



Avaya Solution & Interoperability Test Lab

Application Notes for EPOS Connect and EPOS IMPACT 100 Series USB-A Headset with Avaya one-X® Agent - Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the EPOS Connect and EPOS IMPACT 100 Series USB-A Headset with Avaya one-X® Agent.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as any 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

The EPOS IMPACT 100 Series USB-A Headset together with EPOS Connect software allows connection and call control with Avaya one-X® Agent (hereafter referred to as one-X Agent) using a cable connected via the USB interface to the PC. EPOS Connect is a collection of programs that enables remote call control by the EPOS headset when used with one-X Agent. With an EPOS headset connected to the PC USB interface, users can directly answer, end, mute/unmute, and adjust volume with the headset.

The following EPOS IMPACT 100 Series headsets were used for compliance testing.

- IMPACT SC 60 USB ML
- IMPACT SC 75 USB MS

Note: See the EPOS Declaration of Compliance, **Attachment 1**, which provides details of other EPOS IMPACT 100 series models for which this testing applies. For additional information contact EPOS support as shown in **Section 2.3**.

2. General Test Approach and Test Results

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls with one-X Agent, answering and ending calls using the call control button on the EPOS headset, and verifying two-way audio. The call types included calls to voicemail, local extensions, and the PSTN. Auto-answer, call hold and resume, mute and unmute, and volume were also tested.

The serviceability testing focused on verifying the usability of the headset solution after restarting the one-X Agent, restarting the PC, and reconnecting the headset USB cable to the 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 recommends our customers implement Avaya solutions using appropriate security and encryption capabilities enabled by our products. The testing referenced in these DevConnect Application Notes included the enablement of supported encryption capabilities in the Avaya products. Readers should consult the appropriate Avaya product documentation for further information regarding security and encryption capabilities supported by those Avaya products.

Support for these security and encryption capabilities in any non-Avaya solution component is the responsibility of each individual vendor. Readers should consult the appropriate vendor-supplied product documentation for more information regarding those products.

For the testing associated with these Application Notes, the interface between Avaya systems and endpoints utilized enabled capabilities of TLS/SRTP.

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.

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.
- Answering and ending calls using the call control button on the headset and the soft button on one-X Agent.
- Using the soft button on one-X Agent to hold and resume the audio.
- Using the volume buttons on the headset to adjust the audio volume.
- Using the mute button on the headset and the soft button on one-X Agent to mute and unmute the audio and verifying the mute status.
- Verifying incoming call notification.
- Verifying call ended notification.

The serviceability testing focused on verifying the usability of the headset solution after restarting the one-X Agent, restarting the PC, and reconnecting the USB interface to the PC.

2.2. Test Results

All test cases passed successfully.

2.3. Support

For support on this EPOS headset solution, contact EPOS Technical Support at the website below; sign-in is required:

- Website: <https://eposaudio.com/support/>

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the EPOS Connect and EPOS IMPACT 100 Series headset with Avaya one-X® Agent. The EPOS Connect software was installed on the PCs together with Avaya one-X® Agent. The EPOS headsets were connected via a cable into the PCs' USB interface. The following EPOS IMPACT 100 headsets were tested:

- IMPACT SC 60 USB ML
- IMPACT SC 75 USB MS

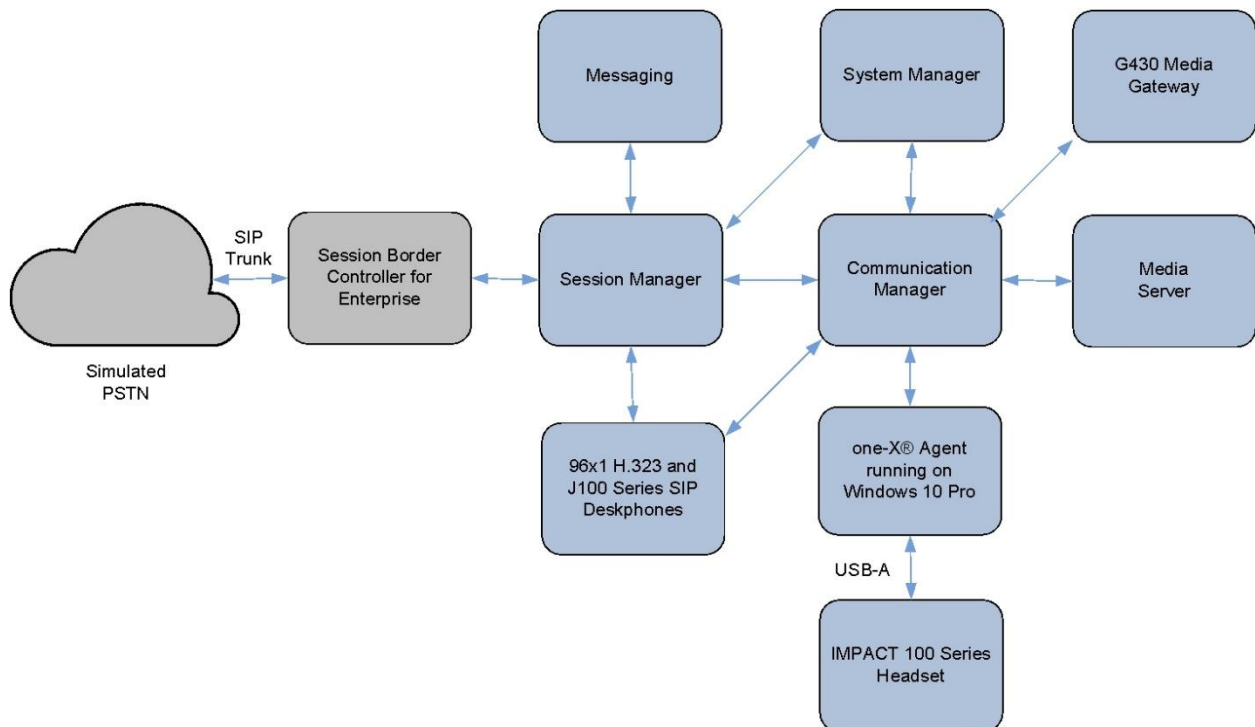


Figure 1: Test Configuration

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	8.1.3.0.1-FP3P1
Avaya G430 Media Gateway <ul style="list-style-type: none">• MGP	41.34.1
Avaya Aura® System Manager	8.1.3.1 Build No. - 8.1.0.0.733078 Software Update Revision No: 8.1.3.1.1012244 Service Pack 1
Avaya Aura® Session Manager	8.1.3.1.813113
Avaya Aura® Media Server	8.0.2.138
Avaya Messaging	10.8 SP1SU2
Avaya 96x1 Series H.323 Deskphones	6.8511
Avaya J100 Series SIP Deskphones	4.0.10
Avaya one-X® Agent running on Windows 10 Pro	2.5.15 (H.323)
EPOS IMPACT 100 Series Headsets <ul style="list-style-type: none">• IMPACT SC 60 USB ML• IMPACT SC 75 USB MS	v15.05.89.0089
EPOS Connect for Windows	4.5.0.1295

5. Configure Avaya Aura® Communication Manager

This section covers the station configuration for one-X Agent. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

Use the **add station** command to create a station for one-X Agent. Set the **Type** field to the station type to be emulated. In this example, *9641G* was used. Set the **Port** field to *IP* and configure a **Security Code**, which will be used as the password by one-X Agent to log in. Set the **IP Softphone** field to *y*.

```
add station 10004                                     Page 1 of 5
                                                    STATION
Extension: 10004                                     Lock Messages? n      BCC: 0
Type: 9641G                                           Security Code: xxxxxx  TN: 1
Port: S00005                                          Coverage Path 1:      COR: 1
Name: one-X Agent                                     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: 10003
Speakerphone: 2-way                                Mute Button Enabled? y
Display Language: english                           Button Modules: 0
Survivable GK Node Name:                             Media Complex Ext:
Survivable COR: internal                             IP SoftPhone? y
Survivable Trunk Dest? y

                                                    IP Video Softphone? n
Short/Prefixed Registration Allowed: default

                                                    Customizable Labels? y
```

On **Page 4** of the Station form, configure the additional feature buttons shown in bold, which are used by one-X Agent to log in as an Automatic Call Distribution (ACD) agent.


```
add station 10004                                     Page 4 of 5
                                                    STATION
SITE DATA
Room:                                                 Headset? n
Jack:                                                 Speaker? n
Cable:                                                Mounting: d
Floor:                                                Cord Length: 0
Building:                                             Set Color:

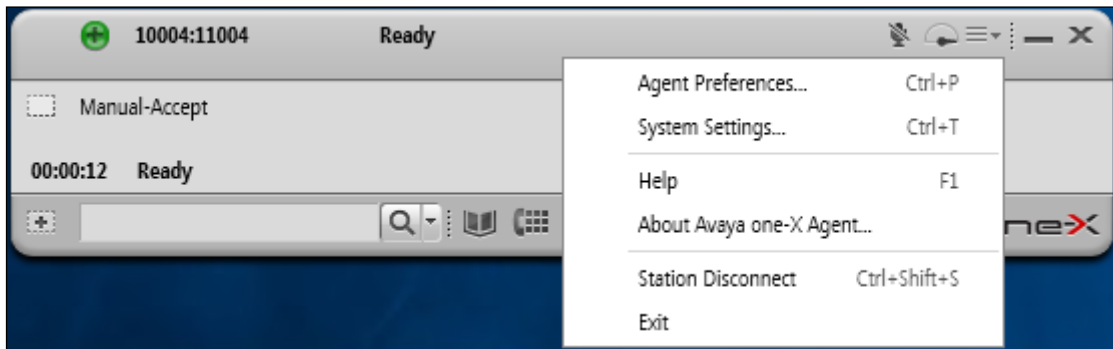
ABBREVIATED DIALING
List1: system                                         List2:
List3:

BUTTON ASSIGNMENTS
1: call-appr                                         5: abrv-dial List: 1 DC: 01
2: call-appr                                         6: abrv-dial List: 1 DC: 02
3: call-appr                                         7: auto-in Grp:
4:                                                    8: aux-work RC: Grp:

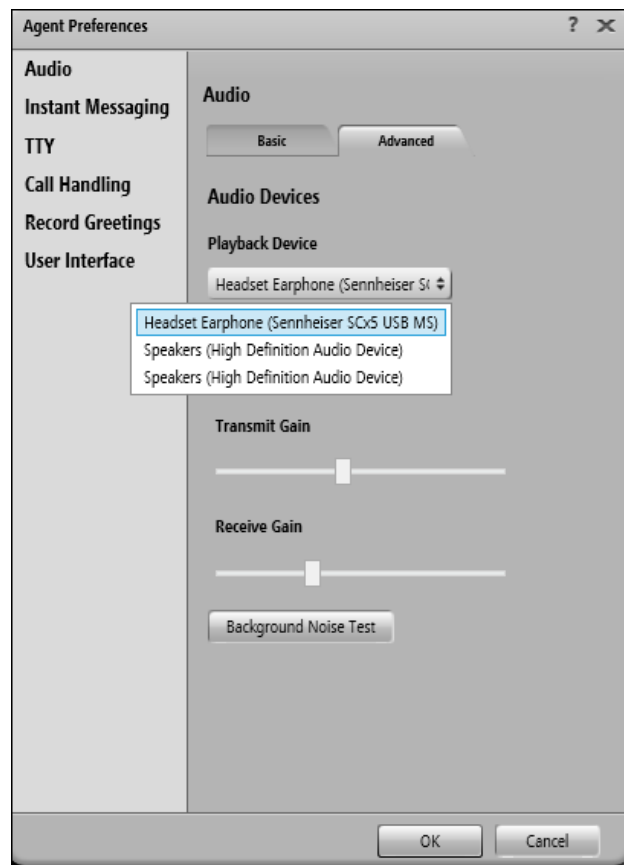
voice-mail 10000
```

6. Configure Avaya one-X® Agent

Before configuring one-X Agent, the headset must first be configured and provisioned as in **Section 7**. After logging into one-X Agent, click on the menu  and then select **Agent Preferences** as shown below.



In the **Agent Preferences** window, click on **Audio** in the left panel and then select the **Advanced** tab on the right as shown below. Check that **Playback Device** and **Record Device** fields display the right headset model. In the following *Sennheiser SCx5 USB MS* is selected for SC 75 USB MS. Otherwise, select the device from the click down menu on the respective box.



7. Configure EPOS IMPACT 100 Series headset solutions

This section covers the steps to integrate EPOS IMPACT 100 Series headsets with one-X Agent, including:

- Installing the EPOS Connect software
- Connecting the EPOS headset
- Configuring the EPOS headset with EPOS Connect

Note: After successfully performing this procedure, the EPOS headset will be detected in one-X Agent as described in **Section 6**.

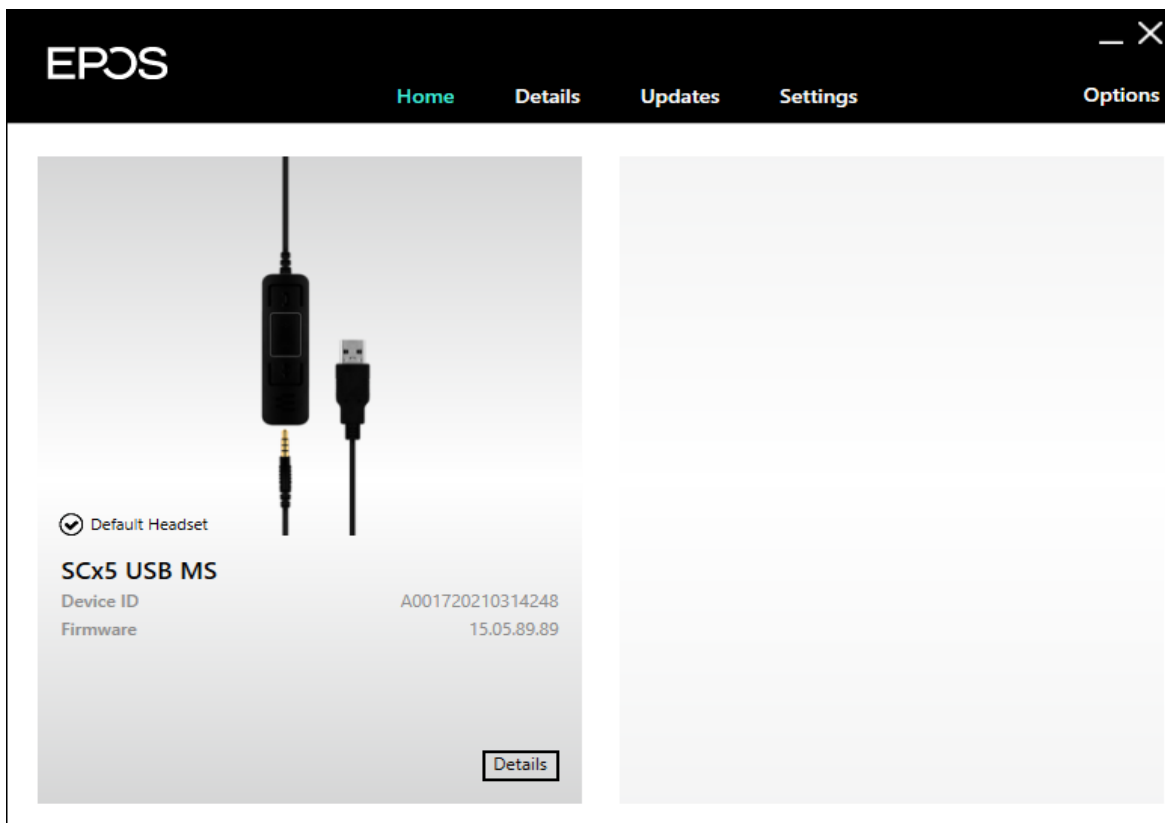
7.1. Installing the EPOS Connect Software

EPOS Connect software can be obtained from the EPOS support portal at <https://eposaudio.com/support/>. Installation of the software is done by running the .exe file and following the prompt.

7.2. Connect the EPOS headset

Plug the EPOS IMPACT 100 Series headset cable into the USB port of the PC. The device drivers will automatically be installed.

Open the EPOS Connect program installed on the PC. Select the **Home** tab and check that the headset is detected, as shown below for one of the IMPACT SC 75 USB MS headsets tested.



7.3. Configuring EPOS headset with EPOS Connect

Open the one-X Agent program and click the EPOS Connect program **Settings** tab followed by the **Softphone** sub tab as shown below. Verify the **Default Headset** is properly detected. Check that the **Default Softphone** is set as **Avaya one-X Agent**. Otherwise, click the drop-down menu of **Default Softphone** to select. Click **Save** on the bottom right to retain it.

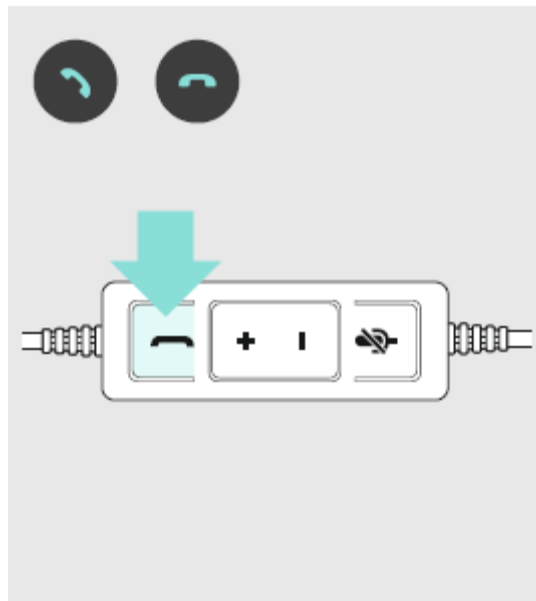
The screenshot shows the EPOS Connect application window with the 'Settings' tab selected. Within the 'Settings' tab, the 'Softphone' sub-tab is active. The window has a dark header with the 'EPOS' logo and navigation links: 'Home', 'Details', 'Updates', 'Settings' (highlighted), and 'Options'. The main content area is divided into sections: 'Headset', 'Softphone', and 'General'. The 'Headset' section shows 'Default Headset' set to 'SCx5 USB MS'. The 'Softphone' section shows 'Default Softphone' set to 'Avaya one-X Agent'. The 'General' section has a 'Pause Media' checkbox checked and a 'Configure' button for 'Windows Sound and Audio Settings...'. At the bottom left is a 'Restore Default' button, and at the bottom right is a 'Save' button.

Feature	Setting	Description	Mode
Headset			
Default Headset	SCx5 USB MS	Indicates the headset that will have call	
Softphone			
Default Softphone	Avaya one-X Agent	Indicates the softphone that will be use	
General			
<input checked="" type="checkbox"/> Pause Media		Controls the function of media players	
Configure	Windows Sound and Audio Settings...		

8. Verification Steps

This section verifies that the EPOS solution has been successfully integrated with one-X Agent PC.

1. Open the EPOS Connect program to verify that the headset has been successfully connected to the PC for use with one-X Agent running. Observe that EPOS IMPACT 100 Series headset is detected as detailed in **Section 7.2**.
2. Make incoming and outgoing calls and verify that calls can be established with two-way audio. For incoming calls, answer the call by pressing the call control button on the headset (see inline controller as shown below).
3. End the call by pressing the same call control button on the headset.
4. Verify that remote control call functions, such as mute/un-mute and adjusting the volume can also be performed by pressing the relevant keys on the headset. Similarly, verify that the same call control functions can also be performed using one-X Agent.



9. Conclusion

These Application Notes describe the configuration steps required to integrate EPOS Connect and EPOS IMPACT 100 Series USB-A Headset with Avaya one-X® Agent. All test cases were completed successfully.

10. Additional References

This section references the Avaya and EPOS 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 8.1.x, Issue 8, Nov 2020
- [2] *Using Avaya one-X® Agent, Release 2.5.10 (H.323)*, Issue 1.0, Mar 2017.

The following EPOS documentation can be found at <http://www.eposaudio.com>.

- [3] *EPOS IMPACT SC 30 SC60 USB ML Quick Guide*.

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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.

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Declaration of Compliance

We, EPOS Group A/S, declare under sole responsibility that within EPOS IMPACT 100 series there are more variants that have similar features, differences affecting only the wearing style.

These differences have no other impact on firmware (FW) functionality. The schematics of RF board is 100% the same. The firmware version is also the same. The attached headsets which define the acoustics are 100% the same.

Product sales name	IMPACT SC 45 USB MS Single-sided USB-A headset with in-line call control IMPACT SC 75 USB MS Double-sided USB-A headset with in-line call control IMPACT SC 30 Single-sided USB-A headset with detachable USB cable and in-line call control IMPACT SC 60 Double-sided USB-A headset with detachable USB cable and in-line call control	
Product similarities	Firmware version RF PCBA Schematic Acoustical design	
Differences	Wearing style: Single vs Double sided headset Acoustical components: speaker, microphone	
	SC 45 / SC 75 - Black leatherette padding (headband and ear pad/s cover/s)	SC 30 / SC 60 - Foam padding (headband and ear pad/s cover/s)
connection method to Avaya one-X® Agent	USB-A direct	

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Appendix 1. Impact 100 Series, comparison overview

Comparison overview				
IMPACT 100 Series				
				
Art. no.	1000634	1000635	1000551	1000550
Wearing style				
Single-sided headset	*			*
Double-sided headset		*	*	
Headband	*	*	*	*
Connectivity				
Softphone/PC via USB	*	*	*	*
Microphone				
Noise-cancelling	*	*	*	*
Features & technologies				
In-line call control unit	*	*	*	*
EPOS ActiveGard® technology	*	*	*	*
Optimized for communication & multimedia	*	*	*	*
Noise at Work, (EU directive)*	*	*	*	*

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Appendix 2. Differences in acoustical components: speaker, microphone

	IMPACT SC 30 / SC 60	IMPACT SC 45 USB MS / SC 75 USB MS
Microphone frequency response	100 - 10,000 Hz	150 – 6,800 Hz (Wideband)
Speaker type	Neodymium magnet speaker	High-quality neodymium magnet speaker
Speaker frequency response	50 - 10,000 Hz	60 – 16,000 Hz (Wideband)
Sound pressure	SC 30 - Max 117 dB SC 60 - Max 113 dB	Max 113 dB on USB interface Max 118 dB on 3.5 mm interface