Application Note



ST-218 January 22, 2007

ShoreTel SoftPhone with Plantronics CS-50 USB Headset

This document goes through the SoftPhone configuration steps when using the Plantronics CS-50 USB Wireless headset. In some cases, including the CS-50, the far end party of the call may experience fluctuating volume levels from the use of automatic gain control. This application note shows you how to turn off automatic gain control, set the volume level played into your headset speakers and set the volume level recorded by your headset microphone.

We cover the audio configuration when using the Plantronics CS-50 USB Wireless headset; however, this will provide insight into all the configuration options that are applicable to other headsets. When using other headsets, please refer to the "SoftPhone Application note ST-111". For information about installing and using the Persono software from Plantronics, please contact Plantronics.

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SoftPhone Audio Configuration

From the "File" menu of the ShoreTel Call Manager, start the SoftPhone by selecting the "SoftPhone..." menu item (Refer to SoftPhone Application Note ST-111).



Figure 1 - SoftPhone control panel

Note: The SoftPhone does not support automatic on-hook and off-hook. To answer and place a call, the "Talk" button must be engaged (See Figure 1). Most users choose the option to automatically assign their extension, go off-hook and go into handsfree mode when the SoftPhone is started. This is available from the Telephony tab of the ShoreTel System control panel. Handsfree mode turns off dial tone between calls (See Figure 2).



Figure 2 - SoftPhone Configuration

From the SoftPhone application, click on the "Options..." button (See Figure 3). A new window called "ShoreTel SoftPhone Configuration" will appear. Click on the tab called "Audio" (See Figure 4) and make sure the following items are selected:



Figure 3 - SoftPhone "Options" page.

Sound Devices

- Recording: CS50/CS60-USB Headset
- Playback: CS50/CS60-USB Headset
- Check: Use only configured devices

Device Type

In this section there are three choices (See Figure 4).

- **Headphones:** This setting should not be used. If you select this option audio input, the volume heard by far end party will be automatically adjusted (Auto Gain Control). **NOTE:** We've had some issues when this setting is used were the volume adjusts erratically.
- **Desktop Speakers**: This setting should not be used.
- **Telephone:** This setting should be used. Selecting this setting turns off the "Auto Gain Control" which delivers better performance so the far end can hear you clearly. Using this setting requires manual setting of the input volume (shown in the next section).

Recording	CS50/CS60/USB Headure
Playback I Use only	CS50/CS60USB Headset
C Headph	hones 🦈 Desktop Speakers 👎 Telephone

Note: Once done click "OK" and shut down the "SoftPhone" application and re-launch to make sure all the new settings are in effect.

Microsoft Audio Configuration

From the "Control Panel," double click "Sounds and Audio Devices" icon (Figure 5).



Figure 5 -Control Panel – Sounds and Audio Devices.

Sounds and Audio Devices Properties

A new window called "Sounds and Audio Devices Properties" will open up (See Figure 6). From this new window, click on the tab called "Voice." From the Voice menu, use the drop down for "Voice playback" make sure "CS50/CS60-USB Headset" is selected. Confirm the same device is also selected for "Voice recording."

nds an	d Audio Devices Properties
Volume	Sounds Audio Voice Hardware
These s playbacl	ettings control volume and advanced options for the voice < or recording device you selected.
Voice	playback
O.	Default device:
-	CS50/CS60-USB Headset
	Volume Advanced
Voice	recording
2	Default device:
18	CS50/CS60-USB Headset
	Volume Advanced
	Test hardware

Figure 6 - Sounds and Audio Device Properties.

Note: The "Test hardware" option does not work with the CS-50 USB Wireless since the device will not go off-hook.

Setting the Voice Playback Volume

First you need to set the volume level that is played into the speakers of your headset.

Adjust the voice playback volume from the "Sounds and Audio Device Properties" page on the "Voice" tab by clicking on the "Volume..." button just beneath "Voice playback" (See Figure 6). Once the button is clicked, a new window will be presented that says "Speaker" (Figure 7). Adjust the volume to an acceptable level. We have found setting the volume to maximum works best.



Figure 7 - Voice Playback

Setting the Voice Recording Level

Now you need to set the volume level that is recorded by the microphone on your headset. Adjusting the voice recording volume is very important since the far end may not be able to hear you if set incorrectly.

Note: If "Headphones" is selected from the "ShoreTel SoftPhone Configuration" page (covered in previous section), then adjusting the next setting will not be saved. Make sure "Telephone" was selected before continuing so Auto Gain Control is turned off.

Adjust the voice record volume from the "Sounds and Audio Device Properties" page on the "Voice" tab by clicking on the "Volume..." button just beneath "Voice recording" section in the window (See "Figure 6: Sounds and Audio Devices Properties" above). Once the button is clicked, a new window called "Wave In" will open (See Figure 8). From this window, the record volume should be adjusted. It is best to set this level when on a call with another party (coworker for example). Find a volume level that is acceptable. Once the level has been set, close out all the volume properties windows.

Record of Change

This application note is subject to change. Updates and corrections are always welcome. Please submit any updates or corrections to info@shoretel.com.

🖥 Wave In 📃 🗆 🗙					
Options Help					
Wave In					
Balance:					
Volume:					
Mute all					
CS50/CS60-USB Headset					
Figure 8 - Wave In					

Note: You may consider making a few additional calls to confirm the voice playback and voice record levels are acceptable. You should make both internal and external calls including calls to a cell phone.

Issue	Author	Reason for Change	Date
3.0	J. Casselman, ShoreTel	Edits	January 20 ,2007
1.0	J. Casselman, ShoreTel	Initial Release	October 5, 2006

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