



DevConnect Program

Application Notes for EPOS IMPACT 1000 Series Bluetooth Headset 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 IMPACT 1000 Series Bluetooth Headset 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 Avaya DevConnect Program.

1. Introduction

The EPOS IMPACT 1000 Series Bluetooth Headset 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.

Declaration of Compliance is detailed in **Attachment 1** for all the EPOS IMPACT 1000 Series Headsets for Avaya J100 series Deskphones. Since all headsets in these series use the same firmware, these Application Notes also apply. In these compliance testing, IMPACT 1061 ANC BT Headsets are tested.

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 are 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:

- The call is muted, but the mute status is not synchronized between EPOS headset and J100.
- With active call on the EPOS headset with audio and handset undocked, pressing the call control button on the headset drops the call instead of transferring the call to the handset.

2.3. Support

For support on this EPOS headset solution, contact EPOS Technical Support below:

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

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify EPOS IMPACT 1000 Series BT integration to the Avaya J100 Series Deskphone with Wireless Module. Avaya J189 SIP Deskphone and EPOS IMPACT 1061 ANC BT headsets are used for these compliance test.

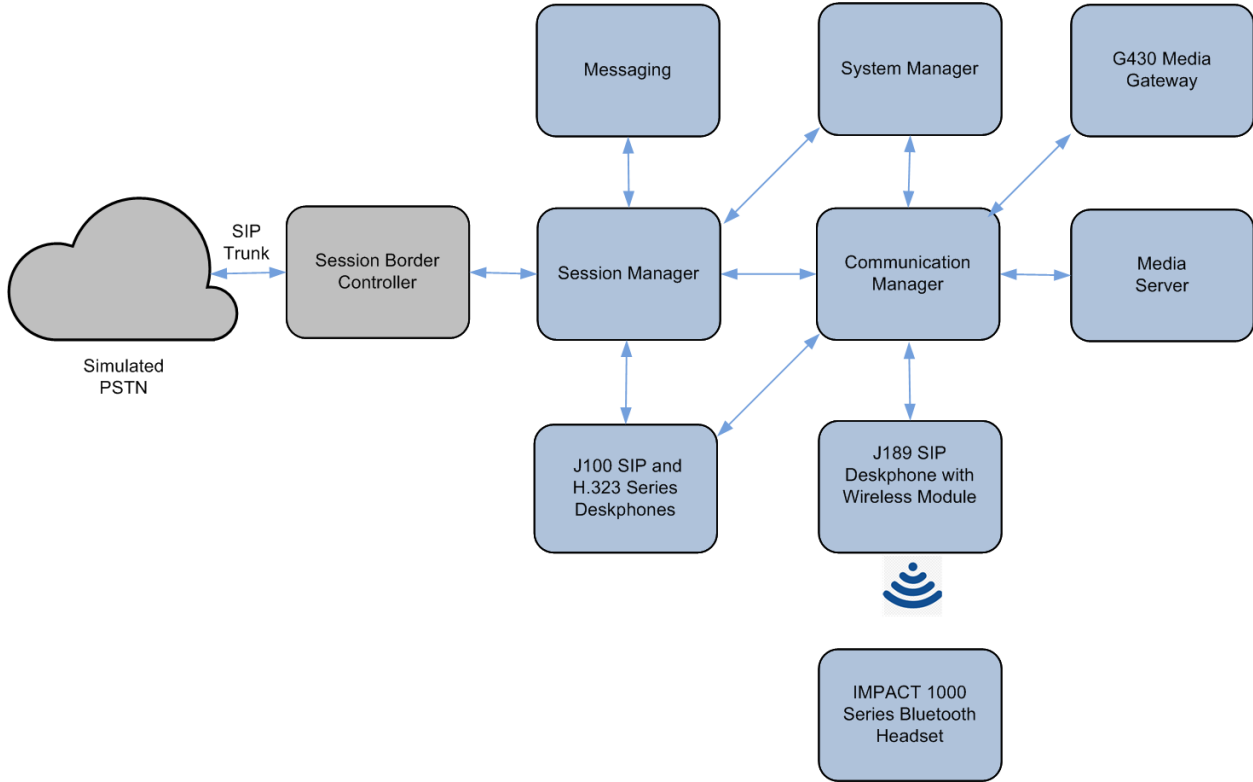


Figure 1: Test Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Session Border Controller	10.1.0.0-32-21432
Avaya Aura® Communication Manager	10.1.3 (10.1.3.0.0.974.27867)
Avaya G430 Media Gateway • MGP	42.22.0
Avaya Aura® System Manager	10.1 Build 10.1.0.0.537353 Feature Pack 3 Latest Build 10.1.3.0.0715713
Avaya Aura® Session Manager	10.1.3 (10.1.0.3.1013007)
Avaya Aura® Media Server	10.1.0.147
Avaya Messaging	10.8.20.1502
Avaya J100 Series Deskphone (H.323)	6.8.5.4
Avaya J100 Series Deskphone (SIP)	4.1.1.0
EPOS IMPACT 1000 Bluetooth Headsets • EPOS IMPACT 1061 ANC	1.0.26

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

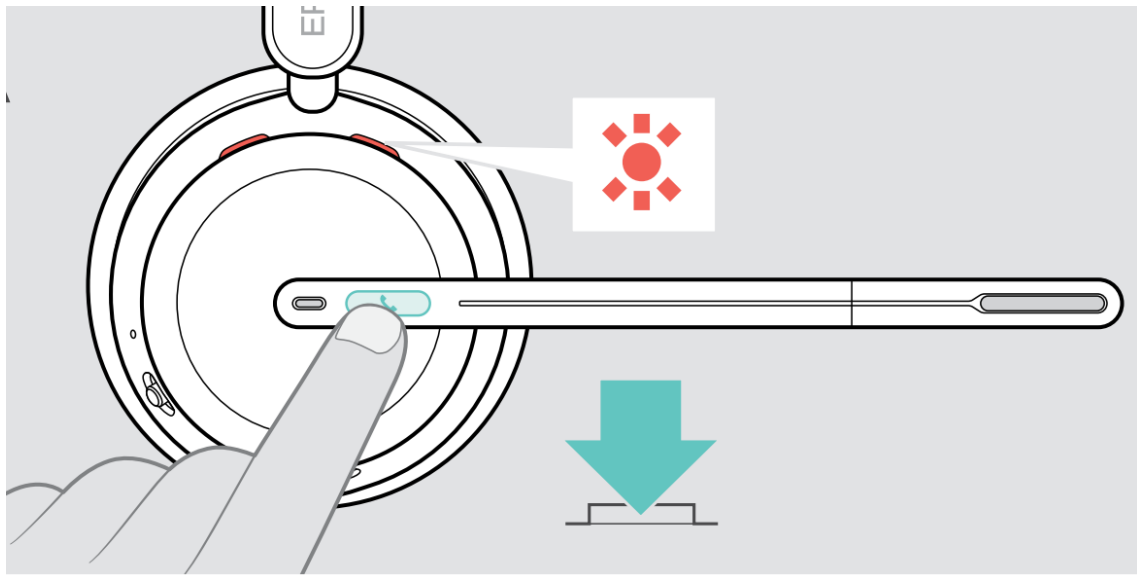
Pair the EPOS IMPACT 1000 Series BT with the J100 Wireless Module BT. The following briefly list the steps required. Refer to **Section 9** for product documents in details.

1. Move the power sliding to the center to switch the headset on.
2. Move the power sliding in the direction of the Bluetooth icon and hold it 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 IMPACT 1000 device is then displayed. Select it, pair, and connect it to the J100.

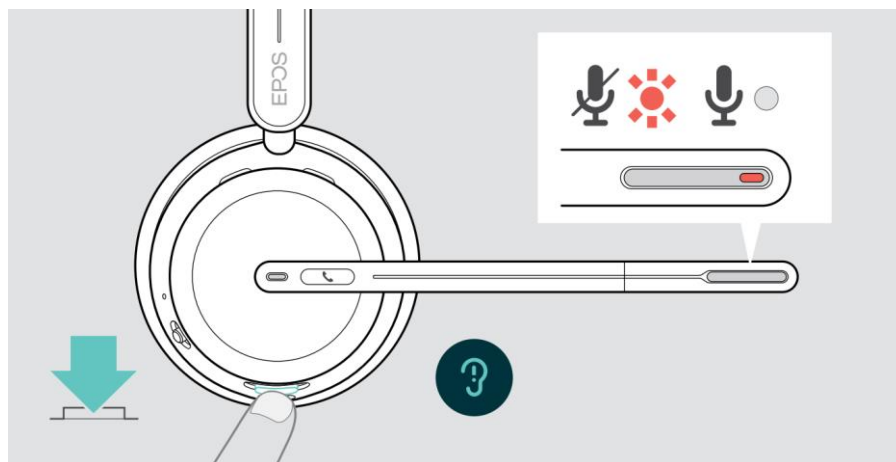
7. Verification Steps

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 can 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 IMPACT 1000 Series Bluetooth Headset 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 10.1.x, Issue 5, Mar 2023.
- [2] *Administering Avaya Aura® Session Manager*, Release 10.1.x, Issue 5, Feb 2023.
- [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 IMPACT 1000 Series User 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 IMPACT 1000 series there are more variants that have similar features, differences affecting only the wearing style.

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.

Note: The ANC model enables noise reduction (such as in open offices), and it has additionally ultra-noise-cancelling microphones.

Product sales name	IMPACT 1030 Single-sided headset, USB-C to USB-C cable, USB-A dongle IMPACT 1060 / 1060 ANC Double-sided headset, USB-C to USB-C cable, USB-A dongle IMPACT 1061 / 1061 ANC Double-sided headset, USB-C to USB-C cable, USB-A dongle, Wireless charging stand
Product similarities	Firmware version RF PCBA Schematic Acoustical design Industry leading own voice pick-up powered by EPOS AI Stereo sound Optimized B-side
Differences	Wearing style: single vs double sided headset
connection method to J100 deskphone	Bluetooth

2023-10-20

X Michael Aaslund

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Appendix 1. Images displaying the differences

IMPACT 1030



IMPACT 1060 / 160 ANC



IMPACT 161 / 161 ANC

