



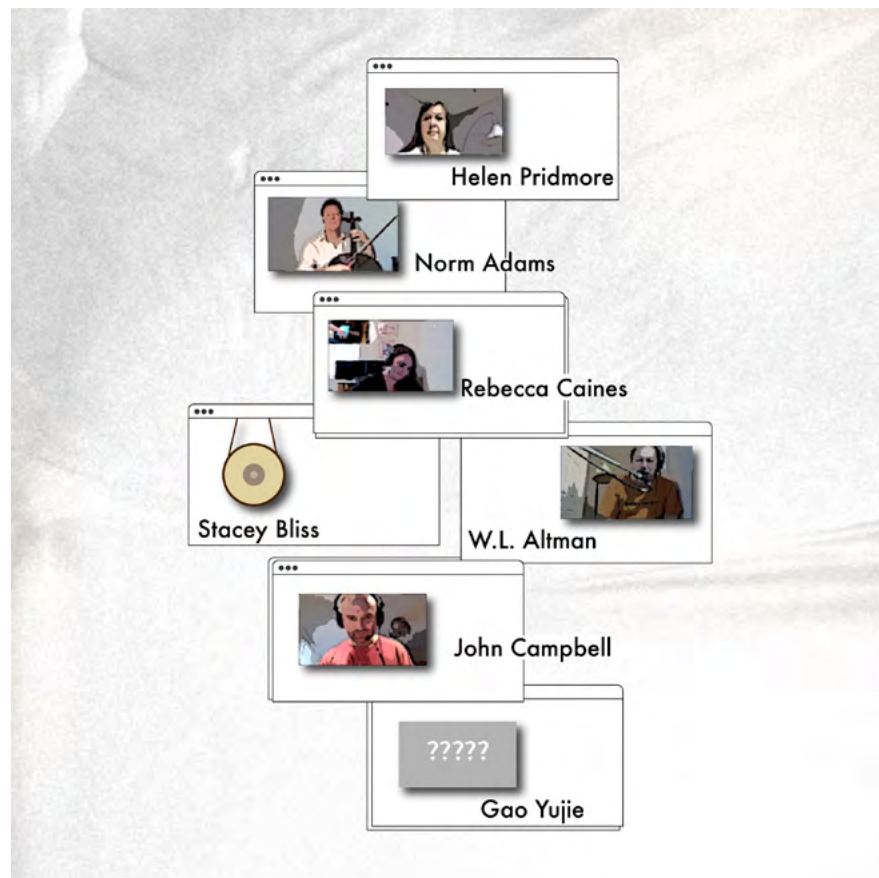
HOW TO ENGAGE ONLINE FOR IMPROVISED PLAY

A GUIDE CREATED BASED ON THE REMOTIONS' PRACTICE

WHAT IS THIS GUIDE FOR?

This guide will help you to improvise sound and music online with your friends, achieving decent quality and at no cost. It was created based on the setup of The Remotions, a seven-person audio-visual improvisation group whose practices evolved over two years during the pandemic. The members of The Remotions reside across Canada and met weekly online to improvise and play from 2020 to 2022.

Read more about [The Remotions](#).



BEFORE YOU START

1

All these systems/tools are open-sourced and free to use (some have evaluation periods)

2

All users need to plug in to **Ethernet** NOT USE WI-FI

3

All users need working **headphones**

4

All users need a decent computer with a webcam, and be willing to do some work modifying their sound settings.

5

Mac computers require less additional steps to get started

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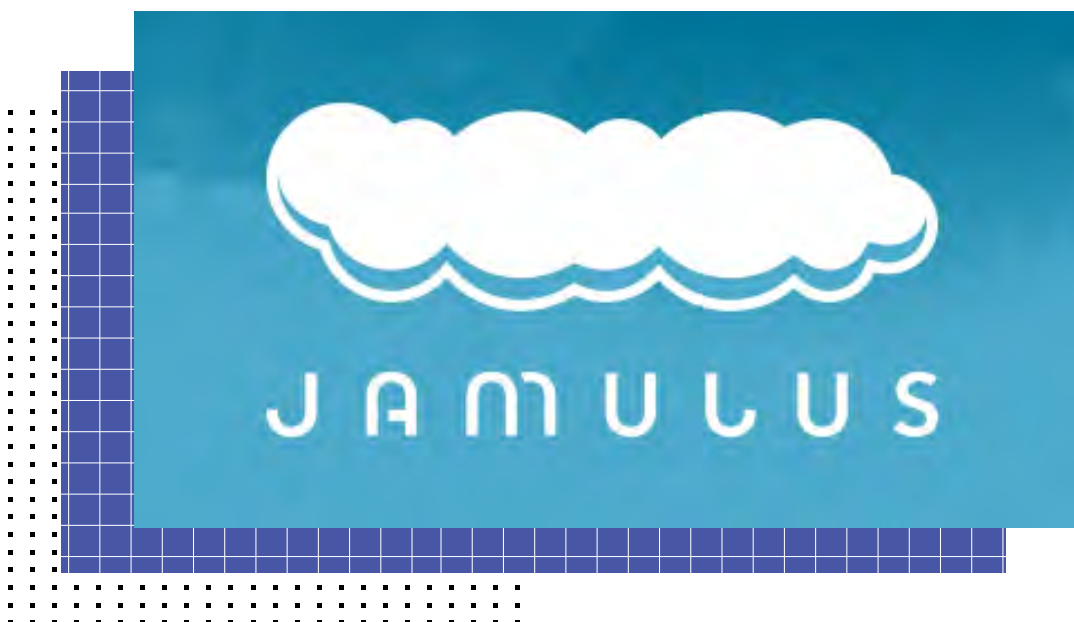
Users with instruments need to make sure they can send sound via a working microphone (check your background noise is low!) or through their computer.

SOUND

Jamulus

<https://jamulus.io/>

Jamulus enables high quality audio transmission online. The primary challenges in collaborating remotely are delays and subpar audio quality. Jamulus empowers you to optimize your tools and networks, minimizing delays and ensuring good audio transmission.

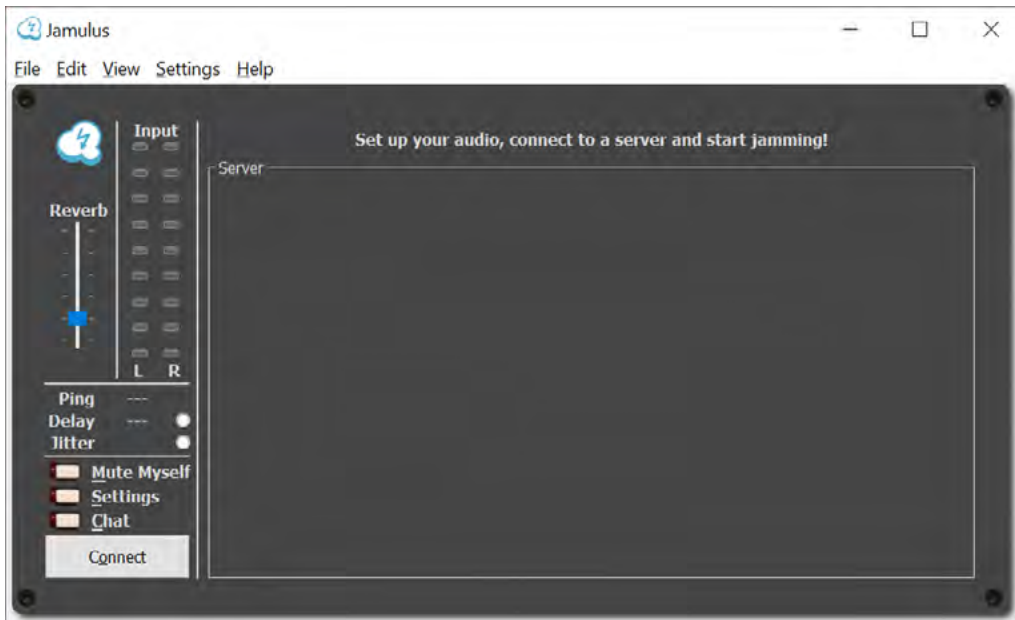


How to use Jamulus:

1. Your group needs to ask someone to set up a free private server on Jamulus (requires some tech know how) OR decide use one of the existing public servers on the list (others users may appear and talk with you on these public servers but lots of people use them)
2. Get all of your members to download Jamulus to their computer. Jamulus has good guides to help with

[Windows](#) | [Mac OS](#) | [Linux](#)

3. Each user should set up a profile and check their settings, see [here](#).



The main window before you connect to a Server

and then connect to the server on the list that you have all agreed to use/ the new server you have set up.

Once everyone is on the server, you will need to check everyone's settings to get the best quality/lowest delay possible.

VISUAL

VDO.Ninja

<https://vdo.ninja/>

VDO.Ninja seamlessly integrates live video feeds from smartphones, tablets, or remote computers directly into OBS Studio or other browser-enabled software.

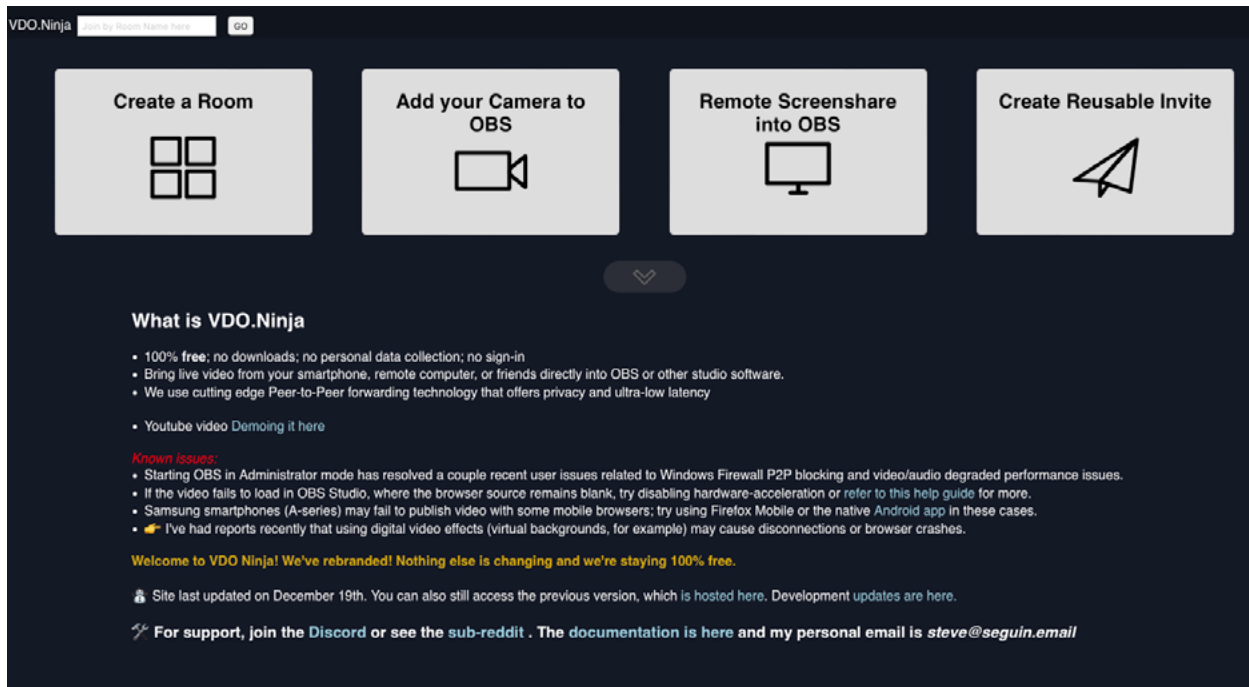


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Be careful to use a visual only version of seeing each other/recording visuals, many videoconferencing programs take over your sound card and cause major issues with using Jamulus.

How to use VDO.Ninja:

1. Create a room for your group
2. Give the details to your members
3. Get people to join NO AUDIO



The main window before you join a room

The Remotions also had a stream of backdrop imagery/video sent to VDO.Ninja for advanced combining (not required just for playing together)

FOR ADVANCED USERS:

CREATING AMBISONIC/SPATIALIZED SOUND AND 360 VISUALS

The Remotions wanted to create a spatial environment where each artist was placed into a 360 background and audiences could move to hear each one placed into the space.





To do this, the person mixing used multiple computers:

Machine 1:

Jamulus Server

Machine 2:

Jamulus: Ran multiple clients, each listened to one users audio only, and sent this out to Reaper software via a multichannel virtual sound card

([Blackhole 64 channel soundcard](#))

[REAPER](#):

We used Reaper create a first order ambisonic track with users placed in space

With this plug in [AmbiX](#)

The Remotions used [Sonobus](#) to send the audio to OBS

Machine 3:

OBS for combining (see below)

COMBINING SOUND AND VIDEO FOR STREAMING:

If you have someone who can do this work it is possible to combine sound and video into a combined stream for public viewing.

[OBS](#) received video from VDO Ninja and sound from Sonobus.

This stream can be sent to different services like YouTube. The Remotions set it up as a 360 degree stream.

[YouTube live stream Settings](#)

