



The Home Recording Handbook

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Chapter 2: Get It All Working

Okay - you've finished reading chapter one, you've done some shopping, and now you're sitting in front of a pile of strange electronics. Great. Let's set it up!

Prepare the computer.

If you've had your computer for a while and haven't gone through things in a while, now would be the perfect time to do a little bit of cleaning. Make sure you have plenty of hard drive space by either deleting old programs/files you no longer use, or buying an external hard drive if you don't already have one. Audio programs can be pretty large because they come bundled with virtual instrument libraries, and each song can take up a few hundred MBs to a few GBs of space.

Take out your interface. Read the instructions.

Yeah. Self-explanatory. Everything's a little different, so just follow the instructions that came with your audio interface. If you bought it used, usually the best course of action is to visit the manufacturer's website, find a "support" or "downloads" page, and find the drivers that correspond to your unit and your computer's operating system. Do this before you plug the interface in and try to use it.

As a rule of thumb, you'll want your interface connected and functioning properly before you start up your recording software (DAW, remember?) - this way the interface will appear in the settings or preferences menu of your DAW. This stuff can be finicky and might take a little bit of experimentation to get right, but I believe in you!

Install your DAW(s).

Search for the DAW(s) you're interested in, find the product website(s), and follow the instructions they give you. You'll probably have to jump through some hoops and authorize some licenses, even if you're using free versions. That's all normal, and hopefully won't be too draining.

Set up your stand, mic, pop filter, and plug it all in.

Do it in that order! Make sure you have the mic facing the right way (read the documentation if you aren't sure), make sure everything's tight-ish (don't break the plastic parts on your stand), and make sure your pop filter is around 2 to 5 inches away from the grill of your microphone. When that's all up and the mic is in its mount, plug the mic into the interface using your XLR cable. The part you plugged the mic into is called the preamp. If you're using a condenser mic, turn on the phantom power (usually labeled as +48v) on the preamp AFTER you've plugged it in.

Also, plug your headphones in. When you select your shiny new audio interface as your audio device, sound won't come out of your internal speakers, so you'll need those headphones to monitor what's going on.

Handy tip: if you plugged everything in and aren't getting any signal, check to make sure you've turned the phantom power on. This only matters for condenser microphones - if you forget to turn it on, you won't hear anything at all.

Other tip: for many side-address microphones, the side you're meant to sing into is the one with the brand's logo on it.

DO A TEST! DO A TEST!

Cross your fingers!

- 1.** Open up your DAW and check the audio preferences/settings to make sure your interface is selected as the audio device. As a general rule, it is the industry standard to record at 44.1 KHz and 24 bits. 48KHz is good too, no big deal either way.
- 2.** Create a new audio track and set its input to the one your mic is plugged into (let me guess... input 1?).
- 3.** Record enable that track (press the little red button on the track itself), press play/record in your DAW, and let it roll. You should see an audio clip being made as the playhead moves from left to right in your edit window.
- 4.** Starting with your mic preamp turned all the way down, gradually turn the "gain" knob (or the only knob next to the mic input if it isn't labeled) clockwise while speaking into the mic and you should see/hear the volume of your voice gradually increase. If it seems to be working, you can stop the recording.

CONGRATULATIONS - you've just made your first recording! What's next?

Get your levels right.

The process you just used to test your mic, interface, and software is pretty similar to what you should do before beginning each recording session. As you get ready to record something "for real," you'll want to make sure you're recording at a proper volume level. It's better to have the mic preamp too quiet than too loud, but thankfully the middle ground is large and you have a little room for imperfection. The process for a real level check usually looks like this:

- 1.** Start recording, just like you did the first time.
- 2.** Set the preamp gain somewhere conservative - if the preamp's gain knob is a clock, try 11 o' clock to start.
- 3.** Sing/belt/scream/scree the loudest thing you can imagine belonging in the song you're working on. If you're not working on anything in particular, just sing the loudest thing you can think of.
- 4.** Check the peak level (the very loudest point of the recording) and adjust, aiming for any value between -14dB and -8dB. The average level should be a bit lower than this. You may need to stop recording to accurately check where the loudest part of the recording landed (in Pro Tools I like to stop and use the "Gain" tool in the audiosuite menu), but if your software has well-labeled meters you may not need to. If you're hitting the red part of the meter and hearing distortion (at any point in the process), turn it down and re-record!

You're all set.

You've successfully put together your recording rig. Now, it's time to christen it like a boat. Get a nice bottle of champagne or Martinelli's and break it over your setup, then name it something weird (I'm kidding, please DO NOT DO THIS).

In Chapter 3, we'll dive into more specific techniques to make your recordings AWESOME, with a focus on vocals, vocal percussion, and a cappella standard practices.