



Avaya Solution & Interoperability Test Lab

Application Notes for EPOS Connect and EPOS IMPACT SD & DW Series DECT Headset with Avaya one-X® Agent - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the EPOS Connect and EPOS IMPACT SD & DW Series DECT Headset with Avaya one-X® Agent.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as any 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 IMPACT SD & DW Series DECT Headset together with EPOS Connect software allow connection and call control with Avaya one-X® Agent (hereafter referred to as one-X Agent) using a cable via the USB interface to the PC. The EPOS Connect is a collection of programs that enable remote call control with EPOS headsets and one-X Agent. With an EPOS headset connected to the PC USB interface, users can directly answer, end, mute/unmute and adjust volume with the headset.

The following EPOS IMPACT SD & DW Series DECT headsets were used for compliance testing.

- IMPACT SD Pro 2 ML
- IMPACT DW Office ML
- IMPACT DW Pro 2 ML

Note: See the EPOS Declaration of Compliance, **Attachment 1**, which provides details of other IMPACT SD & DW Series DECT headsets 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 with one-X Agent, answering and ending calls using the call control button on the EPOS headset, and verifying two-way audio. The call types included calls to voicemail, local extensions, and the PSTN. Auto-answer, call hold and resume, mute and unmute, and volume were also tested.

The serviceability testing focused on verifying the usability of the headset solution after restarting the one-X Agent, restarting the PC, reconnecting the headset USB cable to the PC and moving out of the DECT 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 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

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.
- Answering and ending calls using the call control button on the headset and base, and the soft button on one-X Agent.
- Using the soft button on one-X Agent to hold and resume the audio.
- Using the volume buttons on the headset to adjust the audio volume.
- Using the mute button on the headset and the soft button on one-X Agent to mute and un-mute the audio and verifying the mute status.
- Verifying incoming call notification.
- Verifying call ended notification.

The serviceability testing focused on verifying the usability of the headset solution after restarting the one-X Agent, restarting the PC, reconnecting the USB interface to the PC and moving out of the DECT range.

2.2. Test Results

All test cases passed successfully.

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 the EPOS Connect and EPOS IMPACT SD & DW Series DECT headset with Avaya one-X® Agent. The EPOS Connect software was installed on the PCs together with Avaya one-X® Agent. The EPOS headsets base were connected via cable into the PCs' USB interface. The following EPOS IMPACT SD & DW Series DECT headsets were tested:

- IMPACT SD Pro 2 ML
- IMPACT DW Office ML
- IMPACT DW Pro 2 ML

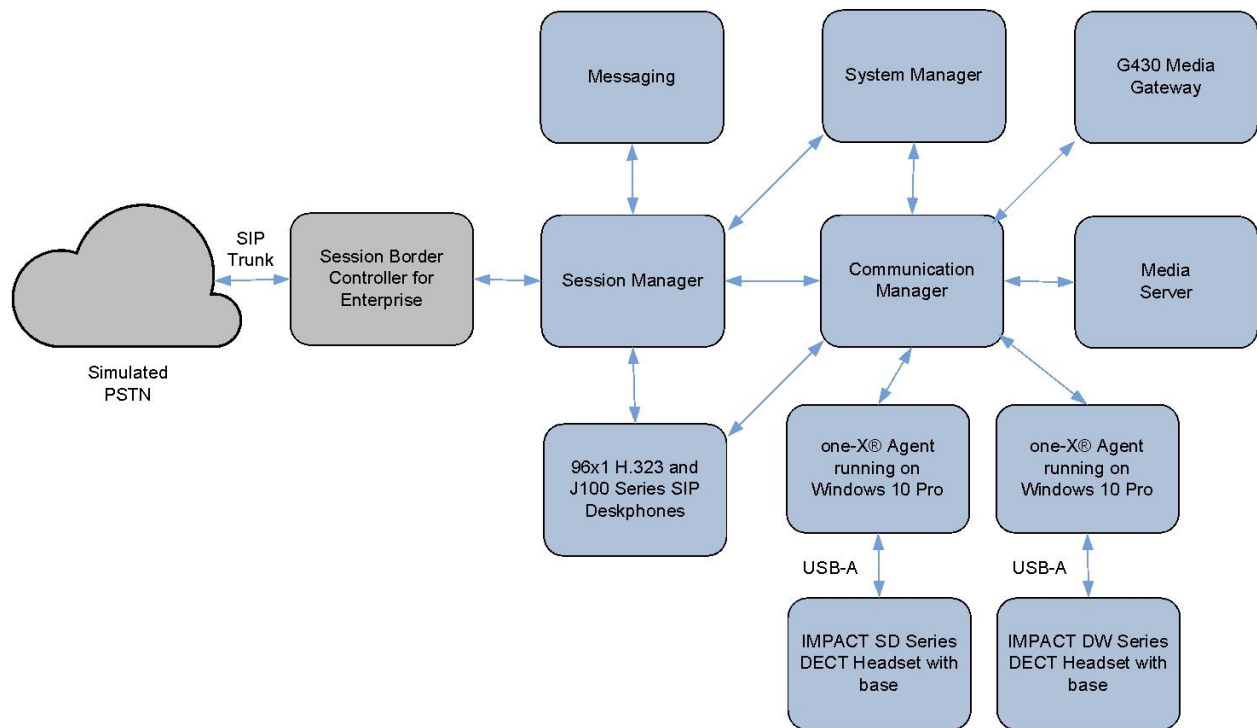


Figure 1: Test Configuration

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 96x1 Series H.323 Deskphones | 6.8511 |
| Avaya J100 Series SIP Deskphones | 4.0.10 |
| Avaya one-X® Agent running on Windows 10 Pro | 2.5.15 (H.323) |
| IMPACT SD & DW Series DECT Headsets <ul style="list-style-type: none">• IMPACT SD Pro 2 ML• IMPACT DW Office ML• IMPACT DW Pro 2 ML | 175 |
| EPOS Connect for Windows | 4.5.0.1295 |

5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for one-X Agent. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

Use the **add station** command to create a station for one-X Agent. Set the **Type** field to the station type to be emulated. In this example, *9641G* was used. Set the **Port** field to *IP* and configure a **Security Code**, which will be used as the password by one-X Agent to log in. Set the **IP Softphone** field to *y*.

```

add station 10004                                     Page 1 of 5
                                                    STATION
Extension: 10004                                     Lock Messages? n          BCC: 0
Type: 9641G                                         Security Code: xxxxxx    TN: 1
Port: S00005                                        Coverage Path 1:         COR: 1
Name: one-X Agent                                  Coverage Path 2:         COS: 1
                                                    Hunt-to Station:         Tests? y

STATION OPTIONS
Location:                                           Time of Day Lock Table:
Loss Group: 19                                     Personalized Ringing Pattern: 1
                                                    Message Lamp Ext: 10003
Speakerphone: 2-way                                Mute Button Enabled? y
Display Language: english                          Button Modules: 0
Survivable GK Node Name:                           Media Complex Ext:
Survivable COR: internal                            IP SoftPhone? y
Survivable Trunk Dest? y

                                                    IP Video Softphone? n
Short/Prefixed Registration Allowed: default

                                                    Customizable Labels? y
  
```

On **Page 4** of the Station form, configure the additional feature buttons shown in bold, which are used by one-X Agent to log in as an Automatic Call Distribution (ACD) agent.

```


add station 10004                                     Page 4 of 5
                                                    STATION
SITE DATA
Room:                                               Headset? n
Jack:                                               Speaker? n
Cable:                                             Mounting: d
Floor:                                             Cord Length: 0
Building:                                          Set Color:

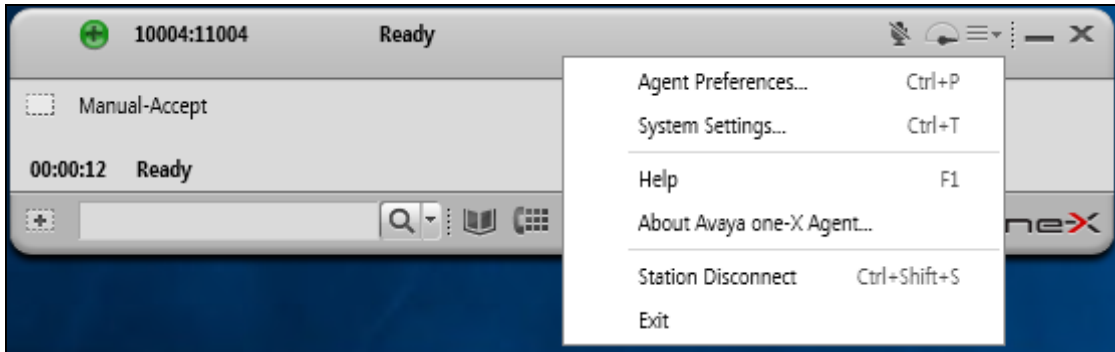
ABBREVIATED DIALING
List1: system                                     List2:                    List3:

BUTTON ASSIGNMENTS
1: call-appr                                     5: abrv-dial List: 1 DC: 01
2: call-appr                                     6: abrv-dial List: 1 DC: 02
3: call-appr                                     7: auto-in      Grp:
4:                                               8: aux-work    RC:      Grp:

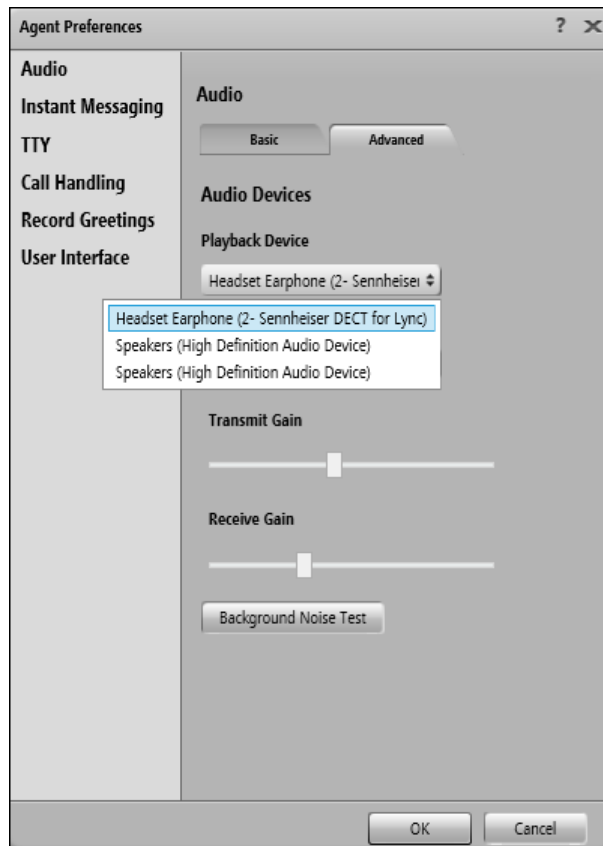
voice-mail 10000
  
```

6. Configure Avaya one-X® Agent

Before configuring the one-X Agent, the headset has to be configured and provisioned as in **Section 7** first. After logging into one-X Agent, click on the menu  and then select **Agent Preferences** as shown below.



In the **Agent Preferences** window, click on **Audio** in the left panel and then select the **Advanced** tab on the right as shown below. Check that **Playback Device** and **Record Device** fields display the right headset model. In the following *Sennheiser DECT for Lync* is selected for DW Office ML. Otherwise, select the device from the click down menu on the respective box.



7. Configure EPOS IMPACT SD & DW Series DECT Headsets solutions

This section covers the steps to integrate EPOS IMPACT SD & DW Series DECT headsets with one-X Agent, including:

- Installing the EPOS Connect software
- Connect the EPOS headset
- Configuring EPOS headset with EPOS Connect

Note: After successfully performing this procedure, the EPOS headset will be detected in one-X Agent as described in **Section 6**.

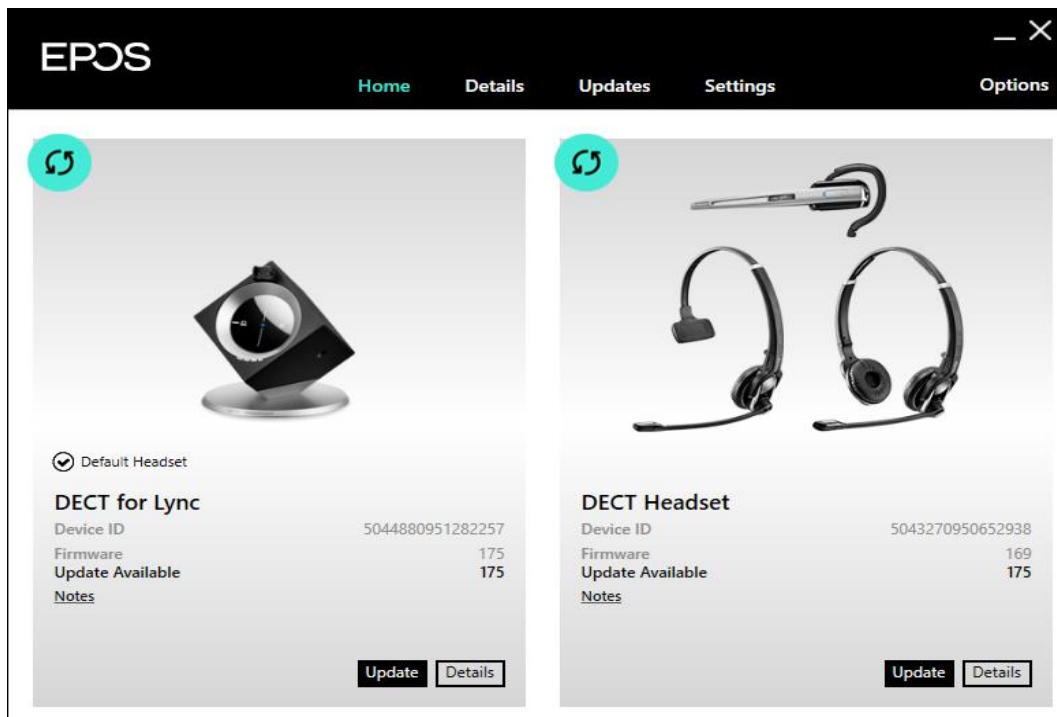
7.1. Installing the EPOS Connect Software

EPOS Connect software can be obtained from EPOS support portal at <https://eposaudio.com/support/>. Installation of the software is done through running the .exe file and following the prompt.

7.2. Connect the EPOS headset

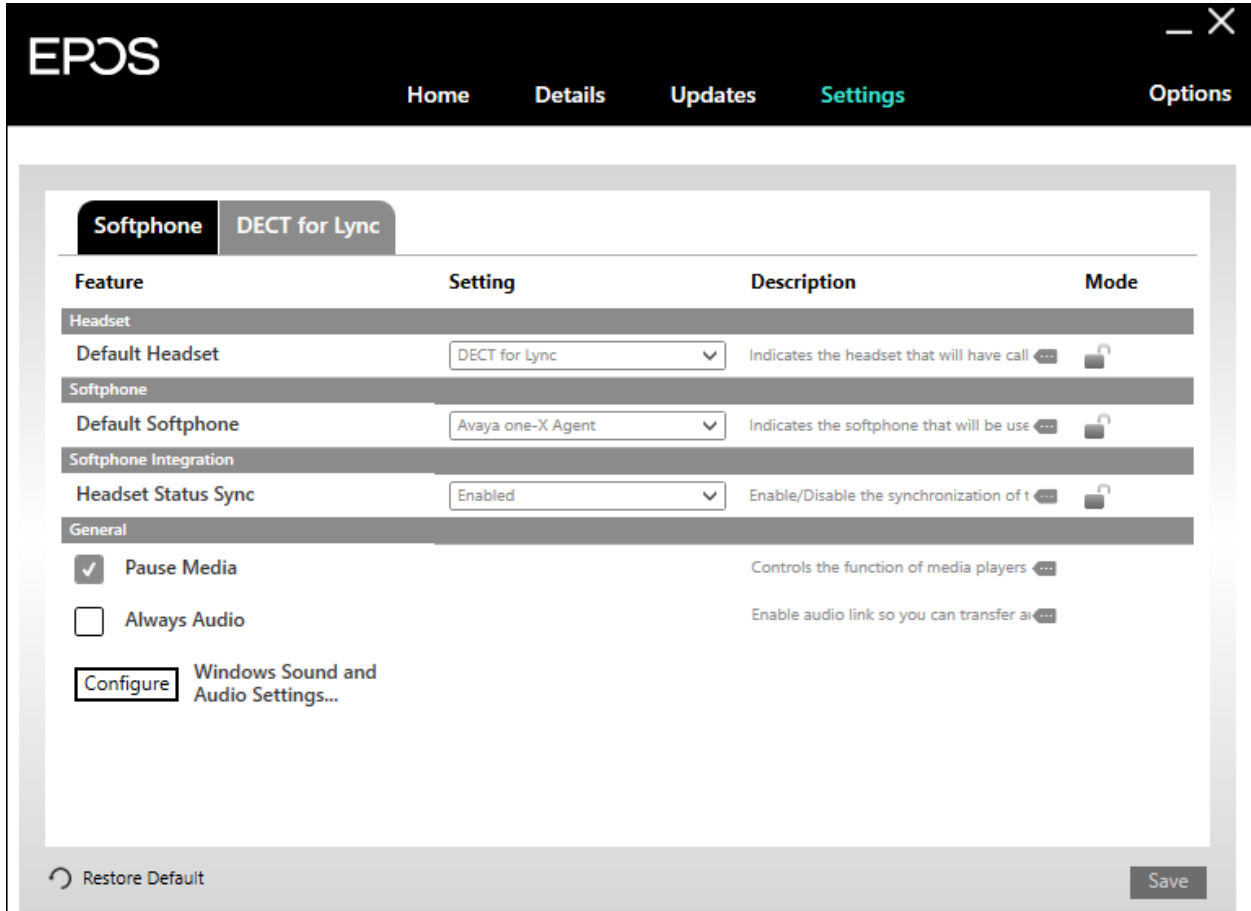
Plug the EPOS IMPACT SD & DW Series DECT headset base into the USB port of the PC. The device drivers will automatically be installed.

Open the EPOS Connect program installed on the PC. Select the **Home** tab and check that the headset is detected as shown below which is for one of the headset EPOS IMPACT DW Office ML tested.



7.3. Configuring EPOS headset with EPOS Connect

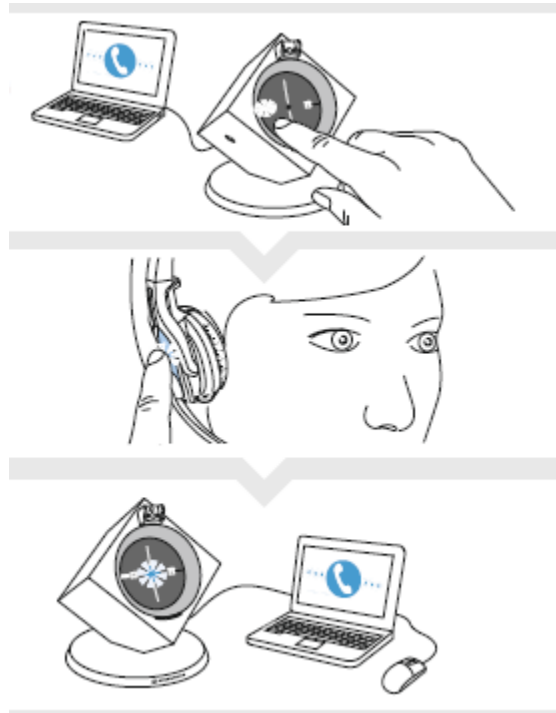
Open the one-X Agent program and click EPOS Connect program **Settings** tab follow by **Softphone** sub tab as shown below. Verify the **Default Headset** is properly detected. Check that the **Default Softphone** is set as **Avaya one-X Agent**. Otherwise, click the drop-down menu of **Default Softphone** to select. Click **Save** on the bottom right to retain it.



8. Verification Steps

This section verifies that the EPOS solution has been successfully integrated with one-X Agent PC.

1. Open the EPOS Connect program to verify that the headset has been successfully connected to the PC for use with one-X Agent running. Observed that EPOS IMPACT SD & DW Series DECT headset is detected as detailed in **Section 7.2**.
2. 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 call control button on the headset or base (as shown below for DW Series).
3. End the call by pressing the same call control button on the headset or base.
4. Verify also that the headset is able to remotely control call functions such as mute/unmute and adjust the volume. Similarly, verify such call control functions could also be done on one-X Agent.



9. Conclusion

These Application Notes describe the configuration steps required to integrate EPOS Connect and EPOS IMPACT SD & DW Series DECT Headset with Avaya one-X® Agent. All test cases were completed successfully.

10. 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] *Using Avaya one-X® Agent, Release 2.5.10 (H.323)*, Issue 1.0, Mar 2017.

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

[3] *EPOS DW Series Base station Quick Guide*.

[4] *EPOS IMPACT SD Series 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.

EPOS Group A/S
 Industriparken 27,
 DK-2750 Ballerup, Denmark
 eposaudio.com


Declaration of Compliance

We, EPOS Group A/S, declare under sole responsibility that product series, IMPACT DW Office/Pro 1/Pro2, and IMPACT SD Office/Pro1/Pro2 are only mechanical variations with no impact on firmware (FW) functionality or acoustical performance.

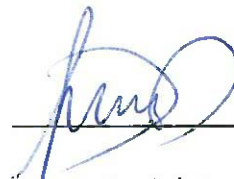
The difference between the IMPACT DW Office/Pro 1/Pro2 and IMPACT SD Office/Pro 1/Pro2 is the base station which was redesigned mechanically while the schematics and RF board is kept 100% the same. The FW is also the same. The headsets which defines the acoustics are 100% the same.

| | IPC Recommended product series | Variant series |
|----------------------|---|--|
| Product sales name | IMPACT DW Office IMPACT DW Pro 1 IMPACT DW Pro 2 | IMPACT SD Office IMPACT SD Pro 1 IMPACT SD Pro 2 |
| Product similarities | Firmware image Headsets supported RF PCBA Schematic Acoustical design | |
| Product differences | Mechanical design of basestation | |

Table 1: Products overview



Theis Mørk
 VP Product Management Enterprise
 Solutions
 EPOS Group A/S



Jurate Beniulyte
 Head of Strategic Alliances
 EPOS Group A/S

EPOS Group A/S
Industriparken 27,
DK-2750 Ballerup, Denmark
eposaudio.com

Appendix 1: Photos

Front side: IMPACT DW Office/Pro 1/Pro2 base

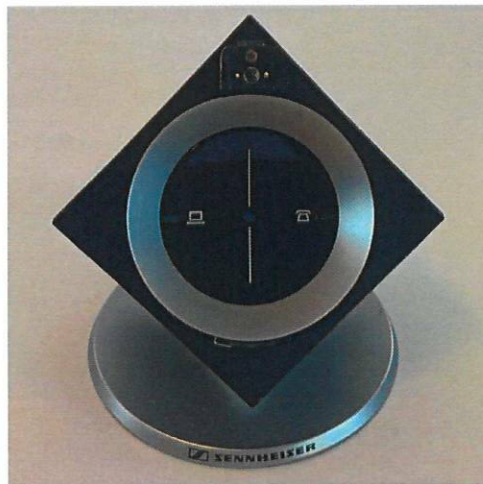


Photo 1: IMPACT DW Office/Pro 1/Pro 2 base, front view

Showing buttons for selection of soft phone or desk phone & hook on / answer and hook off and led lights and contacts for charging.

Front side: IMPACT SD Office/Pro 1/Pro2 base



Photo 2: IMPACT SD Office/Pro 1/Pro 2 base, front view

Showing buttons for selection of soft phone or desk phone & hook on / answer and hook off, led lights and contacts for charging.

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 DK-2750 Ballerup, Denmark
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Rear side: IMPACT DW Office/Pro 1/Pro2



Photo 3a; IMPACT DW Office/Pro 1/Pro2, rear side view

Photo 3b ; IMPACT DW Office/Pro 1/Pro2, rear side view, close up

Showing termination selector (ABC button), volume control, dip switches, connectors for phone, handset & ACC, micro USB and power supply.

Rear side: IMPACT SD Office/Pro 1/Pro2



Photo 4a; IMPACT SD Office/Pro 1/Pro2, rear side view

Photo 4b; IMPACT SD Office/Pro 1/Pro2, bottom side view

Showing connectors for phone, handset & ACC, micro USB and power supply.

Showing termination selector (ABC button), volume control and dip switches.