

Using SoundJack in Low Latency Rooms

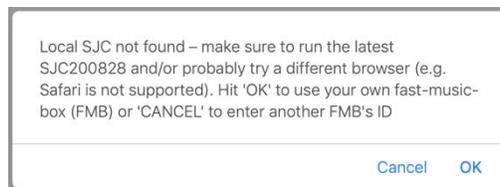
IMPORTANT: Please RESTART the computer before starting setup to ensure stability.

Audio setup

- (1) Check that all of these things are correct:
 - a. Plug audio interface into Soundjack computer (labeled)
 - b. Plug your microphone into the left channel and your headphones into the headphone jack. Turn headphone volume down.
 - c. Turn phantom power (48V) on if you are using a condenser mic
 - d. Turn the MIXER knob to PLAYBACK on the Presonus audio interface
 - e. Execute a representative high and loud sound for your instrument. Adjust your left channel gain knob as high as possible without distorting or clipping.

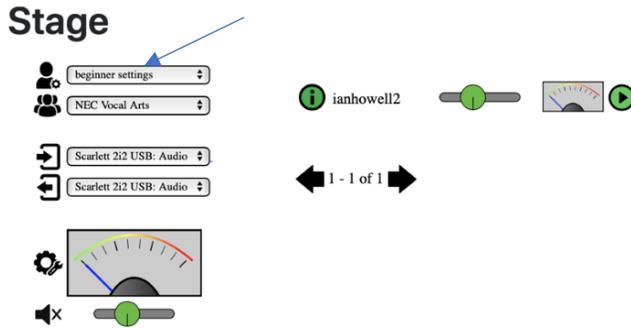
SoundJack setup

- (2) Log in with computer username/password pasted on the monitor
- (3) Launch (double click) the Soundjack application if not already open.
 - On PC, should be labeled “SoundJack” on the Desktop. A black dialog box appears. Minimize this window, but do not close it.
- (4) Open a single browser window. It should go to soundjack.eu automatically; if not, go there.
- (5) Log in with your Soundjack account
- (6) Click on “Stage” in the menu. Please make sure that only one browser window on the computer is on the Stage. If you see the following pop up:
 - On PC, check to make sure the SJC app is running (black dialog box). Try quitting and restarting the SJC app.



- (7) Wait several seconds for the Stage to fully load.

- (8) If the upper left dropdown says *expert* or *advanced*, change it to *beginner*.



(9) In the second dropdown, select the group you would like to join (here NEC Vocal Arts).

(10) Make sure that your audio interface input  and output  appear in the next two dropdowns. Both should say “Audiobox ASIO”

(11) You should see your own audio level in the VU meter . If you wish to hear yourself in your own headphones, adjust the green slider below that . If you wish to mute yourself, click the speaker icon to the left (shown here muted).

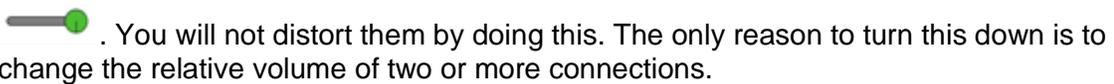
(12) Find your collaborator on the user list to the right.



(13) If their info circle  is green, they are ready to connect. If this is yellow their audio interface is not correctly set up. Red, their network connection is not correctly set up. If your own info circle is yellow, and you know your audio interface is correctly connected and selected, click the gear icon to the left of your VU meter to reset the



(14) Turn the volume slider of anyone you connect to all the way up to the right.



(15) This VU Meter shows their incoming audio level.

(16) Click play . The connection will be established and change into a stop button with an estimated one-way network travel time  6.50 ms. Anything below 14-16ms will be perceptually unnoticeable. Lower is better.

(17) To make more than one connection, click play  for each additional collaborator. Every person in the group connects directly to every other person.

(18) If you are connecting to someone off campus (or conceivably on campus if the expert settings were changed) and the estimate is higher than this, you may want to switch from *beginner settings* to *expert setting* to confirm that the sample buffer



is set to 64 and the network buffer  is set to 128. Once confirmed, switch back to *beginner settings*. Note switching from *beginner* to *expert* settings will cut off your connections. You will have to reconnect to everyone on your call.

Troubleshooting

- Please make sure that you have only one browser window (the Stage) and the SJC app running on this computer. Close all other windows and apps. IF you have a powerful computer (typically an i7 with 6 or more cores) you may be able to run a video app at the same time.
- The most common issues are solved by reloading the Stage (click the reload button in your browser). You may also need to quit the SoundJack app (SJC) and your browser, then restart the SoundJack app and your browser in that order.
- If you are experiencing a connection issue, please make sure that you are not logged into the stage in another browser window.
- Dropdowns on the stage behave best if you click, hold, and drag to make your selection. Clicking and releasing may cause the screen to jump down.
- Be patient as you let the stage load; it can take several seconds.
- Be patient if there is an occasional glitch in the system. This is advanced technology under active development. Always have a backup way to connect.
- If your own info circle is yellow, and you know your audio interface is correctly connected and selected, click the gear icon to the left of your VU meter to reset the audio interface

- If you have to restart the computer, you may need to turn phantom power (48V) back on. This depends on the audio interface.
- If your latency is higher than 14-16ms for an on-campus connection, switch from *beginner* to *expert* settings and verify that the sample buffer is 64 and network buffer 128.
- If your latency is higher than 14-16ms for an off campus connection, consider switching to *expert* settings and manually adjusting the buffers (see the advanced guide).
- If your audio quality is low, switch from *beginner* to *expert* settings and verify that the Opus Codec is set to 192.
- If you hear clipping and distortion, the most likely explanation is that your collaborator's mic is too hot (they need to turn down the gain.)
- If you hear a garbled sound like being underwater, experience other issues, or see another error message please contact the RPTS tech support who can walk you through adjusting the jitter buffer in the *expert* settings. (This should not happen on campus.)

Please note – this is working document. If you find anything that is incorrect or needs to be clarified, please reach out to RPTS (Recording and Performance Technology Services) at

rpts@necmusic.edu or (617)585-1275