



Avaya Solution & Interoperability Test Lab

**Application Notes for Configuring Felitron Epko Noise
Cancelling Direct QD Headset with Avaya one-X®
Attendant – Issue 1.0**

Abstract

These Application Notes describe the configuration steps required to integrate the Felitron Epko Noise Cancelling Direct QD Headset using USB cable with Avaya one-X® Attendant.

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 Felitron Epko Noise Cancelling Direct QD Headset using USB interface cable with Avaya one-X® Attendant. Felitron Epko Noise Cancelling Direct QD Headset is developed for use in call centers and offices. The USB interface cable provided by Felitron will be the interface between the Avaya one-X® Attendant and the Felitron Epko Noise Cancelling Direct QD Headset. The cord connects to the USB port on the computer where the Avaya one-X® Attendant installed.

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 one-X® Attendant with Felitron Epko Noise Cancelling Direct QD Headset and verifying two-way audio. The call types included calls with voicemail, with local extensions, and with the PSTN.

The serviceability testing focused on verifying the usability of the Felitron Epko Noise Cancelling Direct QD Headset by disconnecting the USB cable from the workstation PC and restarting the Avaya one-X® Attendant.

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 headset interfaces, different manufacturers utilize different 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 and receiving calls to and from internal extensions to verify two-way audio.
- Placing and receiving calls to and from the PSTN to verify two-way audio.
- Hearing ring back tone for incoming and outgoing calls.
- Answering and ending calls using the call control on the one-X Attendant.
- Using the volume control buttons on the headset to adjust the audio volume.
- Using the mute control button on the headset and on the one-X Attendant to mute and un-mute the audio.

For the serviceability testing, the headset was disconnected and reconnected to verify proper operation. The one-X Attendant application was also restarted for the same purpose. The desktop PC was also rebooted to verify that one-X Attendant and headset were operational when the PC came back into service.

2.2. Test Results

Testing was completed successfully with the following observation.

- There is no mute synchronization between Felitron Epko Noise Cancelling Direct QD Headset and one-X Attendant. That is, the mute status on Epko Noise Cancelling Direct QD Headset is not accurately reflected on one-X Attendant or vice versa.

2.3. Support

For support on the Felitron Headset solution, contact Felitron technical support at:

Website: <http://www.felitron.com.br>

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify Felitron Epko Noise Cancelling Direct QD Headset using USB interface cable with Avaya one-X® Attendant. For the Avaya one-X® Attendant the configuration consists of an Avaya S8800 Server running Avaya Aura® Communication Manager with an Avaya G650 Media Gateway, the T1/PRI trunk from G650 to real PSTN.

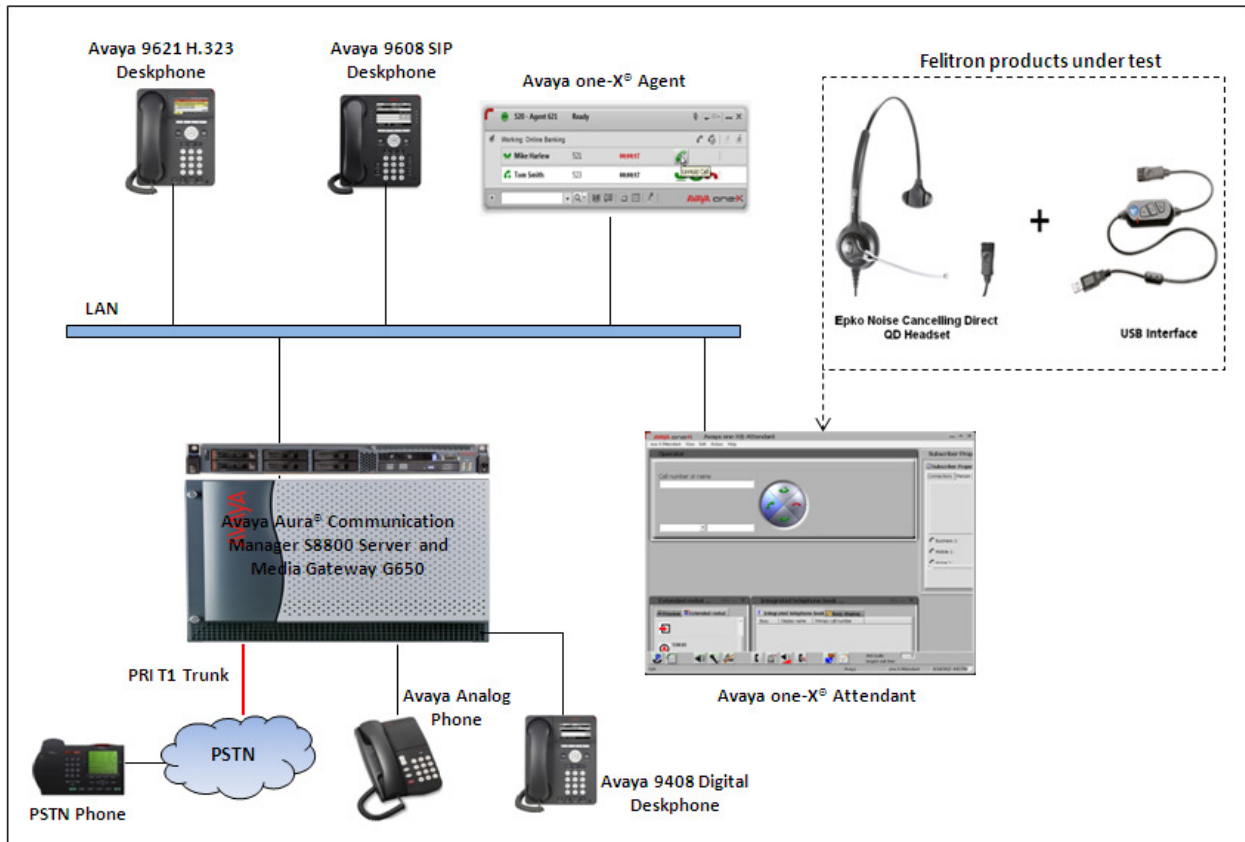


Figure 1: Test diagram for Avaya one-X® Attendant with Felitron Epko Noise Cancelling Direct QD Headset Using USB Interface Cable

4. Equipment and Software Validated

The following equipment and software were used for the compliance test:

Equipment	Software
Avaya Aura® Communication Manager running on an Avaya S8800 Server	R6.3 – FP2 Build R016x.03.0.124.0 Patch 20553
Avaya Media Gateway G650 <ul style="list-style-type: none">▪ IP Server Interface TN2312BP▪ Digital Line TN2224	<ul style="list-style-type: none">▪ FW043▪ 000006
Avaya one-X® Agent on Microsoft Operating System XP SP3	2.5
Avaya one-X® Attendant on Microsoft Operating System XP SP3	4.03.1
Avaya 9621G H.323 Deskphone	6.2313
Avaya 9608 SIP Deskphone	6.2.2
Avaya 9408 Digital Deskphone	21
Avaya Analog Deskphone	N/A
Felitron Epko Noise Cancelling Direct QD Headset	-
Felitron USB Interface Cable	-

5. Configure Avaya Aura® Communication Manager

This section displays the station configuration for the Avaya one-X® Attendant. The configuration is performed via the System Access Terminal (SAT) on Avaya Aura® Communication Manager.

Use the **display system-parameters customer-options** command to verify that **IP Stations** and **IP Attendant Consoles** on Page 4 are enabled. The license file installed on Communication Manager controls the values for these attributes. If a required feature is not enabled or there is insufficient capacity, contact an authorized Avaya sales representative.

```
display system-parameters customer-options                               Page 4 of 11
                                OPTIONAL FEATURES

Emergency Access to Attendant? y                                     IP Stations? y
  Enable 'dadmin' Login? y
  Enhanced Conferencing? y                                           ISDN Feature Plus? n
  Enhanced EC500? y                                                  ISDN/SIP Network Call Redirection? y
Enterprise Survivable Server? n                                       ISDN-BRI Trunks? y
  Enterprise Wide Licensing? n                                       ISDN-PRI? y
  ESS Administration? y                                             Local Survivable Processor? n
  Extended Cvg/Fwd Admin? y                                         Malicious Call Trace? y
  External Device Alarm Admin? y                                     Media Encryption Over IP? n
Five Port Networks Max Per MCC? n                                     Mode Code for Centralized Voice Mail? n
  Flexible Billing? n
Forced Entry of Account Codes? y                                       Multifrequency Signaling? y
  Global Call Classification? y                                       Multimedia Call Handling (Basic)? y
  Hospitality (Basic)? y                                             Multimedia Call Handling (Enhanced)? y
Hospitality (G3V3 Enhancements)? y                                   Multimedia IP SIP Trunking? y
  IP Trunks? y

IP Attendant Consoles? y
```

Use the **add attendant <n>** command; where <n> is an available attendant position. The Type field should be set to **302** for IP consoles. Enter the **Extension** and the **Security Code**, which will be used by one-X Attendant to register with Communication Manager. Since only one attendant was used, **Console Type** was set to **principal**. Set the **Port** to **IP**.

```
add attendant 1                                                         Page 1 of 4
                                ATTENDANT CONSOLE 1

Type: 302                      Name: Operator
Extension: 53000                Group: 1
Console Type: principal         TN: 1
Port: IP                       COR: 1
Security Code: *               COS: 1
                                Auto Answer: none
                                Data Module? n
                                Disp Client Redir? n
                                Display Language: english
                                H.320 Conversion? n
```

On Page 2, set **Auto Start** to **n**. Default values were used for all other fields.

```
add attendant 1                                     Page 2 of 4
                                               ATTENDANT CONSOLE

VIS FEATURE OPTIONS

      Auto Start? n
      Echo Digits Dialed? y

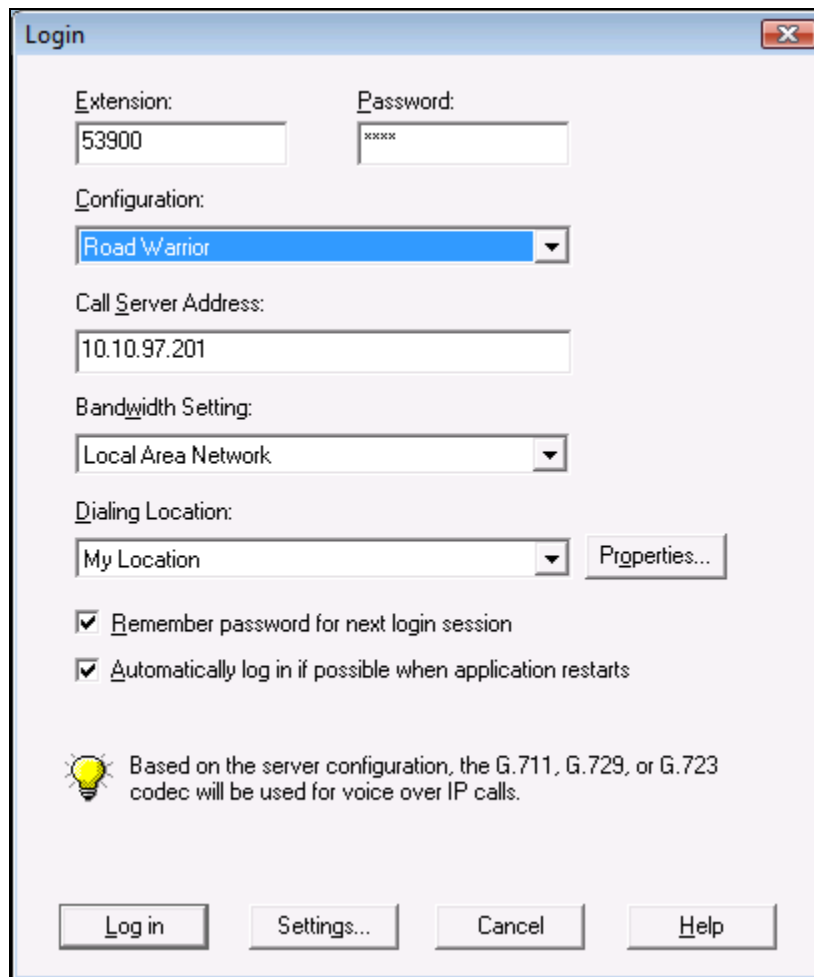
IP FEATURE OPTIONS

Remote Softphone Emergency Calls: as-on-local Direct IP-IP Audio Connections? y
Emergency Location Ext: 53000           Always Use? n   IP Audio Hairpinning? n
                                           Service Link Mode: permanent
```

6. Configure Avaya one-X® Attendant


This section describes the configuration steps required for Avaya one-X® Attendant to work with the Felitron Epko Noise Cancelling Direct QD Headset. These Application Notes do not cover the general installation and configuration of Avaya one-X® Attendant. For additional information refer to **Section 10 [2]**.

Launch Avaya one-X® Attendant and log into Communication Manager using the attendant extension and security code created in **Section 5**. Select **Road Warrior** for **Configuration** and **Local Area Network** for **Bandwidth Setting**. Enter the information in the remaining fields as appropriate. Click **Log in**.




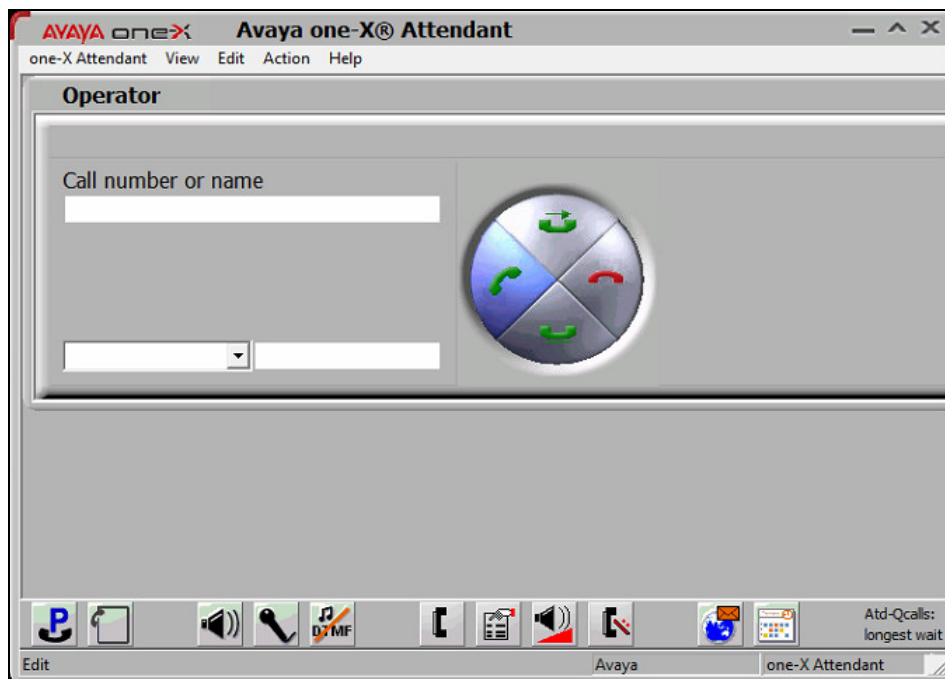
The screenshot shows a 'Login' dialog box with the following fields and options:

- Extension:** 53900
- Password:** masked with 'xxxx'
- Configuration:** Road Warrior (selected in a dropdown menu)
- Call Server Address:** 10.10.97.201
- Bandwidth Setting:** Local Area Network (selected in a dropdown menu)
- Dialing Location:** My Location (selected in a dropdown menu) with a 'Properties...' button next to it.
- Remember password for next login session
- Automatically log in if possible when application restarts
- A lightbulb icon with the text: "Based on the server configuration, the G.711, G.729, or G.723 codec will be used for voice over IP calls."
- Buttons at the bottom: Log in, Settings..., Cancel, Help

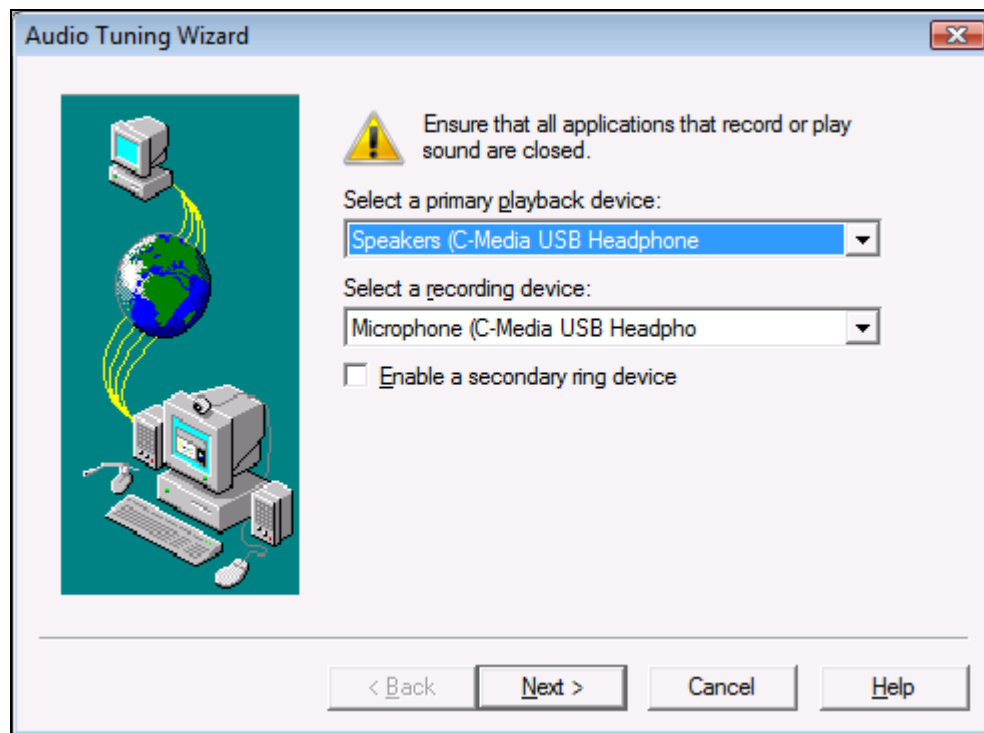
On the next screen, click the **Login**  button to log in as a one-X® Attendant user. Enter the default name as **Avaya** and its default password. The user will be prompted to change the password once logged in. Select the **one-X Attendant** under **Work profile**. Click **OK**.



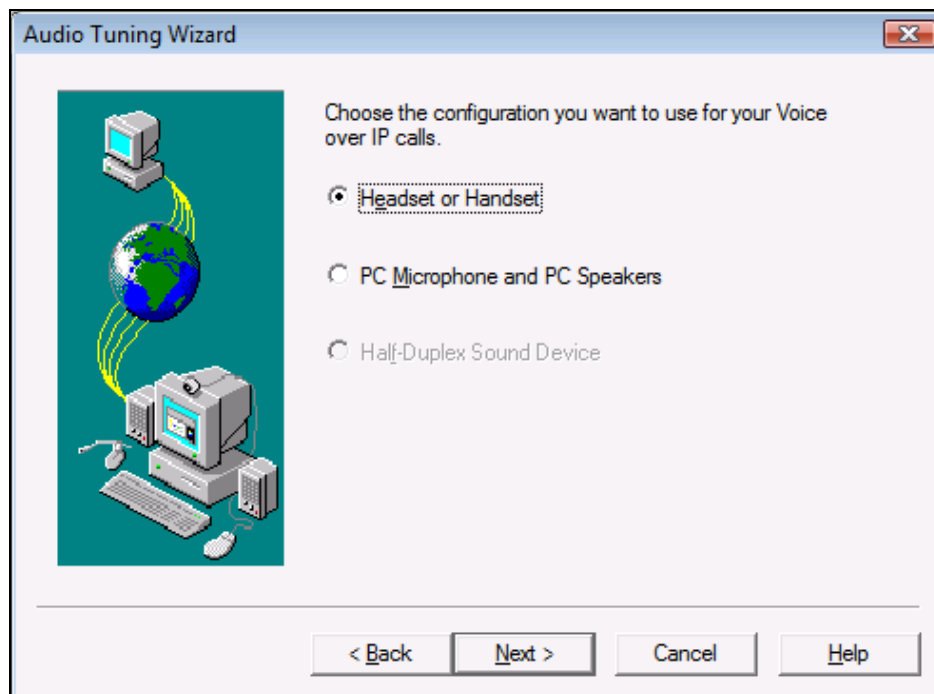
On the **Avaya one-X® Attendant** main screen, click the icon  on the toolbar to launch the Audio Tuning Wizard. Note that the icon is not available during an active telephone call.



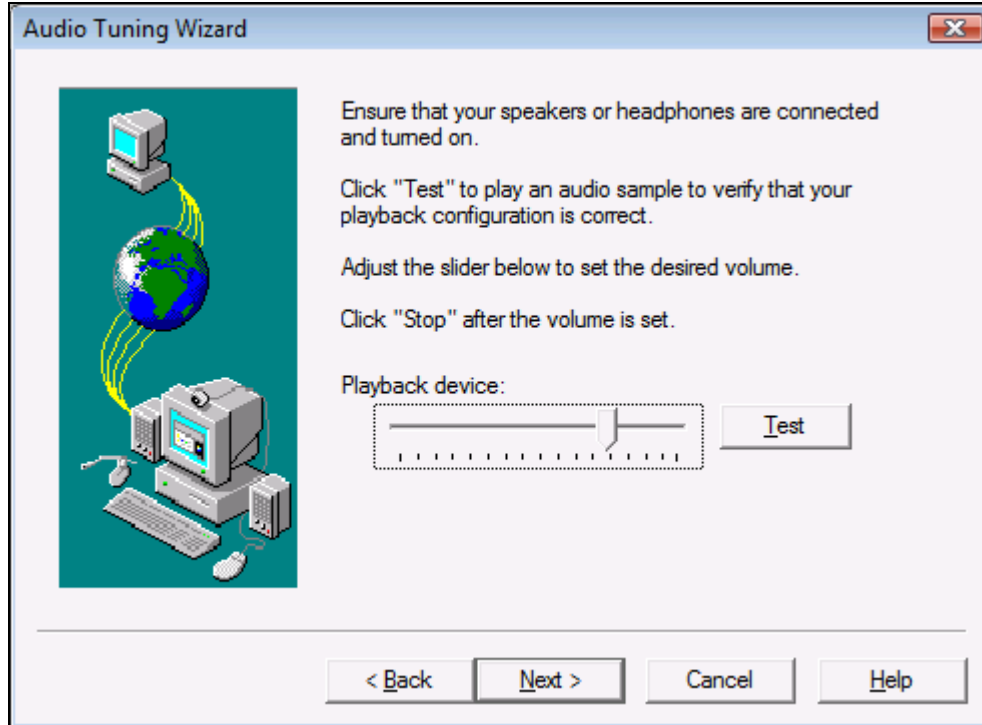
In the **Audio Tuning Wizard**, set the playback device and recording device to **Speakers (C-Media USB Headphone)** and **Microphone (C-Media USB headphone)**, respectively. Click **Next**.



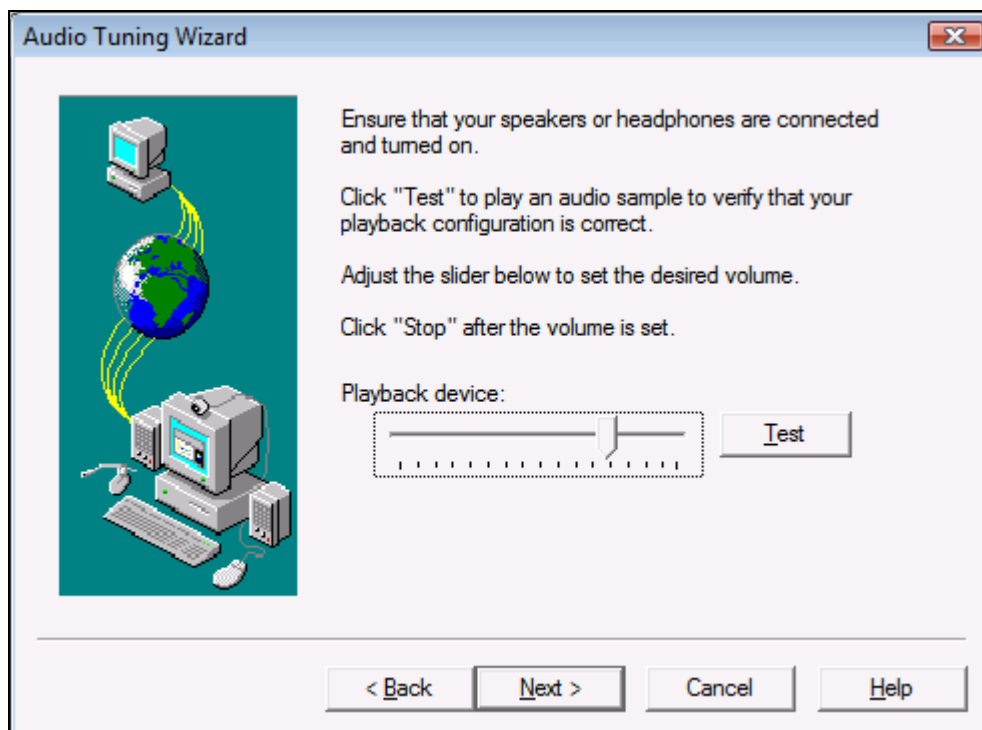
In the next window, select **Headset or Handset** as shown below. Click **Next**.



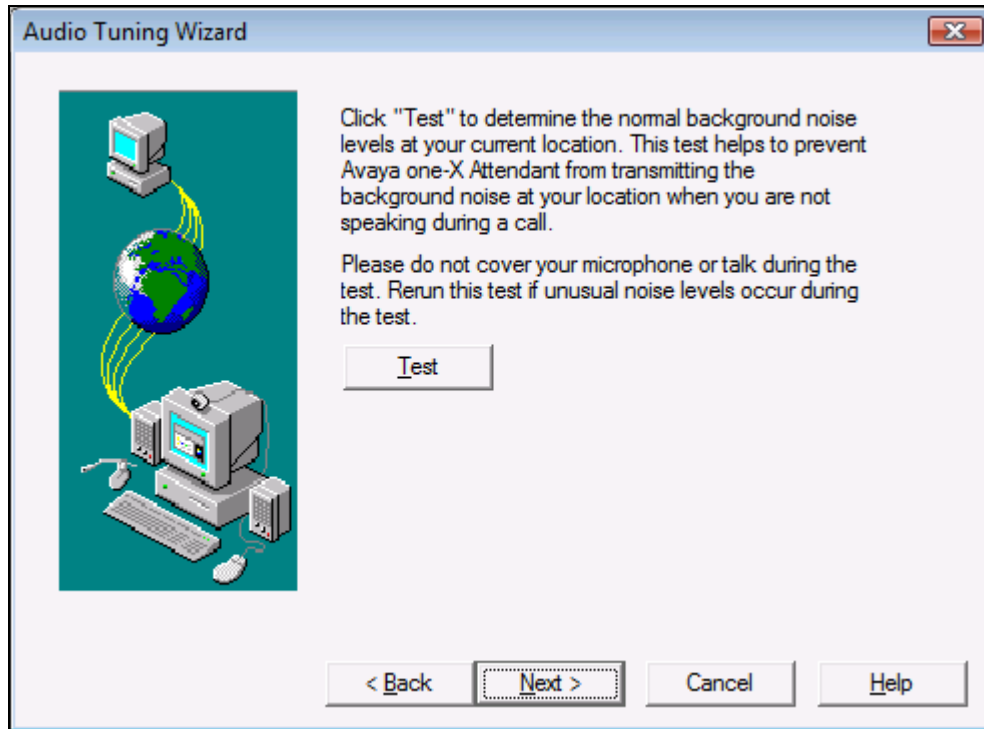
Next, click the **Test** button and verify that audio is heard through the Felitron headset. Click **Next**.



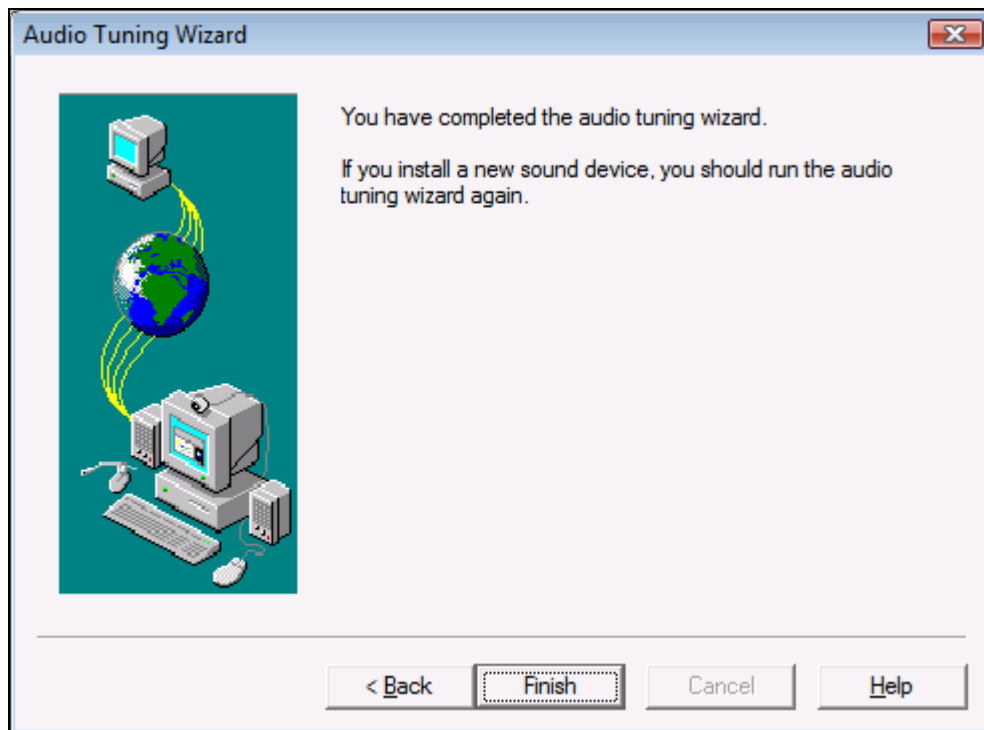
Speak into the headset and verify that the audio meter detects sound to set the recording level. Click **Next**.




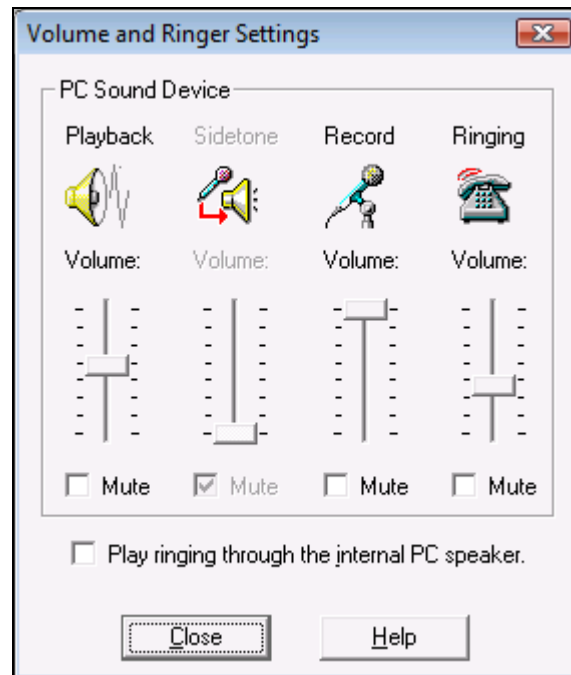
Next, click the **Test** button to determine the normal background noise. Click **Next**.



On the last **Audio Tuning Wizard** window, click **Finish**.



Configure the volume and ringer settings to allow the user to hear ringing. To access the settings, select the  icon on the toolbar. Set the **Playback**, **Record**, and **Ringing** volume to the desired levels as shown below.



7. Configure Felitron Epko Noise Cancelling Direct QD

This section describes the configured steps for the Felitron Epko Noise Cancelling Direct QD Headset with the Avaya one-X® Attendant.

- Connect the Felitron Epko Noise Cancelling Direct QD Headset to the USB interface cable by using the disconnect plug and plug the USB interface to USB port on desktop PC which has one-X® Attendant application installed.
- The headset will be automatically detected and recognized by Windows. Configure Windows to use Felitron headset as default speaker and microphone.
- Install the Avaya one-X® Attendant application to a desktop PC and connect this PC to local network and register the one-X® Attendant to the Communication Manager server.

8. Verification

This section provides the tests that can be performed to verify proper installation and configuration of the Felitron Epko Noise Cancelling Direct QD Headset using USB interface cable with Avaya one-X® Attendant.

1. Start the one-X® Attendant application and log in.
2. Place an incoming call to one-X® Attendant from any local phone or PSTN phone.
3. Answer the call using the call control button on one-X® Attendant.
4. Verify two-way talk path between the Felitron headset and origination phone.
5. Disconnect the call from the headset using the disconnect button on one-X® Attendant.
6. Verify that the call is properly disconnected.

9. Conclusion

These Application Notes describe the configuration steps required to integrate the Felitron Epko Noise Cancelling Direct QD Headset using USB cable interface with Avaya one-X® Attendant. All test cases were completed successfully. Testing was completed successfully with observation noted in **Section 2.2**.

10. Additional References

This section references the Avaya and Felitron 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 6.0, May 2013, Document Number 03-300509.

[2] Avaya one-X® Attendant 4.0 connected to Avaya Communication Manager. Installation and Administration Manual, Document 16-603459, Release 4.01, July 2012.

The Felitron following documentation can be found at

http://www.felitron.com.br/site/manual/epko-compact_Epko%20series.pdf

[1] Felitron Epko Compact Headset Series Manual

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