Setting up Jamulus in Five Steps

There is only one piece of hardware that you absolutely need to use Jamulus, apart from your computer. That is a headphone (with cable – not Bluetooth). Even earbuds will work, but are less than ideal from the sound quality. There are some other things that will improve the sound quality, but that are not absolutely necessary. I will discuss them later, I start here with the minimum installation.

1 : Install Jamulus

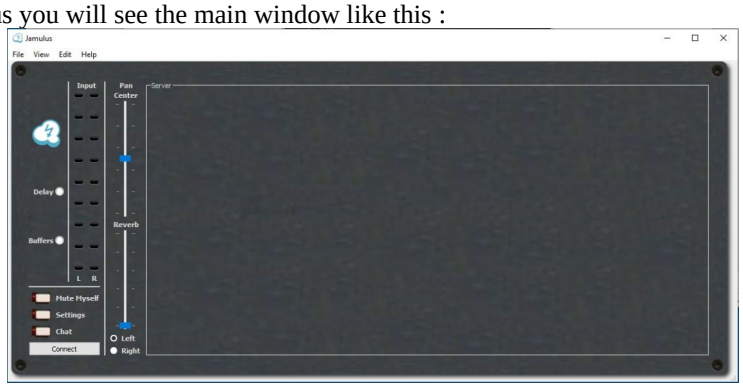
Download and install Jamulus for your computer from the Jamulus home page http://jamulus.io
Jamulus is available for Windows 10, Mac and Linux. Note that although it will also be installed, you do not need the Jamulus server.

2 : Connect your Hardware

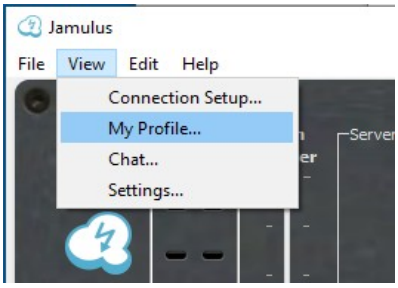
Now is the time to connect your hardware, headphone (if you are using them – audio interface, microphone)

3 : Set up your Profile

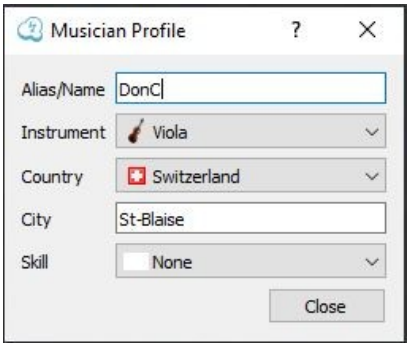
When you launch Jamulus you will see the main window like this :



The first thing you need to do is set up your profile. Select View → My Profile



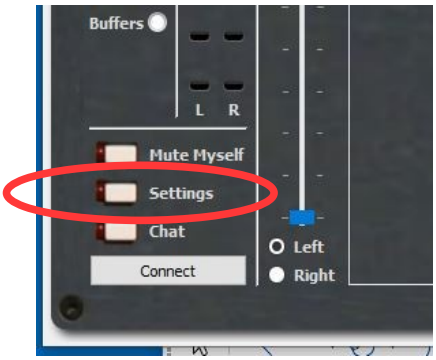
You will see a window like this :



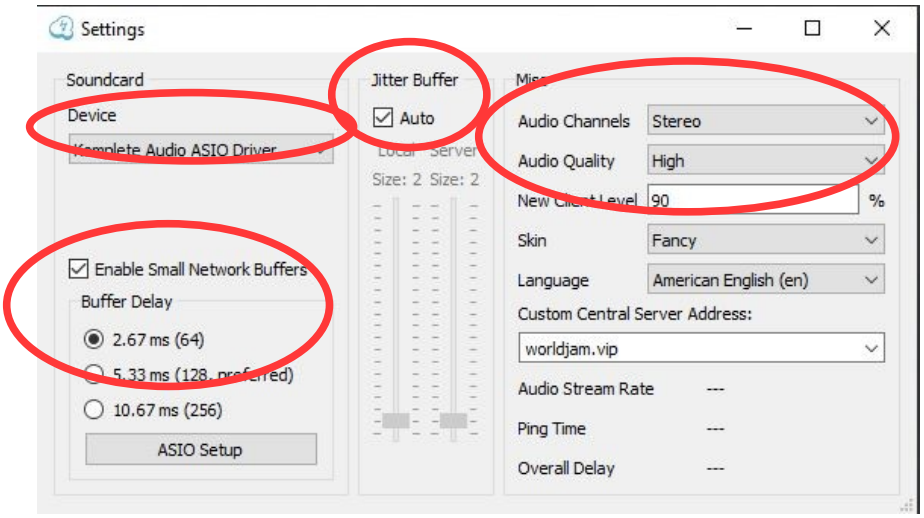
Fill in your Alias/Name and any other info you would like. This information is saved when you exit Jamulus, you will not need to enter it again in the future.

4 : Control the Connection Parameters

Next select Settings,



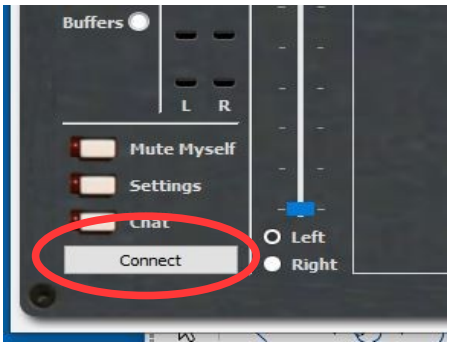
this will open a window as shown below.



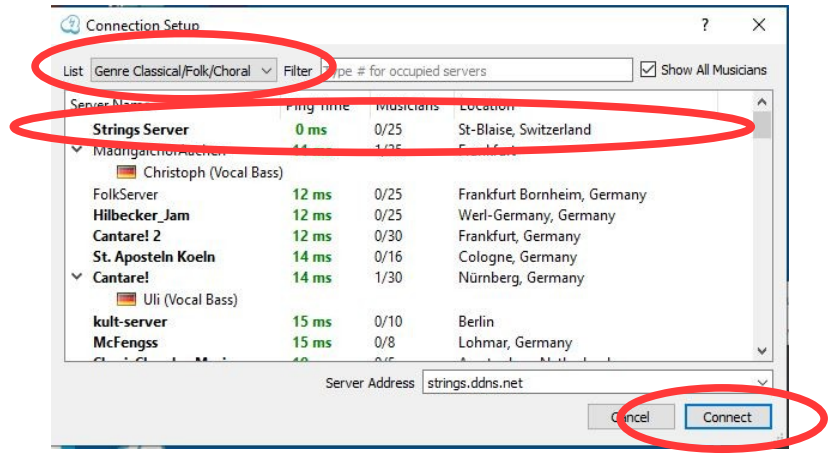
Under Device select your sound device. Set the other values as shown.

5 : Set your Microphone Volume

Now you need to set the input volume of your microphone. Start by connecting to a server by pressing the Connect button on the main window.

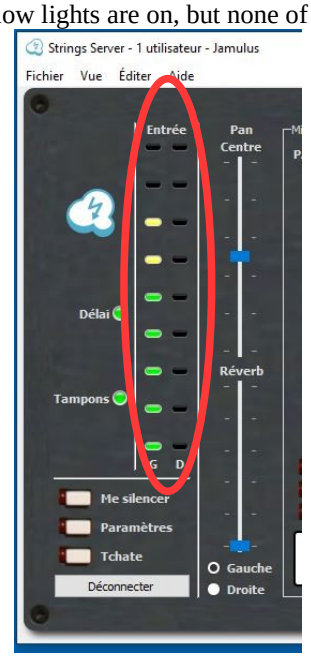


That opens the connection window showing the available servers.
We will be using the «Strings Server» in the Liste «Genre classique/folk/choeur».



Select the “Strings Server” and then press the connect button to register on the server. You will now be able to hear and be heard on the server.

To set your microphone volume play your instrument as loud as you can. You will see lights of the Input meter at the left side of the main window light up. The louder you play the more will light up. You want to set your volume so that when playing as loud as you can both the yellow lights are on, but none of the red lights, as shown.



If you are using the internal microphone of your computer you set the microphone volume in the settings of your computer.
Win10 : Settings → System → Sound → Input
MAC : Apple → System Preferences → Sound → >Input Volume
External Audio Interface: Use the knobs on your interface to set the volume.

6 : Now you are ready to try out the Jamulus experience !

Monday evenings at 20:00 as we are accustomed to.
Connect to the “Strings Server” in the list “Genre classic/folk/choir”.

We are looking forward to greeting you there!

7 : Improving the Audio Quality

Cabled Connection to the Internet

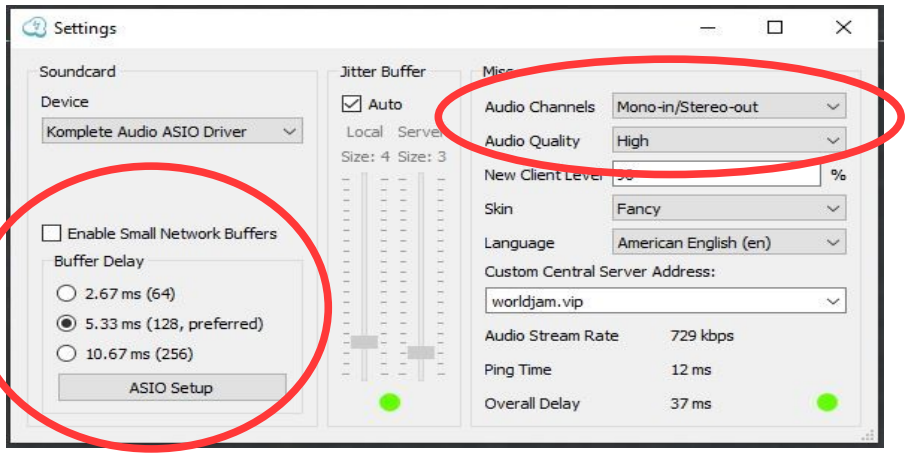
The most important rule to improve your sound quality is :

Use a cabled connection to the Internet, not Wifi !

No matter how good, how fast your wifi is, wifi introduces random delays in the communications stream that cause strange sounds that you as well as all others hear. Use a cable !

The Influence of your Settings

In the Settings window there are some parameters you can change to improve the sound quality if you are experiencing noises or interruptions. These parameters can help if you have a less than ideal Internet connection.



If you suspect communication problems try the following actions, in this order:

1: deactivate the box “Enable Small Network Buffers”
2: select “5.33ms (128, preferred)”
3: change the “Audio Quality” to “normal”
4: change the “Audio Channels” to “Mono”
5: change the “Audio Quality” to “low”

After each change test to see if things have gotten better. Each of these steps reduces the audio quality or increases the delay time so do as little as possible.

External Audio Interface

The internal audio interface on a MAC is usable, on PCs it is very variable according the model (mostly very bad). If you are using a PC I would recommend always using an external audio interface and not even trying the internal one. With a USB connected audio interface one can get excellent audio quality, reduce the delay and use a good microphone greatly reducing the hiss and noise. For a PC the interface must have an ASIO driver which must be installed before using the interface. The interfaces mentioned below all have ASIO drivers and can be used on both a MAC and a PC.

Important when using Jamulus is to never use the Direct Monitoring. It is important to hear only the signal that is coming back from the server. Be sure to turn Direct Monitoring off, or use Host monitoring, not Input monitoring.

From what I have read from other users I would recommend as a minimum the Behringer U-Phoria UMC202HD which costs chf 72.- at www.thommanmusic.ch.

https://www.thomannmusic.ch/behringer_u_phoria_umc202hd.htm

Personally I have a NI Komplete Audio 2.

https://www.thomannmusic.ch/native_instruments_komplete_audio_2.htm

Another interface that always gets good comments is from Focusrite :

https://www.thomannmusic.ch/focusrite_scarlett_2i2_3rd_gen.htm

In general I think any of the interfaces with 24 Bit / 192 kHz sampling would work well.

Microphone

There are thousands of microphones on the market that will probably all work. I have experience with only two. Even some USB microphones work, but be sure that they work with a sampling rate of 48000hz. If you are using a PC the USB microphone also needs an ASIO driver.

I started using an instrument microphone meant to be clipped on the instrument.

https://www.thomannmusic.ch/the_tbone_ovid_system_violin_bundle.htm

The problem then is that others can't hear you talking. So I clipped it on my music stand. That worked OK, but I had to turn up the volume to near the maximum and the microphone had a lot of noise, it hissed.

I now have a microphone Rode NT5.

https://www.thomannmusic.ch/rode_nt_5_s.htm

It is a completely different class, no noise at all that I can hear. (It is also a different price class, but Anibis helped to make it less painful).

D.Corson, 2.1.2021