IDC Jamulus setup - January 2025

This is a simple checklist to help you start using Jamulus for online rehearsals with Irish Doctors Choir. It assumes very little prior knowledge and sets out some basic requirements. Some things are essential to have a good experience, some are highly desirable and some are nice to have. Concentrate on the essentials

When it comes to the actual live rehearsal, remember that this is for real and we will hear each other. It is so easy to lose yourself in trying to set up and listening in, that you can forget that you are sitting bent over with your lung capacity and sound greatly affected. Warm up your body and your voice to sing, the whole instrument is needed. Stand up if possible or sit actively, as if standing (channelling Brian here \cong).

This is a simplified set of steps. If it isn't clear enough for you, try the official set up guide

https://jamulus.io/wiki/Getting-Started

<u>1. KIT</u>

- a. Laptop or Desktop (NOT a mobile)
- b. Wired Headphones
 - avoid echo / feedback from your speaker to mic
 - wired NOT Bluetooth headphones
 - a separate USB mic is fine. You don't need an Audio Interface, though that can help latency (the delay between your sound entering the computer, being processed and leaving the computer).
 - standard wired in-ear buds as for mobile phones are fine - but don't use their mic if you can avoid it (see below). The simpler they are, the better
 - Keep 1 ear in and one out / off your ear. This is so you can hear your own pitch and adjust it.
 Otherwise, you will automatically get out of tune.
 Forget expensive, noise-cancelling ones
 - Separate Microphone avoid headsets with integral headphone / mics. If you don't have these, use the mic built into your computer, not a headset. Earbuds are fine as headphones but select the computer or separate mic if you notice any audio issues. See '12' Tips for Headphones / Speakers when you have the main set up.



3. INTERNET

- You need a good connection to run Jamulus, better than is needed to download it the faster and more stable, the better.
- For the session, **go to where you have best WiFi**, go to the same room as your internet hub if needed,
- or connect directly to your hub using an **Ethernet** cable

4. DOWNLOAD & INSTALL JAMULUS

Download Jamulus itself from one of these links.

The Windows link also includes the option of ASIO4ALL to help your PC manage the audio signal more efficiently. This is a good idea but complicates the setup slightly as you have some settings to adjust so that you can use it. Don't worry if you don't want the extra effort.

You do not need this if you use an Apple computer or you have an Audio Interface. You don't need an Audio Interface, but they can help latency.

Follow the guide in the link below that is relevant to your computer.

Windows download

https://jamulus.io/wiki/Installation-for-Windows

MacOS /iOS

https://jamulus.io/wiki/Installation-for-Macintosh

5. PROFILE

- Click Settings / CTRL-P
- My Profile
 - type your name
 - Instrument select your voice, eg Vocal Soprano (this allow Brian to sort us into voice groups)
- Audio/Network Setup
 - Select Mono In / Stereo Out or Stereo for best quality, but if you're connection isn't great or popping / dropout starts, change to Mono out again, then try to get a better connection - as above.

② Settings				_	C	ן	>
My Profile Audio/Network Setup Advan		nced Setu	цр				
Audio Device		Jitter Buffer					
Realtek ASIO 🗸			🖂 Au	to			
			Loc	al	Se	rver	
			Size: 7		Size: 7		
ASIO	Pevice Settings					-	
Audio Channels	Mono-in/Stereo-out	~	-	-	-	-	
Audio Quality	Normal	~	-	-	-	-	
			-	-	-	-	

6. ADJUSTING WHAT YOU HEAR

- adjust your fader level to mid-range when you start, to prevent hearing your own voice too loudly. When chatting, keep it 20% or so to reduce feedback you hear. When singing, raise it to around 60%.
- If anyone seems too loud to you, adjust down the fader above their name - it will only change what you hear, not what anyone else hears.

7. ADJUSTING WHAT OTHERS HEAR

- Watch your Input levels
 - if they aren't rising much, you are probably too far from your mic. Move much closer.
 - If they are rising into the red, then move a little away from the mic. Even 15cm / 6 inches is a lot and makes a difference. If you have a Gain setting, then reduce that.

Input: your volume Input levels - left side

Fader: What you hear from each person - right side



8. <u>CONNECT</u>

- hit the Connect button. A new windowlet will open (see below)
- Find the **Server Address** box under the list of available rooms (see below)
- You will have been given a new Server Address from us before each session, with 8 number digits in this format: x.xxx.xx.xx
- Paste / type this Server Address into this field: like the example below

this is our private rehearsal room for this session

OPTIONAL ADJUSTMENTS

9. PAN

- You don't need to do this, but it might be nice as we get used to it, to group each voice group so they sound like they are singing from the same place
- If you change output in Settings Audio to Stereo, then you will have a Pan dial above each singer's Fader slider.
- Pan people to the their group place in the stereo field if possible. One suggestion is sopranos toward the left eg 30 degrees, altos a little left 15 degrees, tenors a little right 15 degrees, basses toward the right 30 degrees.

10. LATE ARRIVALS

If YOU arrive late, select Mute Self on the left side of Jamulus. No-one can hear you, only you can hear yourself, so you can now check your settings, eg set your Fader to around 40. You can listen for any hum or cracks. Microphones are sensitive, so check their connections and for anything that would cause distortions.

Stop late arrivals affecting your sound: Settings - New Client Level - set to Zero

11. ZOOM Video

If we are using Zoom video alongside, make sure that you

- Open Jamulus first so it gets first access to your mic and sound
- Do not join audio / Mute Zoom only get your audio via Jamulus.
- If you have any issues after joining on Zoom, close it and join it from another device, eg a phone
- For more information on Optimising Zoom, see below. Get the other things below set up first.

Optional Zoom setting

Zoom has a feature that automatically adjusts the microphone volume to what it thinks is optimum. This may only happen with the built-in microphone, but it can wreak havoc with proper singing levels. To disable it, go to the Zoom preferences window, choose Audio, and uncheck the "Automatically adjust microphone volume" check box. Also, if using Zoom at the same time as Jamulus (as we do), don't connect computer audio in Zoom. This is better than just muting yourself in Zoom, as Zoom is less likely to fiddle with your audio settings.

12. TIPS with Headphones / Speakers

You should not listen to yourself play or sing "live" - instead, you listen to yourself played back as others hear you (which is slightly delayed), helping to ensure synchronization. To achieve this, you need wired headphones, earbuds, or similar that are connected to your computer (or Audio Interface if you use one)

In a quiet environment, earbuds are sufficient. In a louder environment, you'll want to block out background noise with headphones. "Noise cancelling" is not necessary and not particularly helpful, unless background noise is relatively constant and high pitched (such as roadway noise). If you will be singing, you may prefer "open back" headphones that allow your own voice to reach your ears "live", or block it completely with "closed" headphones. Beware noise-cancelling headphones, as you can get out of tune quickly as you can't hear your own voice at all. Best balance is earbuds or cheaper earphones of any variety, with 1 ear out / uncovered

You should not be monitoring your "live" sound and should not be listening through speakers, particularly if you have a microphone (since the microphone will likely pick up sound from the speakers, creating a feedback loop and echo).

Important Note: Headphones/earbuds must be wired, not wireless. Bluetooth headphones/earbuds cannot be used because they add significant latency.

ENDS