Avaya Solution & Interoperability Test Lab

Application Notes for Telekonnectors TLK Dual-Digital connected to TLK Galaxy Pro and TLK C Plus Headsets with Avaya one-X® Communicator and Avaya Communicator for Windows - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Telekonnectors TLK Dual-Digital connected to TLK Galaxy Pro and TLK C Plus Headsets with Avaya one-X® Communicator and Avaya Communicator for Windows.

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 DevConnect Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

These Application Notes describe the configuration steps required to integrate Telekonnectors TLK Dual-Digital connected to TLK Galaxy Pro and TLK C Plus Headsets with Avaya one-X® Communicator and Avaya Communicator for Windows.

The TLK Dual-Digital is a USB device that provides interfaces to phones via headset ports and PCs via USB. The USB cable connection to PC also provides power to the device. All call control functions are performed from Avaya softphones. Only mute/un-mute and volume control is provided on device. There is no software component from TeleKonnectors required for this solution.

2. General Test Approach an Results

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls to and from the Avaya one-X® Communicator and Avaya Communicator for Windows using the Telekonnectors 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 Telekonnectors device after restart of PC, Avaya softphones, disconnection and reconnection from the USB port of 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 that carry the Avaya brand or logo. Avaya may conduct testing of non-Avaya headset to determine interoperability with Avaya phones. However, Avaya does not conduct the testing of non-Avaya headsets 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 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 calls to internal extensions to verify two-way audio.
- Hearing ringing tone for incoming and ring back for outgoing calls.
- Answering and ending calls using the call control button on the Avaya phone.
- Using the volume control buttons on the Avaya phone and/or the device to adjust the audio volume.
- Using the mute control button on the Avaya phone and/or the device to mute and un-mute the audio.
- Using the hold control button on the Avaya phone to hold and resume call.
- Switching between the Telekonnectors headset, the phone handset and speaker while in conversation.

For the serviceability testing, the PC was rebooted, softphone restarted and the device USB cable was unplug and plug back to the PC to verify proper operation.

2.2. Test Results

All test cases passed. But a point to note is that TLK Dual-Digital does not use headset API integration with one-X Communicator or Communicator for Windows for call control functions, the volume control and activation or deactivation of mute button are not reflected in the softphone.

2.3. Support

For support on this Telekonnectors headset solution, contact Telekonnectors at:

- Phone: +91-44-24414100
- Email: sales@Telekonnectors.com

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the Telekonnectors TLK Dual-Digital with Avaya one-X® Communicator and Avaya Communicator for Windows. The configuration consists of an Avaya S8300D Server running Avaya Aura® Communication Manager with an Avaya G450 Media Gateway providing connectivity to the PSTN via an ISDN-PRI trunk (not shown), Avaya Aura® Session Manager and Avaya Aura® System Manager. Avaya Aura® Messaging was used as the voicemail system. Avaya one-X® Communicator and Avaya Communicator for Windows were installed on a desktop PC having TLK Dual-Digital with headset attached to the USB Port of the desktop PC.

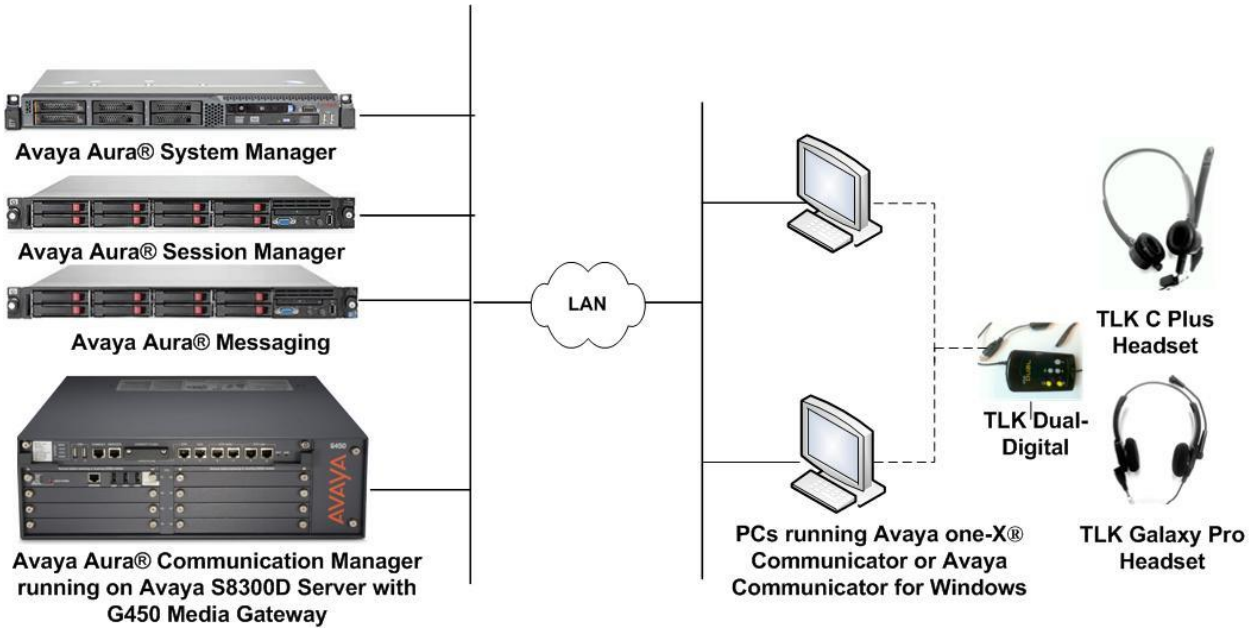


Figure 1: Avaya one-X® Communicator or Avaya Communicator for Windows connected to Telekonnectors TLK Dual-Digital with TLK C Plus and TLK Galaxy Pro Headsets

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 Avaya S8300D Server with a G450 Media Gateway	6.3.7.0
Avaya Aura® System Manager	6.3.9.1.2538
Avaya Aura® Session Manager	6.3.9.0.639011
Avaya Aura® Messaging	6.3.124.315-1.247325
Avaya one-X® Communicator running on Windows 7 Professional Service Pack 1	6.2.3.05-FP3
Avaya Communicator for Windows running on Windows 7 Professional Service Pack 1	2.0.1.23
Telekonnectors TLK Dual-Digital device	-
Telekonnectors TLK C Plus headsets	-
Telekonnectors TLK Galaxy Pro headsets	

5. Configure Avaya Aura® Communication Manager

The following sections show the relevant configuration screens for Communication Manager. The screen shots included in this section focused only on the configuration of the station for 96xx. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

5.1. Configure a station for Avaya 96xx IP Deskphones (H.323)

Use the **add station** command to create a station for the 96xx IP Deskphone. Set the **Type** field to the station type to be emulated. In this example, *9611G* was used. Set the **Port** field to *IP* and configure a **Security Code** as that password to be used by the Avaya Deskphone to log in. Set the **IP Softphone** to *y*.

```
add station 10001                                          Page   1 of   5
                                   STATION

Extension: 10001                       Lock Messages? n               BCC: 0
     Type: 9611G                       Security Code:                  TN: 1
     Port: IP                        Coverage Path 1: 99              COR: 1
     Name: 96xx IP Telephone         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: 10001
           Speakerphone: 2-way             Mute Button Enabled? y
        Display Language: english               Button Modules: 0
 Survivable GK Node Name:
          Survivable COR: internal            Media Complex Ext:
   Survivable Trunk Dest? y                       IP SoftPhone? y

                                                     IP Video? n
                            Short/Prefixed Registration Allowed: default

                                                  Customizable Labels? y
```

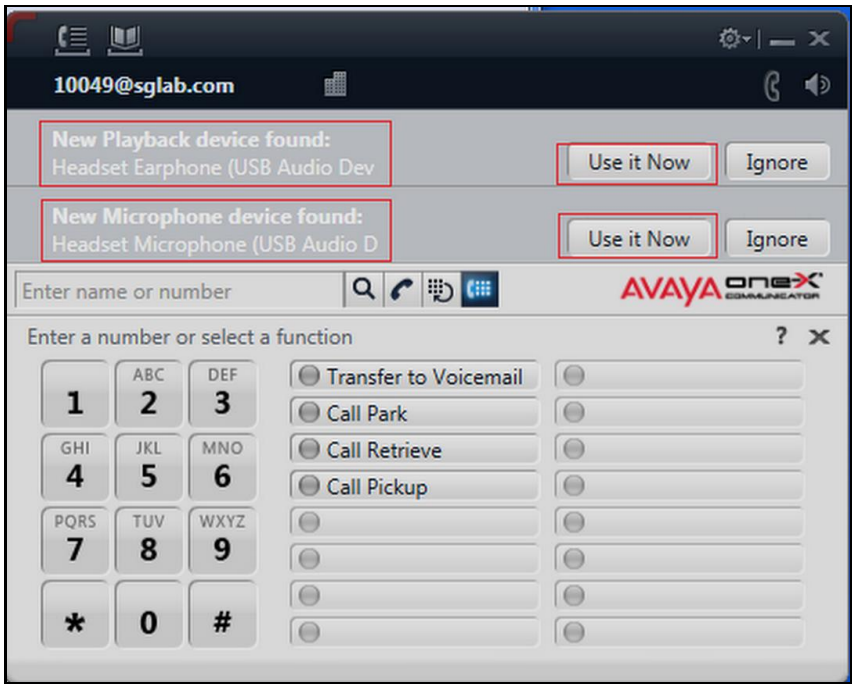
5.2. Configure a Station for Avaya 96xx IP Deskphones (SIP)

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 complete details. Below shows the SIP Station with **Type** *9641SIP* configured.

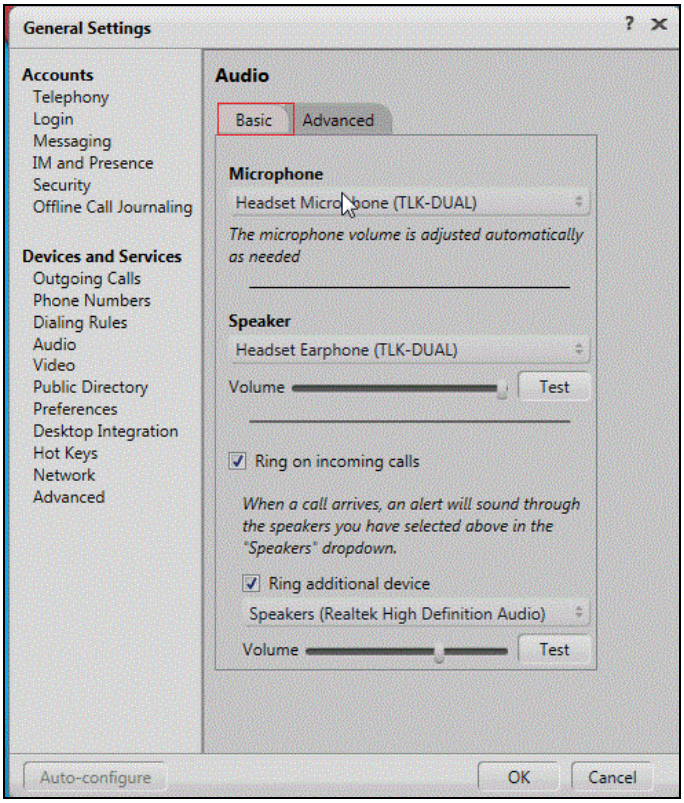
```
display station 10049                                      Page   1 of   6
                                   STATION

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
```

6. Configure Avaya one-X® Communicator (H.323 or SIP)

After logging into Avaya one-X® Communicator, the TLK Dual-Digital device is automatically detected. Both **Headset Microphone (TLK-DUAL**) and **Headset Earphone (TLK-DUAL**) are detected. Below shows the screenshot using one-X Communicator (SIP mode) for both the playback and microphone devices which are automatically detected. Click the **"Use it Now"** for selecting both the device.



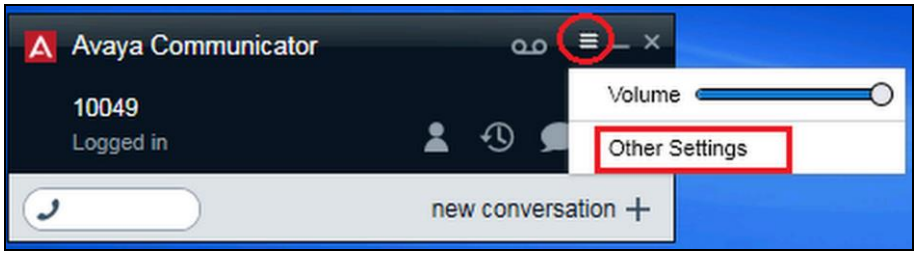
Select the settings wheel drop down menu and click "**Settings → General Settings**". Select **Audio** from the left panel and click the **Basic** tab. The microphone is automatically adjusted and the speakers' volume can be adjusted.



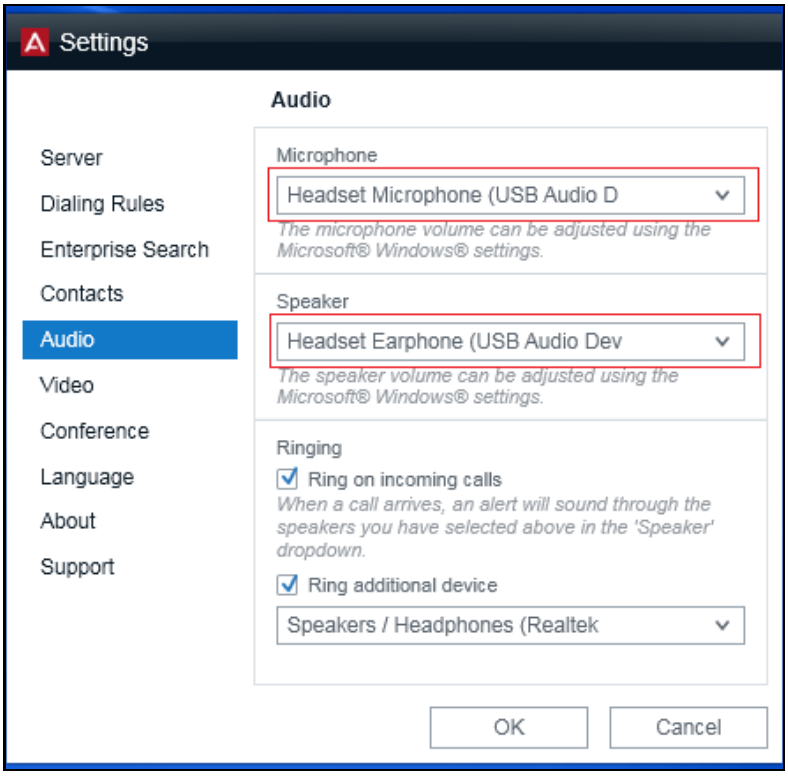
Note that the Telekonnectors TLK Dual-Digital is automatically detected in Microsoft Windows as **Headset Microphone (TLK-DUAL**) as **Microphone** and **Headset Earphone (TLK-Dual**) as **Speaker**.

7. Configure Avaya Communicator for Windows (SIP)

After logging into Avaya Communicator for Windows, the TLK Dual-Digital device is automatically detected. Click "**Settings → Other Settings"** and select **Audio** from the left panel.



Both **Headset Microphone (USB Audio Device)** and **Headset Earphone (USB Audio Device)** are detected in Microsoft Windows as **Microphone** and **Speaker** respectively. Below shows the screenshot using Communicator for Windows for both the Speaker and Microphone devices.



8. Configure Telekonnectors TLK Dual-Digital and headsets

No configuration is required for the Telekonnectors TLK Dual-Digital. The TLK Dual-Digital provides a cable to the headset connector and a USB cable to the PC. The USB cable also provides power to the device. Refer to **Figure 1** for details.

9. Verification Steps

Verify that the Telekonnectors Dual-Digital has been connected properly as described in **Section 8** to the Avaya one-X® Communicator and Avaya Communicator for Windows. Once the headset is connected to the TLK Dual-Digital, verify that incoming and outgoing calls are established with two-way audio to the headset and that the headset can get dial tone and end an active call.

10. Conclusion

These Application Notes describe the configuration steps required to integrate the Telekonnectors TLK Dual-Digital connected to TLK Galaxy Pro and TLK C Plus Headsets with Avaya one-X® Communicator and Avaya Communicator for Windows. All test cases were completed successfully with observations in **Section 2.2**.

11. Additional References

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, Jun 2014, Document Number 03-300509.
[2] *Administering Avaya IP Deskphone H.323 9608, 9611G, 9621G, and 9641G*, Release 6.2 Service Pack 4, Issue 15, Aug 2013, Document Number 16-300698.
[3] *Application Notes for Configuring Avaya 9600 Series IP Deskphones running Avaya one-X® SIP firmware with Avaya Aura® Session Manager*.
[4] *Administering Avaya Aura® Session Manager*, Release 6.3, Issue 5, Jun 2014.

The Telekonnectors headset and accessories product information can be obtained from Telekonnectors.

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.