



Virtual
Recording
Kit for Handbell
Musicians

by Brian Seemann



Handbell Musicians
OF AMERICA

Virtual Recording Kit for Handbell Musicians

by Brian Seemann

Copyright ©2021 AGEHR, Inc. dba Handbell Musicians of America. Purchasers of this resource may make ONE copy for their own use and may not distribute the work to any other party.

Introduction

by **J.R. Smith**

HMA Publications Director

Virtual ensemble recordings became popular in 2010, when choral composer and conductor Eric Whitacre organized a virtual choir to perform his work “Lux Aurumque.” 185 singers submitted recordings of themselves singing one part, which were put together as one full virtual performance and premiered on YouTube. In 2013, Handbell Musicians of America produced the first-ever virtual handbell ensemble with James Meredith’s “Misterium,” which he composed specifically for the project. It was unique in that ringers could download just a few bars of the piece, without knowing how they fit in or even what the full piece sounded like, and they could record as many of the snippets as they wanted.

Since then, many groups have tried their hand at performing virtual ensembles with people they do not live near, some being a large ensemble and some as small as a duet. But it’s something many others have shied away from through lack of technical skill or just not knowing where to begin. Well, here is a set of tips and instructions you can use to do your very own virtual handbell ensemble with friends you’ve made around the world or with yourself playing all the parts.

The COVID-19 pandemic and the necessity for people to gather in virtual environments forced the world—and certainly the handbell world—to become vastly smaller. The more people became comfortable with technology and interacting with people across long distances, the more they yearned for new ways to unleash their creativity—and virtual ensembles became one such way to do just that.

As we begin to put the pandemic behind us, friendships we have made around the world through virtual events will remain, and so will the desire to continue making music together virtually and pulling in interest from people who may not have known much about handbells before.

Good luck and have fun!



[CLICK HERE](#) to access the Virtual Bell Academy class recording, music, and downloadable instructions for ringers. Please note, you will need to log in with the same email address you used when purchasing the recording kit.

Depending on which kit you purchased, you will receive the music and recordings for either:

“Allegro in C”
W.A. Mozart;
arr. Kevin McChesney

or

“A Festive Peal”
Michael Helman

Congratulations on your desire to create a virtual handbell ensemble and for the purchase of our Virtual Ensemble Recording Kit.

The kit includes access to our Virtual Bell Academy class recording with Brian Seemann, instructions and tips, notes to distribute to those who will be participating, recording click track, and the music—with permission to copy—to get you started.

The following are the class notes to accompany the Virtual Bell Academy class recording.

Preparation

Choosing the Right Piece

- Keep It Simple! At least a level or two lower than what you or your ensemble normally play at.
- Simple meter (any time signature where the beat is divided into 2 subdivisions, 4/4, 3/4, etc.) is your friend. It will be a lot easier to both record and edit.
- Do not recommend compound meter (any time signature where the beat is divided into 3 subdivisions, 6/8, 9/8, etc.) and certainly not anything with changing time signatures. At least not until you are comfortable with the whole recording and editing process.
- Try to avoid syncopation and swung rhythms

Making a Click Track

- Your click track should have more than just a straight metronome, as it is really easy to get lost playing only one part with no other reference.
 - Option 1: In a music notation software, enter both the

- bell part and metronome (wood block/claves).
 - Option 2: Record a metronome and a piano reduction of the bell score.
 - Option 3: Record a metronome and vocal measure cues
 - Last resort: Use an existing recording and clap/click sticks along with the beat.
- Make sure the click starts with enough prep time to clap (if desired) and pick up the bells. Also make sure the click continues all the way through the cutoff of the last note.
 - Adding a clap point in the prep counts will give you a great starting point to line everything up later.

Recording

If you are making your own virtual ensemble recording or submitting your videos to another virtual ensemble project, here are some tips for getting the best recording possible before putting them into your own project or uploading as a submission to a project.

Equipment needed

At minimum, you will need two devices and a pair of earbud/headphones; one device to play the click track in your ear and one to do the recording. These can be two smartphones, a smartphone and a laptop, etc.

Audio recording options

Smartphone

- **PROS:** Many people already have one
- **CONS:** Microphone is designed with human voice in mind, not the frequency range of bells.



[CLICK HERE](#) to view Brian's YouTube video *Guide to Recording Handbells at Home*.



CLICK HERE to download a set of instructions in Microsoft Word format, which you can forward to ringers who will take part in your virtual ensemble project.

PLEASE TAKE NOTE of the section asking you to “insert instructions for uploading your video.” There, you will want to insert links and instructions for participants to get their videos to you, probably through a service like Google Drive or DropBox.

After inserting upload instructions, save the file as a Word document or PDF and share with your participants.

USB Microphone (\$100-150)

- **PROS:** A more natural microphone that will replicate all frequencies. Can plug directly into a computer and most cell phones
- **CONS:** Additional expense.

XLR microphone setup (\$250+)

- **PROS:** The best quality recording.
- **CONS:** Expensive. Need an audio interface to connect with a computer.

Video recording options

- Most smartphones have a pretty good camera built in as many manufacturers have made photo and video a priority. Short of having a separate DSLR camera or camcorder, phones will usually give you the best quality.
- Computer webcams, either built-in or external, are an option as well. Since the main goal of a webcam is to send video as quickly as possible over the internet, the actual image quality is usually lower than even a cell phone camera

Recording considerations

- Record the video in a well lit location. You will want as much front lighting, and as little backlighting as possible. Avoid recording in front of windows when possible.
- Minimize external noise when recording audio. Especially using USB mics and up, even subtle noises like pet collars, fans, and people talking in another room will be picked up.
- A steady, consistent background noise (such as an air conditioner or appliance hum) can be more easily edited out later, but try

to minimize as much as possible.

- Record in landscape orientation and have the camera in a steady location (table, tripod, etc.)
- The microphone should be 8-10 feet from the bells if possible.
- At the start of the recording, either clap (in camera shot) or click your bell handles together along with the clap sound in your click track (this will help to line everything up later!)
- After the last cutoff, count silently and slowly to 5 before relaxing your bells and moving to end the recording.
- If others will be submitting individual videos to your project, download the recording instructions at the left to share. Before sharing, be sure to insert instructions for sending the recordings to you.

Editing

Editing the Audio

I personally use Adobe Audition, a paid software. Audacity is a great free alternative for audio editing.

Audio Editing steps

- Import click track. This is used as “home base” to line up all of the other submitted audio.
- Import all submissions. Go through each one and clean up the audio if needed. This includes trimming any sections before or after the actual recording, and eliminating any external noise on the track.
- Almost all audio editing software has a “Noise Reduction” command that can be used to eliminate any consistent background noise, like that air conditioner hum. Most all work by first se-

Most Important Step when Recording!

Watch and listen to your recordings before submitting them. There might have been something in the background (or a loud page turn) you missed while recording because your focus was on playing bells.



[CLICK HERE](#) to learn more about and download the free [AUDACITY](#) audio editing software.



[CLICK HERE](#) to learn more about and download the free [DAVINCI RESOLVE](#) video editing software.

lecting a sample of just the hum to tell the program “Get rid of everything that sounds like this”, and then applying that process to the whole track.

- Using the clap as a starting point, line up each submission with the click track as your reference. Once the clap is lined up, you might still have to nudge some tracks one way or the other to line up the actual bell playing.
- Once the audio is lined up, export an audio file of all tracks combined (Referred to in most software as “Multitrack Mixdown”)

Editing the Video

I personally use Adobe Premiere Pro, a paid software. DaVinci Resolve is a great free alternative for video editing (download link all the way at the bottom of the linked page).

Video Editing Steps

- Import mixdown just created in the audio process. This is used as a “home base” to line up all of the submitted videos.
- Import all submissions. Go through each one and trim off anything outside of the actual recording.
- Using the clap as a starting point, line up each submission with the click track as your reference. Once the clap is lined up, you might still have to nudge some tracks one way or the other to line up the actual bell playing.
 - Lining up the video, you can be less picky than lining up the audio. As long as the video looks like it’s producing the sound you are hearing, there’s usually no need to be super exact down to individual frames.
- Delete or mute all audio from the individual video clips so that only the “mixdown” audio from before is audible.

Audio fine tuning

- Back in your audio editing software, open the mixdown track.
 - Silence, but do not delete, everything up to the first note, including the clap. (This keeps the audio file the same length, so you can just drop it back in to the video timeline without trying to line it up again)
 - Add any effects to the track. I add a slight reverb, as well as a EQ filter that slightly boosts the bass and cuts the super high frequencies. Both of these will make the bells a little more natural sounding as if you recorded in a concert hall or church, not your smaller, furnished living room.
- Save the audio file and import the updated version back into the video program.

Final video edits

- Resize and move each clip so that all are visible on the screen.
- Add title or any other text as needed.
- Export your finished product!



a resource from

Handbell Musicians

O F A M E R I C A

www.HandbellMusicians.org

1055 E. Centerville Station Rd. • Dayton, Ohio 45459

800-878-5459