



Avaya Solution & Interoperability Test Lab

Application Notes for PhoneTech A10RJAMP Headset with Avaya 96x1 Series IP Telephones - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the PhoneTech A10RJAMP (Configuration 4) Headset with Avaya 96x1 Series IP Telephones using H.323 and SIP protocols. The A10RJAMP headset provides two-way audio, allows the audio volume to be adjusted and the audio to be muted/unmuted directly from the headset. This solution does not provide call control features directly from the headset, such as answering or terminating a call from the headset.

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 the PhoneTech A10RJAMP (Configuration 4) Headset with Avaya 96x1 Series IP Telephones using H.323 and SIP protocols. The A10RJAMP headset provides two-way audio, allows the audio volume to be adjusted and the audio to be muted/unmuted directly from the headset. This solution does not provide call control features directly from the headset, such as answering or terminating a call from the headset.

2. General Test Approach and Test Results

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.

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls to and from the Avaya 96x1 Series IP Telephones with the PhoneTech A10RJAMP Headset and verifying two-way audio. The call types included calls to voicemail, to local extensions, and to the PSTN.

The serviceability testing focused on verifying the usability of the PhoneTech headset after restarting the Avaya 96x1 Series IP Telephones and re-connecting the PhoneTech headset.

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.
- Incoming call alert notification for 96x1 H.323 telephone only.
- Hearing ring back tone for outgoing calls.
- Toggling between handset, speakerphone, and headset.
- Using the volume control buttons on the PhoneTech headset to adjust the audio volume.
- Using the mute control button on the PhoneTech headset to mute and un-mute the audio.
- Using the headset with 9621 H.323 and SIP telephones.

For the serviceability testing, a 9621 IP telephone and headset were restarted to verify proper operation of the headset after the reboot was completed.

2.2. Test Results

All test cases passed with the following observation(s):

- For 96x1 SIP telephone only, incoming call alerting is not heard through headset, it is heard through phone.
- For 96x1 H.323 telephone only, the headset button does not stay activated when the far-end terminates the call. Therefore, subsequent calls cannot be auto-answered via the headset.
- There is no mute sync between headset and phone.

2.3. Support

For technical support and information on PhoneTech A10RJAMP Headset, contact PhoneTech in Brazil:

- Phone: 11-3717-1881
- Website: <http://www.phonetech.com.br>
- Email: contato@phonetech.com.br

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the PhoneTech A10RJAMP Headset with Avaya 96x1 Series IP Telephones. The configuration consists of an Avaya S8800 Server running Avaya Aura® Communication Manager with an Avaya G650 Media Gateway providing connectivity to the PSTN via an ISDN-PRI trunk (not shown). Avaya Aura® Messaging was used as the voicemail system. The PhoneTech A10RJAMP Headset was connected to the Avaya phone via the headset port.

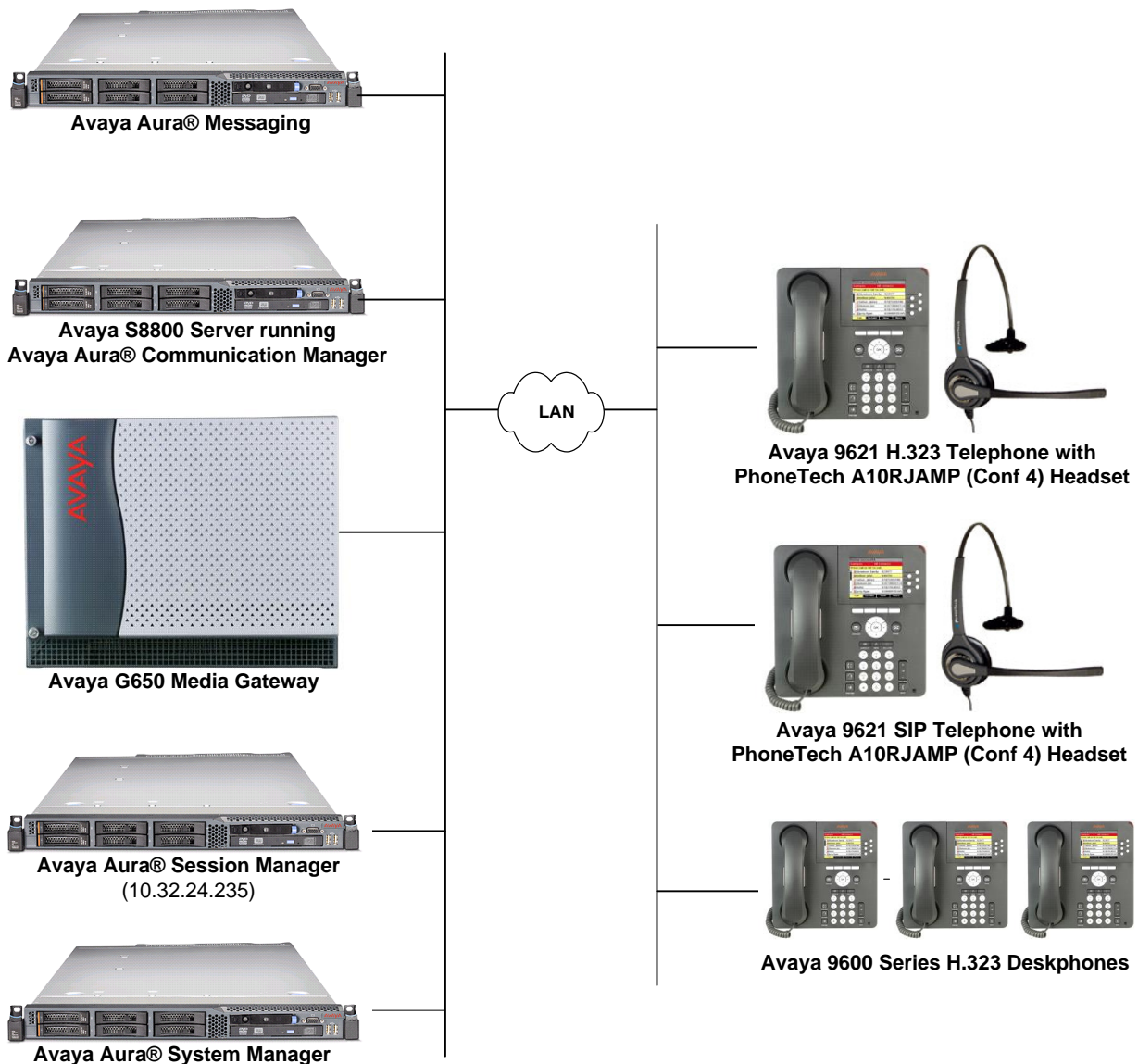


Figure 1: Avaya 96x1 Series IP Telephones with PhoneTech A10RJAMP Headset

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 running on an Avaya S8800 Server with a G650 Media Gateway and Communication Manager Messaging	6.3 SP 4 (R016x.03.0.124.0 w/Patch 21291)
Avaya Aura® Session Manager	6.3 (6.3.5.0.635005)
Avaya Aura® System Manager	6.3.5 Build No. – 6.3.0.8.5682-6.3.8.2826 Software Update Revision No: 6.3.5.5.2017
Avaya 96x1 Series IP Telephone	6.3037 (H.323) 6.3.0.73 (SIP)
PhoneTech A10RJAMP (Conf 4) Headset	N/A

5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for the Avaya 9621 IP Telephone. The configuration is performed via the System Access Terminal (SAT) on Communication Manager or via Avaya Aura® System Manager for SIP stations.

5.1. Configure a Station for Avaya 96x1 Series IP Telephone

Use the **add station** command to create a station for the 9621 IP telephone. Set the **Type** field to the station type to be emulated. In this example, *9621* was used. Set the **Port** field to *IP* and configure a **Security Code** as that password to be used by the Avaya telephone to log in.

Note: To enable Auto Answer on the IP telephone set the **Auto Answer** field on **Page 2** (not shown) to the appropriate value, such as *all*.

add station 40000		Page 1 of 5
STATION		
Extension: 40000	Lock Messages? n	BCC: 0
Type: 9621	Security Code: 40000	TN: 1
Port: IP	Coverage Path 1:	COR: 1
Name: PhoneTech	Coverage Path 2:	COS: 1
	Hunt-to Station:	
STATION OPTIONS		
Loss Group: 19	Time of Day Lock Table:	
	Personalized Ringing Pattern: 1	
	Message Lamp Ext: 40000	
Speakerphone: 2-way	Mute Button Enabled? y	
Display Language: english		
Survivable GK Node Name:		
Survivable COR: internal	Media Complex Ext:	
Survivable Trunk Dest? y	IP SoftPhone? n	
	IP Video? n	
	Short/Prefixed Registration Allowed: default	

5.1.1. Enable Switchhook & Alerting Option

In the 46xxsettings.txt file, the HEADSETBIDIR parameter needs to be set to '1' so that switchhook and alerting are enabled for the H.323 phone. This allows incoming call alert to be heard through the headset. Below is an example for setting the parameter.

```
##### HEADSET SETTINGS (H.323 ONLY) #####
##
## HEADSETBIDIR specifies whether bidirectional signaling
## on the headset interface will be enabled or disabled.
## Value Operation
## 0 Disabled (default)
## 1 Switchhook and alerting signaling are both enabled
## 2 Only switchhook signaling is enabled
## This parameter is supported by:
## 96x1 H.323 R6.3 and later (values 0-2)
## 96x1 H.323 R6.2.1 and later (values 0-1)
## Note that 96x1 H.323 R6.2 only supported signaling for alerting.
SET HEADSETBIDIR 1
```

Alternatively, the switchhook and alerting options can be enabled through the 96x1 phone menu. Press the **Menu** button on the phone and then navigate to **Options & Settings → Call Settings → Headset Signaling...** Select the **Switchhook & Alerting** option.

5.2. Configure a Station for Avaya 96x1 Series SIP Telephone

The SIP station was configured automatically through Avaya Aura® System Manager. Use the **display station** command to view the station for the 9621 IP telephone. The **Station Type** was set to *9621SIP* and a descriptive **Name** was also provided. Use the default values for the other fields on **Page 1**.

Note: To enable Auto Answer on the IP telephone set the **Auto Answer** field on **Page 2** (not shown) to the appropriate value, such as *all*.

display station 46010		Page 1 of 6
STATION		
Extension: 46010	Lock Messages? n	BCC: 0
Type: 9621SIP	Security Code:	TN: 1
Port: IP	Coverage Path 1: 50	COR: 1
Name: PhoneTech	Coverage Path 2:	COS: 1
	Hunt-to Station:	
STATION OPTIONS		
	Time of Day Lock Table:	
Loss Group: 19		
	Message Lamp Ext: 46010	
Display Language: english		
Survivable COR: internal		
Survivable Trunk Dest? y	IP SoftPhone? n	
	IP Video? n	

6. Connect PhoneTech A10RJAMP Headset

Connect the A10RJAMP headset directly to the headset port of the Avaya 96x1 Series IP Telephone.

7. Verification Steps

Verify that the PhoneTech A10RJAMP Headset has been connected to the Avaya 96x1 Series IP Telephone. Once the headset is connected to the phone, verify that incoming and outgoing calls are established with two-way audio to the headset and that the headset can provide volume and mute control.

8. Conclusion

These Application Notes describe the configuration steps required to integrate the PhoneTech A10RJAMP (Conf 4) Headset with Avaya 96x1 Series IP Telephones. All test cases were completed successfully with observations noted in **Section 2.2**.

9. Additional References

This section references the Avaya and PhoneTech 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 9, October 2013, Document Number 03-300509.*
- [2] *Administering Avaya 9601/9608/9608G/9611G/9621G/9641G Deskphones SIP, Release 6.3.1, Issue 3, January 2014, Document Number 16-601944.*
- [3] *Installing and Maintaining Avaya Deskphone SIP 9601/9608/9608G/9611G/9621G/9641G Deskphones, Release 6.3.1, Issue 4, January 2014, Document Number 16-603504.*
- [4] *Administering Avaya IP Deskphone H.323 9608, 9608G, 9611G, 9621G, and 9641G, Release 6.3.1, Issue 17, January 2014, Document Number 16-300698.*
- [5] *Installing and Maintaining Avaya IP Deskphone H.323 9608, 9608G, 9611G, 9621G, and 9641G, Release 6.3.1, Issue 9, January 2014, Document Number 16-603603.*

The following PhoneTech product documentation is available with the headset.

- [6] *Manual do Usuário A10 RJ.*

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