



SET YOUR PODCAST UP FOR SUCCESS

*full podcast
recording guide*



Welcome

This guide is for you with a great idea for a podcast. With a story to tell or a concept to convey. I find that a lot of people have wonderful ideas on what to talk about, a great structure on how to do so and all in all a compelling idea for a great podcast. All that just to get overwhelmed by the technical aspects of things. If that is you keep on reading! To you who isn't yet in the clear of what you want to talk about in your podcast I suggest you start there.

This guide will very soon begin to poke around in the technical aspects of starting a podcast. Recording techniques, editing software and equipment are the key parts of this guide. Together with a great idea of what you want to discuss this will very quickly make you stand out. A lot of podcasts either have interesting content with terrible audio quality or great quality with nothing to talk about. This guide will most definitely help you with the former part but if you still feel a little lost in this technical jungle be sure to E-mail me at andreas@grotteko.com to continue the conversation. Let's begin shall we?

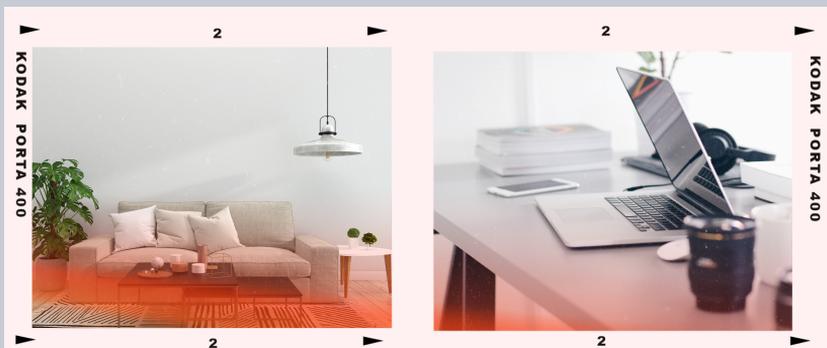


Surroundings

One might wonder why this guide doesn't begin with some technical aspect of what microphones you should use or what type of recording device you should seek out in your nearest electronics store. The thing is I'm pretty baffled with the amount of money podcasters, and YouTubers none the less, spend on gear without paying attention to the surroundings. They might willingly spend 400\$ on a microphone and 100\$ on a fancy desk holder without spending a dime on the acoustics.

This is where you can most definitely stand out in audio quality for your podcast without it costing a fortune, and at the same time don't spend as much on equipment because of it. Before I begin talking about simple tricks to improve your room sound let's do a little test. Go to the place where you intend to record your podcast. If it's your home office desk, kitchen table or living room chair doesn't matter. Just go there, sit down as if you were to start recording the podcast. Clap your hands a couple of times and pay attention to the echo. If your clap sounds completely dead or smooth you're in luck. If your clap sounds massive or even start to give some weird echo feedback we've got some work to do.





If your space is a normal living space and you haven't done any acoustic treatment nor have fluffy rugs and pillows everywhere chances are you got that massive clap. So we've got to spend some time fixing our surroundings. This can be done in a couple of different ways depending on whether you're going to record here multiple times and you're ok with putting stuff on the walls, or if you need something portable that can be taken down. Let's go down the latter route first!

In today's world of podcasts people generally expect very dry recordings. Meaning that the voice should sound like you're having an intimate conversation in a couch. Not like you're getting yelled at from a distance. This means that we need to take some action to get rid of the reverberation (echo) to make our podcast feel like that. So we've got to go looking for soft and fluffy materials around the house. The thicker the better. Preferably the pillows from your couch and a blanket or two. With these we're going to build ourselves a little fort putting pillows behind and around our microphone (or even our phone if we were to record with that) to block out the echo in our room.

The pillow fort is a great and cost effective way of getting rid of reverberation in your recordings. Unfortunately it can take some time to set up each time you're recording and if your planing to record your podcast for video as well it's probably a no go. You may be fine with just one pillow behind your microphone and be able to have that out of frame but you may still end up with some echo leaving us with the only option to actually acoustically treat our space.

There are many types of acoustic treatment for different applications. A lot of it is marketed towards music studios or venues and are very much over kill for podcast recording applications. We don't need to improve the sound in the room coming from a stage or some speakers but simply make the room less reverberant. The good news about this is that there are lots of solutions for dampening office spaces out there that are a lot cheaper than the stuff used for studios and venues. IKEA even has a full product line aimed towards this called *Eilif*.

If you're recording from a home office space of sorts this a great way of getting rid of reverberation. Putting one of those on the back of your desk so that you're talking into the dampening material will most likely improve the sound in a pretty drastic way. There are also office space dividers in this product line that you can put away when not recording. When looking this up I also stumbled upon the desk divider IKEA *Övning*. This will work great to bring with you to less ideal locations and build that small "fort" in a matter of seconds!

If you're recording in your living room or kitchen or similar you might not want to introduce acoustic absorbers. Bad acoustics are tiring for the brain though and improving your acoustics will not only improve the sound of your podcast but also the room in general. So you can have more comfortable conversations the next time you have people over for instance! The first step is to look into ways of simply populating the walls. There are lots of multipurpose art that also absorb sound, nice looking wooden panels that are acoustic panels in disguise etc. A little goes a long way here. A too clean floor will also impact the acoustics so see if you can add some more rugs to the floor or simply add more fabric in general in the way you best see fit.

Up until now we've only covered inside acoustic but what about noise? If you live in a city chances are you're going to have to deal with outside noise leaking into your microphone somewhat. In all honesty there aren't too many things you can do here at a low cost to get rid of a noisy environment. Changing windows and doors to block out sound are all expensive renovation projects and nothing you would do just to get a podcast recording up and running. There are some minor things you can look into though if you face these problems. Number one is simply picking the location that is the furthest away from the street and if you live in an apartment, furthest from the main entrance.

There are some small hacks you can do as well to block out noise from the outside world. Most hardware stores have insulation lists mostly for keeping out the cold. You can use these to isolate the door into the podcast recording room. Use a flashlight and ask someone to aim at the door edges. In that way you can see if there are any cracks to take care of. Where light gets in, sound gets in! If you want more in depth tips on improving your home recording place i recommend [this video](#) on studio acoustics that is a bit lengthy but highly informative.



Microphones

So now we've gotten through the crucial part of getting your room ready for podcasting. Let's dive into some technical stuff, the first of course being what type of microphones you should be using for your podcast recording. There are way too many microphones, even types of microphones, out there to make space for them all. Even in the podcast space there are as many different set ups as there are podcasts. To not get overwhelmed by this let's settle for the fact that there are two different types of microphones out there that are suitable for podcast recording. There are dynamic microphones and condenser microphones.



Dynamic Microphones

There are a lot of different dynamic microphones out there but the key take away is that these are less expensive and not as fragile as condenser microphones. That is true in most cases at least. There are cheap condenser microphones and expensive dynamic microphones. However if you were to compare build and sound quality between the two, a comparable condenser microphone is always more expensive than a dynamic one.

Don't take this as if a condenser microphone is always a better choice because of the price though. For a podcast I would argue that in most cases a dynamic microphone is the better choice. A dynamic microphone is, because of its construction, a lot less sensitive than a condenser one. For podcast recording this is often a good thing. You need to be close up to a dynamic microphone for it to sound its best. This results in the microphone being less sensitive to the noises around you and if your room still doesn't sound great despite the things we did in the prior section this will be beneficial. To summarize a dynamic microphone is more forgiving to poor recording conditions. Because of its less sensitive construction though it lacks a little clarity and detail and that is where the next microphone shines!



Condenser Microphones

This is the most widely used microphone in professional studios. Music studios at least. They are, as stated earlier, more sensitive, more fragile and more expensive. To make up for these flaws they sound very detailed and clear though and that is why they are so widely used in professional studios. If you have a great sounding space and the money to spend these can be a great choice. I live in Sweden and I've heard some great podcast recordings for Swedish national television and Swedish radio stations using condenser microphones. With that said you can without a doubt get a great sounding product with a dynamic microphone as well and lots of top tier podcasts use dynamic microphones in different shapes and forms.



A side note to condenser microphones is that there are in general two types of condenser microphones. Large diaphragm microphones and small diaphragm microphones. This refers to the microphone capsule which is a coin looking thing in a condenser microphone responsible for picking up the sound. I will only feature large diaphragm microphones in the list. Large diaphragm microphones are a lot better at picking up bass because of its construction and your voice will therefore sound a lot fuller using one. Small diaphragm microphones lack bass and are therefore better suited for bright instruments like cymbals and violins. Don't forget about them though because they can be used for voice and podcast recordings in awkward situations.

Brands & Models

Ok, so you've decided on either one of the different types of microphones and need some options. I'm going to categorize these in price order both for dynamic and condenser microphones. Full disclaimer though that this is very biased in brands I personally like. There are so many microphones out there and be sure to get some more opinions before purchase!

Shure SM58 - 100\$

This is a legendary vocal microphone that's been around for decades. It's sturdy as a tank and you've probably seen it on a concert somewhere. Audio engineers love this because it's so reliable and also inexpensive so that you can have lots of spares. It works well for podcasts too and it's a great entry level microphone for this. It may lack a little bass and top end though that you'll have to compensate for in the editing/mixing phase.



Rode PodMic - 130\$

The Danish audio company has been aiming towards podcast studios and film makers for a long time now and make some great products for podcasts. The PodMic is great value and not a lot more expensive than the SM58. For that you get a little better bass and clarity. This microphone is made for a microphone stand or desk mount though so if you plan to make some outdoor interviews or handheld recordings the SM58 is a better choice.



Shure MV7 - 250\$

You'll notice a lot of Shure microphones in this list for a good reason. They make quality products that has been around for ages and that are widely used and tested. This one is a new comer though and designed to be a somewhat cheaper alternative to the next microphone on this list. This one also has some unusual connectivity to it. We're going to talk more about sound cards later but this microphone has one built in. This means that you can plug it in via USB and record directly to your computer, iPad, phone etc. This while still keeping the normal XLR connection that all the other microphones use making it highly flexible!

Shure SM7b - 400\$

This is the most expensive dynamic microphone featured on this list. You've most certainly seen it on a video podcast or YouTube video. It is specifically made for broadcast applications and can be seen as the luxury version of the Shure SM58. It has a lot more presence and bass to it, it is super sturdy and frankly sounds fantastic. The biggest problem with this though besides the price is that it's a little demanding on your sound card. To compensate for this you may need to buy an accessory to boost the signal. This will set you back around 100\$ more.



Rode NT-1/A 150-220\$



This is an entry level condenser microphone mostly aimed towards singers. It sounds really good for its price but compared to a more expensive alternative it's a little bit harsh sounding. You may need to compensate for this later. As per most condenser microphones it doesn't have a built in pop filter (like the dynamic microphones I featured) so you'll need to get one of these as well. Chances are that you can purchase this in a bundle though!

Lewitt LCT 440 PURE - 270\$

The Austrian company Lewitt have really made a name for themselves in the audio industry for the last five years or so. They make solid products for reasonable prices and the LCT 440 Pure condenser microphone is no exception. It's a little more expensive than the Rode but has got some solid reviews. Don't forget the pop filter!



Audio Technica AT-4040 - 450\$

Another microphone receiving praises for its quality despite its price is the Audio Technica AT-4040. Although it sounds great at its price it is not cheap in any way. This may only make sense if you're really investing in a great quality podcast sound and don't want to cut any corners. Don't forget the pop filter!

Austrian Audio OC818 1140\$

This one may not make sense to most people and especially not if you're just starting out. It's in here because even though it's expensive in one sense you get a lot from this microphone. The reason I found this microphone was that I watched a video podcast from Swedish national television and it sounded absolutely amazing. I found it was this microphone and read up on it. It has some great features like hypercardioid (allows you to focus on a narrow target) stereo capabilities (so you could potentially record two people with one of these) and even bluetooth compatibility for app control. If you don't need anything of the later though you can get the same sound from a cheaper model namely the OC18 that will "only" set you back around 700\$.

Other alternatives

I think you have enough microphones to choose from now but I just wanted to throw some worthy mentions out there. The Rode NT5G and Senheiser MKE 600 don't share their price but they do share microphone type. I have not yet mentioned the shotgun microphone type which is an extremely narrow microphone used on a distance to capture a very specific target well. These microphones are widely used in video recording to have an out of frame microphone while maintaining great sound quality.



If all this feels overwhelming both financially and technically I think it's worth mentioning the microphone you always carry with you. Phone microphones have gotten so much better over the last few years and you can definitely record a listenable podcast with your phone. Make sure to build that fort of pillows though because they are pretty sensitive to noise and echo. You can even use one phone per speaker and sync up in your computer later!



Recording devices

Alright! We now have ourselves a good sounding room, a proper microphone to record with and hopefully something interesting to record. Now we need to capture this somehow. There are many ways to do this both with and without a computer. A lot of companies have aimed towards making devices specifically for recording podcasts while other devices are made for more general recording purposes. All be it a podcast, guitar solo or orchestral piece. Let's have a look at some of them shall we?

ZOOM H4-H6

The Zoom H-series are a series of pocket recorders to record anything from interviews to concerts to field recordings. They all come with attached microphones but the higher tiers (H4-H8) have XLR inputs for microphones. This makes them a great choice for recording podcasts on the go. If you only aim to record two microphones the H4n Pro is a solid choice. You can even use the attached microphone to record a third person if you need to. If you need up to 4 XLR connectors you should look towards the H6 and if you need even more there's an H8 version. These get somewhat pricey though and remember that you're also paying for the attached microphones. The Zoom is however a solid choice and it's convenient to record to an SD-card!



Rode rodecaster Pro 1 & 2

The Rode developed Podcast recorder is a full blown podcast recording machine that is featured in many podcast studios. The podcast community vouch for it and for good reason. It packs a lot of features like the ability to record up to 4 microphones, do some processing while recording for easier editing, storing of jingles and music and recording phone calls via bluetooth. It is quite expensive though starting at 500\$ for the first version but is at the same time very feature packed. One caveat with this machine is that it spits out multi wav-files that are absolutely huge. In one sense this is very convenient and gives you flexibility over multiple microphones in the editing phase. It can though be somewhat of a hassle if you need to send the files to someone to edit your podcast. I've had some experience with downloads and uploads going wrong because of this. Something you don't want in a tight deadline. So keep this in mind!



Sound cards for your computer, tablet or phone

If you plan to edit your podcast yourself, or if you want to save some money on recording devices, a good alternative is to purchase a sound card instead. There are many decent alternatives like the Steinberg UR22c or Focusrite Scarlet 2i2 at around 100\$ that can record up to two microphones. If you need more than that there are the Scarlet 18i8 or Steinberg UR44c to record up to four microphones.

You'll of course need some software to record with but there are lots of free/cheap alternatives. If you're on a Mac Garage band will do just fine and on a PC Audacity and Reaper are both good options. If you're planning to edit yourself you can use the same software to record and edit on for a quick workflow. More on that soon! If you don't have a computer handy these sound cards work with your phone and tablet as well. You can use Garage band for iOS and something like Cubasis for Android to record multiple microphones via your phone/tablet.



Gain Staging

One thing you need to know about regardless if you're using a recording device, sound card, dynamic microphone or condenser microphone is gain staging. Gain is a way of controlling the microphone sensitivity, not to be confused with volume even if they're somewhat related. Setting the gain is crucial to a good sounding recording. If you set it too high the recording can start distorting but if you set it too low you can encounter bad correlation between noise and signal. Today the latter is much easier to fix in post production and the noise floor is so low on most devices it won't be a problem. It is therefore more important to not go too hot. If you have any sort of indicator on your recording device try to be around 60-70% of that bar. In general just make sure that you get some signal and that the indicator don't turn red!



Peripherals

To set the right levels when you're recording you most likely need a pair of headphones. In most cases only one person need headphones but sometimes you want everyone to hear themselves. There are lots of headphones out there and for podcast recording a lot of them will do the trick. The only important thing is that they don't leak sound. There are open back headphones for studio work for instance that leaks a ton of sound. You don't want that. Old iPhone headphones do that as well which doesn't make them ideal. So either look for some closed back studio headphones or simple in ear headphones that won't leak back into the microphones. Some honorable mentions are the Sony MDR-7506 which are great for both recording and editing podcasts. Another not as pricy alternative are the AKG K-52. If you don't need them for editing most things will do though, even cheap consumer grade headphones.

Another peripheral you'll need is a microphone stand and some advice here is to not cheap out on these. It's easy to spend the extra money on nice gear and microphones but then to cheap out on peripherals like stands and cables. But poor quality stands can definitely impact your sound. A less sturdy one can for instance gradually fall down from a good angle during the recording. Some cheap stands are also sensitive to bumps and can transfer the vibrations to the microphone and then your recording. My advice here is to look for table stands with a heavy base like the K&M 23320. These will keep your microphone in place while not being too sensitive to bumps on the table. And finally if you're thinking about holding your microphone instead: DON'T. There is no way you'll be able to hold that still for a 30-50 minute recording. Sorry for being harsh!



Editing software

We are slowly reaching the end but if you plan to edit your podcast yourself you're going to need a proper software for doing so. There are so many options out there it's crazy but my main advice is to stick with what you have and what you know here. If you know garage band use that, if you've made some music in any music recording software use that. If you haven't used any as of yet I have some tips though!

Reaper

If you're here because of my Instagram or TikTok you already know I'm a huge Reaper fan boy. For good reasons though I'd argue. I actually made the transition from Pro Tools (another Digital Audio Workstation) just for podcast editing needs. I improved my workflow like crazy by doing so and ended up cutting my editing speed in half. I'm not going to ramble on why Reaper's great for podcast editing any more here but I've written a [blog post](#) about it that you can read.

The only caveat with Reaper is that the learning curve is somewhat steep. The community is wonderful though and help is easily found. The price compared to other software on the same level is highly competitive as well. Reaper is yours for a mere 60\$ and the trial can be used for 90 days with a full functioning software for ever, but with an annoying pop up.



Audacity

Audacity has been around since 1999 and is still supported and developed. Although it might lack some advanced features, it's a solid software that has all the features needed for podcast editing. It's free, open source, cross platform and a great alternative for the aspiring podcast creator!



Descript

I get it, not everyone loves audio and all of its tools and softwares. Most people just want to get some great stories out there and that's where Descript shines. Descript is not an audio software in its traditional sense but rather an online AI-tool that transcribes your audio into text and then back to audio. In that way you can edit your podcast as if it was a word document which is pretty neat. You can even mix and record it right into descript or export your audio when done editing and let one of your fellow audio nerds (like me for instance!) do the mixing!

Thank You

If you've read this far I want to congratulate you for sticking through to the end. Hopefully you've learned some useful stuff to more confidently start making your podcast. I want the key take away from this to be that you could do a lot with a little. If all the technology feels overwhelming than start with your phone and maybe descript and build from there. After that you can pick up something like the Shure MV7 and plug that into your computer and record through descript. When you get the hang of it and want to start interviewing people you can get yourself a zoom recorder and another microphone, still keeping descript for your editing needs. One thing I can't stress enough though is making the effort to treat your room. Just the smallest thing like the IKEA Övning can make a great impact on sound quality even if you're recording with your phone microphone. There are so many podcasts now that you probably won't get away with poor sound quality starting out. And attention to the room will make a lot more impact to this than microphones or recording devices. That's a promise!



Contact

If you need help in any way with editing, mixing, mastering or starting up your podcast don't hesitate to contact me. Either through the [contact form](#) on my website or directly via [E-Mail](#).

Thank you once again for taking the time to read this and I hope it was helpful!

//Andreas

