



Avaya Solution & Interoperability Test Lab

Application Notes for the IPEVO FR-33.1 for Avaya USB Handset with Avaya IP Softphone – Issue 1.0

Abstract

These Application Notes describe a compliance-tested solution comprised of Avaya IP Softphone Release 6.0 and the IPEVO FR-33.1 USB Handset. The IPEVO FR-33.1 is a USB Handset engineered and optimized for the Avaya IP Softphone with 16 kHz sampling rate and wideband audio receiver and microphone. The IPEVO FR-33.1 gives users a keypad and provides full control of Avaya IP Softphone functions including volume control, making, receiving, transferring and conferencing calls.

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 a compliance-tested solution comprised of Avaya IP Softphone Release 6.0 and IPEVO FR-33.1 USB Handset. For integration with Avaya IP Softphone, IPEVO provides an IPEVO FR-33.1 USB driver specific to Avaya IP Softphone to be installed on the Windows PC/laptop on which the Avaya IP Softphone runs. The IPEVO FR-33.1 USB Handset connects to an available USB port on the PC and is detected as a USB Audio Device in Windows.

Figure 1 shows the layout of the IPEVO FR-33.1 USB Handset and the function of each button.

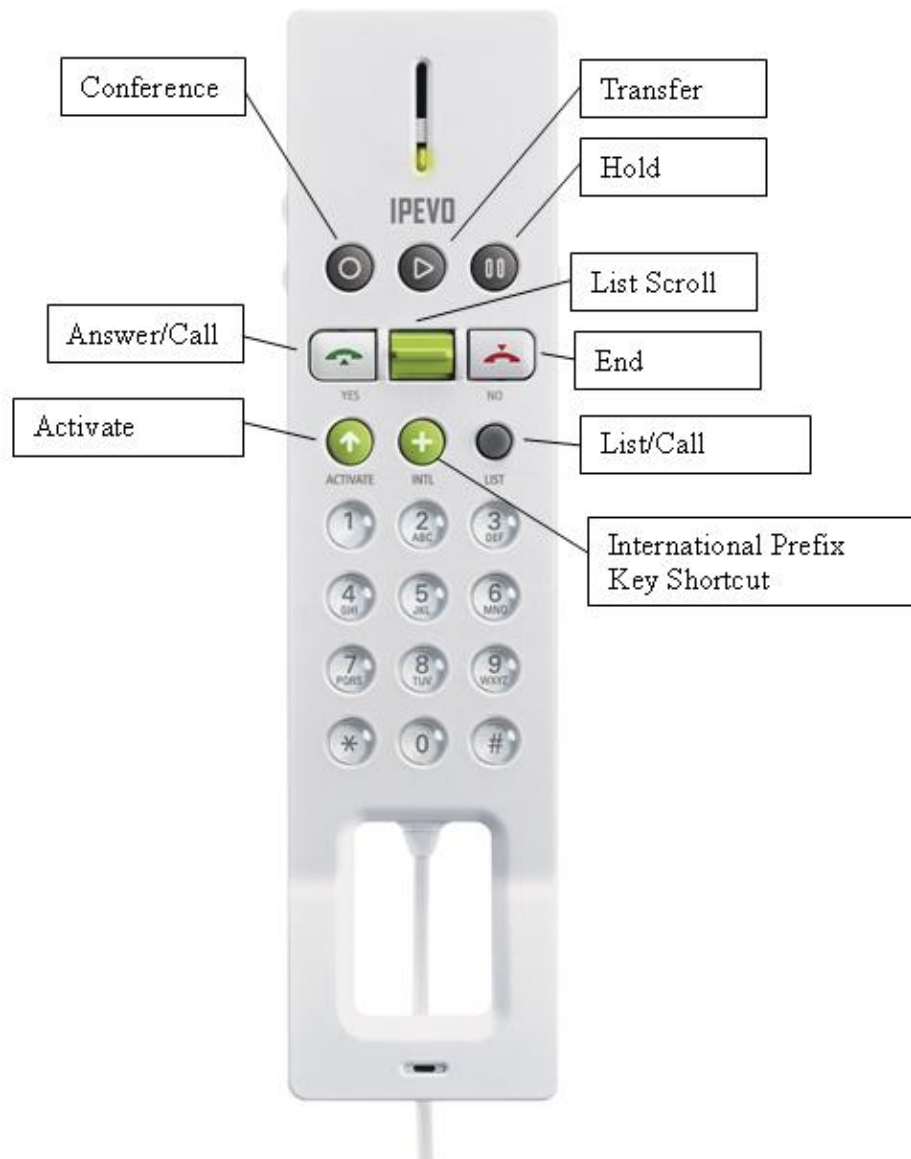


Figure 1: Layout of Handset

Figure 2 illustrates the test configuration comprising of an Avaya S8500 Server and an Avaya G650 Media Gateway, and has connections to the following: Avaya 4621SW IP Telephones, Avaya 2420 Digital Telephones, Avaya IP Softphones, and an ISDN-BRI trunk to the PSTN. The IPEVO FR-33.1 USB Handset is connected to the PC/laptops running Avaya IP Softphone, where the IPEVO Control Center USB Driver software is also installed. The Avaya C364T-PWR Converged Stackable Switch provides Ethernet connectivity to the servers and IP telephones

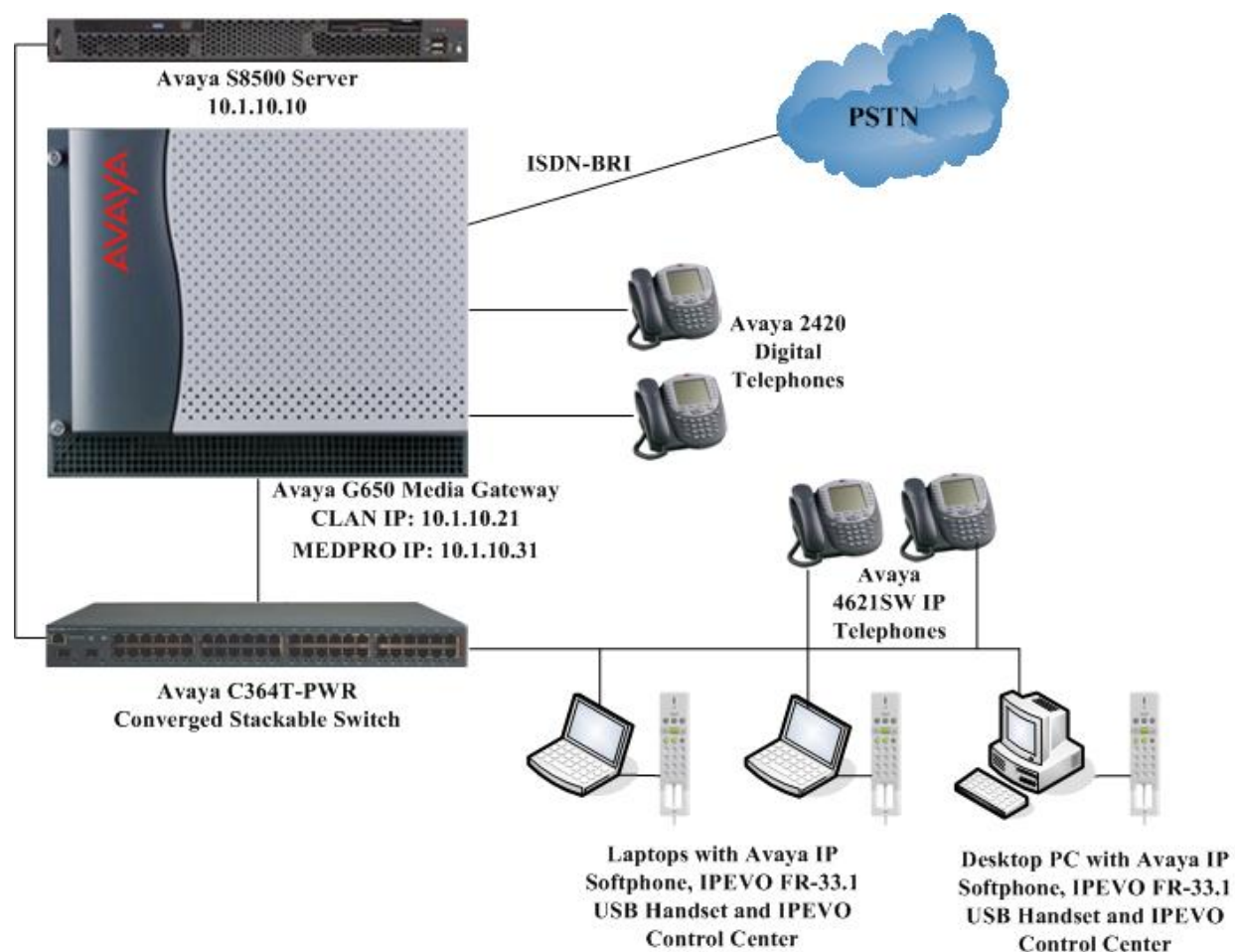


Figure 2: Test Configuration

2. Equipment and Software Validated

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

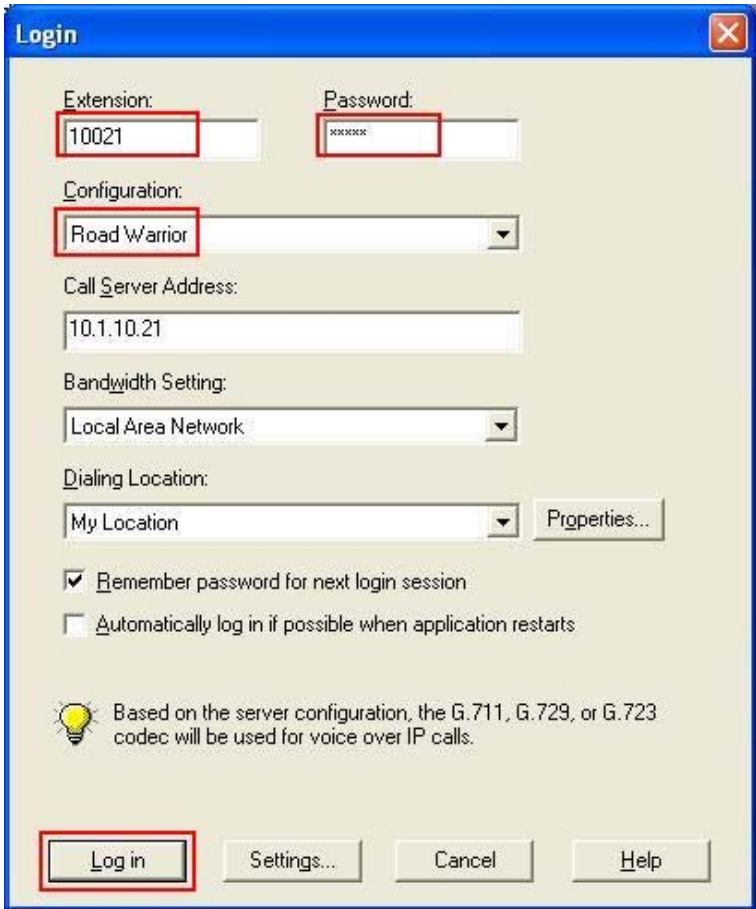
Equipment	Software
Avaya S8500 Server	Avaya Communication Manager 5.1 (Service Pack 1 01.0.414.3-15962)



Equipment	Software
Avaya G650 Media Gateway	-
- TN2312BP IP Server Interface	HW07, FW044
- TN799DP C-LAN Interface	HW01, FW026
- TN2602AP IP Media Processor	HW02, FW040
- TN2214CP Digital Line	HW08, FW015
Avaya IP Softphone	6.0 Service Pack 4
Avaya 4621SW IP Telephones	2.8.8.7 (H.323)
Avaya 2420 Digital Telephones	-
Avaya C364T-PWR Converged Stackable Switch	4.5.18
IPEVO FR-33.1 for Avaya USB Handset (Model number: CDPU-051P)	-
IPEVO Control Center USB Driver	1.0.0.8
PC and Laptops	Microsoft Windows XP Professional Service Pack 2


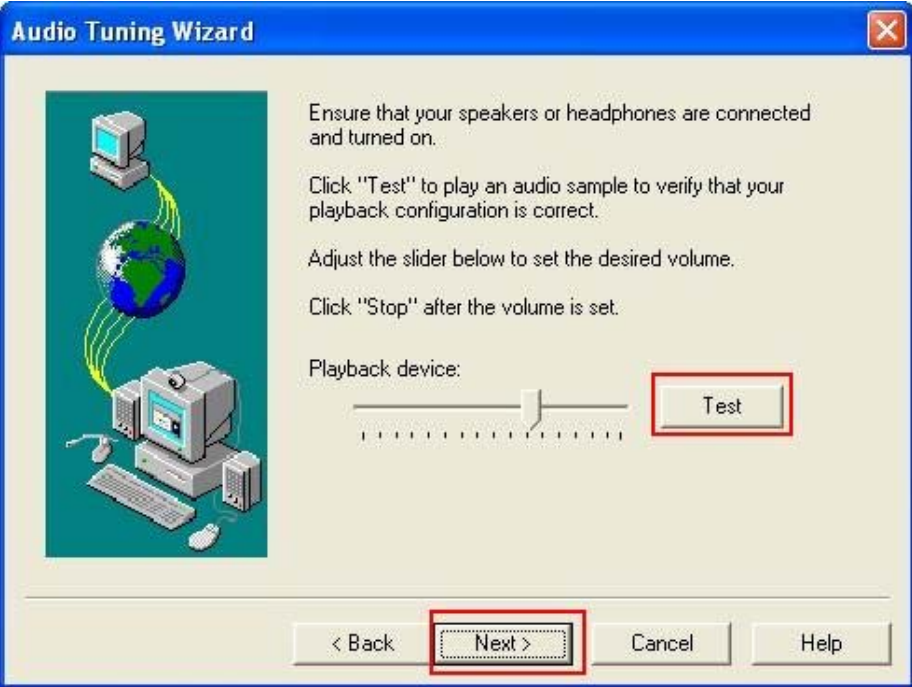
3. Configure Avaya IP Softphone



This section describes the required configuration to configure an Avaya IP Softphone user. It is assumed that the Avaya IP Softphone software is already installed on the PC.


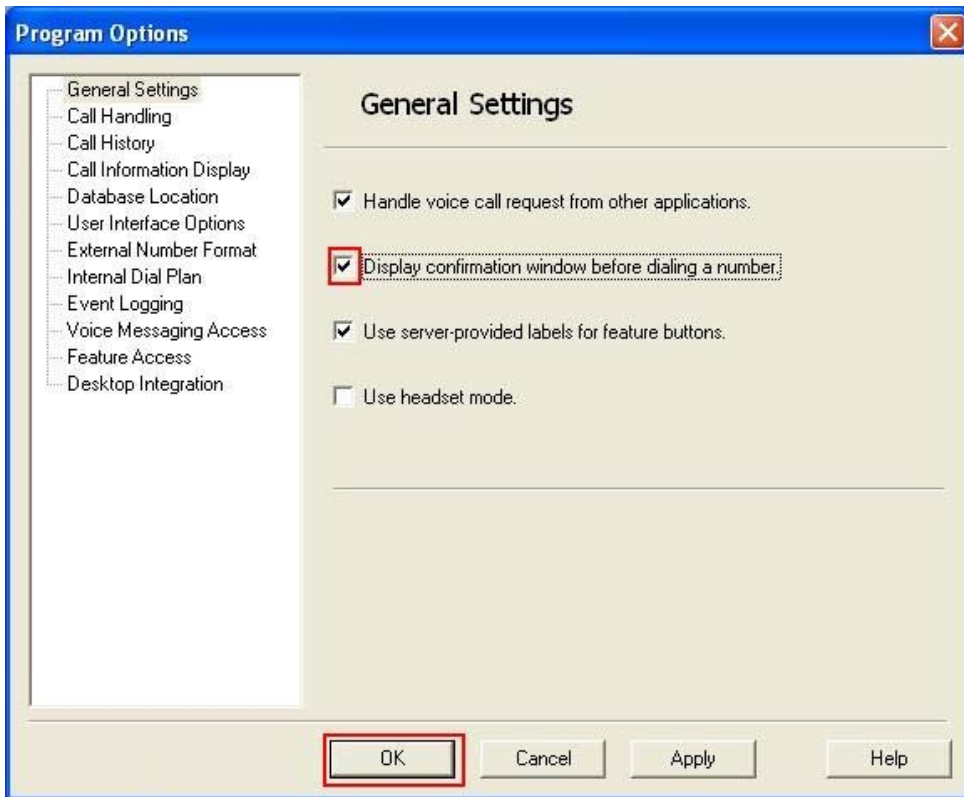
Step	Description
1.	<p>Using the System Access Terminal (SAT) for Avaya Communication Manager, enter the command add station n, where n is a valid extension under the dial plan, to add an extension for the Avaya IP Softphone. Set Type to either a digital or IP station type and specify the Name and Security Code. The Security Code is required in Step 3 to log in to the Avaya IP Softphone application. Ensure that IP SoftPhone is set to y.</p> <pre> add station 10021 Page 1 of 5 STATION Extension: 10021 Lock Messages? n BCC: 0 Type: 4621 Security Code: 12345 TN: 1 Port: IP Coverage Path 1: 99 COR: 1 Name: IP Softphone User 1 Coverage Path 2: COS: 1 Hunt-to Station: STATION OPTIONS Time of Day Lock Table: Personalized Ringing Pattern: 1 Message Lamp Ext: 10021 Mute Button Enabled? y Expansion Module? n Media Complex Ext: IP SoftPhone? y IP Video Softphone? n Customizable Labels? Y </pre>

Step	Description
2.	On the PC where Avaya IP Softphone is installed, install the IPEVO Control Center USB Driver by following the instructions in Section 4 . Connect the IPEVO FR-33.1 USB Handset to an available USB port on the PC.
3.	<p>Click Start > All Programs > Avaya IP Softphone > Avaya IP Softphone to start the Avaya IP Softphone application. From the Login window, enter the extension and Security Code created in Step 1 for Extension and Password respectively and select Road Warrior for Configuration. Click Log in.</p> 

Step	Description
4.	<p>To configure the Avaya IP Softphone to use the IPEVO FR-33.1 USB Handset, select Audio > Tuning Wizard from the menu.</p> 
5.	<p>Select FR-33.1 for both Select a primary playback device and Select a recording device, and click Next.</p> 

Step	Description
6.	<p>Select Headset or Handset and click Next.</p> 
7.	<p>Click Test and verify that audio can be heard on the IPEVO FR-33.1 USB Handset. Click Next.</p> 

Step	Description
8.	<p>Set the microphone recording level as desired and click Next.</p> 
9.	<p>Click Test to allow Avaya IP Softphone to determine the normal background noise level. After the test completes, click Next.</p> 


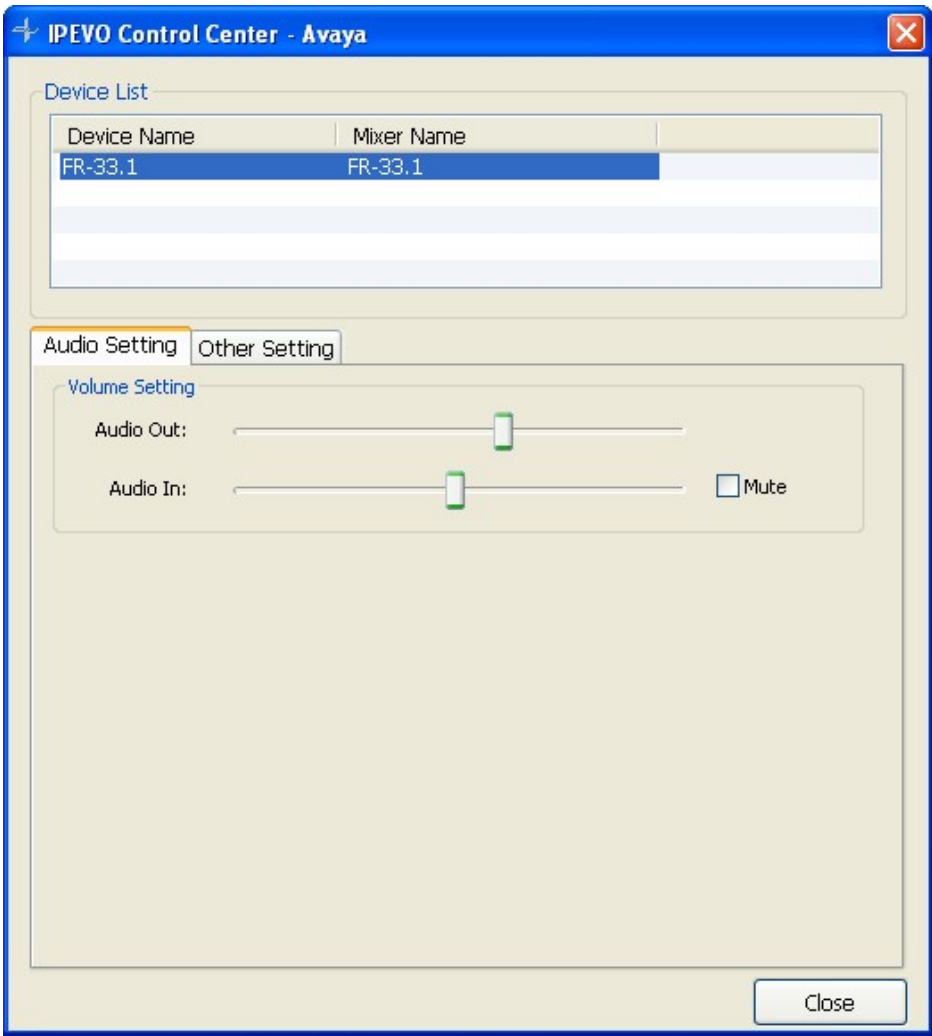
Step	Description
10.	Click Finish to complete the Audio Tuning Wizard.
11.	<p>Select Tools > Program Options from the menu.</p> 
12.	<p>For the initial use of the IPEVO FR-33.1 USB Handset, it is recommended that the field Display confirmation window before dialing a number to be checked so that the number to be dialed can be confirmed. Click OK to confirm the changes.</p> 

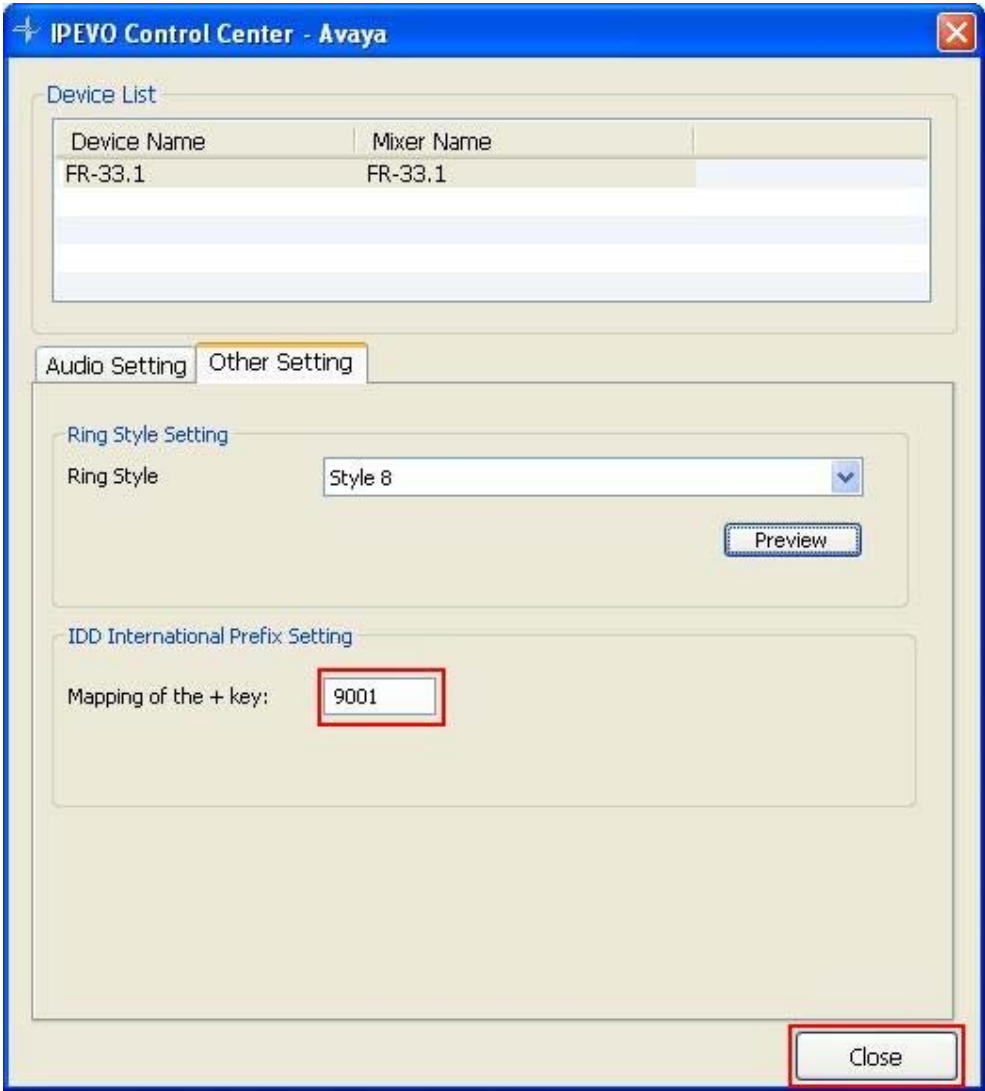
4. Configure IPEVO FR-33.1 for Avaya USB Handset

4.1. Install IPEVO Control Center USB Driver

Install the IPEVO Control Center USB Driver using the instructions provided in [1].

4.2. Configure IPEVO Control Center

Step	Description
1.	<p>Click Start > All Programs > IPEVO > IPEVO Control Center - Avaya to start the IPEVO Control Center application. The application starts up minimized. To bring up the window, right-click on the  icon in the taskbar notification area and click Audio Setting.</p> 

Step	Description
2.	<p>Click the Other Setting tab. Set the Mapping of the + key field to the digits to be inserted when the + button is pressed on the FR-33.1 USB Handset. This is to facilitate the dialing of international destinations using the USB Handset.</p> 

5. Interoperability Compliance Testing

The interoperability testing focused on verifying the integration of IPEVO FR-33.1 USB Handset with Avaya IP Softphone.

5.1. General Test Approach

The general approach was to exercise basic call functions on the Avaya IP Softphone using the IPEVO FR-33.1 USB Handset. The main objectives were to verify that:


- The buttons on the IPEVO FR-33.1 USB Handset correctly correspond to Avaya IP Softphone functions.
- The buttons on the IPEVO FR-33.1 USB Handset and the associated buttons/actions on Avaya IP Softphone can be used interchangeably, i.e. place a call with Avaya IP Softphone and hang the call up by pressing the red **End** button on the IPEVO FR-33.1 USB Handset.
- The volume and mute buttons on the IPEVO FR-33.1 USB Handset work properly during a call.
- Basic calls, transferred calls, and conferences may be established with good voice quality with the integrated Avaya IP Softphone/ IPEVO FR-33.1 USB Handset solution.
- Calls may be established using the Contact Directory and Call History features in Avaya IP Softphone.
- The integrated solution works properly after disconnecting and reconnecting the IPEVO FR-33.1 USB Handset and resetting the PC.

5.2. Test Results

All test cases passed. The IPEVO FR-33.1 USB Handset works correctly for all the tests described in **Section 5.1**.

6. Verification Steps

The following steps may be used to verify the configuration:

- Verify that Avaya IP Softphone is registered with Avaya Communication Manager (use the SAT command **status station n**, where **n** is the extension of the Avaya IP Softphone).
- Verify that IPEVO Control Center is running by observing the  icon in the taskbar notification area.
- Press the Activate button on the IPEVO FR-33.1 USB Handset. Verify that the Avaya IP Softphone window is brought into focus.
- Place calls to and from Avaya IP Softphone using the IPEVO FR-33.1 USB Handset. Verify good voice quality and consistency of the IPEVO FR-33.1 USB Handset buttons with Avaya IP Softphone.

7. Support

For technical support on FR-33.1 for Avaya USB Handset, contact IPEVO at:

- Phone: + 886-2-5550-8686
- Email: <mailto:service@ipevo.com>

8. Conclusion

These Application Notes describe a compliance-tested solution comprised of Avaya IP Softphone Release 6.0 and IPEVO FR-33.1 for Avaya USB Handset. All test cases were completed successfully.

9. Additional References

Product documentation for Avaya products may be found at <http://support.avaya.com>.

The following product documentation is available from IPEVO.

[1] *FR-33.1 User Guide for Avaya*, Version 3, August 2008.

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