



Application Notes for EPOS ADAPT 200 Series Bluetooth Headsets to the Avaya J100 Series SIP Deskphones with Wireless Module - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate EPOS ADAPT 200 Series Bluetooth Headsets to the Avaya J100 Series SIP Deskphones with Wireless Module.

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

The EPOS ADAPT 200 Series Bluetooth Headsets connects to the Avaya J100 Series SIP Deskphones (hereafter referred to as J100) via the J100 wireless module using Bluetooth (BT). The J100 Series Deskphones that support the J100 Wireless module are the SIP Version of the J159, J179, and J189 Deskphone models.

The following EPOS ADAPT 200 Series headsets were used for compliance testing.

- ADAPT 261
- ADAPT 231

Note: See the EPOS Declaration of Compliance, **Attachment 1**, which provides details of other EPOS ADAPT 200 Series headset models for which this testing applies. For additional information contact EPOS support as shown in **Section 2.3**.

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 J100, and verifying two-way audio. The call types included calls to voicemail, to local extensions, and to the PSTN. Auto-answer, call hold and resume, mute and un-mute, and volume were also tested.

The serviceability testing focused on verifying the usability of the headset solution by reconnecting the BT to the J100 Deskphone, Cycle power the headset, restarting J100 Deskphone and moving away from the BT range.

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 recommends our customers implement Avaya solutions using appropriate security and encryption capabilities enabled by our products. The testing referenced in these DevConnect Application Notes included the enablement of supported encryption capabilities in the Avaya products. Readers should consult the appropriate Avaya product documentation for further information regarding security and encryption capabilities supported by those Avaya products.

Support for these security and encryption capabilities in any non-Avaya solution component is the responsibility of each individual vendor. Readers should consult the appropriate vendor-supplied product documentation for more information regarding those products.

For the testing associated with these Application Notes, the interface between Avaya systems and endpoints utilized enabled capabilities of TLS/SRTP.

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 Deskphones 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

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 to internal extensions to verify two-way audio.
- Placing calls to the PSTN to verify two-way audio.
- Hearing ringing tone for incoming and ring back for outgoing calls.
- Answering and ending calls using the call control buttons on the headset and headset button on J100.
- Auto-answer calls place to J100 with headset.
- Using the volume control buttons on the J100 and headset to adjust the audio volume.
- Using the mute control buttons on the J100 and headset to mute and un-mute the audio, and verifying the mute status.
- Using the hold soft button on the J100 to hold and resume the call.
- Switching between the headset, the phone handset and speaker while in conversation.
- Pairing the headset with J100 BT wireless module.

For the serviceability testing, reconnect the BT, power cycle the headset, restart J100 and moving out of the BT range are tested to verify proper operation of the headset.

2.2. Test Results

All test cases passed, and one observation was made:

- A call can be muted, but the mute status is not synchronized between EPOS headset and J100.

2.3. Support

For support on this EPOS headset solution, contact EPOS Technical Support below where sign-in is required:

- Website: <https://eposaudio.com/support/>

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify EPOS ADAPT 200 Series BT integration to the Avaya J100 Series Deskphone with Wireless Module. Avaya J189 SIP Deskphone and the following EPOS ADAPT 200 Series were used for compliance testing.

- ADAPT 261
- ADAPT 231

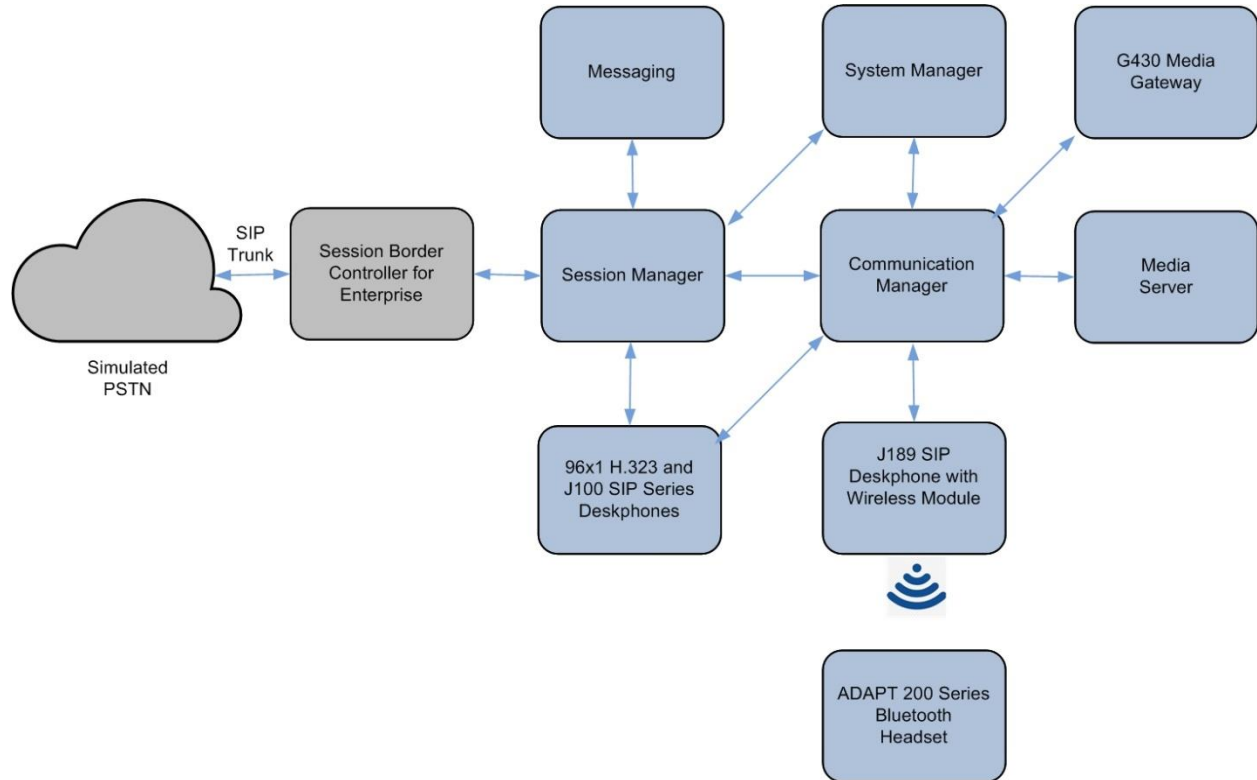


Figure 1: Test Configuration

4. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Equipment/Software	Release/Version
Avaya Aura® Communication Manager	8.1.3.0.1-FP3P1
Avaya G430 Media Gateway <ul style="list-style-type: none">• MGP	41.34.1
Avaya Aura® System Manager	8.1.3.1 Build No. - 8.1.0.0.733078 Software Update Revision No: 8.1.3.1.1012244 Service Pack 1
Avaya Aura® Session Manager	8.1.3.1.813113
Avaya Aura® Media Server	8.0.2.138
Avaya Messaging	10.8 SP1SU2
Avaya J100 Series Deskphone (H.323)	6.8511
Avaya J100 Series Deskphone (SIP)	4.0.10
EPOS ADAPT 200 Series Bluetooth Headsets <ul style="list-style-type: none">• ADAPT 261• ADAPT 231	1.4.4

5. Configure Avaya J100 Deskphone

It is implied a working Communication Manager system is already in place, including dial plans and SIP trunks to Session Manager. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 9**. It is assumed that J100 have been configured and setup. Below list the additional settings required of the J100 Deskphone from the **Menu** button for setting the **Audio Path** and **Headset Selection**.

1. Menu → Settings → Audio → Audio Path → **Headset**
2. Menu → Settings → Audio → Headset Selection → **Bluetooth**

6. Setup of EPOS headset solutions

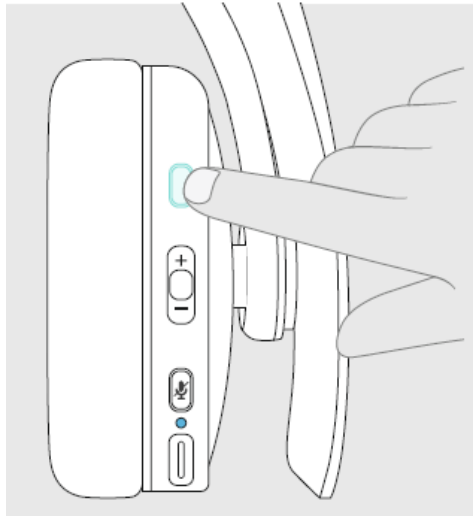
Pair the EPOS ADAPT 200 Series headset with the J100 Wireless Module BT. The following briefly lists the steps required. Refer to **Section 9** for product documents in details.

1. Power on the headset by pressing the multi-function button for 2 seconds.
2. Keep the multi-function button pressed until the LED alternatively flashes blue and red (pairing mode).
3. On J100, press Menu → Settings → Bluetooth → **Toggle On**.
4. On J100, press Menu → Settings → Device, to start scan for BT devices. The ADAPT 200 Series device is then displayed. Select it, pair and connect it to the J100.

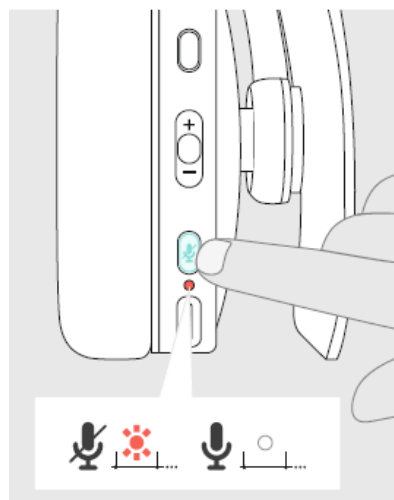
7. Verification Steps

This section verifies that the EPOS headset solution has been successfully integrated to the J100 Deskphone Wireless Module via BT.

- Pair the headset BT with J100 Wireless Module as in **Section 6**.
- Verify dial tone can be heard by pressing the headset button on J100 or the call control button on the headset.
- Make incoming and outgoing calls and verify that calls can be established with two-way audio. For incoming calls, answer the call by pressing the multi-function button on the headset (as shown below).



- End the call by pressing the same button on the headset.
- Verify also that the headset is able to remotely control call functions such as mute/un-mute (as shown below) and adjust the volume. Similarly, verify such call control functions could also be done on the J100.



8. Conclusion

These Application Notes describe the integration of EPOS ADAPT 200 Series Bluetooth Headsets to the Avaya J100 Series Deskphone Wireless Module. All test cases were completed successfully with observations noted in **Section 2.2**.

9. Additional References

This section references the Avaya and EPOS documentation that are relevant to these Application Notes.

The following Avaya product documentation can be found at <http://support.avaya.com>.

- [1] *Administering Avaya Aura® Communication Manager*, Release 8.1.x, Issue 8, Nov 2020.
- [2] *Administering Avaya Aura® Session Manager*, Release 8.1.x, Issue 7, Oct 2020.
- [3] *Using Avaya J189 SIP IP Phone in Avaya Aura®*, Release 4.0.1, Issue 1, July 2021.

The EPOS documentation can be obtained at <http://www.eposaudio.com>.

- [5] *EPOS ADAPT 200 Quick Guide* .

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Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at devconnect@avaya.com.

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Declaration of Compliance

We, EPOS Group A/S, declare under sole responsibility that within EPOS ADAPT 200 series there are more variants that have similar features, differences affecting only the wearing style and connectivity.

These differences have no other impact on firmware (FW) functionality. The schematics of RF board is 100% the same. The firmware version is also the same. The attached headsets which define the acoustics are 100% the same.

	USB & Smartphone / Tablet connectivity
Product sales name	ADAPT 260 On-ear double-sided Bluetooth® headset ADAPT 261 On-ear double-sided Bluetooth® headset ADAPT 230 On-ear single-sided Bluetooth® headset ADAPT 231 On-ear single-sided Bluetooth® headset
Product similarities	Firmware version RF PCBA Schematic Acoustical design
Differences	Single vs Double sided headset
Connection to Avaya J159, J179 and J189 SIP Deskphones using J100 wireless module	Direct Bluetooth®

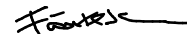
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Appendix 1. Images displaying the differences

ADAPT 231 and ADAPT 261 headsets are the same headsets as the ADAPT 230 and ADAPT 260 and the only differences is the connectivity type of the Bluetooth® dongle (USB-C vs. USB-A).

These differences are not relevant to the certification tests, being considered Bluetooth® connection only.

