



Alaria Guide to JamKazam (JK)

Version 2.00

Introduction

JamKazam is a very sophisticated piece of software. Please approach this software with patience and willingness to deal with technology. We have seen some people have an easy time configuring the app, while others have had to put in more effort to make it work for them. Be ready to deal with equipment (computer, mic, etc), your internet service (speed, updating your service or equipment), and software settings.

Remember, playing through headphones remotely with others is never going to replace in-person chamber music. However, once you have it up and running, you will find that JK will provide you with the opportunity to play and enjoy chamber music with others when you otherwise would not at all be able to do so.

*Important changes in Version 2.00 of this document

- Recommended Products Option B has been revised. The original kit had semi-open back headphones, which are less desirable than closed-back headphones.
- Required Equipment Option B has a note about the Microsoft Surface.
- Minor revision in Step 8-i of the Installation and Setup.

Required Equipment

Option A - For Macs, tested by Alaria Staff (may not work with PC's)

- Computer or laptop (tablets will not work)
- USB Microphone
 - Avoid any mics that add any sound processing
- Headphones
 - Any closed-back, over-the-ear headphone will do
- Ethernet cord
 - Must be long enough to reach from your computer to your router (the device that connects your internet to the wall outlet - usually provided by your internet provider)
- Depending on your computer or laptop, you may need an adapter for connecting the Ethernet cord to your device.
- Some Mac laptops only have 2 USB-C ports, so you will need a USB-C hub adapter to provide additional ports

Option B - Not tested by Alaria staff but recommended by JamKazam, for Macs and PCs

- Computer or laptop (tablets will not work. Special Note: Our anecdotal information shows that Microsoft Surfaces will not work either)
- USB Audio interface (connects microphone and headphones to computer, and controls volume)
- Standard Microphone (not USB)
- Headphones
 - Any closed, over-the-ear headphone will do
- Ethernet cord
 - Must be long enough to reach from your computer to your router (the device that connects your internet to the wall outlet - usually provided by your internet provider)
- Depending on your computer or laptop, you may need an adapter for connecting the Ethernet cord to your device

➔ At the end of this document you will find a list of suggested products.

Other requirements

Internet Speed

The faster your internet speed is, the better. There is no official minimum, as far as we've been able to tell, but there seem to be indications that you should have at least 100 mbps upload speed. We are finding that 200 mbps can make a significant difference. Even more is even better, especially as the physical distance between players increases.

You can check your effective speed at:

<https://www.speedtest.net>

You will ideally want to check your speed when connected by Ethernet cable - WiFi often can be around half the speed of a wired connection. Also it is best that you close all other apps and that no one else with access to your internet is using it - especially YouTube, downloading files, Zoom, internet TV, etc. You want as much bandwidth to yourself as possible.

Plugging in to power

If you are using a laptop, you need to be plugged into a power outlet to ensure you will not run out of battery and prematurely end a session, impacting everyone's participation.

Plugging in your laptop will also allow your computer to work more efficiently.

Advanced: PC laptop users can check your computer power settings to make sure your computer is running at 100% capacity at all times (min to max) while plugged in.

Installation and Setup (assumes Option A above)

1. Download and install JK
 - a. <https://www.jamkazam.com/downloads>
2. Create a JK account. You will need it to log on to JK and join a playing session.
3. Connect mic to computer
4. Connect headphones to computer
5. In computer settings, make sure that you have selected the USB microphone (input) and headphones (output)
6. Set your computer volume to maximum.
7. Open JK.
8. Configure your audio gear.
 - a. From your name drop down menu, select **[Audio Gear]**.
 - b. Select **[add new gear]**.
 - c. Watch the instructional video if you like, otherwise click **[next]**.
 - d. Under Audio Input Device, select your mic.
 - e. Under Audio Output Device, select built-in output.
 - f. After 10 seconds, it will display your latency and I/O levels. Click next.
 - g. If in the next window you only see a Left or a Right input, click **[add audio track]** to add the other channel. When you have both Left and Right, click next.
 - h. In the next window, just click **[next]**. We are not using Voice Chat.

- i. In the subsequent Turn Off Direct Monitoring window, click **[play]**. If you hear the audio clearly, your settings are correct. Click **[next]**.
 - j. Success! Click **[close]**.
 - k. In the Audio Profiles listed next, make sure the entry you just created is marked (active). If it isn't, click **[Activate]** next to it.
 - l. Click the little house in the red top banner to take you to the main screen. You are now ready to start or join a session.
9. Test your audio gear by starting a solo session
 - a. From the red panels, click **[create session]**.
 - b. Click **[quick start solo]**.
 - c. Under **[my live tracks]**, you should see your track panels. If you talk, you should see the volume indicators react and you should be hearing yourself through your headphones.
 - d. You can adjust your volume by hovering over the little speaker icons to open the volume sliders. Note that there is a mute button. Make sure it is not checked.
 - e. You can check your latency by hovering over the colored dot, which ideally should be green. It will open a pop up window. We want the lowest latency possible, hopefully close to 10, but manageable if under 20.

Installation for Option B is similar to Option A with the following differences:

- Check the installation procedure for your specific audio interface
- Install the software drivers that come with the audio interface. This may need to be done before or after connecting the other items.
- Connect your headphones and microphone to the audio interface
- Connect your audio interface to your computer

Starting a Session with Friends

The group needs to determine which player will create the playing session. Once that player creates a session, the others can join the session.

Before your first session, you will want to add the other players in your group and the coach to your Friends list in JK. You can search for your "friends" and send them a friend request. Alternately, you will receive a friend request. When you both agree to be friends, your friends will appear in the list which will make joining a session together very easy.

There are several ways to start and join a session and you will find the one that best suits you. One way is for the person who starts the session to invite other musicians to the session. Once the session is started, click on **[invite musicians]** under **[other live tracks]**. From the pop up window you can choose friends from your friends list, then send the invitation.

Full Startup Checklist

1. Make sure other people on your internet are not taking up bandwidth.
2. Plug in your laptop (if using a laptop).
3. Turn OFF your WiFi, and close any unnecessary programs that are running.
4. Set computer volume to maximum.
5. Double check computer sound settings.
6. Start JamKazam (WiFi must be turned off before you start the app).
7. Start or join a session.
8. Start your video.
9. Do a sound check with the group, adjusting everyone's individual volume levels and the overall volume.

Troubleshooting Startup Checklist

If you can't hear others or others can't hear you:

- Is your computer volume at maximum?
- Is your mic muted? Note that certain mics have a mute button on the mic itself.
- Are you muted on JK?
- What is your volume in JK?
- Is any other player muted on JK?
- What are other players' volumes on JK?
- What is the general volume setting on JK?
- Are your devices plugged in? (Mic, headphones)
- In JK, is the correct Audio Gear activated?

Suggested Products

Option A - for Macs, not reliable on PCs, tested by Alaria Staff

- **Microphone:** Blue Yeti \$129
<https://www.bestbuy.com/site/blue-microphones-yeti-usb-multi-pattern-electret-condenser-microphone/5963805.p?skuld=5963805>
(Amazon is charging a lot more as of this writing)
- **Headphones:** Sony MDR7506 Professional Large Diaphragm Headphone \$96
https://smile.amazon.com/gp/product/B000AJIF4E/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
- **Ethernet cable:** \$9 - \$28 depending on required length
https://smile.amazon.com/gp/product/B003RCI5A0/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&th=1
- **Ethernet adapter for Mac laptops** - depends on which laptop you have, so you need to check which port you have (Thunderbolt or USB-C): \$25 / \$16
 - Thunderbolt:
https://smile.amazon.com/gp/product/B011K4RKFW/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
 - USB-C:
https://smile.amazon.com/gp/product/B00X4S587K/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
- **USB-C hub adapter** for Mac laptops that only have 2 USB-C ports (older laptops, Mac Air): \$29.99
https://www.amazon.com/gp/product/B07PPGWQ15/ref=ppx_yo_dt_b_asin_title_o06_s00?ie=UTF8&psc=1

Option B - for Macs and PCs, NOT TESTED by Alaria Staff, but recommended to us

Bundle Options

Choose only one bundle. You must complete the bundle of your choice with items from the Individual Components list below to meet the Equipment Requirements.

- **Scarlett 2i2 Bundle** - includes a mic, mic cable, and headphones: \$269.99
<https://www.sweetwater.com/store/detail/Scarlett2i2SG3--focusrite-scarlett-2i2-studio-3rd-gen-recording-bundle>
- **Scarlett Solo Bundle** - includes a mic and a mic cable: \$209
<https://www.sweetwater.com/store/detail/AT2020-ScrSI--focusrite-scarlett-solo-audio-interface-and-at2020-recording-package>

Individual Components

Or build your equipment setup completely à la carte.

- **Audio Interface options:**
 - Scarlett Solo, 3rd Generation: \$109.99 (also see kit option below)
<https://www.sweetwater.com/store/detail/ScarSG3--focusrite-scarlett-solo-3rd-gen-usb-audio-interface>
 - Scarlett 2i2, 3rd Generation: \$159.99
<https://www.sweetwater.com/store/detail/Scarlet2i2G3--focusrite-scarlett-2i2-3rd-gen-usb-audio-interface>
 - Steinberg UR22Mkii: \$164.99, Sweetwater and Amazon
 - PreSonus Audiobox USB 96: \$99.95, Sweetwater and Amazon
- **Microphone:** Audio-Technica AT2020: \$99
<https://www.sweetwater.com/store/detail/AT2020--audio-technica-at2020-cardioid-condenser-microphone>
- **10-foot XLR cable** for your mic: ~ \$12 Amazon or Sweetwater
- **Mic stand** of your choice, may depend on your instrument and space conditions
- **Headphones:** Sony MDR7506 Professional Large Diaphragm Headphone \$96
https://smile.amazon.com/gp/product/B000AJIF4E/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
- **Ethernet cable:** \$9 - \$28 depending on required length
https://smile.amazon.com/gp/product/B003RCI5A0/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&th=1
- **Ethernet adapter** - You may need an Ethernet Adapter to connect the Ethernet cord to your laptop.
 - Mac laptops - depends on which laptop you have, you need to check which port you have (Thunderbolt or USB-C): \$25 / \$16
 - Thunderbolt:
https://smile.amazon.com/gp/product/B011K4RKFW/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
 - USB-C:
https://smile.amazon.com/gp/product/B00X4S587K/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
 - PC laptops - depends on the ports that are available. You need to determine if you have USB-3, USB-C, etc.
 - USB-C: same as Mac
 - USB-3: \$15.99
https://smile.amazon.com/Cable-Matters-Ethernet-Adapter-Supporting/dp/B00BBD7NFU/ref=sr_1_5?crid=IYEM234AYT2I&dchild=1&keywords=usb-3+to+ethernet+adapter&qid=1600447600&s=electronics&prefix=usb-3+to+ether%2Celectronics%2C132&sr=1-5