How to easily record your own song and send it to someone.

Let's say there's this song contest in which you want to participate, and they've asked that you record and send in your song. Great. Now in addition to being a song writer and performer, you also have to be a recording engineer?! Don't fear, it really is quite easy, and you probably already have everything you need to make a decent recording and get it on-line. Even if you aren't already equipped, we'll show you some inexpensive options that will do the job nicely. Perhaps you already have equipment and have tried to record yourself but were less than pleased with the results? We'll also give you some simple hints on how to make pretty decent recordings with a minimum of effort. Let's also assume that your recording will feature you playing your autoharp and perhaps singing. Our recommended approach will work well even if you have a friend (or two) playing with you.

What to record with?

The best news is that it's very likely that you already have an acceptable recorder. If you own a computer that was made this century and is of either the Apple or Windows variety, you have most of the problem solved. It will have built-in hardware interfaces with connectors similar to those shown to get sound in and out and we'll show you how to get some free software to record a bit later on. Almost all laptops have a built-in microphone though built-in microphones are usually not that great. Most desktop computers do not come equipped with a microphone. If you need to buy a mic or are willing to spend any money at all, getting a better microphone is the way to go. If you don't have a built-in "audio interface" but you do have USB ports, we can use one of those with a fairly inexpensive microphone to get a good recording as well.

For about \$40 you can get a Blue Microphones Snowflake. It is relatively compact, comes with a stand that can be used on a table or placed on top of your laptop providing surprisingly good sound. It's small enough to carry around in a laptop bag as well. For about the same price you can get the Samson Go Mic. It's about 1/4th the size of the Snowflake, and comes with a small built-in stand and carrying case. The Snowflake works really well to record just one voice and one instrument; the Samson works well if you plan to have a friend or two playing along. Both mics do a great job and both install easily on both Windows and MacOS. You simply plug in a cable; there are no drivers to install! Recording Software? How does free sound? Just google "Audacity", download the software, and follow some simple instructions for installation. Audacity works great for recording stereo files but it also has the ability to record additional tracks if you are considering overdubbing another instrument or vocal

No working computer? How about a smartphone or tablet? An Apple iPhone or iPad or a similar Android device can be a very high quality (and extremely portable) recording device. There are very few that do not already have a microphone and simple recording software is often included. Here too, the quality of the built-in mic often leaves something to be desired, but there are some inexpensive options here as well to get very decent quality. We like the iRig Mic Cast from IK Multimedia which costs about \$30. You simply plug it into the "headphone jack" of your device, and you're done. Again, there are no drivers to install; just plug it in and go. The iRig also comes with a handy carrying case. For recording software, your Apple device will have the "Voice Memos" application, which is fine for recording songs. On your Android device, look for the Smart Voice Recorder which is either already on your device or can be downloaded for free from any of the Android App Stores.

It's still a bit of a hassle to have to deal with your phone or computer if all you want to do is to record a simple song. This argues for using a simple and compact digital recorder that is easy to understand and operate. The cost has come down in the last couple of years, no software is required and the sound quality is exceptional. Want to record? Just turn it on, press the record button, play your song, and press stop. It doesn't get easier than that. We do suggest you get a recorder intended for recording music rather than for voice memos. The difference in sound quality is very noticeable. The Zoom H1 recorder costs about \$95 and does a really nice job but there are many options. The Tascam DR05 is about the same price and is also well regarded. Almost all of these recorders will record in stereo and store your recordings on an SD memory card, which allows you to transfer the digital recording directly to your computer using an SD card slot or by connecting the recorder to an available USB port. There are a couple of extra steps in posting your song if you use a recorder, so it's all a matter of tradeoffs.

Ready? Set? Record!

As you might expect, the Ready? Set? part is the tricky bit here.

The first step is to find a quiet place to record to avoid distracting background noise. Assuming you're not forced to set up immediately adjacent to your desktop computer, find a comfortable place to sit (or stand) with a convenient spot to place your microphone or recorder. If you sing and play sitting down, try your dining room table or desk. Set the mic about 1.5 feet away. Point it at or just below your throat towards the center of your chest. This distance and pointing technique will get good balance between your 'harp and your voice. Experiment a bit. Need a bit more voice? Point the mic up a bit. Need a bit more 'harp? Point it more directly at the 'harp. If you want to record standing up, find a shelf in a closet to put your mic or device on. Position it slightly below your ribs, about 1-2 feet away and pointing up at your throat. A linen closet or walk-in closet usually provides lots of shelves at varying heights and, often, those closets are in a quiet room in your house as well. (yes, that would indeed make you a closet recording artist). If you have a pair of headphones that you can plug in, you might use them to monitor the recording.

The most complicated part of "getting set" is setting your recording level. If it's set too low, the song will not be clearly heard; if it's set too high, you'll get distortion. If you're using Audacity on your computer, click on the little black arrow next to the mic icon and select "start monitoring". Now play and sing a bit and look at the meter right above that mic icon. If it's hitting 0 db, then you slide the mic slider a bit to the left. If it's not registering -12 db, slide it a bit to the right. Somewhere in that -12db to 0db range is the place you want to be. If you're using your phone or tablet, the level will be automatically set for you as you record. Simply open your recording software of choice (Voice Memos in the Utilities folder on Apple; Smart Voice Recorder in the Applications folder on Android) and you're ready to go. If you use a portable recorder, it may have an "auto level" setting. On the Zoom H1, it's a little switch on the back. If your recorder does not have an "auto" setting, use the input level controls to adjust until your level meters are between -12db and 0db. Your recorder may also have an option for quality. For a quick home recording, set to MP3 (on the H1 there's a switch on the back to do this) and then to 256 Kbps (on the H1 you do this with the volume controls on the side). The user manual for your recorder will tell you how to do this if it's not obvious (usually it's in a menu under quality).

So now we're ready (nice quiet spot, microphone aimed correctly, comfortable, headphones on so we can hear what we're recording), set (our levels are where we know they should be) and it's time to record. Press that little red button and quickly check to see that the numbers start running. Relax and take a second to compose yourself. There's no need to rush and we can always trim any unwanted silence from the recording later. Play and sing your song. When you're done, let your instrument ring for a few seconds and then stop your recording. Depending on the device,

you do that by pressing the stop button (Audacity, Android, and Tascam), or by pressing the record button again (Apple devices and Zoom).

Now push play and take a minute to listen to what you just recorded. We suggest you listen to the whole thing, making mental or actual notes on things you think you could or should do better. If you have made a mistake, you can easily do it again. Computer bits are free; you can record as many "takes" as you want and it doesn't cost any more. If you don't quite like the mix or balance of your voice and your instrument, try shifting the mic around a bit to get a better balance and record again. It's our experience that the first recording is seldom the best. On the other hand, neither is the 20th. Do the best you can and stop when you are convinced you can't do any better.

Getting your song ready to submit

If you recorded on a portable recorder, it's time to move your recording onto your computer so you can post it. The easiest way to do this is to connect your recorder to your computer using a USB connection. Almost all recorders will act as a virtual disk drive and you can copy your recording using File Explorer on Windows or the Finder on the Mac. Copy the file to your computer, then launch Audacity and open the recording to do some editing if you want to make any changes. If you don't want to make changes, just skip the next section.

If you recorded on your computer, you will likely have used Audacity to record the file and the file is already open in Audacity.

If you hear a long silence or other undesirable sounds at the beginning or end, you can select that portion of the audio and delete it using the Delete or Backspace key. When you get everything "trimmed" the way you want it, you can optionally improve the sound level of your recording with just a few clicks. Make sure you have no audio selected by clicking outside the wave form, then open the Effect menu and choose Normalize. In the window that pops up, make sure the "normalize maximum amplitude to" checkbox is selected, and set the number to -1 dB and click OK. This will ensure that the peak volume in your recording is just about as loud as you can make it without introducing distortion (also called "clipping"). In most situations, the resulting file will be at a good volume: not too loud and not too soft.

Save your work to make sure you have a high quality copy of the edited file. Use a logical file name, such as the song title, your name, and the date. You won't remember what "recording 7" is a year from now. Audacity will warn you that you're saving an "Audacity Project file" which only it can read. That's fine. Leave the file open in Audacity and, in the next step, we'll make an MP3 which is the perfect file format for submitting your song.

There are four simple steps to making an MP3 in Audacity.

From the File menu, choose Export.

In the window that appears, click next to Format and choose MP3 files.

Click on Options and, under Quality, choose 256Kbps, and click OK.

Give the file a name and choose a place to put it (a place you will remember like the desktop), then click Save. This will create the MP3 file that is ready to post or send.

On your smartphone, you "trim" right on the device. On iPhone, press Done, then give your recording a name. Next, tap the named recording and press Edit. Click the "box with handles" icon on the right, and two red lines will appear which show the start and end of your recording. You can reposition them to trim or remove extraneous silence or noises from the start and end. When done, press Done, and save your recording. On Android, you can move the start and end handles of the recording directly after recording. You do not have to worry about converting your song to an MP3 file; the recording was already done as an MP3 (or equivalent file) that is ready to send.

Submitting your song

You've recorded your song and you've edited the result as appropriate. Now it's time to send the file. By far the simplest method is to attach the MP3 file to an Email message and send it just as you'd attach and send a photo.

If you're using your computer's Email client, compose the Email as you normally would and add an attachment. This will vary by Email client but is typically done with the Attach or Insert File command or with a Paperclip icon while you're composing a message. Pick the MP3 you just made, and send your mail. With files under 5MB, which will be the case with most single song MP3's, this technique should work well.

If you recorded on your smartphone, the process is a bit different. On an Apple device, go back to Voice Memos and tap your (edited) recording in the list. It will highlight, and a "forward" icon (box with an arrow pointing up) will appear. Click on this icon, and from the option list that shows click Email. The Email program will open. Compose a message, and send it. On an Android device, go to your Mail program, compose a message like you normally would, and choose to Attach a file. Find your recording, and select it to attach.

If your file is too large to Email, Dropbox or several other similar services provide an excellent way to store large files on-line for free for other people to retrieve. Unfortunately, describing the Dropbox process is outside of the scope of this article but these services always provide help files to guide you through the process.

Doing more with recording

You have undoubtedly figured out that this is not really how high quality recordings are put together. There are much more sophisticated software, hardware, recording and mixing techniques that you can bring to bear to get better and more professional results using better microphone preamps, mixing boards, hardware workstation interfaces and more sophisticated software. If you're ready for that, then you probably didn't need this article. In any case, you'll find many tutorials on the Web that will take you from here.

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