

vitero audio troubleshooting

1 General

This document covers the most common problems, which might occur when using audio connections and suggested solutions for each problem. Before using the troubleshooting table you should have completed the basic audio setup at your personal vitero room. To do this, please start vitero.exe and choose your personal **vitero** room when the group room selection screen appears. Follow the instructions which are presented by the slides in your personal room in order to start the audio assistant. If you have completed the audio setup at the audio assistant and you still have audio problems, please look up the respective problem in the left column of the troubleshooting table. The right hand column offers you the corresponding solution/measures/steps. Please look up those solutions/steps while you are in your personal vitero room.

Please consider, that it is mandatory for the use of audio devices, like (USB-) soundcards, USB-headsets, etc., to connect those devices directly to the PC (not via a USB-hub, etc.) before beginning the **vitero** meeting. Exempted from this condition are all analog audio devices with TRS-jackplugs, those can be plugged in or changed during a **vitero** meeting.

It is recommended to use a headset (headphones with integrated microphone) for audio communication because it offers the best audio quality most of the time. Other audio devices, like a combination of pc-speakers and a table microphone, are often causing more problems while installing them and during the set-up process (e.g. echo effects, if the microphone is located too close to the speakers) and are often having noticeably worse audio quality.

In case of audio problems it is generally recommended to use the headsets and soundcards listed in Annex B – vitero hardware recommendations.

1.1 Audio problems and suggested solutions/measures

1.1.1 You cannot hear anything

Please follow the suggested solutions below. If you right-click on your photo, a context menu opens, which can be used to play a test sound (menu "play test sound"). Please check after each new setting, if your problem has been solved.

- If your headset or speakers have controls and/or keys, please increase the hearing volume by manipulating these controls or keys.
- Open your context menu by right-clicking on your photo. In the upper part of the menu two rulers are visible. Check the setting of the playback ruler (ruler with loudspeaker symbol) and if necessary increase the audio output level by dragging the ruler to the right.
- Check if your headset is connected properly. Usually the plugs of the headset and sockets of the soundcard are color-coded or provide a microphone or headset symbol. Also, please check the headset cable for loose contact (by moving the cable around and at the same time checking the test sound). Please remember: USB-headsets must not be plugged in or removed during a vitero session. Removing or connecting USB-devices after starting vitero may lead to program crashes.
- If your computer provides several soundcards, check that windows is using the soundcard which is connected to your audio output devices. Please go to Start/Settings/Control Panel/Sounds and Audio Devices/, to select the 'Audio' tab, and

	<p>check if there are several sound card options available in the drop-down menu. If this is the case, select another sound card and restart vitero afterwards, in order to have the system accept the changes. Thereafter verify the new setting by playing the test sound.</p> <ul style="list-style-type: none"> ○ If you are using a USB sound card please look up in Start/Settings/Control Panel/Sounds and Audio Devices/Audio/ if the tick is set correctly to 'Use only default devices'. If necessary you can set the tick to 'Use only default devices' and save this setting by clicking on the 'Apply'-button or the 'OK'-button. Check your settings in vitero by using the test sound. ○ If you are using a notebook with a docking station, please connect the soundcard directly to your notebook and not via the docking station.
<p>1.1.2 When you are talking you can hardly be heard by others and yourself</p>	<p><i>After you have completed one of the solutions suggested below, you can check with the vitero audio assistant if you're voice is transmitted/played back in an adequate volume level. Click with your right mouse-button on your photo and choose 'audio assistant' in the context menu, then follow the instructions of the assistant.</i></p> <ul style="list-style-type: none"> ○ Check the hearing volume and the speaking volume settings in your Avatar Context menu and increase the volume levels, if necessary (by shifting the slide controls to the right). Afterwards talk with your headset in place and observe the microphone volume gauge below the microphone slide control in the upper part of the context menu. The gauge level should

be in the green area most of the time. If it is predominantly in the yellow area, you are too quiet/low/silent. Please adjust your microphone slide control to the right (if it is not in the maximum position already) in order to increase microphone sensitivity.

- If your headset or speakers and/or microphone have controls and/or keys, increase the hearing and the speaking volume by manipulating these controls or keys. If your headset features a 'Mute'-button which can disable the microphone, check the position of the button and deactivate the 'Mute'-button if necessary
- If you still can hardly be heard by others, (microphone volume gauge in the yellow or slightly in the green area) although the slide control is set at maximum volume level, check whether your sound card has a microphone boost option. To do so, you at first open the slide control section for the Windows Record Control by going to Start/Settings/Control Panel/Sounds and Audio Devices/, selecting the 'Audio' tab, clicking on the 'Volume' button in the 'Sound recording' field, and ticking 'Advanced Controls' in the 'Options' menu. After that you can access the 'Advanced Controls for Mic Volume' by clicking the 'Advanced...' button below the microphone volume level control, and activate the 'microphone boost' option there, if available. Depending on each soundcard manufacturer the microphone boost option might be named 'MIC Boost', 'Microphon +20dB increase/gain/amplification
- If the solutions/steps recommended above do not solve the problem, please use another sound card and/or headset, if

	<p>possible. Devices recommended by vitero are listed in <i>Annex B – vitero hardware recommendations</i>.</p>
<p>1.1.3 Your speaking is accompanied by loud microphone noise</p>	<p><i>After you have followed/completed one of the recommended settings, you can check if the noise has been reduced by using the vitero audio assistant for recording a soundfile. Click with your right mouse button on your photo and choose 'audio assistant' in the context menu and follow the instructions of the assistant.</i></p> <ul style="list-style-type: none"> ○ If you are using a notebook together with an external microphone (e.g. headset mic), please check whether the notebook's onboard microphone is disabled. To do so first open the slide control section for the Windows Record Control by going to Start/Settings/Control Panel/Sounds and Audio Devices/, select the 'Audio' tab, click on the 'Volume' button in the 'Sound recording' field, and set a tick at 'Advanced Controls' in the 'Options' menu. After that you can access the 'Advanced Controls for Mic Volume' by clicking the 'Advanced...' button below the microphone volume level control, and disable the notebook's onboard microphone there. ○ If you are using a desk microphone, change to a headset, if possible. If no headset is available and you have to use the desk microphone, limit the microphone noise by making sure he/she does not sit too far away from the microphone and the distance to the microphone remains roughly constant. ○ Check if your headset is connected properly. Disconnect your headset and then reconnect it, in order to see if it was connected correctly. (Caution: You only may proceed with this step if you are using an analog (TRS jacks & sockets) headset!

	<p>USB headsets must not be connected and/or disconnected while vitero is in operation, as this may lead to system crash!). Make sure you are obeying the color coding and/or the microphone and headphones symbols on the jacks of the headset and on the sockets of the sound card, and check if you have connected the devices accordingly. Also, check the headset cable for loose contact (by moving the cable around and speaking into the microphone at the same time to check if the noise can be reduced).</p> <ul style="list-style-type: none"> ○ Check if you have selected the correct soundcard for microphone audio input for vitero. Select the 'My PC' tab in the ,Options' menu and to check whether the correct sound card has been selected next to 'Microphone'. If you can choose from several sound card options, select one after another. Check each sound card for reduced microphone noise. ○ If the above mentioned steps do not solve the problem, check your sound card drivers and provide for updating/upgrading, if necessary.
<p>1.1.4 Other participants hear an echo effect when you are speaking</p>	<p><i>An echo effect is often caused by your playback/audio output (what you hear) being recorded by your microphone and played back to the other participants. It is important to know, that you are not hearing the echo effect you might be causing. Therefore it is not possible to check the suggested solutions in your personal vitero room by yourself</i></p> <ul style="list-style-type: none"> ○ Check your hearing volume level in your Avatar Context menu and lower the volume level, if necessary (by shifting the lower slide control next to the speaker symbol to the left). ○ Check your microphone volume level in your Avatar Context menu and lower the volume level, if need be. Speak using your

	<p>microphone and observe the volume gauge . The microphone volume gauge should mainly remain in the green area during speaking (for short peaks the gauge may reach the red area temporarily).</p> <ul style="list-style-type: none"> ○ Open the menu „settings“ by clicking on the tool symbol button in the lower left part of the vitero button bar . Set a tick at “echo suppression” in the “My PC” tab and confirm your selection by clicking “OK”. ○ For more information, see <i>Annex B - vitero echo suppression</i>
<p>1.1.5 When you are talking a big audio delay is caused, which delays/retards/ your talk at the other participants playback (or your voice is lagging behind).</p>	<p><i>If your computer usage is extremely high or your internet access has only limited bandwidth, it is possible that a substantial audio delay can occur. Please follow these steps in order to increase audio quality. Since the audio delay happens as you are speaking it is not possible to check improvements due to these steps by yourself in your personal vitero room.</i></p> <ul style="list-style-type: none"> ○ If your internet access has limited bandwidth please ask the moderator or team leader to reduce the audio quality of the vitero room via the menu „settings“. If you are a moderator or team leader yourself, click on the tool button in the lower left part of the vitero button bar in order to open the menu “settings”. Under the tab “expert options” set a tick at “reduce audio transmission frequency to 5 kHz from 11 kHz” and confirm your selection by clicking on „OK” ○ Close all programs that you do not necessarily need during the time of the vitero session, especially online applications such as e-mail client programs (e.g. Outlook, Lotus Notes) and browser programs (Microsoft Internet Explorer, Firefox etc.) in

order to decrease the data volume that has to be transmitted.

- For more information, see *Annex B - vitero audio delay minimization*.