**What kind of equipment do I need to make a podcast?**

At its most basic, you need a computer and a way to get sound into it. Assuming you already have access to a computer, which you’ll need to edit your podcast and put it online, the biggest cost variability will be in how you get sound into that computer. The choices you make will depend on your budget and the type of show you want to do.

**Computer**

While you don’t need a top-of-the-line computer, you will want something with reasonable power, a decent amount of memory, and a reasonably large hard drive. A Windows or Mac computer from the last 5 years or so with at least 4 GB of RAM would be my recommendation. Project files for an hour-long show can be around 1 GB of data, so keep that in mind when considering hard drive size.

**Software**

You’re in luck - there are free programs that will do an excellent job of recording and editing your podcast, and there’s no reason to spend money here unless you’re getting very advanced. For most recording and editing situations, I recommend Audacity: it’s free, open-source, easy to learn, and widely used. There are tutorials on YouTube, Lynda, and other sources. Get it at <http://audacityteam.org> (and follow the links to get the LAME MP3 encoder, too).

**Single Microphone Options**

If your podcast will consist of 1 person talking at a time, you have the simplest and cheapest options open to you. You can buy a USB microphone - they plug directly into your computer and don’t require an extra audio interface or special cables. I recommend a dynamic mic for this situation - it doesn’t pick up background noise as much as a condenser microphone. You’ll want to have your mouth as close to the microphone as you can while recording for the clearest signal. An excellent choice is the Audio-Technica ATR2100-USB, which retails for around $100.

If you want to record more than one person talking, the simplest option is to use a condenser USB microphone like the Blue Yeti, which retails for around $150. This microphone can record in stereo and offers different pickup modes for different recording situations. Because it is a condenser mic, you don’t have to be as close to it when you talk; it will also pick up more background noise, so it’s helpful to record in as quiet a space as you can find. You can position 2 or more people around the microphone and pick up the entire conversation clearly.

Both of those options come with a small desktop microphone stand, but you can also buy a larger microphone stand ($40 or more, depending on type) which gives you more options for positioning your microphone.

**Multiple Microphone Options**

If you are recording multiple people at the same time, want to improve the sound quality of your recordings, and have the budget and time for it, you can use multiple microphones instead of just one. Note that this is a significant step up in complexity, effort, and cost. There are a lot of considerations, so I’d advise doing your research first, but I’ll describe the setup we use for *Time To Read* as an example.

We have 4 hosts, and we can’t always get a perfectly quiet room to record in, so we have moved to using 4 dynamic microphones (Shure SM58, $130 each) so that we don’t get a lot of background noise. Each mic needs an XLR cable (~$15 each) and a mic stand (~$40 each). They all get plugged into an audio interface (Behringer U-Phoria UMC404HD, $150), which plugs into a laptop through USB. We plug the laptop and audio interface into a power conditioner (~$100). So that’s nearly $1000 before taxes.

Because we have 4 mics going in to our audio interface, we can’t use Audacity to record, as the audio driver for Audacity doesn’t support using all 4 mics at the same time. Instead, we use Tracktion 6, a full-featured Digital Audio Workstation program; you can get it from <https://www.tracktion.com/products/t6-daw> for free. Once the recording is complete, we export the 4 separate audio tracks to a stereo track that I edit in Audacity later.

**Additional Options**

If you’re talking directly into a microphone (like when you’re using a dynamic mic and want to be as close to it as possible), you will sometimes end up with rushes of air that create a bigger-than-desired sound, especially when you use words that start with ‘p’ and ‘b’. You can use a pop filter (~$15) attached to your mic stand as a barrier that filters out those rushes of air.

Depending on the wiring of your building and certain other factors, you may not get completely “clean” power from your outlets. This can cause a low-frequency “hum” to be barely audible on your recording. You can avoid this by using a power conditioner (similar to a power bar, but it filters out the power hum, amongst other things), usually available for around $100.

Sometimes you may want to record someone in a place where you don’t have access to your normal recording gear, like a person-in-the-street-style interview or quick comments from someone who isn’t able to come in to your regular recording location. There are some excellent field recorders available (I’m partial to the Zoom H2n Handy Recorder, which costs about $220), but you can also use a smartphone to make recordings. The results don’t sound as good as using a proper recording setup, but they are clear and intelligible and perfectly usable. Use your phone’s sharing options to email the audio file to yourself, and you can edit the recording into your show in Audacity.

**Other Resources**

The best book I know of on the subject of making good recordings on a budget is *Guerrilla home recording : how to get great sound from any studio (no matter how weird or cheap your gear is)* by Karl Coryat. The very best book on audio recording is *Mastering Audio: the Art and the Science* by Bob Katz. They are both oriented towards recording music, but apply to any recording situation.

Finding music for your podcast:

<https://medium.com/podcast-101/music-for-podcasts-myths-licences-and-what-you-need-to-know-dd5ed4506d00>

Youtube tutorial - assembling a podcast in Audacity

<https://www.youtube.com/watch?v=piuMLXF2rZY>

Wikipedia article on microphones:

<https://en.wikipedia.org/wiki/Microphone>

Information on microphones and how to place them:

<http://artsites.ucsc.edu/EMS/Music/tech_background/TE-20/teces_20.html>

DIY pop filters:

<https://www.wikihow.com/Make-a-Pop-Filter>