.11 (SP11) Build No. – 6.3.0.8.5682 - 6.3.8.3204 Software Update Revision No: 6.3.7.7.2275
Avaya Communication Server 1000 running on an Avaya CPPM	R7.6
Avaya Callpilot Server	R5.0
Avaya 1120E IP Deskphone	UNISlim 0624C8Y
Avaya 1120E IP Deskphone	SIP 04.00.04.12
Avaya 1140E IP Deskphone	UNISlim 0625C8Y
Avaya 1140E IP Deskphone	SIP 04.03.12.0
Avaya 1150E IP Deskphone	UNISlim 0627C8Y
JPL Limited X400 Cordless DECT Headset with Handset Lifter	N/A

5. Configure Avaya Communication Server 1000

It is assumed that a fully functioning Avaya Communication Server 1000 (CS1000) is in place with the necessary licensing. It is assumed that the Avaya 1100 Series IP telephones, UNISim and SIP, are all configured. For further information on how to configure these telephones and on the configuration of CS1000 please see **Section 10** of these Application Notes.

Note: An example of a configured 1140E UNISim and SIP telephone is included in the **Appendix** of these Application Notes.

6. Configuring Avaya 1100 Series IP Telephones

Because a lifter is used to answer an incoming call there is no specific configuration required for any of the 1100 Series telephones.

7. Configure JPL X-400 Wireless Headset to work with Avaya Telephones

The following lifter is used to lift the handset on the 1100 series telephone. This is manually fitted under the handset and can be adjusted to lift the handset a certain height.



Note: With the JPL-X400 headset the base station is connected to the handset port on the 1100 series telephone using the RJ9 cord provided. Typically with a headset the headset port is used but because the lifter is used the handset port is used.

Plug out the handset cord on the Avaya 1100 series telephone and plug in the RJ9 cord from the base station.

8. Verification Steps

The following steps can be taken to ensure that connections between the JPL headsets and Avaya 1100 Series IP Telephones are achieved.

1. To answer a call press the button on the headset when the telephone is ringing the lifter should operate and lift the handset of the telephone. The call is then heard on the headset.

9. Conclusion

These Application Notes outline the steps necessary to configure the JPL X400 Cordless DECT Headset with Handset Lifter from JPL Limited to allow full interoperability with Avaya 1100 Series IP telephones, with both UNISTim and SIP firmware. Please refer to **Section 2.2** of these Application Notes for test results and observations.

10. Additional References

This section references documentation relevant to these Application Notes. Product documentation for Avaya products may be found at <http://support.avaya.com>

- [1] *Software Input Reference Administration Avaya Communication Server 1000, Release 7.6*; Document No. NN43001-611_05.02
- [2] *Avaya 1120E IP Deskphone User Guide*, Document number NN43113-103
- [3] *Avaya 1140E IP Deskphone User Guide*, Document number NN43113-106
- [4] *Avaya 1150E IP Deskphone User Guide*, Document number NN43114-100

JPL headset product documentation can be found at <http://www.jpltele.com>

Appendix

Avaya 1140E IP UNISTim Deskphone

```
DES JPL-Limited
TN 096 0 00 00 VIRTUAL
TYPE 1140
CDEN 8D
CTYP XDLC
CUST 0
NUID
NHTN
CFG_ZONE 00001
CUR_ZONE 00001
MRT
ERL 0
ECL 0
TGAR 0
LDN NO
NCOS 0
LNRS 16
XLST 0
SCPW 1234
SFLT NO
CAC_CIS 0
CAC_MFC 0
CLS UNR FBD WTA LPR PUA MTD FND HTD TDD HFD CRPD
MWD LMPN RMMD SMWD AAD IMD XHD IRA NID OLD VCE DRG1
POD SLKD CCSD SWD LNA CNDD
CFTD SFD MRD DDV CNID CDCA MSID DAPA BFED RCBF
ICDD CDMD LLCN MCTD CLBD AUTU
GPUD DPUD DNDD CFXD ARHD CNTD CLTD ASCD
CPFA CPTA ABDD CFHD FICD NAID DNAA RDLA BUZZ AGRD MOAD
UDI RCC HBTD AHA IPND DDGA NAMA MIND PRSD NRWD NRCD NROD
DRDD EXR0
USMD USRD ULAD CCBD RTDD RBDD RBHD PGND OCBD FLXD FTTC DNDY DNO3 MCBN
FDSD NOVD VOLA VOUA CDMR PRED RECA MCDD T87D SBMD
KEM3 MSNV FRA PKCH MUTA MWTD DVLD CROD ELCD
CPND LANG ENG
PLEV 02
PUID
UPWD
DANI NO
SPID NONE
DNDR 0
KEY 00 SCR 5000
01 MSB
17 TRN
18 AO6
19 CFW
20 RGA
21 PRK
22 RNP
24 PRS
25 CHG
26 CPN
```


Avaya 1140E IP SIP Deskphone

```
DES    SIP
TN     096 0 01 00  VIRTUAL
TYPE   UEXT
CDEN   8D
CTYP   XDLC
CUST   0
UXTY   SIPL
MCCL   YES
SIPN   1
SIP3   0
FMCL   0
TLSV   0
SIPU   3230
NDID   200
SUPR   NO
UXID
NUID
NHTN
CFG_ZONE 00001
CUR_ZONE 00001
MRT
ERL    0
ECL    0
VSIT   NO
FDN
TGAR   0
LDN    NO
NCOS   0
SGRP   0
RNPG   0
SCI    0
SSU
LNRS   16
XLST
SCPW   3230
SFLT   NO
CAC_CIS 0
CAC_MFC 0
CLS    UNR FBD WTA LPR MTD FND HTD TDD HFA CRPD
        MWD LMPN RMMD SMWD AAD IMD XHD IRD NID OLD VCE DRG1
        POD SLKD CCSD SWD LNA CNDD
        CFTD SFD MRD DDV CNID CDCA MSID DAPA BFED RCBF
        ICDD CDMD LLCN MCTD CLBD AUTU
        GPUD DPUD DNDD CFXD ARHD FITD CLTD ASCD
        CPFA CPTA ABDD CFHD FICD NAID DNAA RDLA BUZZ AGRD MOAD
        UDI RCC HBTB AHA IPND DDGA NAMA MIND PRSD NRWD NRCD NROD
        DRDD EXR0
        USMD USRD ULAD CCBF RTDD RBDD RBHD PGND OCBF FLXD FTTC DNDY DNO3 MCBN
        FDSD NOVD VOLA VOUD CDMR PRED RECD MCDD T87D SBMD ELMD
        MSNV FRA  PKCH MWTD DVLD CROD ELCD
CPND_LANG ENG
HUNT
PLEV   02
PUID
UPWD
DANI   NO
AST    00
IAPG   1
```

```
AACS NO
ITNA NO
DGRP
MLWU LANG 0
MLNG ENG
DNDR 0
KEY 00 SCR 3230 0      MARP
      ANIE 0
      01 HOT U 3231 MARP 0
      ANIE 0
      02
      03
      04
      05
      06
      07
      08
      09
      10
      11
      12
      13
      14
      15
      16
      17 TRN
      18 AO6
      19 CFW 16
      20 RGA
      21 PRK
      22 RNP
      23
      24 PRS
      25 CHG
      26 CPN
      27
      28
      29
      30
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