



## **Application Notes for Sennheiser Communications A/S HeadSetup Software and SD & DW Series Headsets with Avaya Communicator for Windows 2.1 - Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required to integrate the Sennheiser Communications A/S HeadSetup software and SD & DW Series Headsets with Avaya Communicator for Windows 2.1. HeadSetup is a collection of programs that enable remote call control with Sennheiser headsets and Avaya Communicator for Windows. With Sennheiser SD & DW Series Headsets connected via DECT radio to the base, users can answer, end, mute/unmute and adjust volume using buttons on the DW Series Headsets device.

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 Sennheiser Communications A/S DW Office USB Headsets together with HeadSetup software allow connection and call control with Avaya Communicator for Windows 2.1 (hereafter referred to as Avaya Communicator) via USB port on a PC. HeadSetup is a collection of programs that enable remote call control with DW Series Headsets and Avaya Communicator. In this compliance testing, the DW Office USB Headsets is used. With Sennheiser DW Office USB Headsets connected via DECT radio to the base, users can answer, end, mute/unmute and adjust volume using buttons on the device.

DW Office USB headsets are part of the DW series headset (Europe) and SD series headset (US). Although only the DW Office were used in the compliance testing, Sennheiser Communications A/S declares that all functional and electrical characteristics related to interoperability with Avaya phones are identical for the product series DW Office/Pro1/Pro2, and SD Office/Pro1/Pro2. This includes the firmware which controls functionality and acoustical performance. This compliance testing therefore applies to both the DW and the SD series. The list of DW and SD Series Headsets can be found in the **Section 10**, reference [8].

## 2. General Test Approach and Test Results

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls with Avaya Communicator, answering and ending calls using the call control button on the headset, and verifying two-way audio. The call types included calls to voicemail, local extensions, and the PSTN.

The serviceability testing focused on verifying the usability of the Sennheiser headset solution after restarting the Avaya Communicator, restarting the PC, moving a distance away from PC to lose radio connectivity and reconnecting the headset to the PC.

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

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 the soft button on Avaya Communicator.
- Using the soft button on Avaya Communicator to hold and un-hold the audio.
- Using the volume control buttons on the headset to adjust the audio volume.
- Using the voice control button on the headset and the soft button on Avaya Communicator to mute and un-mute the audio.
- Verifying incoming call notification and ringback tone for outgoing calls on headset.
- Verifying call ended notification on headset.

The serviceability testing focused on verifying the usability of the Sennheiser headset solution after restarting the Avaya Communicator, moving a distance away from PC to lose radio connectivity, restarting the PC and reconnecting the headset to the PC.

## 2.2. Test Results

All test cases are successfully completed.

## 2.3. Support

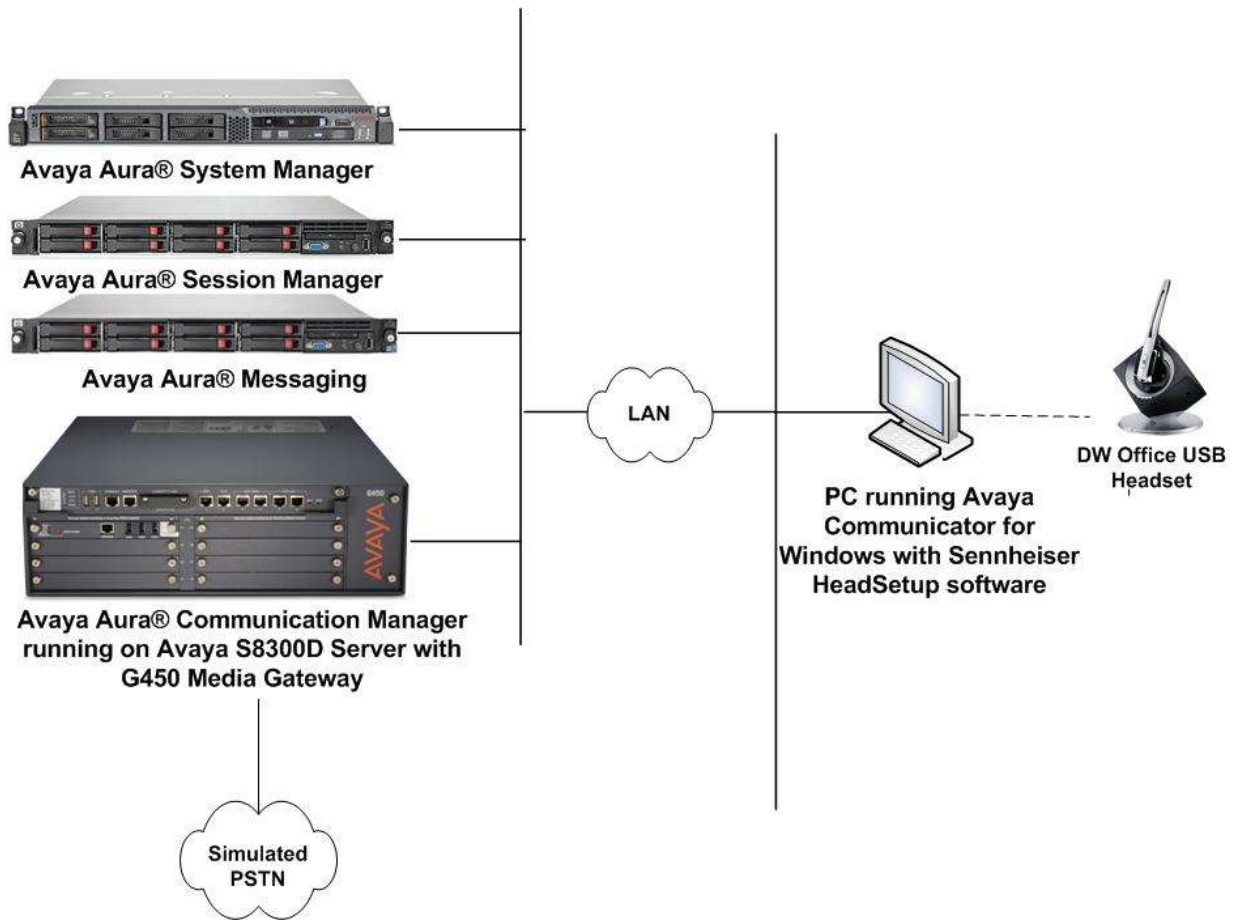
For support on the Sennheiser Communications A/S headset solution, contact Sennheiser Communications A/S technical support at:

Website: <http://en-de.sennheiser.com/service-support/>

Phone: +1-866-697-8757

### 3. Reference Configuration

**Figure 1** illustrates the test configuration used to verify Sennheiser HeadSetup software and DW Office USB Headsets solution. The configuration consists of an Avaya S8300D Server running Avaya Aura® Communication Manager with an Avaya G450 Media Gateway providing connectivity to the simulated PSTN via an ISDN-PRI trunk. Avaya Aura® Messaging was used as the voicemail system. The Sennheiser HeadSetup software was installed on the PC. The DW Office USB headsets are connected via the USB interface on the PC.



**Figure 1: Test Configuration**

## 4. Equipment and Software Validated

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

<b>Equipment/Software</b>	<b>Release/Version</b>
Avaya Aura® Communication Manager running Avaya S8300D Server with a G450 Media Gateway	6.3.9.1 (Build R016x.03.0.124.0-22098)
Avaya Aura® System Manager	6.3.12 (6.3.12.9.3022)
Avaya Aura® Session Manager	6.3.12 (6.3.12.0.631208)
Avaya Aura® Messaging	6.3.124.321-1.251259
Avaya Communicator for Windows running on Windows 7 Professional Service Pack 1	2.1 (2.1.0.69)
Sennheiser HeadSetup Software	V3.0.4
Sennheiser DW Office Headset	131

Note: Although only the Sennheiser DW Office headset was used in the compliance testing, Sennheiser Communications A/S declares that all functional and electrical characteristics related to interoperability with Avaya phones are identical for the product series DW Office/Pro1/Pro2, and SD Office/Pro1/Pro2. This includes the firmware which controls functionality and acoustical performance. This compliance testing therefore applies to both the DW and the SD series.

# Configure Avaya Aura® Communication Manager


This section covers the station configuration for Avaya Communicator. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

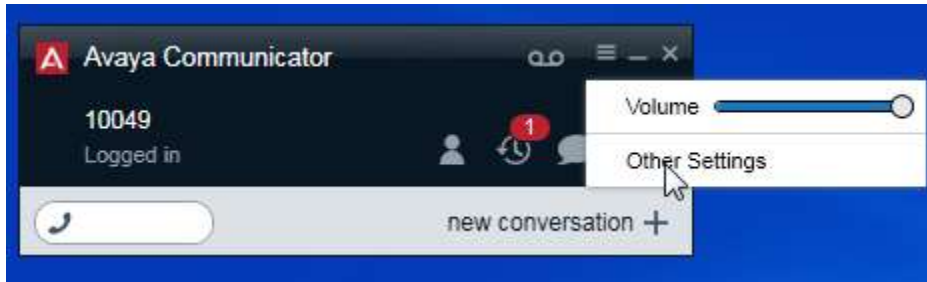
## 4.1. Configure SIP Station

The configuration for SIP station is performed partially via the System Access Terminal (SAT) on Communication Manager. The rest of the configurations are performed via the System Manager. There is an option to generate SIP station without using the SAT when adding a new SIP user using System Manager. The details will not be covered in this document. Please refer to the application notes in [3] for details. Below shows the SIP Station with **Type 9641SIP** configured.

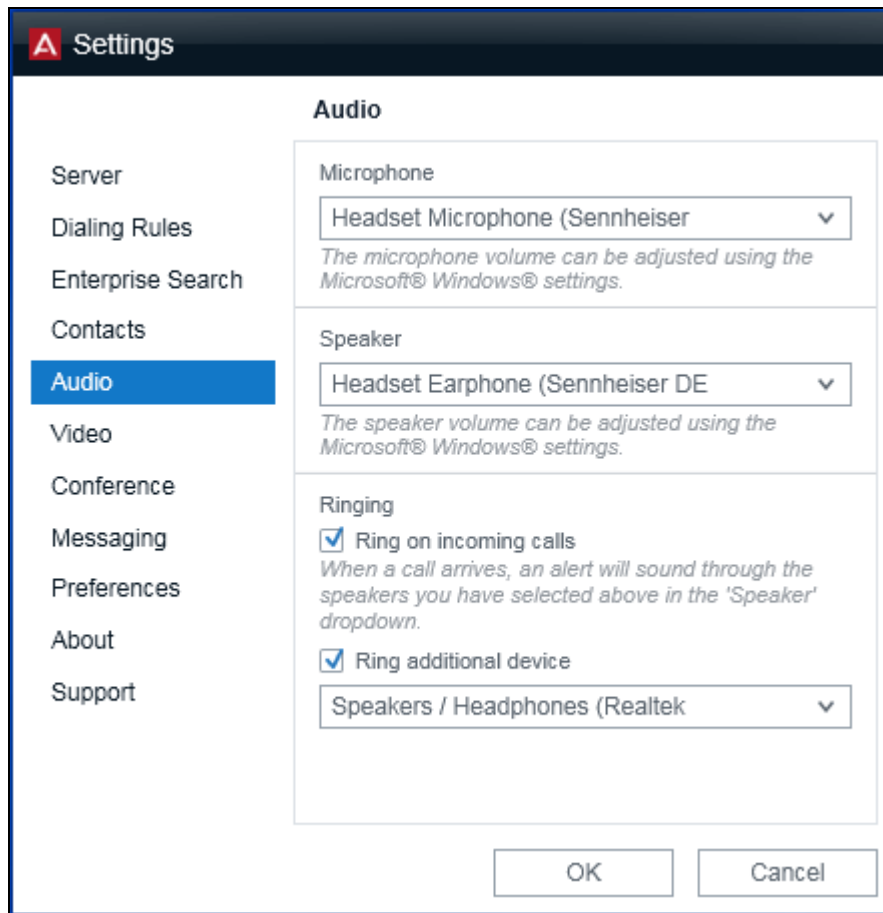
```
display station 10049                                     Page 1 of 6
                                                         STATION
Extension: 10049                                         Lock Messages? n          BCC: 0
  Type: 9641SIP                                         Security Code:           TN: 1
  Port: S00138                                           Coverage Path 1:        COR: 1
  Name: AVAYA, SIP3                                       Coverage Path 2:        COS: 1
                                                         Hunt-to Station:
STATION OPTIONS
  Location:                                               Time of Day Lock Table:
  Loss Group: 19                                         Message Lamp Ext: 10049
Display Language: english                               Button Modules: 0
  Survivable COR: internal
Survivable Trunk Dest? y                               IP SoftPhone? n
                                                         IP Video? n
```

## 5. Configure Avaya Communicator for Windows

Before configuring the Avaya Communicator, the headset has to be configured and provisioned as detailed in **Section 7**. After logging into Avaya Communicator, select  → **Other Settings** → **General Settings** as shown below.



Check that the device **Headset Microphone (Sennheiser)** is detected in the **Microphone** field and **Headset Earphone (Sennheiser)** is detected in the **Speaker** field from the **Audio** settings on the right panel. Otherwise, select it manually from the drop down menu, respectively.





## 6. Configure Sennheiser DW Series Headsets solution

This section covers the steps to integrate Sennheiser headsets with Avaya Communicator, including:

- Installing the Sennheiser HeadSetup software
- Configuring HeadSetup software
- Connect Sennheiser DW Series Headsets

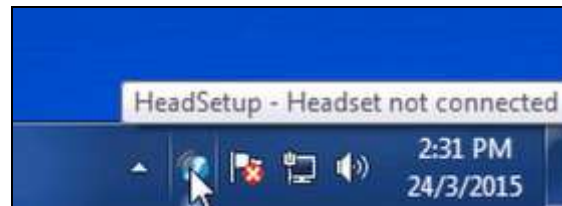
**Note:** After successfully performing this procedure, the headset may not be selected in the **Audio** Settings of Avaya Communicator. Manual selection may be required as described in **Section 5**.

### 6.1. Installing the Sennheiser HeadSetup software

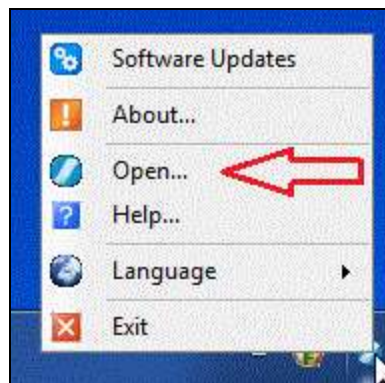
The installation instructions for Sennheiser HeadSetup software on the Avaya Communicator PC is described in [4] listed in **Section 10**.

### 6.2. Configuring HeadSetup software

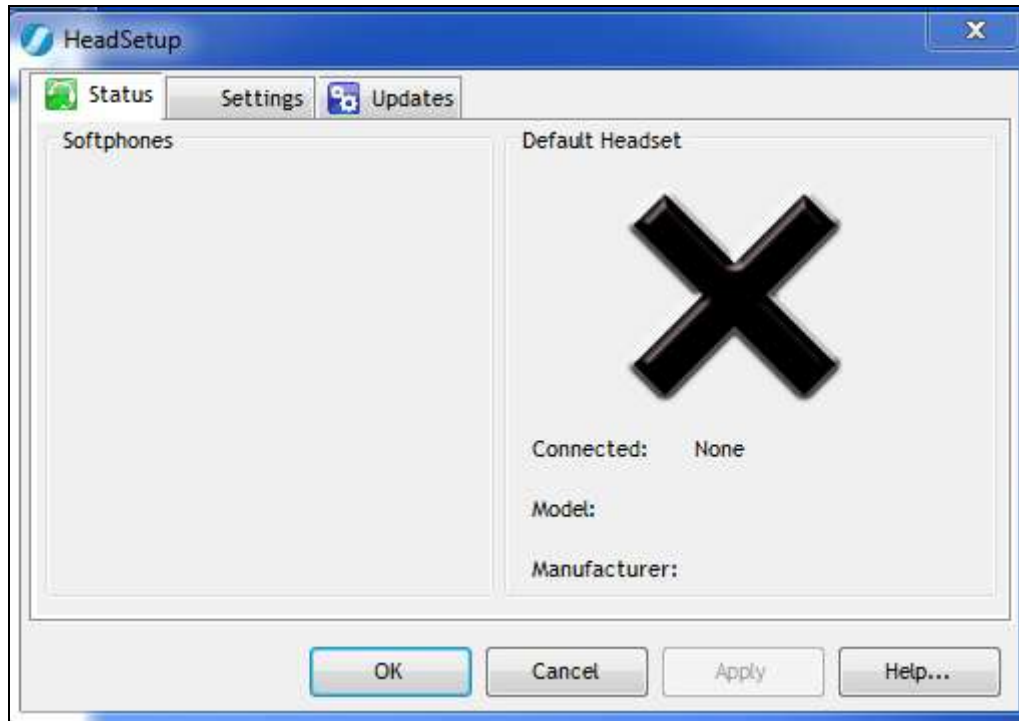
Launch the **HeadSetup** icon from the desktop. Hover the mouse over the HeadSetup icon on bottom right taskbar and verify that it shows “**HeadSetup – Headset not connected**”.



**Right Click** on the HeadSetup application icon at the bottom right taskbar and select **Open**.

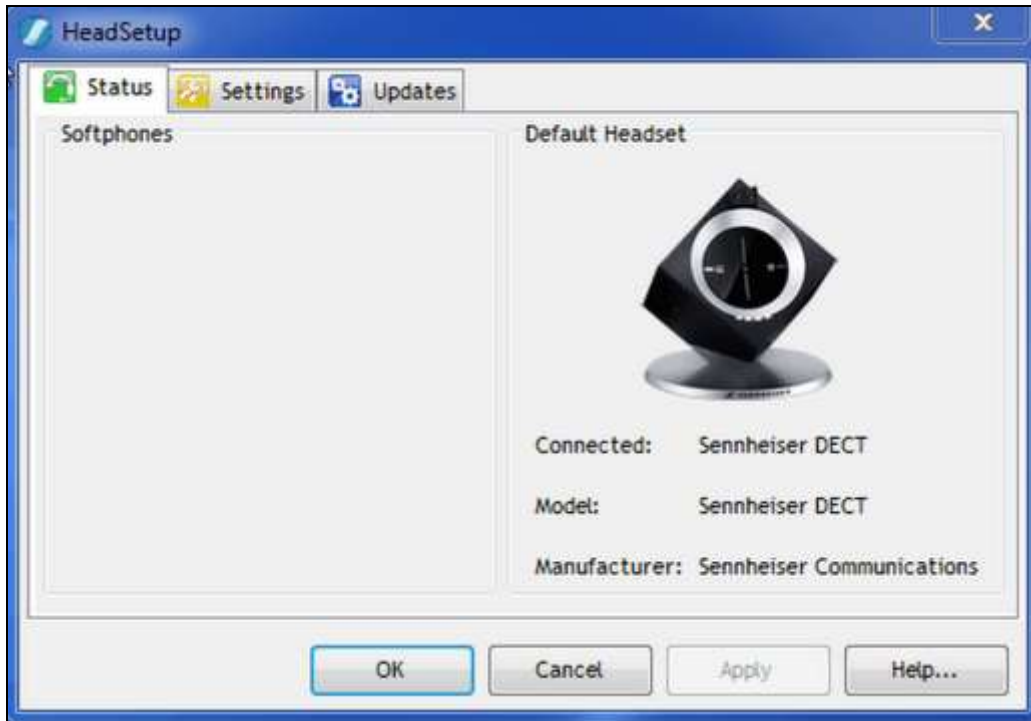


Select the **Status** tab and **Default Headset** on the right pane shows no headset is detected with an **X**.

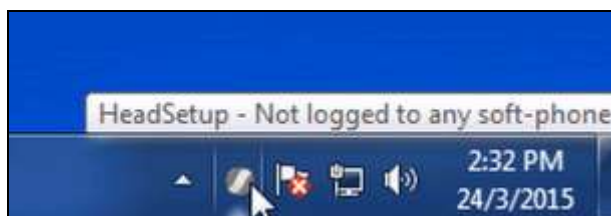


### 6.3. Connect Sennheiser DW Series Headsets

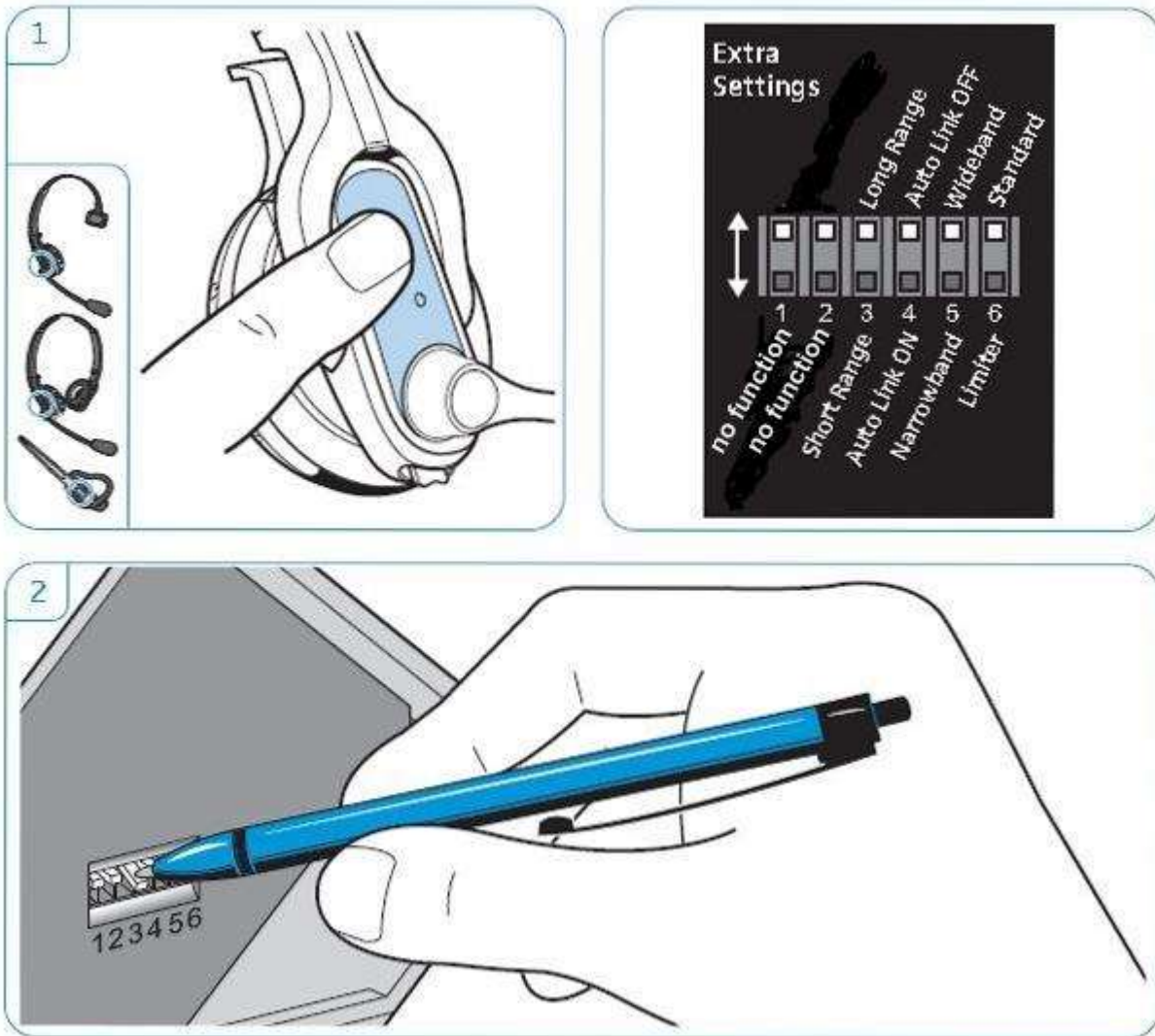
Plug Sennheiser DW Office USB headset system to the USB port on a PC. The device drivers will automatically be installed once plugged into the PC. The HeadSetup software **Status tab** shows the **Sennheiser DECT** headset is detected.



Hover the mouse over the HeadSetup icon (in grey) on bottom right taskbar and verify it shows “HeadSetup – Not logged to any soft-phone”.



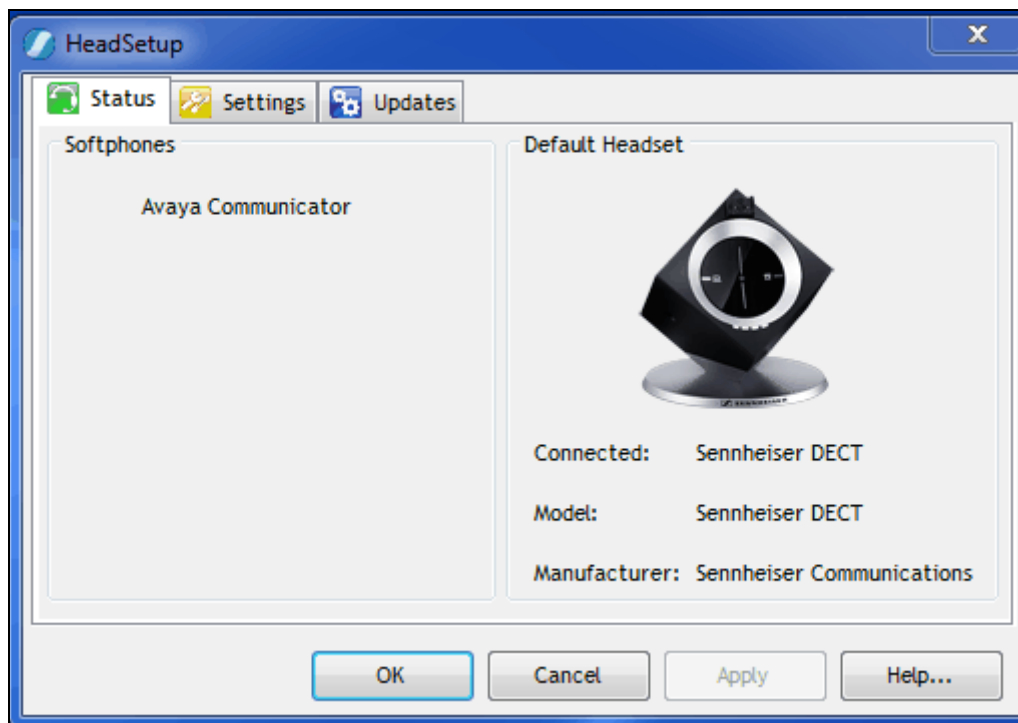
Tune the headset system using the DIP switches for radio range, link establishment, wideband or narrowband audio transmission and limiting the volume. Refer to the setup guide [5] for details.



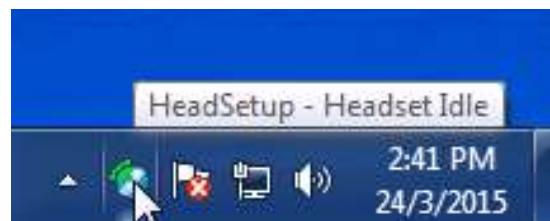
## 7. Verification Steps

This section verifies that the headset solution has been successfully integrated with the Avaya Communicator after logging in.

1. Verify that the Sennheiser headset has been successfully connected for use with Avaya Communicator. From the **HeadSetup** program, select the **Status** tab. Verify that:
  - The **Softphones** on the left pane shows **Avaya Communicator**.
  - The **Default Headset** on the right pane shows the **Sennheiser DECT** is connected.



2. Hover the mouse over the HeadSetup icon (in green) on bottom right taskbar and verify that it shows “**HeadSetup – Headset Idle**”.



3. Once the headset is connected to Avaya Communicator, verify that incoming and outgoing calls can be established with two-way audio to the headset. Hover the mouse

over the HeadSetup icon on bottom right taskbar and verify that it shows “**HeadSetup – Headset in use**”. If the headset call control buttons is not functioning, restart the connection by closing and opening the **HeadSetup** application.



4. For incoming calls, answer the call by pressing the call control button on the headset.
5. End the call by pressing the call control button on the headset.

## 8. Conclusion

These Application Notes describe the configuration steps required to integrate Sennheiser Communications A/S HeadSetup software and DW Office USB Headsets with Avaya Communicator for Windows 2.1. All test cases were completed successfully.

## 9. Additional References

This section references the Avaya and Sennheiser Communications A/S 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 6.3, Issue 10.0, June 2014, Document Number 03-300509.
- [2] *Administering Avaya Communicator for Android, iPad, iPhone, and Windows, Release 2.1 Issue 2, March 2015*.
- [3] *Application Notes for Configuring Avaya 9600 Series IP Deskphones running Avaya one-X® SIP firmware with Avaya Aura® Session Manager*.

The following Sennheiser Communications A/S documentation can be found at <http://en-de.sennheiser.com/>

- [4] *Sennheiser Updater – Mass Deployment Installation Guide*.
- [5] *Sennheiser DW Series Setup Guide*.
- [6] *Sennheiser DW Series User Guide*
- [7] *Sennheiser DW Office - HS quick guide*.
- [8] *Sennheiser Declaration of Compliance of DW and SD headsets series*

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