VIRTUAL CHOIR
for
THE REST OF US

Carol Spradling
Music Director,
First Congregational Church of Essex Junction, VT
EQUIPMENT
What you (director) will need

What they (choir/musicians) will need

Hardware Components:
- Keyboard(s)
- Microphone(s)
- Audio interface
- Cables: MIDI, XLR, TRS
- Desktop, mobile device

Software:
- DAW (director)
- BandLab (director; choir)

MIDI vs audio

BandLab app/interface (mobile & desktop)

Mastering and troubleshooting: sync, intonation, dynamics
WORKFLOW VISUAL

1. **Director lays down accompaniment tracks**
   - Direct into BandLab or into DAW mixed down into BL.

2. **Get music to singers and rehearse over Zoom**
   - Write in your breathing plan, dynamics, other interp details, before sending PDF. (CameraScan)

3. **Singers record their tracks**
   - Teach them how to record; give them a deadline

4. **Director adds mastering (reverb, EQ) and mixes down**
   - MP3 sent to worship team for inclusion in worship webcast.
ANATOMY OF A DIRECTOR TRACK

- **ACCOMPANIMENT** = leads the interpretation; precise

- **VOCAL PARTS** = I record every note of the vocals. This is omitted in final mix.

- Play it the way you want it! Precise cutoffs, rhythm, diction.

- **CLICK TRACK** = to keep the rhythm precise and clean. Don’t rely on BL’s metronome, because it can be changed inadvertently by group members (or turned off). To be reliable and accurate, this is created as a MIDI file using a percussion voice.
Get music to singers and rehearse over Zoom

Write in your breathing plan, dynamics, other interp details, before sending PDF.

ANATOMY OF A ZOOM REHEARSAL

Audio setting: Enable original sound

- EVERYONE IS MUTED once singing starts (not yet possible to “sing together” on Zoom)

- PLAY TRACK THROUGH ZOOM. Play piano through your computer audio (Audio Interface) rather than acoustically - less lag, purer sound

- TALK THRU TRANSITIONS

- I start with prayer and warmup, and we end with social gathering

Don’t forget security! Password, waiting room, require authentication
RECORDING TIPS FOR SINGERS

- **USE MOBILE DEVICE NOT COMPUTER WHEN STARTING OUT:** Better microphones, easier interface, lower latency

- **WARM UP FIRST.** There are literally hundreds of YouTube vocal warmups. Pick one and do this for five minutes. You’ll like the results!

- **LISTEN BEFORE YOU RECORD:** Listen to the entire accompaniment bed while following along in your music to make sure you are comfortable

- **DO A SOUND CHECK:** The only way to make sure you are set up properly is to test it out first

- **ACCEPT YOUR VOICE:** Director doesn’t want an AutoTuned studio performance - she wants YOUR voice.

- **BE PATIENT:** You can do this. If it’s all new to you, do what you can. Ask for help and trust in God.
POST PRODUCTION

- **AREAS YOU’LL WANT TO ADDRESS:** Sync, EQ, intonation, vocal presence - all of these can be “fixed in post”.

- **START SIMPLE:** Give yourself permission to be a beginner at this, and let go of the inner critical voice.

- **FOCUS FIRST ON UTILITY:** Does the hymn encourage singing at home, if that is an outcome your worship team desires? If not, what adjustments can be made?

- **DON’T DO IT ALL YOURSELF:** Get a choir member or two up to speed on the tech, particularly BandLab for the singers, so you can focus on putting it together. As Sondheim wrote… “Bit by bit. Putting it together…”

- **BE PATIENT WITH SELF AND PROCESS:** Like anything else, this gets easier and works better, with practice.

Director adds mastering (reverb, EQ) and mixes down MP3 sent to worship team for inclusion in worship webcast.
There are many many ways to achieve the same thing...
PART ONE: DIRECTOR
TOOLS NEEDED: DIRECTOR

- Keyboard
- MIDI-to-USB interface (for older models)
- Computer
- BandLab software
- Microphone/headphones
- (Digital) Audio Interface
- External DAW for post-production/mixing
## Framework for each workflow component

4 ways of achieving the goal, from free to expensive, from basic to advanced...

<table>
<thead>
<tr>
<th>YOU CAN... BUT DON'T (or, try not to...)</th>
<th>Examples might be jury-rigging cables, using headphones as a mic, trying to record audio of your pipe organ as accompaniment, your PC’s onboard mic, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIC BUT FINE</td>
<td>Most accessible with the least amount of investment or know-how required, but still possible to achieve adequate result. Choir members can live here.</td>
</tr>
<tr>
<td>INTERMEDIATE</td>
<td>Next steps in refining more favorable outcomes, especially for director use. Invest in what you can. Church reimbursement… fund-raise… schedule C…</td>
</tr>
<tr>
<td>ADVANCED</td>
<td>Generally speaking, good equipment and more know-how than “Intermediate”; will happen over time.</td>
</tr>
</tbody>
</table>
EQUIPMENT/T TOOLS: a closer look
I found this insane deal. Includes extras that can add up: piano stand, speaker, music stand, bench, and full weighted keyboard. $400 for an Alesis “Clavinova”!!
## KEYBOARD: 4 LEVELS

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YOU CAN... BUT DON'T</strong></td>
<td>Acoustic piano - or organ - recorded acoustically (with external microphone)</td>
<td>Leave this to recitals. Going to have audio issues (room noise, mic quality)… Frustrating because we love our Steinways and pipe organs… but not best for clean, accurate track that singers need for precision.</td>
</tr>
<tr>
<td><strong>BASIC BUT FINE</strong></td>
<td>Electronic keyboard recorded as audio from headphone output</td>
<td>You will need a digital audio interface. Don’t forget keyboard stand, music stand, speakers, cables, bench.  Will need adaptor/splitter if using headphone output (¼” balanced cable required). Output will be mono unless splitter is used.</td>
</tr>
<tr>
<td><strong>INTERMEDIATE</strong></td>
<td>MIDI from thrift store Casio into BandLab direct</td>
<td>Basic sounds; no visual (WYSIWYG) editing; need a MIDI editor for imported file and notation software for printed edits</td>
</tr>
<tr>
<td><strong>ADVANCED</strong></td>
<td>MIDI recorded using full (professional) weighted digital keyboard (Korg, Roland, Nord, Yamaha)</td>
<td>The better the keyboard Digital audio interface not needed for modern (USB midi) keyboards. MIDI interface required for older 5-pin MIDI (interface transmits MIDI from 5-pin to USB input on computer)</td>
</tr>
</tbody>
</table>
## KEYBOARD (for virtual choir): 4 LEVELS

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>Equipment Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YOU CAN... BUT DON'T</strong> (or, try not to...)</td>
<td>Acoustic piano - or organ - recorded acoustically (with external microphone)</td>
<td>Leave this to recitals. Going to have audio issues (room noise, mic quality)... Frustrating because we love our Steinways and pipe organs... but not best for clean, accurate track that singers need for precision. You'll need a digital audio interface (DAI)</td>
</tr>
<tr>
<td><strong>BASIC BUT FINE</strong></td>
<td>ANY Electronic keyboard, including thrift store Casio, recorded as audio from headphone (stereo) output</td>
<td>You will need a DAI. Will need adaptor/splitter if using headphone output (¼” balanced cable required). Output will be mono unless splitter is used.</td>
</tr>
<tr>
<td><strong>INTERMEDIATE</strong></td>
<td>MIDI from ANY keyboard, into BandLab direct or DAW</td>
<td>MIDI beats audio hands down. Basic sounds; no visual (WYSIWYG) editing; need a MIDI editor for imported file and notation software for printed edits. No DAI needed for MIDI but MIDI-to-USB interface cable to be used for old-style MIDI output.</td>
</tr>
<tr>
<td><strong>ADVANCED</strong></td>
<td>MIDI recorded using full (professional) weighted digital keyboard (Korg, Roland, Nord, Yamaha), particularly those with USB MIDI</td>
<td>USB MIDI requires no interface of any kind. Better keyboards will allow virtuosic performances while sacrificing no precision.</td>
</tr>
</tbody>
</table>
Old style (5 pin) MIDI connection:

- Connects to USB using a USB-to-MIDI cable or hub
- Input into USB port on your device using MIDI-to-USB cable
- No digital audio interface required (but playback audio will need to be routed from your keyboards audio output to speakers)
MIDI - whazzit?

A non-technical (user) perspective

MIDI is not sound. It is a series of commands, like computer code, that tell a sound-producing instrument (keyboard or computer) how to produce sound.

Thus, when you play a MIDI keyboard into a MIDI recorder like GarageBand, you are essentially “typing”. Computer receives what you type and turns into sounds and into printed music.
MIDI VS AUDIO RECORDING

Same song, recorded at the same time, 2 formats… 2 results

Audio track, aka Attack of the Blobs

MIDI track (note built in score editor; highly editable and versatile)
MIDI vs AUDIO RECORDING

**MIDI**
- The voices/sounds are generated by your software, not your keyboard
- MIDI (5 pin) or USB port on keyboard
- Produces both sound and printable score
- You “type from the keyboard”...
- Or there are vast libraries of MIDI files on ChoralWiki, of varying quality
- Editable - hit a wrong note, change it after
- $400 Casio from WalMart just as good as my $4500 Nord Stage 3
- Use digital audio interface for lag issues
- Go beyond solo piano! Play pipe organ, or add a clarinet solo, or drum track…

**AUDIO**
- Using audio out (L/R) ports from back of your keyboard. ¼” “guitar cables”
- These go into a DIGITAL AUDIO INTERFACE (next section)
- Audio Interface connects to USB port of computer
- The voices are generated on board your keyboard
- Better keyboards (Clavinova, etc.) will have better keyboard sounds than starter MIDI voices… solo piano music recorded as performance would be better audio
- MIDI better for recording or for multi-timbral (“patches”) performance like modern musical theater
If you are not a keyboard player, or do not have a keyboard...

“Found” MIDI files (e.g. ChoralWiki)

There is a wealth of MIDI public domain music - some basic, some terrible, but many are very good as at least a starter template
Common music formats

**MIDI**: A common language between printed musical language and musical sounds. Import into music publishing software or desktop audio workstation.

**MUSIC XML**: Newer language, more geared toward printed page. Functions as “smart PDF”. Can import into DAW with more limitations than MIDI.

RECORDING SOFTWARE
# SOFTWARE (DAW) for director: 4 LEVELS

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>SOFTWARE DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YOU CAN... BUT DON’T</strong>&lt;br&gt;(or, try not to...)</td>
<td>Any old, out of date software on your Windows 98 computer....</td>
</tr>
<tr>
<td><strong>BASIC BUT FINE</strong></td>
<td>BandLab (for production)</td>
</tr>
<tr>
<td></td>
<td>Free! Limitations: virtual instruments, 12 track limit, very limited post-production.</td>
</tr>
<tr>
<td><strong>INTERMEDIATE</strong></td>
<td>GarageBand, Cakewalk(which is BandLab), LMMS, other free software.</td>
</tr>
<tr>
<td></td>
<td>Cute, easy, cheap, great way to get started and go to the next level beyond BL.</td>
</tr>
<tr>
<td><strong>ADVANCED</strong></td>
<td>Professional DAW: Logic Pro, Ableton Pro Tools, Adobe Audition, dozens more</td>
</tr>
<tr>
<td></td>
<td>Many more MIDI sounds and robust features. Expandable through vast universe of samples and plugins (Melodyne, Kontakt, etc). Includes MIDI editing, score editing, audio production</td>
</tr>
</tbody>
</table>
DAWs - a sample list

Free: Cakewalk, Audacity (audio only), LMMS, GarageBand*

Paid/professional: Cubase, Audition, Ableton Live, Pro Tools, Logic Pro*

Mac only
MICROPHONES

Shure SM-58, the Dunkin Donuts of vocal mics (as in, they’re everywhere, they’re cheap, and they’re perfectly adequate)
MICROPHONES

Record a vocal track. Even if you’re not a “singer”, you want to lay out phrasing, articulation, and other performance conventions in a way that only demonstration can.

You also want to know first hand what it feels like to record vocals, to better assist choir members.
**MICROPHONES: 4 LEVELS**

<table>
<thead>
<tr>
<th>Mic built in to desktop/laptop, or mic inserted into PC headphone jack.</th>
<th>YMMV. Most not built for music. Quality and lag issues. If external mic is plugged in, need a splitter and a digital audio interface.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct into phone or mobile device</td>
<td>Acceptable quality. Limited control over gain/noise. Cost: free</td>
</tr>
<tr>
<td>USB microphone or dynamic (SM58)</td>
<td>USB mics have an onboard audio-to-digital converter for plugging directly into computer (so no DAI needed). Cost: inexpensive $15 to moderate $150. Dynamic mic - (SM58 type) - ideal for live sound, decent for recording. Less sensitive than condensor. Requires DAI.</td>
</tr>
<tr>
<td>Large-diaphragm condenser mic</td>
<td>Larger condensor mics (“soda can”) ($200 and up) require <em>phantom power</em> but can reproduce virtually flawless human voice. Requires Digital Audio Interface. VERY sensitive - so best for very quiet recording environment. Need closed back headphones.</td>
</tr>
</tbody>
</table>
MICS are sensitive. They will pick up the tiniest sound from movement, and “room noises”.

Must not hold mic - use a mic stand. If needs be, put mic on a surface and record. If using phone, put on a cloth surface (towel on a desk is fine).

Rooms have sounds of their own - electrical hum, reflective surfaces. Low priced “isolation booth” can solve.
Focusrite Scarlett 2i2 ($160). They make a “solo” but it’s only $50 less and you will want that second input!
DIGITAL AUDIO INTERFACE

The DAI does the work of converting analog (sound) to digital (0s an 1s), so your CPU doesn’t have to. Also acts as a pre-amp (boosting signal), and provides *phantom power* to professional microphones.

Come with software plug-ins to aid recording quality.

Cost: plan for about $100 for a good used 2-channel AI to get started with.
HEADPHONES

WIRED FOR SOUND

ANY HEADPHONES WILL DO AS LONG AS THEY HAVE ONE OF THESE
## HEADPHONES (AKA CANS): 4 LEVELS

<table>
<thead>
<tr>
<th>Wireless, no matter how fancy</th>
<th>Do not use. Bluetooth lag will mean recorded vocals will not sync up.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheapo (wired)</td>
<td>Literally can be less than $10. As long as you can hear the accompaniment while you sing, good to go. Check “bleed” during sound check (required).</td>
</tr>
<tr>
<td>Quality ear buds (wired)</td>
<td>Pro: less cumbersome. Allows singer to hear more of own resonance. Con: bleed with sensitive mic</td>
</tr>
<tr>
<td>Quality “cans” (over ear “closed-back”) - wired (a must if using higher end condensor type mics, which will pick up “bleed” from open type cans</td>
<td>Pro: Cover the ear to keep sound in. Con: trained singers (like me) HATE wearing cans because they cancel our ingrained proprioceptic signals. Can put all signal in one ear and only wear one side…</td>
</tr>
</tbody>
</table>
VIRTUAL CHOIR using BANDLAB
A choral singer’s guide to hardware and software

Carol Spradling, Director of Music
First Congregational Church of Essex Junction, VT
Introduction

As of June 2020, we have been told that singing could be dangerous as far as spreading a virus. We voice teachers know that makes perfect sense. When you all sing the way we’ve taught you - from your diaphragm - the athletic action propels forth a LOT of air. Until it has been deemed safe, many of us will be unable to sing together in worship. This project - a virtual choir - helps feed everyone’s soul in the meantime.

I use a service called BandLab, which allows singers to record their parts into an online project. To keep it simple, I use audio only (not video). I create the foundations of the project (the accompaniment or “bed”), singers add to it, and I mix it down to create a final mp3, which is uploaded to the church and included in our online worship service.

My process is not perfect (I decided long ago to let go of the perfect and seek instead the good.) And it’s not effortless - both my singers and myself have put countless hours into these recordings. At first, the recordings were a bit messy, as we all learned how to use the technology. But now, we are able to create high-quality hymns and anthems fairly quickly. The music has been nothing short of mind-blowing to our community members, who have shared deep and meaningful connections to what the music has meant to them.

Please join me and thank, in your hearts, for a moment, the choir members of a little town outside Burlington, Vermont. When we started all of this, the snow was still falling onto our empty ski slopes. Now our Green Mountains are green again, and the choir is taking a well-deserved haitus for some fresh air. Their work, and the headaches we all solved together, have helped me create this guide to steer you clear of some stuff that left us head-scratching and stumped.

Enjoy the singing, keep the goal in mind… soli Deo gloria!

Carol Spradling
Essex Junction, VT
1. **Something to record into** - a laptop, desktop, phone, or tablet

2. **A microphone** (if using phone/tablet, internal mic is fine… desktop/PC requires external **USB** mic (only this mic can be used directly into PC without adding a digital audio interface). Don’t forget the mic stand.

3. **WIRED headphones** (wireless, no matter how fancy and expensive, will have lag issues and your voice will not sync to the recording). Headphones ideally need to be closed (“cans”) so that sound does not bleed from phones into microphone.

(Additional gear if desired)... a digital audio interface, XLR dynamic or condenser mic, desktop digital audio workstation (DAW) (Audacity, GarageBand, or professional apps like Pro Tools, Logic, Ableton Live). Don’t forget the mic stand if using an external mic.

FOLKS - YOU CAN DO THIS ENTIRE PROJECT, quite successfully, WITH JUST YOUR CELLPHONE!!
## WORKFLOW: CHOIR MEMBER

<table>
<thead>
<tr>
<th>YOU CAN... BUT DON’T (or, try not to...)</th>
<th>Laptop/Desktop using onboard mic, or external (non-USB) mic without audio interface.</th>
<th>Lag issue with internet (cloud-based) web recording, most computer mics are barely adequate for spoken word. NON-USB mics require the use of an external digital audio interface (not required with USB mics)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIC BUT FINE</td>
<td>Apple or Android phone or tablet - EASIEST BY FAR.</td>
<td>Using on-board mic… these mics are far better than computer, and the recording is housed locally (on the device). iOS = ZERO lag. Android = lag varies. Most of my singers do this.</td>
</tr>
<tr>
<td>INTERMEDIATE</td>
<td>USB mic (Blue Yeti)</td>
<td>Primarily made for podcast/spoken word, step up from built in phone mic. Use with mobile version not desktop (lag). No audio interface needed.</td>
</tr>
<tr>
<td>ADVANCED</td>
<td>Similar to director’s rig, professional (XLR) mic to digital audio interface</td>
<td>Great equipment, but watch for mic sensitivity (requires closed-back headphones). Best result by recording into local DAW then uploading to BL. Only one of my singers does this, and he’s an engineer and audio geek.</td>
</tr>
</tbody>
</table>
BandLab is a music creation social media platform. It has two different possible interfaces (ways of using it):

**Desktop** - web interface. Best for editing (see next slide for pics to compare)...

**Mobile** - Apple/iOS - ZERO lag. Great for recording, simple interface.
BandLab interface comparison

Desktop

Mobile (iPhone)

iPad
BandLab 101

Setup for singers

1. Go to [www.bandlab.com](http://www.bandlab.com). Click “sign up” (under “log in with Facebook”)
2. After you enter your email address and choose a password,
3. Choose a username (or use the long one they assign you) on next screen. *Write it down!*
4. Email your username to your music director (MD)
5. MD will send you an invitation to join “band” (your choir)
6. MD sets up “projects” and shares with the group
7. You go in and ADD A TRACK, then record your part
8. MD mixes all of the singing voices together into a virtual choir!
BandLab
A VISUAL TUTORIAL FOR SINGERS
BandLab
GET STARTED

SET UP on computer  Visit www.bandlab.com and set up a free account. Use your real name so Director can find you.

Phone or tablet  Download free app (android or IOS)
Sign up at [www.bandlab.com](http://www.bandlab.com). Click “sign up”, here....

On the next screen, delete the username BL has assigned you, and create your own. Then write it down!
AFTER SIGNING UP FOR A BANDLAB ACCOUNT - sign in to the app. Look for a notification that your director has invited you to join a group (band), and respond to that invitation.

TO ACCESS CHOIR PROJECTS: Click file icon - bottom row, right hand side…
A MINI TUTORIAL FOR SINGERS

Opening a song

After you click the file icon (bottom row right)...

brings you to this page. Click the project name you’re looking for...

After clicking song name, you reach this screen… click the shiny red “open” button…

BandLab
BandLab

A MINI TUTORIAL FOR SINGERS

Open Mix Editor to record

After clicking “open”, you are prompted thus…

Choose “Mix Editor” (red mic icon)
BandLab

A MINI TUTORIAL FOR SINGERS

Setting up to record

This is the main screen for the Mix Editor. You’re looking for a small plus sign (+) which is underneath the bottom recorded track.

OOPS! Where is it??
BandLab

A MINI TUTORIAL FOR SINGERS

Adding a track

Scroll down thru the tracks to the last one, and there it is

Press the + to add a track.

Think of the track as tape in a tape recorder - each track gets their own tape. You have to add (+) your tape so you don’t record over anyone else.
After clicking +, choose Voice/Mic from this menu…
BEFORE YOU RECORD, do a mic check to make sure the level is correct.

Prepare your recording setup. Put your mic on a stand, or lay your phone on a surface about 1-2 feet in front of you. Have your headphones on, and sing something at your normal volume, to test the sound.
MIC LEVEL is a matter of TRIAL AND ERROR.

Sing, then play back and listen to your voice. Is it so quiet that you can’t be heard no matter how much you turn it up? Or is your voice too loud and distorting?

Make adjustments - take a deep breath - try again!
If you want to do a mic check beyond just singing/listening, you can use some visuals.

Desktop: there is a VU level indicator on bottom of screen. Aim for ¾ way to top. See next slide (L side).

Mobile: Record a mic check, notice the blobs, adjust if needed (back away from mic if must).

- If “blobs” are touching top/bottom of track, that will distort (clip).
- If “blob” is barely more than a flat line, director can’t add enough gain.
- See next slide (R side)
BandLab
A MINI TUTORIAL FOR SINGERS

Recording

This is the recording interface.

Once you press the friendly red button, you’ll be recording!

But a few things first....
To access “track heads”, press the small icon bottom left of screen. That opens the track heads, which looks like this...

BandLab
A MINI TUTORIAL FOR SINGERS
Tweaking your interface (some next level stuff)
From here you can mute (M) any tracks you don’t want to listen to as you record. Top left of the track...

BandLab
A MINI TUTORIAL FOR SINGERS

Tweaking your interface (some next level stuff)
You can also do a limited amount of other tweaks from here:

S - solo, to listen ONLY to that track

… menu brings up options to download, rename, duplicate.

BandLab

A MINI TUTORIAL FOR SINGERS

Tweaking your interface (some next level stuff)
Desktop...

Click this if you aren’t seeing the meter

Should stay in the green but not too low down. This mic is too hot (meter is up in red)

Mobile...

This level looks good… the sound waves are high enough but not too high…
Wearing wired headphones, and listening to, at the very least, your Director’s accompaniment track, record your part.

You must not be holding on to the device or microphone you are singing into - if a mobile, place on flat surface. If a mic, use a stand - to avoid handling noise.
WHEN YOU MAKE A MISTAKE: press the “record” button at the bottom of the phone screen to stop recording.

With your finger, slide the playhead (vertical line) back to a place you want to “punch in” (re-record). Go back to the beginning of the phrase (the last time you took a breath) to make sure it will sync.
This process is easy once you get the hang of it, but it can take some trial and error. Please be patient with yourself AND your director, because you are both new at this particular life skill. Go slow, allow it to be messy at first, and you will get there!

Happy harmonies! - Carol
FINISHING PROJECT
MASTERING
aka MIXING DOWN

Can be done right in BandLab

Vocals - hardest instrument for mastering... be patient with result

Sync - moving visual blobs

Dynamics/gain - per track or whole

Pitch - not really part of BL; use alternate desktop DAW (basic ones like GB and Audacity are great for this)

Advanced tweaks - note timing, delay, compression, FX: better on external DAW

Vocal layering - easy pro tweak

Start simple (BandLab), then venture out into a desktop (off-line) DAW when you’re ready...
FINISHING IN BANDLAB

GO TO

- FILE…
- DOWNLOAD…
- MIXDOWN AS

Choose a name for your project and select a location to save to. This will mix into an mp3 (convenient, low storage need)
IN SUMMARY...
WORKFLOW VISUAL (again)

1. Director lays down accompaniment tracks
   - Direct into BandLab or into DAW mixed down into BL.

2. Get music to singers and rehearse over Zoom
   - Write in your breathing plan, dynamics, other interp details, before sending PDF (CameraScan).

3. Singers record their tracks
   - Teach them how to record; give them a deadline.

4. Director adds mastering (reverb, EQ) and mixes down
   - MP3 sent to worship team for inclusion in worship webcast.
ANATOMY OF A DIRECTOR TRACK

- **PIANO ACCOMPANIMENT** = percussive, leads the rhythm, precise (this can be turned into organ in final mix). Watch for choppy vocals.

- **VOCAL PARTS** = I use a soft string sound and record every note of the vocals. This is omitted in final mix.

- Play it the way you want it! Precise cutoffs, rhythm, diction.

- **VOCAL MELODY** = audio of sung track (or as many parts as you’d like to record, but at least one). “Show, don’t tell”

- **CLICK TRACK** = I mix the click directly into the accompaniment rather than relying on BandLab’s metronome.
Get music to singers and rehearse over Zoom

Write in your breathing plan, dynamics, other interp details, before sending PDF.

ANATOMY OF A ZOOM REHEARSAL

- **SECURITY**: “Only authenticated users”, waiting room, password, turn off join before host. Assign co-host to monitor waiting room once rehearsal starts

- **EVERYONE IS MUTED** once singing starts (not possible to “sing together” on Zoom)

- **PLAY TRACK THROUGH ZOOM**. Play piano through your computer audio (Audio Interface) rather than acoustically - less lag, purer sound

- **TALK THRU TRANSITIONS**

- I start with prayer and warmup, and we end with social gathering
Singers record their tracks
Teach them how to record; give them a deadline

RECORDING TIPS FOR SINGERS

● **USE MOBILE DEVICE NOT COMPUTER WHEN STARTING OUT:** Better microphones, easier interface, lower latency

● **WARM UP FIRST.** There are literally hundreds of YouTube vocal warmups. Pick one and do this for five minutes. You’ll like the results!

● **LISTEN BEFORE YOU RECORD:** Listen to the entire accompaniment bed while following along in your music to make sure you are comfortable

● **RECORD IN THE CLOSET:** An acoustically dry room where you have your privacy. It’s like singing in the shower!

● **ACCEPT YOUR VOICE:** Director doesn’t want an AutoTuned studio performance - she wants YOUR voice.

● **BE PATIENT WITH SELF AND PROCESS:** Like anything else, this gets easier and works better, with practice.
POST PRODUCTION

- **IN SOME WAYS THE HARDEST PART:** Sync, EQ, intonation, vocal presence - all of these can be “fixed in post”.

- **START SIMPLE:** Your first hymn may sound like the singers are in phone booths to your over-critical ears. Give yourself permission to be a beginner at this, and let go of the inner critical voice.

- **SUNG WORSHIP IS PRAYER:** Does the hymn encourage singing at home, if that is an outcome your worship team desires? If not, what adjustments can be made?

- **DON’T DO IT ALL YOURSELF:** Get a choir member or two up to speed on the tech, particularly BandLab for the singers, so you can focus on putting it together. As Sondheim wrote… “Bit by bit.. Putting it together…”

- **BE PATIENT WITH SELF AND PROCESS:** Like anything else, this gets easier and works better, with practice.
Send music, MARKED, ahead of time
Singers mute their mics, you direct
What can you do to cue your singers?
Click track vs. “watch my hands”
“Enable original sound” and advanced audio options - tweaks
Encourage more ambitious singers to record multiple tracks/parts

MIDI fun! Use external DAW for unlimited samples

BandLab MIDI - comes with piano and keyboards including pipe organ. Faves - solo instrument obligati, percussion, guitar, bass

Tweak your accompaniments after the fact. Example: want a note louder, or remove a color tone…

Remote choir members!

Ever wish you could sing with your hands? Recording gives you CONTROL, baby! Someone didn’t cut off on time?…
EXTRAS

GOODIES you USE!

→ ChoralWiki - public domain EVERYTHING: MIDI, PDF, more
→ Hymnary.org - free PDF/MIDI of public domain hymns
→ Scribd - paid service, many goodies
→ Spotify - they have everything, free account (with ads), where was this when I was a conservatory student?!
→ Reddit - subreddits with answers to every tech question. Also subreddits for music/score sharing.
→ Little apps to use constantly (free): metronomes, tuners, pitch pipes
→ ForScore - for seriously stopping with the paper scores, forever. Turn pages with your eyeballs!
→ Google Drive - for document storage/sharing, free/cheap
→ CamScan - FREE and insanely useful! No more lugging hymnals to the photocopier
→ MuseScore - free, feature-rich. Bonus: PDF to music scanning service (beta). Import/export PDF, MusicXML, MIDI
→ Audacity - covered above. Free audio DAW. Great for fine-tuning vocals on a budget. Import WAV/MP3, export back out when you’re done
→ MainStage (Mac) - how to play a theatre book with 400 patches… they’re set up in this program. Easier to use than you may think! Only $30, amazing. Change patches with your una corda pedal!
→ iPad and Apple pencil - another component in getting rid of paper scores forever.
→ Craigslist “musical instruments” - secondhand is a great way to try new tech!!! Speakers, keyboards, pedals/accessories - find them gently used…
→ Dropbox - free account, great for storing/sharing digital content
→ YouTube - an embarrassment of riches. Dive in and grow - guaranteed!
→ ACDA, AGO, NATS, MTNA, etc. Now more than ever we need to band together and support the organizations that bring us together. Membership is tax deductible, or have church cover it… All have incredible depth of resources available.
LICENSING ORGANIZATIONS

CCLI: Huge database of contemporary Christian songs. Members can freely download/distribute/reproduce all included songs. Streaming license available. us.CCLI.com

OneLicense: Covers Catholic publishers and most choral music publishers. Allows distribution and reproduction of specific music for funerals, bulletins, etc. Streaming license available. www.OneLicense.net

Christian Copyright Solutions: This is the blanket performance license for ASCAP/BMI. Streaming license available. Necessary in order to perform licensed music outside of worship (coffee house, fundraiser). www.ChristianCopyrightSolutions.com