

# **Recording for Church Soloists**

by Dick Frantzreb (11/12/07, updated 3/24/11)

For over 10 years, I've been recording my Sunday morning rehearsals of solos, and I'd like to share my approach for those who might like to do the same.

Not that long ago, the common way to try to record one's voice was to use a standard cassette player, and those of us who have taken this route have been generally disappointed with the results. Today, one is more likely to use an iPod or mp3 player/recorder, using a built-in microphone, and the results can be surprisingly good. But I believe I get far superior results with the methods I'm about to disclose.

Digital recording is certainly superior to the analog recording that goes on in old fashioned cassette recorders, and there are various digital recording technologies (defined by the recording medium): digital tape, minidisc, flash drives, etc. My personal experience with different recorders is limited, but I can offer some suggestions that may steer your own research in the right direction. I should caution, though, that I don't consider myself an expert in this field, and I may inadvertently say some things below that are incorrect. I can only really explain what I'm doing. In any case, corrections of any mistakes (or suggestions about things I've missed) are most welcome.

## **Step 1: The Recorder**

Although I'm not sure of the precise dates, I would say that from about 1995 to 2005, Sony's minidisc technology was a leader in portable, compact sound recording, yielding professional or near-professional results. Today, Sony has largely abandoned the minidisc technology, although an Internet search will show that it is still possible to buy used, refurbished, or even new minidisc machines. I use Sony's MZ-NH900, a tiny metal unit that is 3 inches square and a half-inch thick, and it records with stunning clarity.

The void left by the demise of minidisc technology has been filled by increasingly sophisticated recorders with internal, solid-state (non-moving) drives. Of these, the most prominent as of this writing is the Zoom Portable Stereo Recorder, in particular the H2 model. This device has a multitude of sophisticated features, and sells on Amazon.com for under \$150. I don't have personal experience with it, though many people are very high on this device.

There are other devices on the market, and generically they are most likely to be represented as "digital voice recorders." The point here is that you don't need a bulky multi-track recording "studio" to get good recordings of your singing. It's the combination of low-cost, compactness and high recording quality that makes the latest recording technology so desirable for a church soloist.

### **Step 2: The Microphone**

Most digital voice recorders include an on-board microphone. The Zoom's built-in microphone apparently provides excellent results, but I question the internal microphones of the less expensive units. If I were shopping today, I'd look for a recorder that at least supports an external microphone. If you're not familiar with microphones, one fundamental distinction among them is that some are powered, some are not. Those that don't have their own power get "phantom power" from the recording machine, but any portable machine you're likely to use will not provide phantom power: it will need a powered mic.

### **Step 3: The Recording Process**

On Sunday mornings, I place the recorder on the front pew in the middle of the church, point the microphone toward where I'll be standing, and press the "record" button. If we have to stop to fix mistakes, I let the recording run. After the first run-through, I try to stop the recording, give it a moment to save, and then I press "record" again for the next run-through. This puts each performance on a separate track.

### **Step 4: Playback**

After rehearsal, I listen through portable headphones (any will do) to at least the last recording to see if I can catch anything that I would like to improve when singing during the service.

### **Step 5: Uploading**

My Sony minidisc recorder came with software called *SonicStage*. I've loaded this onto my computer, and when I get home on Sunday, I connect my minidisc recorder to my computer via a USB cable that came with the recorder. I start *SonicStage*, and in a few moments it recognizes the recorder as being attached and gives me a list of the recordings it currently holds. I select one or more of those I recorded that morning and click on an arrow which starts the process of transferring them to my computer. (I had previously selected an option in *SonicStage* to specify that the files will be uploaded in .wav format.) After a few minutes the files are uploaded to "My Music" in the "My Documents" section of my computer. I change the name of the files (which, by default, are named by the date and time they were recorded). Then I move the files to the folder I have set up to store my Sunday morning recordings.

### **Step 6: Editing**

I next open my sound editing program, called *GoldWave*. From within it, I open what I think will be the best recording of that morning's solo, and it's displayed on my screen graphically, second-by-second as a complex wave. Still, I can tell from the shape of the wave where the music got louder or softer, where there was a rest, etc. I click on a CD-player-like "control" in the *GoldWave* interface to play the recording. Here's the neat

part. If we had to stop for any reason, I can often locate the last note worth saving, find the next note where everything went right, and cut out everything in between. Then I can play it back, and it sounds like an uninterrupted performance. I can even take a separate recording and cut and paste into the primary recording. It's just like word processing with music, though it does take a bit more practice than I'm making it appear.

### **Step 7: Converting**

*GoldWave* includes the capability to convert into other audio formats. The most useful, of course, is mp3, and a single command converts my recording to the mp3 format. That file can be uploaded to my website, and my website maintenance software (Microsoft's *FrontPage 2003*) allows me to reference the new sound file so that people may access it.

That's the whole story. So how can you get to where you're capable of doing this, or something like it? There are just a few action steps to get you to where you can do what I'm doing.

### **Action 1: Buying a Recorder**

In today's market, you should be looking for a digital voice recorder. There are many manufacturers of these devices, including Zoom (mentioned above) and Sony. To get an idea of the scope of the market at the present time, I'd suggest going to Amazon.com's section on "Musical Instruments." Then I'd search for digital voice recorders, which you'll find in abundance – and in prices ranging from \$150 up. You can also search Amazon's section on "Electronics" for digital voice recorders to find many less expensive models, but I'd be wary in that most of these are designed to record the spoken word, and may prove less than satisfactory for music recordings.

In shopping for the digital recorders, look for machines that accept a stereo microphone input and that have a USB connectivity (if you want to be able to upload recordings to your computer). Also, I would look for recorders that can produce .wav files (the standard for music, incrementally superior to mp3 files). If the device can produce .wav files, it can probably also produce mp3 files; if not, your software can convert .wav to mp3.

As for microphones, built-in mics will probably be satisfactory for the most expensive recorders. Otherwise, Amazon offers an abundance of standalone mics, and they'll turn up in your search for "digital voice recorder."

### **Action 2: Anticipating the Transfer to Your Computer**

There are various ways to get your recordings into your computer, but in these times, I wouldn't bother with anything less than connection between your recorder and computer via USB cable.

### Action 3: Buying Sound Editing Software

There are numerous sound-editing software programs available, and some are even bundled with high-end recorders. I've already mentioned Sony's *Sound Forge*. Adobe has an expensive program called *Premier*, and there are many more. Windows itself even has a built-in "Sound Recorder" that gives very basic editing capabilities. My preference, though, is the software I mentioned above, called *GoldWave*. I've used it for more than 10 years, and seen it improved substantially over that time. The current version is fast and reliable and seems easy to use (to me, at least). It's well documented, and has features that would satisfy a lot of sound engineers (I probably use 2% of its capabilities). Best of all, it's inexpensive, just \$45.

If you want to take small steps before deciding, you can download the trial version of the program from their website, [www.goldwave.com](http://www.goldwave.com). (By the way, the person or people behind the program are in England.) Then you can examine its user interface, figure out what it's like to edit a sound file, and so on. When you're ready to buy the program, it's all handled over the Internet, so you have the full software program almost immediately.

### Final Words

What you do with your recordings is really beyond my scope here. You can make an archive CD of your work. You can create MP3 files and put them on a website for limited or widespread access – including this website. I just hope my explanations above will prove helpful in getting you started.

Dick Frantzreb  
[frantz@vocal-works.com](mailto:frantz@vocal-works.com)